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#### **ABSTRACT**

**IDENTIFIERS** 

This appendix of state-by-state results is designed as a companion reference to two National Assessment of Educational Progress (NAEP) reports containing national data from the 1992 mathematics assessment. It contains a selected set of state-by-state data tables that focus on the school and classroom contexts for learning mathematics in grades 4 and 8. Data tables are presented in the following sections: (1) Demographic Characteristics of Schools; (2) School Problems and Climate; (3) Students' Home Background; (4) Curricular Emphasis and Coursework in Mathematics; (5) Mathematics Teachers and Their Classes; (6) Classroom Instructional Approaches; (7) Calculators and Computers; and (8) Students' Perceptions of Mathematics. Some findings include: (1) the percentage of students reporting no absences during the month prior to the assessment increased and the percentage reporting 3 days or more absent, decrease in six states: Indiana, Iowa, Maryland, Minnesota, North Carolina, and Wisconsin; (2) in 10 states, there was a significant increase in the percentage of students who reported reading more than 10 pages daily, and in no state was there a decrease in this amount of daily reading for school; and (3) the overall trends in homework assigned at grade 8 showed a general shift from 15 to 30 minutes of homework typically assigned each day. (JRH)

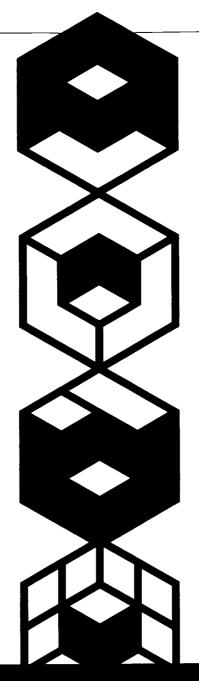
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## **State-by-State Background Questionnaire Data Appendix:** NAEP 1992 Mathematics Assessment, Grades 4 and 8



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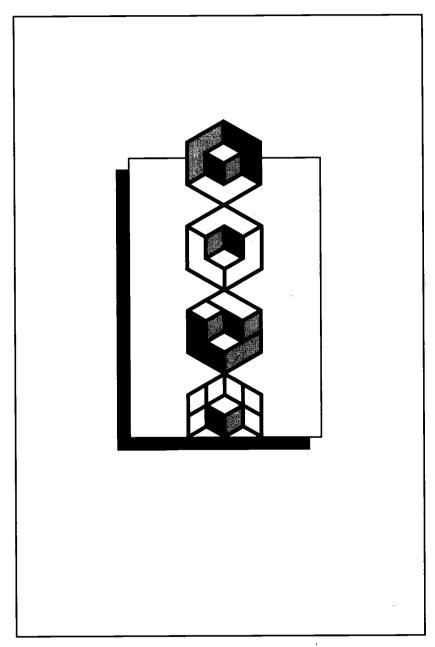
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# State-by-State Background Questionnaire Data Appendix: NAEP 1992 Mathematics Assessment, Grades 4 and 8



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October 1994



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## INTRODUCTION

This appendix of state-by-state results is designed as a companion reference to two NAEP reports containing national data from the 1992 mathematics assessment. These two reports are:

## How School Mathematics Functions: Perspectives from the NAEP 1990 and 1992 Assessments

This report contains background questionnaire information from students at grades 4, 8, and 12 as well as the teachers of the fourth and eighth graders about school curricular practices, resource availability, and instructional approaches in mathematics. The report also presents information about students' perceptions about mathematics and the high school mathematics courses they have taken. The background data are related to students' achievement on the cognitive portion of the assessment.

## Effective Schools in Mathematics: A Research and Development Report

This report is part of the NCES Research and Development series. It focuses on the school questionnaire results collected from principals or their designees. The report presents information about the characteristics of the top-performing one-third of the schools compared to their bottom-performing counterparts as well as the results of hierarchical analyses adjusting for associations among key schooling variables.

Full details about the methods and procedures underlying NAEP's 1992 Trial State Assessment Program can be found in the Technical Report of the NAEP 1992 Trial State Assessment Program in Mathematics. The operational aspects of the



state assessments also are summarized in the Procedural Appendix of the NAEP 1992 Mathematics Report Card for the Nation and the States as well as in the Procedural Appendix of Can Students Do Mathematical Problem Solving? — the two NAEP reports containing the 1992 mathematics achievement results for the nation and the states. The 1992 Mathematics Report Card concentrates on summary data for various demographic subpopulations, including performance trends between 1990 and 1992 at grade 8. Can Students Do Mathematical Problem Solving? focuses on results for questions where students were asked to construct their own written responses. A comprehensive set of national and state tables is contained in the Data Compendium for the NAEP 1992 Mathematics Assessment of the Nation and the States.

## The Information in This Appendix

This appendix contains a selected set of state-by-state data tables that focus on the school and classroom contexts for learning mathematics at grades 4 and 8. Generally, across jurisdictions, there were few dramatic changes in school context between 1990 and 1992, yet there were a few indications that some aspects of school reform may be taking hold. For example, students may be spending more time on their schooling by virtue of improving their attendance and spending more time on homework. As shown in TABLE A.7, the percentage of students reporting no absences during the month prior to the assessment increased and the percentage reporting three days or more absent decreased in six states: Indiana, Iowa, Maryland, Minnesota, North Carolina, and Wisconsin. Other participating states also showed some evidence of improved attendance with either an increase in the percentage of students with no absences or a decrease in the percentage of students missing three days or more of school during the past month.

Also, eighth graders across the states and territories indicated that the they were reading more for their schoolwork in 1992 than in 1990 (TABLE A.29). In 10 states, there was a significant increase in the percentage of students who reported reading more than 10 pages daily, and in no state was there a decrease in this amount of daily reading for school.

Similarly, the overall trends in homework assigned at grade 8 presented in TABLE A.35 showed a general shift from 15 to 30 minutes of homework typically assigned each day. Between 1990 and 1992, teachers reported decreases in the percentages of students assigned 15 minutes of mathematics homework



each night in 13 participating jurisdictions and increases in the percentages of students assigned 30 minutes of daily homework in 10 of the jurisdictions.

There also were some signs of progress for some recommendations targeted specifically toward reform in school mathematics, most notably those of the National Council of Teachers of Mathematics (NCTM) in its Curriculum and Evaluation Standards for School Mathematics. For example, TABLE A.48 contains the teachers' reports about staff development opportunities for the states and territories. In 1992, from 5 to 36 percent of the fourth graders were estimated to have been taught by teachers who had spent no time on in-service education in mathematics or mathematics teaching during the year before the assessment. At grade 8, however, fewer students (from an estimated 3 to 16 percent) had teachers who reported no time spent in mathematics staff development, and this reflected an improvement compared to 1992. In 16 states, there was an increase in the percentage of eighth graders whose teachers reported 16 hours or more of inservice training in mathematics or mathematics instruction during the year before the assessment. In 1992, these percentages ranged from an estimated 23 percent in Guam, 27 percent in New York, and 28 percent in Massachusetts to an estimated 61 percent in California.

Pervasive increases in at least a "moderate" amount of attention being paid to various mathematics content areas may reflect attempts to better balance the mathematics curricula across a broader range of material (see TABLES A.37 through A.42). Between 1990 and 1992, 34 of the participating jurisdictions also showed significant increases in the percentages of students receiving moderate emphasis in measurement. In most cases, the increases matched similar decreases in the percentages of students receiving little or no emphasis in measurement. Similarly, 30 states had significant increases in the percentages of students receiving moderate emphasis in geometry and 24 had decreases in the percentages of students receiving little or no emphasis in geometry. percentage of eighth graders receiving instructional emphasis in algebra and functions also increased in some states between 1990 and 1992. The District of Columbia and Louisiana showed significantly greater percentages of students receiving heavy instructional emphasis and 11 other jurisdictions reported significantly greater percentages of students receiving moderate emphasis in algebra and functions. Despite these shifts, however, an emphasis in numbers and operations remains central to the curriculum even at grade 8. In 1992, most eighth graders across the states and territories — from 57 to 86 percent — were receiving heavy instructional emphasis in numbers and operations.



As shown in TABLE A.43, 11 of the states and territories had increased percentages of eighth graders receiving instructional emphasis in reasoning, and seven had increased percentages receiving heavy instructional emphasis in communication — two areas emphasized in the NCTM Standards.

Among other areas of interest it can be noted that 15 jurisdictions had a significant decrease in the percentage of their eighth graders assigned to ability groups for instruction in mathematics (TABLE A.51), 30 jurisdictions reported an increase in the percentage of students asked to do mathematics problems from their textbooks on a daily basis (TABLE A.52), and 29 jurisdictions reported an increase in the percentage of students being afforded unrestricted use of calculators in their mathematics classes (TABLE A.76).

## A Note on Interpretations

The selection of background questions included in the NAEP mathematics assessment was guided by the NAEP 1992 Background Questionnaire Framework.\(^1\) In developing the framework, the committee of policy analysts and researchers considered the wide body of available research about factors including student learning as well as the particular purposes and strengths of NAEP data collection. In contrast to other questionnaires, which may ask for detailed information on a small set of topics, the 1992 NAEP questionnaires attempted to include a few well-targeted questions addressing a wide variety of topics. NAEP always has been sensitive to its voluntary nature and the burden it places on respondents. A deliberate effort has been made to curtail the questionnaires to about 15 to 30 minutes for any one respondent. (Students, of course, also spend approximately an hour on the achievement portion of the assessment.) Thus, a limited pool of questions was included in the assessment and the results necessarily must be considered in light of ongoing research about instructional practices.

When there are constraints, choices need to be made. In selecting the background questions associated with NAEP's 1992 mathematics assessment, three goals were kept in mind:

 to provide an educational context for understanding data on student achievement



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<sup>&</sup>lt;sup>1</sup> National Assessment of Educational Progress, 1992 Background Questionnaire Framework (Princeton, NJ: National Assessment of Educational Progress, Educational Testing Service, 1992).

- to identify differences in access to instruction and distribution of services for various types of students
- to track changes in policy-relevant variables across time

As much as possible, this report presents data in an attempt to address these goals. The survey data collected by NAEP can be used to monitor trends in key areas, while ongoing research can be used to determine the classroom contexts that best foster achievement. NAEP is able to ask questions that collect information about whether schools are implementing those strategies that research has found to be most effective in helping students learn.

Because NAEP's is the only comprehensive set of data about school mathematics regularly collected at the national level, the NAEP information from teacher and student questionnaires has served the mathematics education community in a number of ways over the past 20 years. Topics of interest in this appendix include patterns in curricular emphasis and the use and impact of hand calculators as well as profiles of teachers' mathematical and pedagogical backgrounds. It also presents information on changes in the testing and assessment practices of teachers.

It is unwise, however, to rely too heavily on responses to any single question. Also, particularly given the reform environment, there undoubtedly is some inherently ambiguous language in the questions. Different terms have different meaning to different people, and these alternate understandings can be further pronounced depending on differences in contexts and environments. Still, the data can be used to point practitioners toward examining their own program in greater detail. Perhaps more than anything, the data from the NAEP questionnaires can provide educators with a basis to confirm or illuminate patterns observed at the local level. They provide a back-up litmus test for checking the reasonableness of local findings. They also provide a source of questions and approaches for examining local policy issues, conducting local studies, and creating local initiatives to change practice.

Because of their basis in research, the NAEP survey results often help to confirm our understanding of how school and instructional factors relate to achievement. Although the effects of schooling and instruction are of prime concern, these analyses do not reveal the underlying relationships between background factors and performance. Associations between NAEP background factors and mathematics achievement must necessarily be interpreted cautiously given the correlational nature of NAEP data and the complexity of the context in



which learning takes place. For example, associations may result because of differential instruction in which teachers tailor what they do based on their perceptions of students' abilities. That is, some instructional strategies may be more effective or appropriate for high-achieving students, while others are more suitable for lower-achieving students. In particular, various remedial techniques are often associated with lower average proficiency — not because these strategies in any way cause lower achievement, but because the poorer-performing students need special assistance.

Relationships between average proficiency and contextual variables are also affected by socioeconomic factors, which make it easier for wealthy school districts to hire better educated and more experienced teachers, and to provide more instructional materials than poorer districts. Poorer districts also have to contend with poverty and its attendant social problems, which, in turn, tend to depress student achievement.

In considering the findings reported herein, the reader should keep firmly in mind the high degree of interrelatedness among all the factors involved. It is impossible to ascribe cause and effect to a single variable; no single variable by itself will result in higher achievement. The NAEP assessment results are most useful when they are considered in light of other knowledge about the education system, such as trends in instructional reform, changes in the school age population, and societal demands and expectations. Throughout this report, references are provided to assist the reader in finding additional related information about the topics covered.

#### Acknowledgments

The data presented herein reflect a culmination of effort by hundreds of individuals who contributed their considerable expertise, energy, and creativity to NAEP's mathematics assessments, from developing and conducting the assessments to analyzing and reporting the results. NAEP's Trial State Assessment Program benefited from the contributions of numerous individuals at the state and local levels — Governors, Chief State School Officers, State and District Test Directors, State Coordinators, and district administrators — who tirelessly provided their wisdom, experience, and hard work. Most importantly, NAEP is grateful to the students and school staff who made the assessments possible. Special appreciation also is expressed to Robert Patrick and David Freund of Educational Testing Service, who designed and implemented the state-by-state table generation system. Sharon Davis-Johnson provided the excellent desktop publishing skills essential to the project.



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# Demographic Characteristics of Schools



#### TABLE A.1

## Average Mathematics Proficiency for the States and for the Top-Performing One-Third Schools and the Bottom-Performing One-Third Schools

	<del></del>	Grade 4	l - 1992		
<u> </u>		Top One-Th	ird Schools	Bottom One-T	hird Schools
PUBLIC SCHOOLS	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	217 (0.8)	44 (2.9)	234 (0.9)	23 (1.6)	192 (1.0)
Northeast	223 (2.1)	59 (6.7)	236 (2.1)	24 (3.8)	194 (2.1)
Southeast	209 (1.9)	21 (5.2)	234 (2.8)!	38 (4.3)	192 (1.9)
Central	222 (2.2)	56 (8.3)	233 (1.2)	12 (3.3)	190 (3.2)!
West	217 (1.6)	43 (4.4)	232 (1.9)	20 (2.6)	190 (1.3)
STATES	,	` ,			
Alabama	207 (1.6)	34 (5.2)	225 (1.8)	32 (4.5)	188 (1.1)
Arizona	214 (1.1)	35 (2.9)	230 (1.0)	35 (3.7)	197 (1.6)
Arkansas	209 (0.9)	33 (3.7)	222 (1.5)	32 (3.7)	194 (1.5)
California	207 (1.6)	34 (4.8)	228 (1.5)	31 (3.9)	183 (2.2)
Colorado	220 (1.0)	35 (4.0)	234 (1.0)	32 (3.3)	205 (1.0)
Connecticut	226 (1.2)	36 (3.9)	242 (1.1)	30 (3.2)	203 (2.4)
Delaware	217 (0.8)	31 (0.2)	228 (1.9)	40 (0.3)	207 (1.4)
Dist. Columbia	191 (0.5)	30 (0.2)	211 (0.9)	38 (0.3)	175 (0.8)
Florida	· · · · · · · · · · · · · · · · · · ·	34 (4.4)	229 (1.3)	33 (4.0)	194 (1.9)
	212 (1.5)	32 (4.2)	234 (1.2)	36 (3.4)	196 (1.2)
Georgia Hawaii	214 (1.3)	32 (4.2) 32 (4.1)	229 (1.1)	34 (4.6)	197 (1.4)
idaho	213 (1.3) 220 (1.0)	33 (4.4)	231 (1.1)	34 (5.2)	211 (1.2)
	. ,	, ,	` ,	` '	
Indiana	220 (1.1)	34 (4.5)	232 (0.7)	33 (4.6)	206 (1.2)
lowa	229 (1.1)	34 (4.7)	240 (0.8)	33 (4.1)	217 (1.2)
Kentucky	214 (1.0)	35 (3.5)	226 (1.0)	32 (3.6)	201 (0.9)
Louisiana	203 (1.4)	36 (4.1)	221 (1.4)	33 (4.1)	181 (2.1)
Maine	231 (1.0)	31 (4.8)	241 (1.3)	34 (5.7)	221 (0.9)
Maryland	216 (1.3)	32 (3.5)	236 (1.3)	35 (3.6)	195 (2.1)
Massachusetts	226 (1.2)	37 (4.4)	241 (1.2)	28 (3.8)	203 (1.9)
Michigan	219 (1.8)	34 (5.2)	236 (1.4)	33 (4.4)	197 (2.9)
Minnesota	227 (0.9)	31 (4.1)	239 (0.9)	38 (4.7)	217 (1.4)
Mississippi	200 (1.1)	31 (2.9)	218 (1.1)	36 (3.4)	183 (1.6)
Missouri	221 (1.2)	38 (4.6)	234 (1.1)	32 (3.9)	204 (1.9)
Nebraska	224 (1.3)	34 (4.8)	238 (1.0)	33 (4.4)	209 (1.1)
New Hampshire	, ,	33 (5.0)	241 (1.4)	32 (4.6)	215 (1.1)
New Jersey	229 (1.2)	37 (4.5)	243 (1.3)	31 (3.1)	202 (2.7)
New Mexico	226 (1.5)	34 (5.2)	227 (1.5)	35 (5.3)	197 (1.4)
New York	212 (1.5)	34 (3.2) 32 (3.6)	235 (1.2)	37 (4.6)	198 (2.1)
North Carolina	217 (1.3)	34 (4.1)	227 (1.3)	34 (4.5)	197 (1.0)
North Dakota	211 (1.1)	34 (4.4)	237 (0.9)	34 (3.9)	218 (0.9)
	228 (0.8)			• •	
Ohio	217 (1.2)	34 (3.9)	234 (1.1)	29 (3.6)	199 (1.9)
Oklahoma	219 (1.0)	37 (4.5)	230 (1.1)	30 (3.8)	207 (1.2)
Pennsylvania	223 (1.4)	33 (4.5)	240 (1.2)	30 (3.9)	202 (2.2)
Rhode Island	214 (1.6)	35 (4.9)	231 (1.4)	32 (4.1)	192 (2.4)
South Carolina	211 (1.1)	36 (4.2)	226 (1.1)	31 (3.7)	194 (1.4) 193 (1.8)
Tennessee	209 (1.4)	34 (4.1)	225 (1.3)	33 (4.4)	193 (1.8)
Texas	217 (1.3)	37 (4.7)	231 (1.7)	33 (3.8)	200 (1.5)
Utah	223 (1.0)	32 (4.1)	235 (0.9)	35 (4.7)	211 (1.1)
Virginia	220 (1.3)	35 (4.2)	239 (1.6)	34 (3.6)	202 (1.2)
West Virginia	214 (1.1)	35 (4.0)	225 (1.5)	33 (4.0)	202 (1.1)
Wisconsin	228 (1.1)	34 (5.0)	238 (1.2)	32 (4.5)	214 (1.5)
Wyoming	224 (1.0)	30 (4.0)	234 (0.9)	37 (5.0)	215 (1.2)
TERRITORY	, ,			48 48 41	400 (4.5)
Guam	191 (0.8)	33 (0.1)	202 (1.5)	37 (0.2)	180 (1.5)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Trial State Mathematics Assessment.

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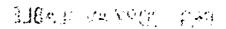
#### TABLE A.1

## Average Mathematics Proficiency for the States and for the Top-Performing One-Third Schools and the Bottom-Performing One-Third Schools (continued)

	Grade 8 - 1992									
nue ic		Top One-Th	ird Schools	Bottom One-T	hird Schools					
PUBLIC SCHOOLS	Average Proficiency	Percentage of Average Students Proficien		Percentage of Students	Average Proficiency					
NATION	266 (1.0)	39 (4.1)	284 (1.2)	25 (1.9)	240 (1.4)					
Northeast	267 (3.0)	45 (9.0)	285 (3.5)	29 (3.8)	237 (2.6)					
Southeast	258 (1.2)	9 (4.4)	284 (1.6)!	37 (5.5)	1 :					
Central	273 (2.2)	59 (8.2)			242 (2.8)					
West	267 (2.1)	45 (9.6)	284 (1.5)	14 (2.6)	240 (3.6)					
STATES	201 (2.1)	45 (9.6)	282 (2.0)!	20 (3.7)	240 (1.7)					
Alabama	054 (4.7)	22 ( . 2)								
Arizona	251 (1.7)	32 (4.6)	269 (1.8)	36 (4.7)	234 (2.9)					
Arkansas	265 (1.3)>	37 (4.5)	279 (1.5)>	32 (3.7)	247 (2.0)>					
	255 (1.2)	32 (3.9)	270 (1.1)	33 (4.1)	240 (1.4)					
California	260 (1.7)	34 (4.4)	281 (1.9)>	33 (4.1)	236 (2.0)					
Colorado	272 (1.1)>	34 (4.1)	286 (1.3)>	34 (4.0)	257 (1.3)>					
Connecticut	273 (1.1)>	<b>34</b> (3.1)	293 (0.9) >	36 (3.2)	251 (2.1)					
Delaware	262 (1.0)	29 (0.2)>>	273 (1.8)	41 (0.2)≪	255 (1.3)>					
Dist. Columbia	234 (0.9)>	32 (0.6)>>	255 (1.8)	38 (0.4)	219 (1.1)					
Florida	259 (1.5)	36 (4.1)	276 (1.4)>	34 (3.8)	241 (2.4)					
Georgia	259 (1.2)	34 (4.6)	275 (1.3)		3 3					
Hawaii	257 (0.9) >>	37 (0.3) <b>«</b>	, , , , , , , , , , , , , , , , , , ,	34 (3.9)	242 (1.3)					
Idaho	274 (0.8)>	29 (3.9)	270 (1.2) <i>&gt;</i> > 283 (1.0) <i>&gt;</i>	31 (0.3)≪ 34 (3.5)	241 (1.3) <b>»</b> 266 (1.1)>					
Indiana	269 (1.2)	34 (5.3)	283 (1.3)	` '	• •					
lowa	283 (1.0) >>	32 (4.6)	3 7	32 (3.6)	254 (1.6)					
Kentucky	, ,	` <i>,</i>	293 (1.0)	33 (4.6)	272 (1.1)>					
Louisiana	261 (1.1)>	33 (4.7)	275 (1.4)>	36 (4.6)	250 (1.1)					
Maine <sup>1</sup>	249 (1.7)	33 (4.9)	268 (1.9)>	32 (4.2)	229 (2.1)					
i i	278 (1.0)	30 (4.6)	289 (1.6)	37 (4.7)	269 (1.1)					
Maryland	264 (1.3)	32 (4.0)	286 (1.5)	34 (3.4)	241 (2.6)					
Massachusetts <sup>1</sup>	272 (1.1)	35 (4.3)	289 (1.5)	33 (3.3)	251 (1.7)					
Michigan	267 (1.4)	35 (5.1)	285 (1.7)	33 (3.4)	242 (1.9)					
Minnesota	282 (1.0)>>	35 (4.8)	291 (1.0)>>	33 (5.5)	272 (1.1) >>					
Mississippi <sup>1</sup>	246 (1.2)	34 (4.8)	262 (1.1)	33 (2.9)	228 (1.1)					
Missouri <sup>1</sup>	270 (1.2)	31 (4.6)	282 (0.8)	34 (4.8)	1 1					
Nebraska	277 (1.1)	27 (4.7)	291 (1.2)	39 (4.7)	257 (2.0) 266 (1.3)>					
New Hampshire	278 (1.0)>>	29 (4.3)	287 (1.5)	35 (4.1)	, ,					
New Jersey	271 (1.6)	30 (3.4)		, ,	268 (1.0)>>					
New Mexico	259 (0.9)>		293 (1.2)>	34 (4.1)	245 (3.2)					
New York		31 (4.0)	273 (1.1)	29 (3.3)	245 (1.2) >					
North Carolina	266 (2.1)	30 (3.8)	288 (1.3)**	39 (4.8)	241 (3.9)					
North Dakota	258 (1.2)**	34 (4.8)	270 (1.2) >>	33 (4.9)	244 (1.5) >>					
	283 (1.2)	26 (4.0) <	293 (1.5)	37 (4.3)	275 (1.4)					
Ohio Oklahoma	267 (1.5)	34 (5.2)	284 (1.6)>	31 (4.4)	246 (2.1)					
	267 (1.2)>	32 (4.5)	280 (1.1)	35 (5.0)	255 (1.5)>					
Pennsylvania	271 (1.5)	36 (4.5)	286 (1.3)	33 (4.0)	253 (2.1)					
Rhode Island	265 (0.7) <b>&gt;&gt;</b>	31 (0.2)	280 (1.0)	32 (0.1) <b>«</b>	247 (1.4)					
South Carolina <sup>1</sup>	260 (1.0)	33 (3.5)	276 (1.2)	33 (3.7)	244 (1.2)					
Tennessee <sup>1</sup>	258 (1.4)	33 (4.3)	272 (1.4)	33 (4.6)	243 (1.8)					
Texas	264 (1.3)>	36 (4.2)	282 (1.5)>>	33 (4.0)	246 (1.1)>					
Utah¹	274 (0.7)	32 (3.9)	283 (0.9)	35 (4.3)	265 (0.8)					
Virginia	267 (1.2)	33 (4.3)	285 (1.5)	34 (4.2)	, ,					
West Virginia	258 (1.0)	32 (4.9)	, ,		248 (1.2)>					
Wisconsin	277 (1.5)		269 (1.0)	33 (5.0)	248 (1.1) >					
Wyoming		39 (5.0)	289 (1.1)	31 (4.3)	261 (2.3)					
ERRITORIES	274 (0.9)>	28 (3.1)	283 (1.4)	29 (3.4)	265 (1.8)					
Guam	234 (1.0)>	13 (0.2) <<	244 (3.2)	45 (0.3)	229 (1.8)					
Virgin Islands	222 (1.1)>	28 (0.2) <<	232 (1.3)	52 (0.1)»	214 (1.3)>					

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. (The value for 1992 was significantly lower than the value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.





## . TABLE A.2

## Average Mathematics Proficiency by Race/Ethnicity and Type of Community

	Grade 4 - 1992									
	White		Bla	ick	Hisp	anic	Asian / Pac	fic Islander	America	n Indian
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION Northeast Southeast Central West	69 (0.4) 71 (2.9) 61 (2.5) 80 (1.8) 64 (1.7)	226 (1.0) 232 (2.4) 219 (2.2) 228 (1.8) 225 (1.8)	17 (0.4) 17 (2.7) 30 (2.6) 12 (1.7) 10 (1.7)	191 (1.4) 194 (3.1) 190 (2.0) 192 (4.3) 188 (2.7)	10 (0.2) 8 (1.2) 6 (1.0) 6 (0.8) 17 (1.6)	199 (1.5) 200 (3.2) 198 (3.4) 198 (3.3) 200 (2.0)	3 (0.3) 2 (0.7) 1 (0.3) 1 (0.2) 5 (1.0)	232 (2.6) *** (***) *** (***) *** (***) 232 (3.2)	2 (0.2) 1 (0.3) 1 (0.3) 1 (0.3) 2 (0.3)	208 (3.5) *** (***) *** (***) *** (***)
STATES Alabama Arizona Arkansas California Colorado Connecticut	61 (2.5) 56 (2.1) 69 (1.5) 45 (2.0) 68 (1.5) 73 (1.4)	218 (1.6) 225 (0.8) 217 (1.0) 220 (1.8) 227 (1.1) 234 (0.9)	32 (2.3) 4 (0.7) 21 (1.4) 6 (0.7) 5 (1.0) 10 (1.1)	187 (1.1) 198 (3.6) 187 (1.7) 182 (3.3) 199 (2.9) 193 (2.7)	4 (0.6) 29 (1.5) 6 (0.6) 35 (1.7) 22 (1.3) 13 (1.1)	192 (4.0) 202 (1.3) 193 (2.9) 190 (1.6) 205 (1.5) 204 (2.8)	1 (0.2) 1 (0.2) 1 (0.2) 11 (1.1) 3 (0.3) 2 (0.4)	*** (***) *** (***) *** (***) 223 (2.7) 222 (4.4) *** (***)	2 (1.0) 10 (1.7) 3 (0.4) 3 (0.5) 3 (0.3) 1 (0.2)	191 (3.5) 210 (3.7) 207 (6.7) 214 (4.5)
Delaware Dist. Columbia Florida Georgia Hawaii Idaho	66 (1.1) 5 (0.4) 58 (2.2) 56 (2.2) 21 (1.6) 84 (1.2)	226 (0.9) 241 (4.2) 223 (1.4) 228 (1.2) 218 (1.8) 223 (1.0)	23 (0.9) 82 (0.6) 21 (2.0) 35 (2.1) 4 (0.6) 1 (0.2)	196 (1.4) 189 (0.7) 189 (2.0) 195 (1.4) 198 (3.3)	8 (0.4) 10 (0.4) 17 (1.3) 6 (0.6) 11 (0.7) 11 (1.0)	197 (2.6) 181 (2.3) 205 (2.5) 196 (2.7) 197 (2.6) 202 (2.4)	1 (0.2) 1 (0.2) 2 (0.4) 1 (0.2) 61 (2.1) 1 (0.2)	*** (***) *** (***) *** (***) *** (***) 215 (1.6) *** (***)	2 (0.4) 2 (0.3) 2 (0.3) 1 (0.3) 2 (0.3) 3 (0.3)	*** (***) *** (***) *** (***) *** (***) 212 (3.0)
Indiana Iowa Kentucky Louisiana Maine Maryland	82 (1.5) 90 (0.9) 85 (1.6) 50 (2.0) 91 (0.7) 59 (1.7)	224 (0.9) 231 (1.0) 216 (1.0) 217 (1.5) 232 (1.1) 228 (1.2)	10 (1.3) 2 (0.5) 9 (1.3) 43 (2.0) 1 (0.1) 30 (1.4)	194 (2.4) 193 (3.9)! 200 (2.5) 186 (1.7) *** (***) 193 (1.9)	5 (0.6) 5 (0.5) 4 (0.6) 5 (0.6) 5 (0.6) 6 (0.6)	208 (2.0) 218 (2.6) 197 (3.0) 199 (4.3) 218 (3.6) 205 (3.6)	1 (0.2) 1 (0.3) 1 (0.2) 2 (0.7) 1 (0.2) 4 (0.5)	*** (***) *** (***) *** (***) *** (***) 235 (3.8)	1 (0.3) 2 (0.3) 2 (0.3) 1 (0.3) 3 (0.5) 2 (0.2)	*** (***) *** (***) *** (***) *** (***)
Massachusetts Michigan Minnesota Mississippi Missouri Nebraska	79 (1.6) 73 (1.8) 85 (1.3) 40 (2.0) 77 (1.7) 84 (1.3)	231 (1.0) 227 (1.5) 231 (0.9) 217 (1.3) 227 (1.1) 228 (1.2)	7 (0.8) 13 (1.7) 3 (0.5) 52 (2.1) 14 (1.7) 6 (0.7)	192 (3.1) 184 (3.9) 192 (3.1) 188 (1.3) 194 (2.2) 188 (2.5)	8 (0.8) 9 (0.9) 7 (0.8) 6 (0.9) 6 (0.5) 7 (0.9)	205 (2.7) 204 (2.6) 206 (2.9) 184 (2.9) 206 (3.2) 209 (3.2)	4 (0.7) 2 (0.3) 2 (0.4) 1 (0.2) 1 (0.2) 1 (0.2)	228 (8.0) *** (***) *** (***) *** (***) *** (***) *** (***)	2 (0.2) 3 (0.4) 2 (0.3) 1 (0.2) 2 (0.4) 2 (0.3)	210 (4.0) (***) (***) (***) (***)
New Hampshire New Jersey New Mexico New York North Carolina North Dakota	89 (1.2) 66 (2.2) 44 (2.4) 59 (2.2) 62 (1.7) 91 (1.0)	230 (1.1) 236 (1.3) 224 (1.5) 228 (1.4) 222 (1.1) 229 (0.8)	1 (0.2) 14 (1.2) 4 (0.5) 13 (1.6) 29 (1.3) 0 (0.2)	197 (2.6) 201 (3.9) 198 (2.7) 191 (1.3)	5 (0.6) 14 (1.5) 47 (2.0) 22 (1.7) 6 (0.7) 4 (0.6)	214 (2.7) 205 (2.6) 202 (1.5) 198 (2.3) 198 (4.2) 213 (3.6)	1 (0.2) 5 (0.8) 1 (0.3) 4 (0.8) 1 (0.2) 1 (0.2)	240 (3.0) *** (***) 235 (4.4)! *** (***)	3 (0.3) 1 (0.3) 4 (1.3) 2 (0.4) 3 (0.9) 4 (0.8)	*** (***) *** (***) 206 (2.9)! *** (***) 202 (4.9)! 211 (3.2)!
Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee	79 (1.5) 73 (1.5) 77 (1.6) 78 (2.1) 55 (1.7) 69 (2.1)	221 (1.1) 223 (1.0) 230 (1.2) 221 (1.3) 224 (1.2) 217 (1.2)	11 (1.2) 9 (1.2) 12 (1.6) 6 (1.0) 37 (1.8) 23 (1.9)	193 (3.0) 200 (2.6) 192 (2.5) 189 (3.4) 193 (1.1) 191 (1.9)	6 (0.5) 7 (0.8) 7 (0.8) 11 (1.1) 6 (0.8) 5 (0.8)	206 (3.3) 208 (2.5) 203 (2.3) 188 (2.8) 198 (2.7) 191 (4.2)	1 (0.3) 1 (0.2) 2 (0.4) 3 (0.4) 1 (0.2) 1 (0.4)	*** (***) *** (***) *** (***) 191 (4.3) *** (***) *** (***)	2 (0.4) 10 (0.8) 1 (0.3) 2 (0.3) 1 (0.3) 1 (0.2)	216 (4.2) 211 (2.0) *** (***) *** (***) *** (***)
Texas Utah Virginia West Virginia Wisconsin Wyoming	49 (1.8) 86 (1.0) 67 (1.4) 90 (0.9) 81 (1.4) 82 (1.4)	228 (1.7) 225 (1.0) 228 (1.5) 215 (1.0) 233 (0.9) 227 (0.9)	14 (1.8) 1 (0.2) 23 (1.3) 3 (0.4) 6 (1.0) 1 (0.2)	197 (2.0) 196 (1.5) 202 (4.4) 194 (2.9) *** (***)	34 (2.3) 10 (0.8) 5 (0.6) 5 (0.8) 7 (0.7) 11 (0.9)	207 (1.9) 208 (2.2) 211 (3.4) 202 (3.0) 211 (3.0) 214 (1.8)	2 (0.4) 2 (0.3) 3 (0.4) 1 (0.2) 2 (0.5) 1 (0.2)	234 (4.5) *** (***) 236 (4.6) *** (***) *** (***)	1 (0.2) 2 (0.3) 1 (0.3) 2 (0.2) 3 (1.1) 5 (1.2)	*** (***) *** (***) *** (***) *** (***) 206 (8.0)! 211 (4.0)!
TERRITORY Guam	12 (0.7)	205 (2.0)	4 (0.4)	183 (5.4)	20 (0.8)	179 (2.1)	62 (1.0)	193 (1.2)	2 (0.4)	*** (***)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. The percentages for race/ethnicity may not add to 100 percent because some students categorized themselves as "other." When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Trial State Mathematics Assessment.



TABLE A.2 | Average Mathematics Proficiency by Race/Ethnicity and Type of Community (continued)

	Grade 8 - 1992									
	Wh	ite	Bla	ıck	Hisp	anic	Asian / Pac	ific Islander	America	n Indian
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency								
NATION	69 (0.4)	276 (1.1)	16 (0.2)	236 (1.3)	10 (0.3)	245 (1.3)	2 (0.2)	287 (6.6)	1 (0.2)	254 (2.0)
Northeast	67 (2.6)	279 (3.3)	19 (1.5)	239 (3.8)	10 (1.7)	241 (3.8)	2 (0.5)	207 (0.0)	, ,	254 (2.9)
Southeast	68 (1.8)	269 (1.2)	27 (1.8)	233 (1.7)	4 (0.7)	240 (2.8)!	` '	*** }***	1 (0.3)	*** (***)
Central	79 (2.0)	280 (2.0)	13 (1.9)	239 (3.5)	5 (0.8)		1 (0.3)	*** (***)	1 (0.2)	*** (***)
West	63 (1.5)	277 (2.4)	8 (1.3)	234 (3.5)	21 (1.7)	246 (4.2) 246 (1.6)	2 (0.5)	( )	1 (0.4)	*** (***)
STATES	35 (,	2.1 (2.4)	0 (1.5)	204 (5.5)	21 (1.7)	240 (1.0)	5 (0.8)	286(11.3)	2 (0.7)	()
Alabama	61 (2.3)	264 (1.4)	32 (2.1)	231 (2.2)	4 (0.6)	220 (5.3)	4 (0.0)	*** /***\	0 (0 4)	*** /***)
Arizona	60 (2.1)	275 (1.1)>		251 (2.2)	28 (1.6)	,,	1 (0.2)	*** (***)	2 (0.4)	\ /
Arkansas	72 (1.4)	265 (1.0)	22 (1.3)	230 (1.9)	, ,	247 (2.7)	2 (0.3)	*** (***)	6 (1.3)	251 (2.7)
California	44 (1.8)	276 (1.9)	7 (1.1)		4 (0.4)	228 (4.1)	1 (0.2)	\ /	1 (0.2)	(. )
Colorado	74 (1.2)	278 (1.0)>	, ,		36 (1.7)	240 (2.0)	11 (1.0)	276 (2.9)	1 (0.2)	*** (***)
Connecticut	72 (1.6)	283 (0.9)	` '	241 (4.4)	18 (1.1)	254 (1.7)>		*** (***)	2 (0.3)	*** (***)
	, ,	203 (0.9)	12 (1.1)	242 (2.9)	12 (0.9)	241 (2.4)	3 (0.4)	287 (8.0)	0 (0.1)	*** (***)
Delaware	65 (0.9)	272 (1.0)>	25 (1.1)	241 (1.8)	6 (0.6)	239 (3.4)	2 (0.3)	*** (***)	2 (0.3)	*** (***)
Dist. Columbia	3 (0.2)	*** (***)	85 (O.8)	233 (0.9)	10 (0.7)	225 (3.8)	1 (0.2)	*** }***{	1 (0.3)	*** }***
Florida	56 (2.1)	273 (1.3) >>	23 (2.0)	236 (2.3)	18 (2.0)	245 (2.5)	2 (0.3)	*** }***{	1 (0.2)	*** }***
Georgia	59 (2.1)	270 (1.3)	35 (1.9)	241 (1.3)	4 (0.5)	233 (5.5)	2 (0.3)	*** }***	0 (0.1)	*** }***(
Hawaii	17 (0.9)	265 (1.6)	3 (0.3)	*** (***)	11 (0.7)	238 (2.2)	66 (1.1)	259 (1.1)		*** /***
ldaho	88 (0.7)	277 (0.8)>		*** (***)	8 (0.6)	253 (2.3)	1 (0.2)	*** (***)	, ,,	( )
Indiana	i ' '					200 (2.0)	1 (0.2)	( )	3 (0.4)	259 (4.2)
lowa	85 (1.3)	273 (1.2)	8 (1.1)	243 (2.6)	4 (0.6)	249 (4.6)	1 (0.2)	*** (***)	1 (0.2)	*** (***)
Kentucky	92 (0.7)	284 (1.0)>	, ,	*** (***)	4 (0.4)	261 (3.8)	1 (0.2)	*** (***)	1 (0.2)	*** (***)
	87 (1.0)	264 (1.1)>		241 (2.6)	3 (0.4)	231 (4.6)	1 (0.2)	*** (***)	1 (0.2)	*** (***)
Louisiana	54 (1.7)	263 (1.7)	39 (1.5)	232 (2.2)	5 (0.5)	228 (3.5)	2 (0.4)	*** (***)	1 (0.2)	*** (***)
Maine <sup>1</sup>	94 (0.5)	279 (1.0)	0 (0.1)	*** (***)	2 (0.3)	*** (***)	1 (0.2)	*** (***)	3 (0.4)	261 (4.5)
Maryland	60 (1.8)	278 (1.5)	29 (1.8)	239 (2.0)	6 (0.6)	240 (3.3)	3 (0.5)	287 (4.7)	1 (0.2)	*** (***)
Massachusetts1	83 (1.1)	277 (1.1)	5 (1.0)	243 (5.0)	8 (1.5)	040 (0.4)	0 (0 4)	*** (***)		*** (***)
Michigan	73 (1.6)	276 (1.5)>	18 (1.9)	232 (1.8)	, ,	240 (3.4)	2 (0.4)	*** (***)	1 (0.2)	( )
Minnesota	91 (1.0)	284 (1.0)>>		*** (***)	5 (0.8)	248 (4.0)	1 (0.3)	*** (***)	2 (0.3)	( )
Mississippi <sup>1</sup>	49 (1.9)	262 (1.4)	44 (1.8)	( )	3 (0.5)	253 (3.8)>	, ,	\	1 (0.4)	( )
Missouri <sup>1</sup>	82 (1.5)	275 (1.0)		230 (1.4)	6 (0.6)	223 (3.1)	0 (0.1)	( )	1 (0.2)	**** (****)
Nebraska	87 (1.1)	281 (1.1)	12 (1.4)	241 (2.9)	3 (0.3)	251 (4.2)	1 (0.2)	*** (***)	2 (0.3)	*** (***)
	07 (1.1)	201 (1.1)	5 (0.9)	236 (4.7)	6 (0.7)	254 (3.1)	1 (0.2)	*** (***)	2 (0.4)	*** (***)
New Hampshire	91 (1.6)	278 (0.9)>	1 (0.2)	*** (***)	3 (0.3)	258 (5.1)	1 (0.2)	*** (***)	1 (0.2)	*** (***)
New Jersey	61 (2.5)	283 (1.4)	17 (2.4)	242 (2.7)	14 (1.5)	247 (3.5)	6 (0.7)	297 (3.3)	1 (0.2)	*** }***
New Mexico	44 (1.5)	272 (1.2)	2 (0.4)	*** (***)	49 (1.4)	248 (1.1)	1 (0.3)	*** (***)	4 (0.7) «	249 (3.0)
New York	61 (2.7)	279 (1.1)>	17 (2.2)	232 (4.5)	14 (2.0)	243 (4.8)	4 (0.6)	281 (6.8)	1 (0.3)	*** (***)
North Carolina	68 (1.4)>	266 (1.0)>	27 (1.3)	238 (1.7)	3 (0.3) <	238 (4.7)>	1 (0.2)	*** (***)	2 (0.4)	*** /***
North Dakota	93 (0.8)	284 (1.2)	0 (0.1)	*** (***)	3 (0.3)	*** (***)	1 (0.2)	*** }***	3 (0.7)	261 (4.3)!
Ohio	80 (1.0)		` '	` '		` '		\ /		_ , , , , , , , ,
Oklahoma	80 (1.9) 75 (1.6)	274 (1.4)>	14 (1.7)	234 (2.3)	4 (0.5)	245 (4.6)	1 (0.2)	**** (***)	2 (0.3)	*** (***)
Pennsylvania	75 (1.6)	272 (1.0)	8 (1.1)	238 (3.0)	6 (0.6)	252 (3.2)	2 (0.3)	*** (***)	10 (1.0)	261 (3.2)
Rhode Island	83 (1.4)	276 (1.1)>	11 (1.6)	237 (4.6)	3 (0.7)	246 (3.9)!>	3 /	*** (***)	1 (0.3)	*** (***)
South Carolina <sup>1</sup>	81 (0.7)	271 (0.9)*	6 (0.6)	240 (2.9)>	8 (0.4)	232 (2.7)	3 (0.4)	264 (3.4)	2 (0.3)	*** (***)
Tennessee¹	58 (1.5)	273 (1.1)	35 (1.3)	241 (1.0)	6 (0.6)	233 (2.6)	1 (0.2)	*** (***)	1 (0.2)	*** (***)
. 5,11105566	75 (2.0)	266 (1.1)	21 (2.1)	234 (2.4)	3 (0.3)	227 (4.8)	0 (0.1)	*** (***)	1 (0.2)	*** (***)
Гехаѕ	48 (1.9)	279 (1.6)>	12 (1.6)	243 (2.0)>	36 (2.0)	248 (1.2)	3 (0.4)	301 (4.9)		*** (***)
Utah <sup>1</sup>	90 (0.9)	276 (0.8)	1 (0.2)	*** (***)	7 (0.6)	253 (2.3)	2 (0.3)	*** (***)	1 (0.3)	*** (***)
/irginia	69 (1.9)	275 (1.1)	22 (1.6)	244 (1.9)	5 (0.6)	254 (4.0)		١,	2 (0.2)	*** (***)
West Virginia	91 (0.9)	260 (1.0)	4 (0.8)	243 (3.7)	3 (0.8)		4 (0.5)	280 (4.0) <	1 (0.2)	( )
Wisconsin	86 (1.7)	282 (1.2)	7 (1.2)	246 (6.8)		230 (4.9)	0 (0.1)	*** (***)	2 (0.3)	
<b>Vyoming</b>	86 (1.7)	277 (0.8)>		*** (***)	4 (0.8)	246 (4.0)	1 (0.2) <		2 (0.6)	261 (6.0)!
ERRITORIES	00 (1.7)	211 (0.0)	1 (0.2)	()	9 (0.6)	257 (2.1)	1 (0.2)	*** (***)	4 (1.6)	250 (2.4)!
Guam	5 (0.5) <	266 (5.4)	1 (0.2)	*** (***)	15 10 01 -	049 (0.0)	70 /4 4\-	000 (4.4)	4 (5.4)	***
Virgin Islands	1 (0.4)	*** (***)	1 (0.3)	\ /	15 (0.9) <	218 (2.8)	76 (1.1)>	236 (1.1)	1 (0.1)	*** (***)
3	1 (0.4)	( )	77 (1.1)	224 (1.2)	21 (0.9)	213 (1.9)	0 (0.1)	*** (***)	0 (0.2)	*** (***)

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. "The value for 1992 was significantly lower than the value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.



## TABLE A.2 | Average Mathematics Proficiency by Race/Ethnicity and Type of Community (continued)

				Grade	4 - 1992			
	Advantage	ed Urban	Disadvanta	ged Urban	Extreme	Rural	Oth	ner
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	9 (1.8)	240 (3.0)!	10 (1.5)	193 (2.9)	13 (2.4)	216 (3.6)	67 (3.2)	218 (1.0)
Northeast	20 (5.5)	243 (3.3)!	16 (5.5)	206 (3.6)!	4 (1.2)	*** (***)	60 (8.0)	220 (2.4)
Southeast	5 (3.0)	240 (6.4)!	13 (3.5)	190 (4.4)!	19 (6.9)	203 (6.1)!	63 (7.6)	212 (2.0)
Central	5 (2.1)	235(13.4)!	9 (1.9)	188 (4.0)!	16 (3.4)	228 (3.7)!	70 (4.1)	224 (1.5)
West	8 (3.7)	239 (9.1)!	5 (1.3)	180 (7.4)!	13 (4.7)	216 (3.5)!	74 (5.7)	217 (1.9)
STATES	- (,	( /	` '	, ,				
Alabama	11 (3.1)	231 (5.1)!	13 (3.2)	192 (2.9)!	14 (4.0)	204 (3.8)!	62 (5.6)	208 (2.1)
Arizona	13 (3.9)	230 (3.4)!	10 (3.0)	209 (5.0)!	8 (3.3)	206 (5.0)!	69 (5.5)	212 (2.0)
Arkansas	1 (1.2)	*** (***)	6 (1.5)	195 (2.7)!	25 (4.1)	209 (2.6)	68 (4.7)	210 (1.4)
California	12 (2.5)	232 (2.7)!	23 (3.7)	187 (3.4)	1 (0.3)	*** (***)	65 (4.6)	210 (2.1)
Colorado	18 (3.2)	233 (1.6)	13 (2.9)	203 (2.6)!	13 (2.7)	218 (2.2)!	57 (5.0)	219 (1.5)
Connecticut	19 (4.2)	238 (2.3)!	15 (3.0)	196 (3.8)!	0 (0.0)	*** (***)	66 (5.0)	231 (1.4)
	l ' '				24 (0.1)	214 (1.0)	58 (0.3)	219 (1.1)
Delaware Dist. Columbia	10 (0.2)	218 (4.1)	8 (0.2)	207 (4.9)	0 (0.0)	214 (1.0) *** (***)	20 (0.3)	195 (1.6)
	20 (0.3)	212 (1.4)	60 (0.4)	185 (0.9)	3	207 (6.2)!	57 (4.5)	214 (1.5)
Florida	18 (4.4)	231 (2.8)!	21 (3.9)	193 (2.9)	4 (1.3)	215 (2.7)!	63 (6.2)	214 (1.9)
Georgia	10 (3.4)	239 (2.3)!	15 (4.6)	195 (3.1)!	12 (3.6)	- '	, ,	
Hawaii	12 (3.6)	227 (3.3)!	9 (1.8)	194 (3.1)!	5 (1.9)	207 (3.8)!	75 (4.3)	214 (1.6) 220 (1.5)
ldaho	9 (2.6)	235 (2.0)!	1 (0.9)	*** (***)	33 (4.9)	219 (1.2)	56 (5.5)	220 (1.5)
Indiana	8 (2.7)	235 (1.9)!	10 (2.8)	199 (3.4)!	15 (3.3)	223 (1.8)!	68 (4.9)	220 (1.3)
Iowa	7 (2.9)	241 (2.3)!	6 (2.5)	219 (4.6)!	41 (3.5)	229 (1.4)	46 (4.2)	229 (1.9)
Kentucky	6 (2.7)	233 (2.0)!	11 (2.7)	208 (4.1)!	24 (4.2)	215 (1.5)	60 (4.8)	212 (1.6)
Louisiana	5 (2.3)	226 (3.0)!	18 (2.5)	184 (3.9)	11 (2.7)	205 (4.4)!	65 (3.9)	205 (2.0)
Maine	2 (1.6)	*** (***)	2 (1.3)	*** (***)	19 (4.7)	231 (2.8)!	77 (4.9)	231 (1.4)
Maryland	20 (3.6)	231 (3.6)	16 (4.0)	191 (5.7)!	5 (2.1)	222 (3.2)!	59 (4.9)	216 (1.5),
Massachusetts	16 (3.4)	243 (3.0)!	14 (2.7)	200 (2.9)	1 (0.9)	*** (***)	68 (4.2)	229 (1.5)
Michigan	, ,	240 (3.3)!	15 (3.7)	190 (5.0)!	10 (3.6)	220 (3.3)!	65 (5.1)	224 (1.7)
Minnesota	10 (3.0)		3 (2.2)	*** (***)	29 (3.8)	226 (1.4)	56 (5.4)	226 (1.6)
Mississippi	12 (3.9)	237 (3.3)!	6 (1.9)	190 (3.2)!	11 (2.3)	204 (4.7)	82 (3.2)	200 (1.3)
Missouri	1 (1.1)	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	11 (2.9)	192 (4.3)!	26 (3.9)	222 (1.7)	53 (5.3)	223 (1.6)
Nebraska	9 (3.0)	239 (4.0)!	: :	205 (2.9)!	26 (3.9)	225 (2.8)	59 (4.8)	223 (1.8)
	8 (2.7)	238 (2.1)!	6 (1.4)	, ,			•	
New Hampshire	8 (3.5)	235 (3.0)!	1 (1.3)	*** (***)	4 (1.8)	232 (4.3)!	86 (4.0)	229 (1.4)
New Jersey	30 (4.3)	242 (1.8)	17 (3.3)	196 (4.3)!	1 (1.0)	\ _!	53 (5.0)	229 (1.7)
New Mexico	11 (5.7)	230 (2.5)!	9 (2.9)	198 (3.6)!	4 (2.0)	203 (6.5)!	77 (6.1)	210 (1.7)
New York	15 (3.7)	231 (2.7)!	24 (3.7)	199 (2.6)	2 (1.6)	, ,	58 (4.7)	222 (2.6)
North Carolina	5 (1.6)	233 (1.9)!	4 (1.9)	200 (6.0)!	19 (4.0)	208 (3.0)!	71 (4.6)	211 (1.4)
North Dakota	11 (3.1)	237 (2.6)!	2 (1.4)	*** (***)	43 (3.6)	226 (1.3)	44 (4.3)	226 (1.1)
Ohio	10 (2.6)	237 (2.3)!	18 (2.6)	197 (3.2)	17 (3.9)	216 (2.3)!	55 (4.8)	222 (1.6)
Oklahoma	9 (3.1)	230 (3.9)!	10 (2.6)	213 (3.8)!	21 (3.6)	220 (2.2)	60 (4.6)	219 (1.4)
Pennsylvania	15 (4.9)	237 (4.4)!	17 (3.4)	196 (3.7)	14 (3.8)	230 (1.5)!	54 (5.6)	226 (1.5)
Rhode Island	12 (4.0)	236 (3.0)!	24 (4.9)	192 (3.0)!	0 (0.0)	*** (***)	64 (5.7)	219 (1.9)
South Carolina	6 (2.2)	231 (3.3)!	6 (1.5)	195 (2.6)!	13 (3.1)	205 (2.9)!	74 (4.0)	212 (1.4)
Tennessee	6 (2.7)	228 (4.4)!	13 (3.6)	189 (3.4)!	10 (2.8)	206 (4.3)!	71 (4.6)	212 (1.6)
Texas	' '		21 (4.8)	208 (3.9)!	13 (3.3)	223 (2.7)!	56 (6.3)	214 (1.9)
Utah	10 (3.2)	242 (3.1)! 233 (2.0)	3 (1.7)	208 (3.5)!	7 (2.6)	220 (3.2)!	70 (4.4)	222 (1.3)
Virginia	20 (3.6)	* *	14 (3.1)	200 (2.5)!	13 (2.7)	212 (2.3)!	59 (4.7)	220 (2.2)
West Virginia	13 (3.1)	235 (3.5)!	8 (2.5)	200 (2.3)!	16 (3.6)	213 (2.2)!	75 (4.6)	214 (1.4)
Wisconsin	2 (1.4)	\ /			26 (5.0)	229 (1.8)	58 (5.3)	229 (1.4)
Wyoming	9 (2.6)	242 (4.1)!	7 (2.4)	206 (4.6)!		229 (2.1)	69 (4.5)	224 (1.3)
TERRITORY	7 (2.1)	232 (3.7)!	4 (1.8)	214 (2.5)!	20 (3.4)	223 (2.1)	03 (4.5)	227 (1.3)
Guam	0 (0.0)	*** (***)	0 (0.0)	*** (***)	19 (0.1)	183 (2.3)	81 (0.1)	195 (1.0)
J 34	0 (0.0)	\\\	<del></del>		.5 (0.1)	00 (2.0)	- (-,,	

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## TABLE A.2 | Average Mathematics Proficiency by Race/Ethnicity and Type of Community (continued)

	Grade 8 - 1992												
	Advantage	ed Urban	Disadvanta	ged Urban	Extreme	Rural	Oth	ner					
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency					
NATION	8 (2.2)	285 (4.6)!	9 (1.5)	239 (2.7)	10 (2.8)	267 (4.6)!	72 (3.5)	268 (1.2)					
Northeast	12 (6.5)	292 (6.7)!	12 (3.7)	234 (2.3)!	7 (4.8)	*** (***)	69 (8.2)	267 (2.9)					
Southeast	5 (3.5)	272 (2.2)!	9 (2.5)	238 (6.9)!	16 (7.2)			· -:					
Central	8 (2.4)	285 (7.0)!	9 (3.0)			, ,	69 (7.9)	260 (1.5)					
West				236 (5.6)!	9 (6.0)	281 (4.3)!	74 (6.9)	275 (1.9)					
STATES	7 (4.0)	284(11.2)!	9 (3.2)	246 (4.6)!	8 (4.0)	264 (5.2)!	76 (5.3)	268 (2.5)					
Alabama	4 (2.4)	261 (7.4)!	16 (3.5)	237 (4.9)!	15 (3.2)	254 (1.8)!	65 (4.7)	254 (2.4)					
Arizona	15 (5.3)	279 (3.8)!	14 (3.1)	251 (4.0)!	7 (2.2)	255 (8.7)!	64 (5.8)	264 (1.7)					
Arkansas	2 (1.4)	*** (***)	5 (1.9)	236 (6.9)!	16 (3.9)	261 (2.3)!	76 (4.4)	255 (1.3)					
California	8 (3.2)	290 (6.5)!	19 (3.2)	236 (3.5)	3 (1.9)	*** (***)	71 (5.1)	264 (1.9)>					
Colorado	18 (3.5)	283 (2.0)	10 (2.3)	253 (2.8)!	13 (2.9)								
Connecticut	10 (3.5) «	283 (4.9)!	17 (3.3)			272 (2.9)! *** (***)	60 (4.9)	272 (1.6)>					
_	10 (3.5)	203 (4.9):	17 (3.3)	243 (3.5)	0 (0.0)	()	72 (4.4)>	279 (1.6)**					
Delaware	0 (0.0)	*** (***)	0 (0.0)	*** (***)	11 (0.1) <<	263 (2.1)	89 (0.1)>>	262 (1.2)					
Dist. Columbia	7 (0.3) <<	252 (2.9)	67 (O.4)	225 (1.3)	0 (0.0)	*** (***)	25 (0.4)>>	252 (2.1)>>					
Florida	7 (2.9)	271 (5.2)!	17 (3.5)	249 (5.8)!	6 (2.1)	255 (5.5)!							
Georgia	6 (1.9)	274 (5.8)!	• •		, ,		69 (4.9)	261 (2.0)					
Hawaii	5 (0.1) *		10 (2.9)	247 (3.7)!	9 (2.2)	246 (1.4)!	74 (4.0)	260 (1.6)					
Idaho		255 (2.6) <<	16 (0.4)	240 (2.1)	1 (0.0)	( )	78 (0.4) >>	259 (1.4)*					
Idano	4 (2.2)	288 (3.5)!	5 (2.4)	279 (5.1)!	29 (4.3)	274 (1.8)>	62 (5.0)	274 (0.7)					
Indiana	5 (2.3)	286 (5.5)!	11 (2.4)	244 (2.0)!	13 (2.6)	260 (2.8)	74 (4.0)	070 (4.4)					
lowa	4 (2.3)	291 (7.2)!	3 (1.0)		· · ·	269 (2.8)	71 (4.3)	273 (1.4)					
Kentucky	3 (1.1)			271 (4.0)!	44 (5.4)	287 (1.5)>>	49 (5.7)	280 (1.4)					
Louisiana		286 (6.2)!>	12 (3.3)	252 (3.4)!	15 (3.7)<	262 (2.4)!>	70 (5.1) >	262 (1.5)					
	2 (1.6)	*** (***)	19 (3.2)	227 (3.9)	7 (3.0)	254 (3.7)!>>	72 (4.3)	253 (1.9)					
Maine	1 (1.5)	*** (***)	2 (1.6)	*** (***)	19 (4.1)	276 (1.8)!	78 (4.5)	278 (1.3)					
, Maryland	21 (3.8)	283 (3.4)	13 (3.5)	240 (7.3)!	3 (2.6)	*** (***)	63 (5.6)	266 (2.5)					
Massachusetts	7 (2.3)	200 (4.0))	00 (0.5)	047 (0.0)				` '					
Michigan		300 (4.9)!	23 (3.5)	247 (3.0)	1 (1.3)	*** (***)	69 (4.3)	277 (1.8)					
Minnesota	7 (3.0)	290 (8.5)!	19 (3.1)	237 (3.4)	14 (3.8)	273 (2.7)!	60 (5.2)	270 (1.5)					
	7 (3.6) <	290 (6.0)!	0 (0.0)	*** (***)	20 (4.2)	280 (2.1)!	72 (5.2) >	282 (1.4)					
Mississippi	3 (1.8)	*** (***)	6 (2.7)	240 (5.4)!	12 (3.1)	245 (4.2)!	79 (4.6)	245 (1.6)					
Missouri	7 (2.8)	278 (3.2)!	12 (2.4)	252 (5.1)!	13 (3.6)	270 (2.5)!	68 (4.8)	272 (1.3)					
Nebraska	0 (0.0)	*** (***)	6 (0.9)	250 (4.1)	28 (4.3)	281 (2.4)	66 (4.5)>	276 (1.4)>					
New Hampshire	4 (1.6) <	204 /2 0115	0 (0 0)	*** (***)	, ,		` '						
New Jersey	· · · · · · · · · · · · · · · · · · ·	294 (2.9)!>	0 (0.0)	( )	5 (2.3)	281 (2.1)!	92 (2.8)	277 (1.1)					
New Mexico	8 (2.8) **	296 (3.4)!	24 (3.3)	237 (3.3)	3 (2.3)	*** (***)	64 (4.7)	280 (1.5)>>					
New York	5 (0.2)	282 (2.3)	6 (2.6)	251 (3.1)!	6 (2.8)≪	258 (7.3)!	84 (3.8)>	259 (1.1)>					
l l	11 (3.3)	292 (3.5)!>	16 (5.1)	230 (4.8)!	10 (3.5)	277 (2.4)!	63 (6.7)	270 (2.8)					
North Carolina	3 (1.0)	281(12.8)!	5 (2.2)	243 (5.8)!	12 (3.8)	251 (3.7)!	80 (4.3)	258 (1.5)>					
North Dakota	8 (1.8)	286 (2.0)!	0 (0.0)	*** (***)	39 (4.1)	282 (1.8)	53 (3.9)	281 (1.4)					
Ohio	6 (2.7)	206 (4 8)15	47 (0.0)		` ,								
Oklahoma		296 (4.8)!>	17 (3.2)	247 (3.0)	21 (5.5)	277 (2.7)!>	56 (6.3)	269 (2.1)					
1	2 (1.8)	, ,	5 (2.5)	269 (2.7)!>>	19 (4.1)	265 (2.4)!	74 (5.1)	269 (1.5)					
Pennsylvania	4 (2.1) <	289 (5.5)!	15 (3.5)	245 (5.1)!	13 (3.7)	277 (4.0)!	68 (5.0)	275 (1.3)>>					
Rhode Island	7 (0.1)≪	285 (2.4)>	12 (0.1) <	242 (2.4)	0.0)	*** (***)	81 (0.1)>>	268 (0.9)>>					
South Carolina	3 (1.7)	276 (2.8)!	6 (2.2)	246 (5.7)!	4 (1.8)	270 (2.5)!	87 (3.3)	259 (1.2)					
Tennessee	5 (3.3)	279 (2.8)!	7 (2.6)	231 (9.2)!	6 (2.4)	259 (2.1)!	82 (4.0)	259 (1.2)					
Texas	, ,				` '		,						
Utah	10 (2.9)	291 (2.6)! >>	18 (3.9)	247 (2.2)!	6 (2.6)	264 (6.5)!	67 (5.5)	264 (1.8)>					
	13 (2.4)	283 (2.8)	5 (2.2)	268 (2.6)!	10 (2.4)	270 (1.8)!	72 (3.9)	273 (1.0)					
Virginia	9 (2.4) <	284 (3.4)!	13 (3.0)>	250 (3.8)!	14 (4.3)	260 (4.5)!	63 (5.4)	265 (1.6)					
West Virginia	1 (0.9)	*** (***)	10 (1.9)	256 (1.8)	13 (3.4)	257 (2.6)!	76 (3.7)	259 (1.2)					
Wisconsin	11 (5.5)	291 (S.7)!	5 (1.7)	240 (4.0)!	25 (5.4)	282 (2.5)!	59 (6.4)	277 (1.6)					
Wyoming	0 (0.0)	*** (***)	10 (2.6)	273 (5.5)!	13 (2.9) «	276 (2.5)!							
TERRITORIES	- (5.5)	` '	10 (2.0)	210 (3.3)	13 (2.3)	210 (2.3)!	76 (3.8)	275 (0.9)					
Guam	0 (0.0)	*** (***)	0 (0.0)	*** (***)	11 (00)	016 (0.6)4	00 (0.0) \$	007 (4 0) **					
Virgin Islands	0 (0.0)	*** (***)		*** (***)	11 (0.2) <	216 (3.6) <<	89 (0.2) >>	237 (1.2)*					
J	U (U.U)	( )	0 (0.0)	()	27 (0.2) >>	215 (2.4)	73 (0.2)≪	218 (1.3)					

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#### TABLE A.3

## Demographic Characteristics of Students in the Top-Performing One-Third Schools in Average Mathematics Proficiency

				G	rade 4 - 1992	2			
		Percentage of	Students by	Race/Ethnicity		Percenta	ge of Students	by Type of Co	mmunity
PUBLIC SCHOOLS	White	Black	Hispanic	Asian / Pacific Islander	American Indian	Advantaged Urban	Disadvantaged Urban	Extreme Rural	Other
NATION	87 (1.5)	4 (0.9)!	4 (0.6)	3 (0.6)!	*** (***)	18 (4.0)!	*** (***)	14 (3.5)!	67 (4.9)
Northeast	88 (3.2)	*** (***)	*** (***)	*** (***)	*** (***)	31 (8.3)!	*** (***)	*** (***)	61(10.8)
Southeast	85 (6.3)!	*** (***)	*** (***)	*** (***)	**** (****)	*** (***)	*** (***)	19(11.7)!	63(15.7)!
Central	93 (1.6)	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	21 (7.6)! *** (***)	71 (7.1)
West	80 (3.0)	*** (***)	*** (***)	8 (2.2)!	()	18 (8.3)!	( )	( )	69(10.0)
STATES Alabama	70 (0.5)	40 (0.6)	*** (***)	*** /***	*** /***)	26 (7.5)!	*** (***)	*** (***)	65 (7.3)!
Arizona	79 (3.5)	12 (2.6)!	14 (1.8)	*** /***/	*** /***	30 (9.5)!	*** }***	*** }***	59(10.6)!
Arkansas	78 (2.3) 87 (1.3)	*** (***)	*** (***)	*** /***/	*** }***	*** (***)	*** }***{	29 (6.6)!	71 (6.6)
California	63 (3.3)	*** }***	16 (2.2)!	14 (2.4)!	*** }***	35 (6.6)!	*** }***{	*** (***)	58 (7.0)!
Colorado	82 (1.5)	*** }***	12 (1.2)	*** (***)	*** (***)	38 (7.9)!	*** (***)	14 (5.3)!	49 (9.1)!
Connecticut	90 (1.5)	*** }***	*** }***	*** (***)	*** (***)	34 (8.7)!	*** (***)	*** (***)	65 (8.7)!
		00 (4.7)	*** (***)	*** (***)	*** (***)	16 (0.3)	*** (***)	10 (0.1)	74 (0.4)
Delaware Dist. Columbia	68 (1.8)	22 (1.7)	*** (***)	*** (***)	*** (***)	55 (0.6)	30 (0.6)	*** (***)	16 (0.3)
Florida	15 (0.8)	73 (1.2)	12 (2.4)!	*** /***/	*** /***	40 (9.2)!	*** (***)	***	58 (9.3)
Georgia	76 (2.8) 80 (3.2)	8 (1.3)! 11 (2.6)!	12 (2.4):	*** /***/	*** }***	32 (9.4)!	*** }***{	*** (***)	61(10.0)
Hawaii	80 (3.2) 25 (3.1)	11 (2.0):	8 (0.8)	61 (3.8)	*** }***{	22 (8.0)!	*** (***)	*** (***)	77 (8.0)
Idaho	89 (1.4)	*** (***)	7 (1.0)	*** (***)	*** (***)	26 (7.2)!	*** (***)	14 (5.6)!	60 (9.6)!
		*** (***)	*** (***)	*** (***)	*** (***)		*** (***)	10 (5.2)!	67 (8.8)!
Indiana	91 (1.4)	*** (***)	*** (***)	*** (***)	*** (***)	23 (7.9)! 16 (7.2)!	*** /***	33 (6.5)!	51 (8.7)!
lowa Kentucky	90 (1.2)	( )	*** (***)	*** (***)	*** (***)	16 (7.2)!	*** }***	26 (8.2)!	54(10.1)
Louisiana	84 (2.6)	9 (2.1)!	*** (***)	*** /***/	*** }***{	15 (6.0)!	*** }***	13 (4.4)!	69 (7.1)
Maine	73 (2.5) 93 (1.4)	20 (2.5)	*** }***	*** (***)	*** }***	*** (***)	*** }***	22 (8.7)!	76 (8.9)!
Maryland	77 (3.0)	11 (2.0)!	*** (***)	*** (***)	*** (***)	44 (7.6)	*** (***)	*** (***)	51 (8.5)!
Massachusetts	90 (1.1)	*** (***)	*** (***)	*** (***)	*** (***)	34 (7.0)!	*** (***)	*** (***)	66 (7.0)
Michigan	85 (1.8)	*** (***)	*** (***)	*** (***)	*** (***)	23 (8.0)!	*** (***)	*** (***)	69 (8.3)
Minnesota	90 (1.2)	*** (***)	*** (***)	*** (***)	*** (***)	31(11.3)!	*** (***)	19 (7.9)!	50(11.7)!
Mississippi	73 (2.7)	21 (2.3)	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	12 (3.9)!	83 (5.5)
Missouri	85 (1.8)	7 (1.1)	*** (***)	*** (***)	*** (***)	22 (7.5)!	*** (***)	15 (6.3)!	61 (9.5)!
Nebraska	91 (1.4)	*** (***)	*** (***)	*** (***)	*** (***)	25 (7.7)!	*** (***)	26 (8.4)!	49 (9.3)!
New Hampshire	92 (1.4)	*** (***)	*** (***)	*** (***)	*** (***)	13 (7.0)!	*** (***)	*** (***)	79 (7.9)
New Jersey	83 (1.9)	*** (***)	*** (***)	*** (***)	*** (***)	65 (8.1)	*** (***)	*** (***)	35 (8.1)!
New Mexico	66 (3.1)	*** (***)	27 (2.8)	*** (***)	*** (***)	29(14.3)!	*** (***)	*** (***)	71(14.3)!
New York	83 (2.5)	*** (***)	*** (***)	*** (***)	*** (***)	31 (9.6)!	*** (***)		69 (9.6)!
North Carolina	73 (2.7)	17 (2.0)	*** (***)	*** (***)	*** (***)	15 (4.9)!	*** (***)	20 (7.3)! 33 (6.9)!	63 (8.0) 38 (9.2)!
North Dakota	93 (1.1)	()	()	()	` '	29 (8.5)!	( )		
Ohio	88 (1.4)	*** (***)	*** (***)	*** (***)	*** (***)	24 (6.5)!	*** (***)	9 (5.2)!	65 (7.9)
Oklahoma	81 (2.3)	*** (***)	*** (***)	*** (***)	*** (***)	15 (6.2)!	*** (***)	22 (6.5)!	60 (8.4)!
Pennsylvania	90 (1.3)	*** (***)	*** (***)	*** (***)	*** (***)	29 (8.3)!	*** (***)	11 (5.9)!	60 (9.0)!
Rhode Island	92 (1.0)	*** (***)	*** (***)	*** (***)	*** (***)	30(10.2)!	*** (***)	*** (***)	70(10.2)! 81 (6.5)
South Carolina	74 (2.5)	19 (2.4)	*** (***)	*** (***)	*** (***)	17 (6.3)! 16 (7.3)!	*** (***)	*** (***)	78 (7.9)
Tennessee	81 (2.2)	12 (2.0)!	( )	` '	` '				
Texas	71 (3.9)	*** (***)	19 (3.6)!	*** (***)	*** (***)	27 (8.6)!	*** (***)	24 (8.0)! *** (***)	37 (9.2)!
Utah	91 (1.3)	*** (***)	*** (***)	*** (***)	*** (***)	43 (8.0)!	*** (***)	*** (***)	52 (8.3)! 68 (9.4)!
Virginia West Virginia	83 (2.0)	7 (1.4)! *** (***)	*** (***)	*** (***)	*** (***)	29 (9.2)! *** (***)	*** (***)	10 (5.4)!	78 (7.8)
West Virginia	90 (1.5)	*** (***)	*** (***)	*** (***)	*** (***)	16 (7.0)!		20 (6.7)!	64 (9.2)!
Wisconsin Wyoming TERRITORY	88 (1.6) 86 (1.9)	*** (***)	10 (1.5)!	. *** (***)	*** (***)	13 (6.5)!	*** (***)	31 (8.8)!	56 (9.0)!
Guam	16 (1.2)	*** (***)	15 (1.1)	62 (1.5)	*** (***)	*** (***)	*** (***)	*** (***)	100 (0.0)

The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*The number of schools or students was considered insufficient for this analysis. Underlying subgroup population proportions provided in previous tables should be considered in interpreting these results. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Trial State Mathematics Assessment.



TABLE A.3 Demographic Characteristics of Students in the Top-Performing One-Third Schools in Average Mathematics Proficiency (continued)

	Grade 8 - 1992												
		Percentage of	Students by	Race/Ethnicity		Percenta	ge of Students	by Type of Co	ommunity				
PUBLIC SCHOOLS	White	Black	Hispanic	Asian / Pacific Islander	American Indian	Advantaged Urban	Disadvantaged Urban	Extreme Rural	Other				
NATION	85 (1.4)	5 (0.8)!	6 (0.8)	3 (0.7)!	*** (***)	13 (4.3)!	*** (***)	12 (4.8)!	73 (6.1)				
Northeast	87 (3.0)	*** (***)	*** (***)	*** (***)	*** (***)	27(14.6)	*** (***)	*** (***)	58(13.7)!				
Southeast	78 (5.0)!	*** (***)	*** (***)	*** (***)	*** (***)	***` (***)	*** }***\$	*** (***)	87 (7.9)!				
Central	90 (1.8)	*** (***)	*** (***)	*** (***)	*** (***)	11 (3.4)	*** (***)	16(10.1)!	73(10.5)!				
West	79 (3.5)!	*** (***)	10 (2.1)!	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	82 (9.2)!				
STATES						` '	, ,	` ,	, ,				
Alabama	83 (2.1)	11 (1.9)!	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	12 (5.6)!	81 (7.4)				
Arizona	79 (3.3)	*** (***)	14 (2.9)!	*** (***)	*** (***)	36(11.9)!	*** (***)	*** (***)	59(11.7)!				
Arkansas	91 (1.5)	*** (***)	*** (***)	*** (***)	*** (***)	***`(***)	*** (***)	18 (8.2)!	75 (8.2)				
California	63 (3.1)	*** (***)	17 (2.1)!	15 (2.1)	*** (***)	23 (9.3)!	*** (***)	*** (***)	71(10.1)!				
Colorado	88 (1.6)	*** (***)	8 (1.1)!	*** (***)	*** (***)	38 (8.2)!	*** (***)	10 (5.3)!	51 (8.6)!				
Connecticut	91 (1.1)	*** (***)	*** (***)	*** (***)	*** (***)	13 (6.7)!	*** (***)	*** (***)	87 (6.7)				
Delaware	68 (1.4)	20 /0.4\	*** /***\	*** /***\	*** /***)	*** (***)	*** (***)						
Dist. Columbia	*** (***)	22 (2.1)	*** }***	*** /***	*** (***)	· · · · · · · · · · · · · · · · · · ·		15 (0.2)	85 (0.2)				
Florida	( )	78 (1.6)	- 1!	*** (***)	*** (***)	23 (0.8)	15 (0.7)	*** (***)	62 (0.8)				
Georgia	74 (3.2)	14 (2.4)!	8 (1.1) *** (***)	*** (***)	( )	13 (6.1)!	( )		74 (8.8)				
Hawaii	78 (4.1)	16 (3.1)!		, , ,	*** (***)	13 (3.8)!	١,,	*** (***)	87 (3.8)				
Idaho	20 (1.5)	*** (***)	8 (0.6) *** (***)	68 (1.9)	( )	*** (***)	*** (***)	*** (***)	98 (0.2)				
	93 (0.9)	()	()	()	*** (***)	11 (6.1)!	*** (***)	25 (7.6)!	57 (7.9)				
Indiana	92 (1.8)	*** (***)	*** (***)	*** (***)	*** (***)	16 (6.8)!	*** (***)	*** (***)	77 (8.1)!				
lowa	94 (0.8)	*** (***)	*** (***)	*** (***)	*** (***)	*** }***5	*** (***)	61 (9.5)!	30(10.0)				
Kentucky	88 (1.7)	7 (1.5)!	*** (***)	*** (***)	*** (***)	9 (3.6)!	*** (***)	9 (5.2)!	76 (7.5)				
Louisiana	76 (2.6)	19 (2.2)	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	85 (6.3)				
Maine	96 (0.9)	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	*** }***{	79 (8.1)				
Maryland	81 (2.3)	9 (1.7)!	*** (***)	*** (***)	*** (***)	46 (8.7)!	*** (***)	*** (***)	47(10.4)!				
Massachusetts	93 (1.4)	*** /***\	*** /***\	*** /***\	*** /***)		*** /***\	*** (***)	, ,				
Michigan	92 (1.2)	*** /***	*** /***	*** }***	*** /***	16 (5.8)!	*** (***)	( )	84 (5.8)				
Minnesota	94 (1.0)	*** /***	*** /***(	*** /***	*** /***	16 (7.6)!	*** (***)	16 (7.2)! *** (***)	68 (9.8)!				
Mississippi	72 (3.0)	. \ \ /	*** /***	*** (***)	*** /***	14 (7.4)! *** (***)	*** /***		77 (8.8)!				
Missouri	88 (1.9)	24 (3.0)!	*** /***(	*** /***	*** /***		*** /***	12 (6.1)!	78 (8.2)				
Nebraska	94 (1.3)	*** /***/	*** /***	*** /***	*** /***	14 (6.9)! *** (***)	*** (***)	8 (5.0)!	71 (8.4)!				
ı	94 (1.3)	\ /	( )	( )	···· ( )	()	()	39(10.3)!	61(10.3)!				
New Hampshire	94 (0.9)	*** (***)	*** (***)	*** (***)	*** (***)	15 (6.5)!	*** (***)	*** (***)	82 (7.1)!				
New Jersey	82 (2.5)	*** (***)	*** (***)	11 (1.8)	*** (***)	24 (8.1)!	*** (***)	*** (***)	76 (8.1)				
New Mexico	60 (2.2)	*** (***)	34 (2.2)	*** (***)	*** (***)	17 (2.7)	*** (***)	*** (***)	78 (4.6)				
New York	86 (2.3)	*** (***)	*** (***)	*** (***)	*** (***)	32 (9.1)!	*** (***)	15 (7.6)!	53(10.7)!				
North Carolina	78 (2.8)	18 (2.7)	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	82 (5.8)				
North Dakota	95 (1.1)	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	61(11.4)!	39(11.4)!				
Ohio	92 (1.1)	*** (***)	*** (***)	*** (***)	*** (***)	19 (7.9)!	*** (***)	22(12.9)!	50/49 71				
Oklahoma	84 (2.1)	*** }***	*** }***{	*** }***{	*** }***{	19 (7.9): *** (***)	*** /***	22(12.9)! *** (***)	59(12.7)! 91 (5.7)				
Pennsylvania	91 (2.2)	*** }***{	*** }***{	*** }***{	*** }***	10 (5.3)!	*** /***	15 (6.6)!	75 (8.1)				
Rhode Island	93 (0.8)	*** (***)	*** }***{	*** }***	*** }***{	23 (0.2)	*** /***	*** (***)	75 (8.1)				
South Carolina	77 (1.8)	19 (1.8)	*** }***{	*** }***{	*** }***	9 (5.2)!	*** /***	*** }***	81 (7.3)				
Tennessee	87 (2.5)	10 (2.2)!	*** }***{	*** (***)	*** }***{	15 (9.2)!	*** }***{	*** }***{	82 (9.2)				
Texas				` '	\ /		` '	` '					
Utah	68 (2.9)	9 (2.0)!	16 (2.0)	( )	*** (***)	27 (7.3)!	*** (***)	*** (***)	67 (7.9)				
Virginia	92 (1.2)	, ,	١,,	( )	*** (***)	37 (6.1)	*** (***)	*** (***)	60 (6.3)				
West Virginia	77 (2.8)	10 (1.6)!	( )	( )	*** (***)	30 (9.9)!	*** (***)	*** (***)	65(10.4)!				
Wisconsin	93 (1.2)	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	89 (5.8)				
	92 (2.1)	*** (***)	*** (***)	*** (***)	*** (***)	25(13.4)!	*** (***)	28(13.3)!	47(13.6)!				
Wyoming TERRITORIES	91 (1.2)	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	16 (5.1)!	19 (4.9)!	65 (6.1)				
Guam	*** (***)	*** (***)	*** (***)	00 (0.0)	*** /***\	*** ****	*** ****						
Virgin Islands	١,,,	\ /	, ,	86 (3.6)	( )	*** (***)	*** (***)	*** (***)	100 (0.0)				
virgin islanus	*** (***)	83 (2.4)	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)				



#### TABLE A.4

## Demographic Characteristics of Students in the Bottom-Performing One-Third Schools in **Average Mathematics Proficiency**

	<u> </u>		<u>.</u>	G	rade 4 - 1992	2			
		Percentage of	Students by	Race/Ethnicity		Percenta	ge of Students	by Type of Co	mmunity
PUBLIC SCHOOLS	White	Black	Hispanic	Asian / Pacific Islander	American Indian	Advantaged Urban	Disadvantaged Urban	Extreme Rural	Other
NATION	32 (2.4)	45 (2.6)	20 (1.4)	*** (***)	*** (***)	*** (***)	35 (4.7)	13 (6.4)!	51 (6.7)
Northeast	26 (5.2)	49 (6.1)!	21 (4.1)!	*** (***)	*** (***)	*** (***)	31 (9.2)!	*** (***)	69 (9.2)!
Southeast	42 (5.9)	48 (6.6)!	8 (1.7)	*** (***)	*** (***)	*** (***)	31 (8.7)!	29(13.3)!	40(12.4)!
Central	*** (***)	61 (7.4)!	16 (4.5)!	*** (***)	*** (***)	*** (***)	75 (9.6)!	*** (***)	17(10.4)!
West	26 (3.0)	29 (5.9)!	40 (4.6)	*** (***)	*** (***)	*** (***)	25 (7.3)!	*** (***)	71 (8.7)!
STATES		()	()	*** /***	*** (***)	*** (***)	00 (7.7)	*** (***)	CO (0.4)
Alabama	29 (5.0)	66 (4.7)	*** (***)	( )	*** (***)	*** (***)	30 (7.7)!		63 (8.4)!
Arizona	28 (3.7)	*** (***)	45 (3.6)	*** (***)	20 (4.2)!	*** (***)	10 (4.4)!	12 (6.8)!	78 (7.8)
Arkansas	43 (3.4)	46 (3.3)	8 (1.2)	*** (***)	*** (***)	( )	17 (4.9)!	29 (8.3)!	54 (9.5)!
California	18 (2.4)	12 (1.4)	60 (2.7)	8 (1.4)	*** (***)	( )	57 (9.1)	\/.	43 (9.2)!
Colorado	47 (3.1)	9 (2.4)!	37 (3.1)	*** (***)	*** (***)	*** (***)	30 (6.8)!	16 (5.5)!	54 (7.3)
Connecticut	41 (4.1)	26 (3.2)	31 (3.4)	*** (***)	*** (***)	*** (***)	57 (9.0)!	*** (***)	37 (8.7)!
Delaware	63 (2.4)	26 (1.9)	9 (0.7)	.*** (***)	*** (***)	*** (***)	20 (0.4)	27 (0.3)	40 (0.6)
Dist. Columbia	*** (***)	86 (0.7)	11 (0.6)	*** }***	*** }***	*** }***{	84 (0.3)	*** (***)	16 (0.3)
Florida	32 (4.4)	41 (4.5)	24 (2.6)	*** }***	*** (***)	*** }***	51 (8.3)	8 (2.7)!	41 (8.4)!
Georgia	28 (2.7)	63 (2.8)	8 (1.2)	*** /***	*** }***{	*** }***	37(11.0)!	*** (***)	56(11.6)!
Hawaii	16 (2.8)	*** (***)	14 (1.6)	64 (3.5)	*** }***{	*** }***{	21 (5.5)!	8 (4.8)!	70 (7.1)!
Idaho	77 (2.3)	*** }***{	17 (1.9)	*** (***)	*** (***)	*** (***)	*** (***)	41 (9.6)!	59 (9.6)!
		( )	• •		*** (***)	*** (***)	00 (7.4)		
Indiana	68 (4.0)	23 (4.2)!	*** (***)	*** (***)	*** (***)	( )	29 (7.4)!	13 (4.2)!	58 (7.9)!
lowa	88 (1.7)	*** (***)	*** (***)	*** (***)	*** (***)	( )	18 (7.1)!	39 (8.0)!	42 (8.1)!
Kentucky	82 (2.9)	11 (2.8)!	*** (***)	*** (***)	*** (***)	*** (***)	19 (5.8)!	22 (5.5)!	59 (7.1)
Louisiana	21 (3.4)	74 (3.6)	*** (***)	*** (***)	**** (***)	*** (***)	36 (6.4)	9 (5.3)!	55 (8.1)!
Maine	90 (1.4)	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)		23 (9.3)!	68(10.0)!
Maryland	29 (3.4)	60 (3.5)	7 (1.2)!	*** (***)	*** (***)	*** (***)	34 (9.0)!	*** (***)	62 (9.2)
Massachusetts	56 (3.7)	20 (2.1)	16 (1.9)	*** (***)	*** (***)	*** (***)	52 (8.9)	*** (***)	42 (9.2)!
Michigan	48 (5.3)	35 (5.3)	12 (1.9)	*** }***	*** }***{	*** (***)	46 (9.8)!	*** (***)	44 (9.6)!
Minnesota	79 (2.8)	*** (***)	11 (1.6)	*** (***)	*** (***)	*** }***{	*** (***)	32 (8.8)!	60 (9.9)!
Mississippi	11 (2.5)	79 (2.8)	9 (2.1)!	*** (***)	*** (***)	*** (***)	15 (`4.9)!	*** (***)	81 (5.4)
Missouri	57 (4.9)	33 (5.0)	*** (***)	*** (***)	*** (***)	*** (***)	31 (7.9)!	19 (6.8)!	47 (8.7)!
Nebraska	71 (3.0)	15 (2.2)	10 (2.4)!	*** (***)	*** (***)	*** (***)	15 (5.4)!	20 (6.8)!	64 (8.4)!
New Hemmobiro			*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	*** /***\	04 (4.6)
New Hampshire	89 (1.0)	*** (***)		*** (***)	*** (***)	*** (***)	( )	*** (***)	91 (4.6)
New Jersey	29 (5.0)	36 (3.6)	30 (3.8)	*** (***)	*** (***)	*** (***)	50 (9.3)!	*** (***)	50 (9.3)!
New Mexico	26 (2.8)	*** (***)	67 (3.4)	*** (***)	*** (***)	*** (***)	14 (6.7)!	*** (***)	81 (7.1)
New York	26 (4.8)	29 (4.2)	42 (3.9)	*** (***)	*** (***)	*** (***)	56(10.3)!	( )	44(10.3)!
North Carolina	44 (3.0)	42 (3.3)	8 (1.6)!	*** (***)	( )	*** (***)	10 (4.9)!	21 (7.4)!	69 (8.5)
North Dakota	87 (2.5)	*** (***)	*** (***)	(***)	8 (2.2)!	()	*** (***)	47 (6.8)!	46 (7.2)
Ohio	64 (3.8)	24 (3.1)	8 (1.4)!	*** (***)	*** (***)	*** (***)	51 (6.6)	11 (6.7)!	37 (8.7)!
Oklahoma	57 (3.4)	20 (3.5)	*** (***)	*** (***)	13 (1.8)	*** (***)	21 (5.7)!	17 (6.6)!	62 (8.3)!
Pennsylvania	50 (4.9)	32 (4.7)	14 (2.4)	*** (***)	*** (***)	*** (***)	48 (8.9)	*** (***)	48 (8.4)!
Rhode Island	52 (4.5)	14 (1.7)	23 (2.7)	*** (***)	*** (***)	*** (***)	67 (8.1)!	*** (***)	33 (8.1)!
South Carolina	27 (3.9)	64 (3.9)	*** (***)	*** (***)	*** (***)	*** (***)	18 (5.3)!	12 (5.3)!	70 (6.9)
Tennessee	45 (4.9)	45 (4.4)	7 (1.9)!	*** (***)	*** (***)	*** (***)	39 (9.4)!	13 (5.9)!	48(10.0)!
Texas				*** (***)	*** (***)	*** (***)	34 (8.8)!	*** (***)	60 (9.3)!
Utah	29 (4.2)	24 (4.7)! *** (***)	43 (5.7)	*** (***)	*** /***	*** (***)	11 (5.4)!	8 (4.9)!	77 (8.2)!
Virginia	78 (2.1)	· · · · · · · · · · · · · · · · · · ·	16 (1.8) *** (***)	*** (***)	*** /***	*** (***)	31 (6.5)!	19 (4.2)!	50 (7.5)!
West Virginia	51 (3.0)	41 (3.1) *** (***)	*** (***)	*** (***)	*** /***	*** (***)	12 (4.6)!	14 (5.8)!	74 (7.6)
Wisconsin	91 (1.7)			*** (***)	*** (***)	*** (***)	22 (7.3)!	23 (8.1)!	55 (8.7)!
Wyoming	67 (4.0)	13 (2.8)!	9 (2.2)!	*** . (***)	( )	*** (***)	1 1	13 (4.8)!	72 (7.3)!
TERRITORY	77 (3.1)	*** (***)	14 (1.7)	.( )	8 (3.1)!	( )	12 (5.1)!	15 (4.0):	12 (1.3)!
Guam	*** /***\	*** (***)	24 (4 7)	62 (4.6)	*** (***)	*** (***)	*** (***)	50 (0.5)	50 (0.5)
Guain	*** (***)	*** (***)	24 (1.7)	62 (1.6)	( )	( )	( )	JU (U.J)	30 (0.3)

The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. \*\*\*The number of schools or students was considered insufficient for this analysis. Underlying subgroup population proportions provided in previous tables should be considered in interpreting these results. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Trial State Mathematics Assessment.

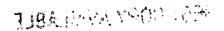




TABLE A.4

## Demographic Characteristics of Students in the Bottom-Performing One-Third Schools in Average Mathematics Proficiency (continued)

	Grade 8 - 1992												
	ı	Percentage of	Students by	Race/Ethnicity		Percenta	ge of Students	by Type of Co	ommunity				
PUBLIC SCHOOLS	White	Black	Hispanic	Asian / Pacific Islandar	Amarican Indian	Advantaged Urban	Disadvantaged Urban	Extrame Rural	Other				
NATION	31 (3.9)	46 (3.2)	20 (1.9)	*** (***)	*** (***)	*** (***)	32 (5.8)	7 (4.4)!	61 (7.0)				
Northeast	27 (4.8)	48 (4.7)	22 (4.1)!	*** (***)	*** (***)	*** }***{	42(11.7)!	*** (***)	58(11.7)!				
Southeast	43 (7.7)	49 (8.2)	*** (***)	*** (***)	*** (***)	*** }***{	18 (7.8)	16(11.3)!	65(13.5)!				
Central	20 (4.6)	69 (4.9)!	*** (***)	*** (***)	*** (***)	*** }***{	51(15.4)!	*** (***)	49(15.4)!				
West	22 (7.9)!	23 (5.0)!	50 (9.3)!	*** (***)	*** }***{	*** }***{	32(11.6)!	*** /***	<b>65</b> (11.6)!				
STATES		, ,	` '	` ,	` '	` '	02(11.0).	\ /	00(11.0):				
Alabama	34 (5.1)	58 (4.5)	7 (1.4)!	*** (***)	*** (***)	*** (***)	33 (9.2)!	*** (***)	65 (9.5)				
Arizona	35 (4.4)	*** (***)	48 (4.6)	*** (***)	10 (3.9)!	*** }***{	30 (7.2)!	*** }***	63 (8.3)				
Arkansas	48 (3.1)	43 (3.0)	*** (***)	*** (***)	*** (***)	*** }***{	13 (4.2)!	*** /***	81 (5.3)				
California	18 (3.6)	12 (3.7)!	61 (4.5)	8 (1.7)!	*** }***{	*** }***	53 (9.1)!	*** }***	47 (9.1)!				
Colorado	57 (2.8)	9 (1.9)!	29 (2.6)	*** }***	*** /***(	*** /***	24 (6.3)!	*** /***	1 1				
Connecticut	46 (3.6)	26 (2.7)	25 (2.3)	*** }***	*** }***	*** }***	44 (7.5)	*** }***{	69 (6.6) 50 (7.6)!				
Delaware			*** (***)	` '	` '	( ,		<b>\</b>	30 (7.0)!				
Dist. Columbia	63 (1.7)	28 (1.9)	( )	*** (***)	*** (***)	*** (***)	*** (***)	5 (0.2)	95 (0.2)				
Florida	\ /	90 (1.3)	*** (***)	*** (***)	*** (***)	*** (***)	100 (0.0)	*** (***)	*** (***)				
	32 (3.9)	38 (4.6)	28 (4.9)!	*** (***)	*** (***)	*** (***)	28 (7.6)!	11 (3.3)!	61 (8.4)!				
Georgia Hawaii	39 (3.8)	55 (3.9)	*** (***)	*** (***)	*** (***)	*** (***)	15 (3.6)!	21 (6.5)!	61 (7.4)				
Idaho	12 (1.4)	. ,	13 (1.4)	72 (2.0)	·*** (***)	*** (***)	50 (0.8)	*** (***)	49 (0.8)				
idano	82 (1.5)	*** (***)	12 (1.3)	*** (***)	*** (***)	*** (***)	*** (***)	23 (7.5)!	69 (8.2)				
Indiana	70 (3.5)	20 (3.1)	7 (1.6)!	*** (***)	*** (***)	*** /***)	36 (8.2)!	12 (5.8)!	52 (0.2)				
lowa	90 (1.4)	*** /***	*** /***/	*** }***{	*** }***(	*** /***	*** (***)		52 (9.2)!				
Kentucky	82 (2.1)	13 (2.2)!	*** }***	*** /***	*** }***	*** /***	24 (7.2)!	28 (9.7)! *** (***)	64 (9.7)!				
Louisiana	25 (3.2)	66 (3.0)	*** }***	*** /***	*** }***	*** }***	49 (7.8)	*** /***	69 (7.8)				
Maine	93 (0.8)	*** (***)	*** /***	*** /***	*** }***	*** }***	*** (***)	12 (3.2)!	51 (7.8)!				
Maryland	30 (4.8)	61 (4.8)	*** }***{	*** }***	*** /***	*** }***(	34 (9.9)!	12 (3.2)! *** (***)	88 (3.2) 61/10.2)				
Massachusetts			00 (40)	*** (***)	*** /***\		, ,	` '	61(10.3)!				
Michigan	65 (3.3)	13 (3.2)!	20 (4.3)!	( )	( )	*** (***)	66(10.0)	*** (***)	34(10.0)!				
Minnesota	40 (5.5)	50 (6.0)	8 (2.2)!	*** (***)	*** (***)	*** (***)	52 (8.0)	*** (***)	35 (7.4)!				
Mississippi	88 (2.1)	_ \ /		*** (***)	*** (***)	*** (***)	*** (***)	22 (9.1)!	78 (9.1)!				
Missouri	18 (3.3)	71 (3.4)	10 (1.1)	*** (***)	*** (***)	*** (***)	13 (6.9)!	9 (5.3)!	77 (8.6)				
Nebraska	71 (4.4)	23 (4.1)!	- 1/.	*** (***)	*** (***)	*** (***)	24 (5.5)!	18 (6.5)!	56 (8.0)!				
	78 (2.4)	10 (2.1)!	8 (1.3)!	*** (***)	*** (***)	*** (***)	13 (2.6)	17 (6.4)!	70 (6.7)				
New Hampshire	93 (0.8)	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	100 (0.0)				
New Jersey	27 (6.5)	39 (6.4)	30 (4.3)	*** (***)	*** (***)	*** (***)	69 (7.6)	*** /***	31 (7.6)!				
New Mexico	27 (2.3)	*** (***)	68 (2.4)	*** (***)	*** (***)	*** }***{	*** (***)	*** }***	86 (8.3)				
New York	32 (5.9)	37 (5.4)	26 (4.8)!	*** (***)	*** (***)	*** }***{	39(11.8)!	*** }***	57(12.0)!				
North Carolina	52 (3.9)	42 (3.5)	*** (***)	*** (***)	*** (***)	*** (***)	10 (4.8)!	16 (6.5)!	75 (7.9)				
North Dakota	91 (1.7)	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	30 (6.1)!	70 (6.1)				
Ohio	56 (4.3)	35 (4.2)	*** /***)	*** /***)	*** /***\	*** /***\	45 (0.0)	(/-					
Oklahoma	65 (2.9)	14 (3.1)!	···	*** /***(	( )	*** }***	45 (8.9)! *** (***)	· · · /	55 (8.9)!				
Pennsylvania	66 (4.4)	25 (4.4)	*** }***{	*** /***	11 (2.0)!	*** /***	/	28 (9.3)!	72 (9.3)!				
Rhode Island	64 (1.5)	12 (1.5)	17 (1.1)	*** }***(	*** }***	*** (***)	50 (9.6)!	12 (7.0)! *** (***)	38 (8.2)!				
South Carolina	35 (3.1)	56 (2.9)	8 (0.9)	*** }***	*** )***(	*** /***/	31 (0.3)	` '	69 (0.3)				
Tennessee	55 (5.0)	40 (5.1)	*** (***)	*** (***)	*** (***)	*** (***)	15 (5.1)!	*** (***)	85 (5.1)				
Texas			` '		, ,	` '	18 (6.0)!	` '	78 (7.1)				
Utah	22 (3.6)	17 (4.1)!	60 (4.8)	*** (***)	*** (***)	*** (***)	36 (9.9)!	*** (***)	60(10.1)!				
	86 (2.0)	*** (***)	8 (1.3)!	*** (***)	*** (***)	*** (***)	10 (5.0)!	12 (5.5)!	75 (7.4)				
Virginia West Virginia	54 (3.4)	38 (3.2)	*** (***)	*** (***)	*** (***)	*** (***)	25 (5.9)!	23 (7.1)!	52 (8.2)				
Wisconsin	88 (2.2)	*** (***)	*** (***)	*** (***)	*** (***)	*** (***)	15 (5.2)!	15 (6.3)!	69 (7.4)				
	71 (4.7)	15 (3.4)!	8 (2.3)!	*** (***)	*** (***)	*** (***)	17 (5.8)!	11 (5.8)!	68 (8.2)				
Wyoming TERRITORIES	78 (5.5)	*** (***)	12 (1.3)	*** (***)	*** (***)	*** (***)	26 (7.5)!	*** (***)	64 (9.0)!				
Guam	*** /***)	*** /***	40 (4.4)	70 (4.5)					. ,				
Virgin Islands	( )	70 (4.4)	18 (1.1)	76 (1.3)	*** (***)	**** (****)	*** (***)	27 (0.5)	73 (0.5)				
9 10.01103	*** (***)	70 (1.4)	28 (1.3)	*** (***)	*** (***)	*** (***)	*** (***)	36 (0.2)	64 (0.2)				

When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent.

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TABLE A.5 | Schools' Reports on the Percentage of Students Receiving Subsidized School Lunches

PUBLIC		Grade (	1 - 1992	
SCHOOLS	Less than 25 Percent	26 to 50 Percent	51 to 75 Percent	More than 75 Percent
NATION	46 (3.6)	30 (3.1)	11 (1.9)	13 (1.7)
Northeast	58 (7.6)	17 (5.4)	10 (2.9)	16 (5.4)
Southeast	23 (4.0)	40 (4.6)	18 (4.6)	19 (4.4)
Central	58 (9.4)	30 (7.5)	7 (3.9)	4 (1.6)
West	47 (5.9)	29 (5.8)	11 (3.5)	13 (3.0)
STATES	(5.5)	25 (5.5)	, , , , , , , , , , , , , , , , , , , ,	, ,
Alabama	33 (4.6)	35 (4.9)	13 (3.1)	19 (3.0)
Arizona	40 (4.8)	31 (4.6)	17 (3.7)	12 (2.8)
Arkansas	23 (4.3)	45 (4.9)	21 (3.9)	11 (2.3)
California	42 (5.0)	28 (5.0)	12 (3.0)	18 (2.7)
Colorado	61 (3.7)	20 (3.4)	13 (2.4)	6 (2.3)
Connecticut	72 (3.2)	14 (3.4)	6 (2.3)	9 (2.2)
Delaware	, ,	, ,	6 (0.1)	2 (0.1)
Dist. Columbia	50 (0.3)	42 (0.3)	15 (0.2)	55 (0.3)
Florida	15 (0.3)	15 (0.2)	18 (3.1)	15 (3.3)
	37 (5.1)	31 (4.7)	16 (3.1) 22 (4.4)	15 (3.3) 17 (3.2)
Georgia	36 (4.5)	25 (4.6)		
Hawaii Idaho	43 (4.8)	33 (5.0)	20 (3.8) 11 (3.1)	4 (1.9) 5 (1.9)
	39 (5.2)	46 (5.1)	, ,	
Indiana	66 (4.8)	18 (3.3)	6 (2.5)	9 (2.8)
lowa	69 (4.1)	21 (3.8)	5 (1.6)	5 (1.9)
Kentucky	29 (4.5)	35 (5.1)	26 (3.8)	10 (2.5)
Louisiana	15 (3.5)	19 (4.2)	32 (4.5)	34 (4.6)
Maine	40 (4.6)	41 (5.4)	12 (3.9)	8 (3.1)
Maryland	65 (3.6)	18 (2.9)	10 (2.7)	8 (2.6)
Massachusetts	70 (3.5)	10 (3.1)	9 (2.3)	11 (2.8)
Michigan	58 (4.1)	23 (4.3)	9 (2.9)	10 (2.1)
Minnesota	66 (4.2)	21 (4.1)	8 (2.4)	5 (2.6)
Mississippi	5 (2.2)	28 (4.6)	19 (4.0)	48 (4.2)
Missouri	53 (4.7)	26 (4.2)	10 (3.7)	11 (1.9)
Nebraska	59 (4.5)	25 (4.3)	9 (2.5)	7 (2.4)
New Hampshire	79 (3.9)	19 (3.8)	1 (0.6)	2 (1.3)
New Jersey	71 (2.8)	7 (2.8)	6 (2.0)	15 (3.0)
New Mexico	31 (5.2)	23 (4.6)	24 (4.6)	22 (4.0)
New York	47 (4.6)	19 (4.2)	15 (3.9)	19 (3.0)
North Carolina	39 (4.3)	32 (4.0)	22 (3.4)	7 (2.2)
North Dakota	56 (5.0)	31 (4.0)	3 (1.6)	9 (2.6)
Ohio	·	30 (4.5)	10 (2.8)	11 (2.6)
Oklahoma	49 (4.1) 25 (4.5)	30 (4.8) 32 (4.8)	22 (4.0)	11 (2.8)
Pennsylvania	35 (4.5)	1 1	5 (2.0)	12 (2.4)
Rhode Island	53 (4.5)	30 (4.2) 14 (4.1)	3 (2.0) 14 (3.5)	14 (3.2)
South Carolina	58 (4.5)	• •	16 (3.0)	18 (3.2)
Tennessee	35 (4.9) 40 (4.3)	31 (4.3) 33 (4.6)	12 (3.5)	15 (3.2)
		, ,	• •	, ,
Texas	29 (3.8)	28 (4.2)	20 (3.6)	24 (2.6)
Utah	61 (5.1)	28 (4.5)	9 (2.9)	3 (1.5)
Virginia	52 (3.4)	30 (4.0)	16 (3.4)	2 (1.4)
West Virginia	24 (4.0)	31 (4.1)	29 (4.0)	15 (3.0)
Wisconsin	66 (3.6)	23 (3.6)	6 (2.0)	5 (1.6)
Wyoming FERRITORY	65 (4.3)	24 (4.1)	4 (1.7)	8 (2.5)
Guam	36 (0.2)	18 (0.2)	13 (0.1)	33 (0.2)

The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.



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TABLE A.5 | Schools' Reports on the Percentage of Students Receiving Subsidized School Lunches (continued)

PUBLIC	Grade 8 - 1992										
SCHOOLS	Less than 25 Percent	26 to 50 Percent	51 to 75 Percent	More than 75 Percent							
NATION	60 (3.3)	20 (3.1)	12 (2.4)	8 (1.4)							
Northeast	69 (5.5)	12 (3.5)	6 (3.3)	13 (4.9)							
Southeast	41 (6.5)	33 (7.7)	19 (6.9)	7 (1.3)							
Central	75 (6.0)	10 (3.9)	7 (2.9)	, ,							
West	59 (7.6)	21 (6.8)	, ,	8 (2.8)							
STATES	33 (7.0)	21 (0.6)	13 (4.5)	6 (2.7)							
Alabama	40 (4.5)	04 (5.0)	00 (4.0)	40 (4.0)							
Arizona	45 (4.6)	24 (5.0)	20 (4.3)	16 (4.3)							
Arkansas		29 (4.6)	16 (3.5)	10 (2.9)							
California	42 (4.8)	35 (4.9)	14 (3.7)	9 (2.6)							
Colorado	52 (4.2)	23 (4.1)	17 (3.6)	8 (2.8)							
Connecticut	63 (4.2)	23 (3.6)	6 (1.9)	8 (2.5)							
	75 (2.5)	9 (3.1)	11 (2.8)	5 (2.2)							
Delaware	78 (0.2)	20 (0.2)	2 (0.1)	0 (0.0)							
Dist. Columbia	7 (0.2)	37 (0.6)	32 (0.8)	24 (0.5)							
Florida	49 (4.7)	33 (4.5)	11 (2.9)	7 (2.2)							
Georgia	43 (4.4)	28 (4.6)	21 (4.5)	9 (2.9)							
Hawaii	65 (O.3)	25 (0.3)	8 (0.1)	1 (0.0)							
Idaho	58 (4.4)	37 (4.0)	5 (2.7)	0 (0.0)							
Indiana	77 (3.9)	11 (3.0)	7 (2.1)	5 (2.9)							
lowa	68 (5.0)	28 (4.5)	2 (1.3)								
Kentucky	43 (4.5)	29 (4.5)	17 (3.6)	2 (1.5)							
Louisiana	26 (4.4)	27 (4.6)		10 (3.3)							
Maine	55 (4.5)		22 (4.1)	25 (3.3)							
Maryland	71 (3.9)	34 (4.4) 20 (4.3)	9 (3.3) 4 (1.5)	2 (1.5)							
Massachusetts	` '			5 (2.2)							
Michigan	74 (3.3)	10 (3.1)	12 (3.1)	4 (2.0)							
Minnesota	68 (3.9)	15 (3.9)	7 (2.5)	10 (2.6)							
	81 (3.8)	13 (3.7)	3 (1.7)	3 (1.9)							
Mississippi	18 (3.3)	31 (4.4)	23 (4.3)	29 (3.9)							
Missouri	64 (4.2)	24 (4.4)	6 (2.3)	6 (2.3)							
Nebraska	71 (4.4)	22 (4.0)	4 (1.5)	3 (0.4)							
New Hampshire	90 (2.3)	9 (2.1)	1 (0.9)	0 (0.0)							
New Jersey	72 (3.7)	8 (2.6)	4 (1.1)	16 (2.8)							
New Mexico	43 (3.7)	28 (3.8)	22 (4.1)	7 (2.2)							
New York	57 (4.7)	17 (4.5)	10 (4.1)	16 (4.0)							
North Carolina	45 (4.6)	39 (4.7)	11 (2.8)	5 (1.6)							
North Dakota	63 (4.4)	29 (4.8)	2 (1.1)	6 (2.1)							
Ohio	64 (3.8)	21 (3.8)	6 (2.5)	8 (2.1)							
Oklahoma	50 (4.6)	37 (4.5)	8 (2.3)	4 (1.6)							
Pennsylvania	69 (3.1)	20 (3.5)	6 (2.8)	5 (1.7)							
Rhode Island	83 (0.2)	6 (0.1)	4 (0.1)	7 (0.1)							
South Carolina	40 (4.4)	35 (5.1)	13 (3.1)	12 (3.1)							
Tennessee	57 (4.6)	23 (4.4)	12 (3.4)	9 (3.0)							
Texas	47 (4.3)	21 (4.3)	•	, ,							
Utah	76 (3.8)		23 (4.1)	9 (2.1)							
Virginia		18 (3.7)	4 (2.1)	2 (1.2)							
West Virginia	70 (4.1) 36 (4.0)	21 (3.7)	7 (2.8)	2 (1.3)							
Wisconsin	36 (4.0) 36 (4.3)	43 (4.9)	18 (3.6)	3 (1.4)							
Wyoming	76 (4.3)	12 (3.0)	8 (2.7)	4 (1.8)							
ERRITORIES	67 (4.2)	25 (3.5)	2 (1.4)	5 (2.1)							
Guam	100 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)							
Virgin Islands	19 (0.1)	0 (0.0)	16 (0.1)	65 (0.1)							

When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent.



## School Problems and Climate



#### TABLE A.6

## Schools' Reports on the Percentage of Students Absent on an Average Day

				Grade	4 - 1992					
	0 - 2 P	ercent	3 - 5 P	ercent	6 - 10 P	ercent	More than	10 Percent		
PUBLIC	Percentage of	Average	Percentage of	Average	Percentage of	Average	Percentage of	Average		
SCHOOLS	Students	Proficiency	Students	Proficiency	Students	Proficiency	Students	Proficiency		
NATION	29 (3.8)	222 (2.0)	59 (4.1)	218 (1.2)	11 (2.0)	206 (3.8)	0 (0.3)	*** (***) *** (***) *** (***) *** (***)		
Northeast	30 (8.8)	229 (3.9)	50(10.5)	224 (3.6)	19 (7.3)	215 (7.3)	1 (1.3)			
Southeast	37 (7.5)	216 (3.4)	56 (7.8)	206 (2.2)	7 (3.2)	198 (5.9)	0 (0.0)			
Central	27 (9.2)	229 (4.6)	70 (9.7)	221 (2.0)	3 (2.8)	187(15.0)	0 (0.0)			
West	24 (4.5)	216 (3.3)	60 (5.1)	220 (2.3)	15 (2.7)	204 (2.9)	0 (0.5)			
STATES Alabama Arizona Arkansas California Colorado Connecticut	25 (4.1) 10 (3.1) 32 (4.7) 21 (4.1) 21 (4.2) 33 (4.7)	201 (3.8) 222 (4.7) 206 (1.8) 211 (4.3) 221 (2.0) 232 (2.3)	62 (4.6) 67 (4.5) 62 (5.2) 62 (5.1) 67 (5.0) 55 (4.3)	209 (2.2) 214 (1.4) 210 (1.3) 207 (1.9) 221 (1.3) 227 (1.8)	12 (3.5) 23 (4.1) 5 (2.3) 15 (3.8) 12 (3.1) 12 (2.8)	203 (2.9) 210 (3.1) 218(12.7) 199 (4.6) 211 (3.8) 202 (4.9)	1 (1.1) 0 (0.0) 2 (1.2) 2 (1.3) 0 (0.0) 0 (0.0)	*** (***) *** (***) *** (***) 205(11.1) *** (***) *** (***)		
Delaware	14 (0.2)	221 (2.8)	63 (0.3)	217 (1.1)	23 (0.2)	214 (1.1)	0 (0.0)	*** (***) *** (***) *** (***) *** (***) *** (***)		
Dist. Columbia	28 (0.2)	197 (1.2)	45 (0.3)	192 (1.0)	27 (0.3)	184 (1.3)	0 (0.0)			
Florida	28 (4.9)	215 (3.0)	56 (5.1)	216 (2.3)	16 (3.5)	197 (4.5)	1 (0.7)			
Georgia	32 (4.5)	215 (3.2)	60 (5.4)	214 (1.8)	8 (2.9)	212 (4.4)	0 (0.0)			
Hawaii	8 (2.6)	218 (3.2)	68 (4.4)	216 (1.6)	23 (4.2)	205 (3.3)	1 (1.1)			
Idaho	37 (4.7)	221 (1.6)	56 (4.9)	221 (1.3)	6 (2.6)	211 (2.3)	0 (0.0)			
Indiana	21 (4.0)	225 (2.2)	76 (4.3)	218 (1.4)	3 (1.9)	217 (7.3)	0 (0.0)	*** (***) *** (***) *** (***) *** (***) *** (***)		
Iowa	43 (4.8)	230 (1.6)	54 (4.7)	229 (1.5)	4 (1.8)	227 (6.8)	0 (0.0)			
Kentucky	14 (3.8)	216 (3.1)	76 (3.8)	214 (1.1)	10 (2.7)	206 (5.3)	0 (0.0)			
Louisiana	35 (4.8)	206 (2.4)	47 (5.2)	204 (2.5)	17 (3.8)	201 (4.9)	1 (1.1)			
Maine	43 (4.2)	234 (1.6)	51 (4.6)	229 (1.4)	7 (2.7)	226 (3.4)	0 (0.0)			
Maryland	24 (4.6)	225 (3.5)	62 (4.9)	218 (1.9)	13 (3.5)	195 (5.6)	1 (1.1)			
Massachusetts	28 (4.0)	228 (2.3)	63 (4.5)	227 (1.7)	9 (2.1)	210 (5.6)	1 (1.0)	*** (***) *** (***) *** (***) *** (***) *** (***)		
Michigan	21 (4.4)	222 (4.8)	68 (4.9)	220 (2.1)	11 (3.0)	204 (6.3)	0 (0.0)			
Minnesota	45 (5.2)	228 (1.3)	53 (5.5)	227 (1.8)	2 (1.5)	*** (***)	0 (0.0)			
Mississippi	33 (4.5)	195 (2.7)	59 (4.7)	204 (1.4)	7 (2.3)	187 (4.9)	0 (0.0)			
Missouri	26 (4.3)	223 (2.8)	59 (4.5)	222 (1.8)	16 (3.5)	214 (4.1)	0 (0.0)			
Nebraska	54 (4.5)	229 (1.5)	45 (4.4)	220 (1.8)	1 (1.0)	*** (***)	0 (0.0)			
New Hampshire New Jersey New Mexico New York North Carolina North Dakota	30 (4.9) 31 (5.2) 32 (4.8) 23 (4.7) 25 (4.1) 55 (5.1)	230 (1.8) 227 (3.2) 214 (2.5) 223 (3.0) 209 (2.8) 228 (1.4)	69 (4.9) 56 (5.1) 56 (5.6) 50 (5.4) 70 (4.5) 45 (5.1)	228 (1.6) 229 (2.1) 212 (2.4) 224 (2.1) 212 (1.5) 227 (1.2)	1 (1.0) 12 (2.7) 13 (4.0) 20 (3.9) 5 (2.0) 1 (0.6)	210 (7.0) . 206 (3.4) 205 (4.1) 210 (5.7)	0 (0.0) 1 (0.7) 0 (0.0) 7 (2.3) 0 (0.0) 0 (0.0)	*** (***) *** (***) 190 (5.7) *** (***) *** (***)		
Ohio	25 (4.5)	228 (2.2)	62 (4.8)	217 (1.6)	13 (2.5)	200 (4.0)	0 (0.0)	*** (***) *** (***) *** (***) *** (***) *** (***)		
Oklahoma	35 (4.2)	222 (1.8)	57 (4.6)	218 (1.2)	6 (2.4)	213 (3.8)	2 (1.5)			
Pennsylvania	28 (4.0)	231 (1.8)	59 (4.7)	223 (2.0)	14 (3.1)	208 (5.1)	0 (0.0)			
Rhode Island	25 (4.8)	218 (3.9)	58 (5.7)	215 (2.1)	18 (3.9)	204 (5.1)	0 (0.0)			
South Carolina	36 (4.8)	211 (2.2)	64 (4.8)	211 (1.7)	0 (0.0)	*** (***)	0 (0.0)			
Tennessee	25 (4.4)	214 (3.5)	58 (4.8)	212 (1.9)	17 (4.0)	195 (3.3)	0 (0.0)			
Texas Utah Virginia West Virginia Wisconsin Wyoming	26 (4.5) 29 (4.4) 16 (3.7) 19 (3.4) 42 (4.4) 25 (3.8)	214 (2.3) 222 (1.6) 221 (4.4) 220 (2.8) 231 (1.6) 226 (1.7)	66 (5.2) 64 (4.8) 74 (4.8) 69 (4.5) 52 (4.9) 68 (4.5)	220 (1.8) 223 (1.3) 221 (2.0) 213 (1.3) 227 (1.6) 224 (1.1)	8 (2.7) 7 (2.3) 10 (3.0) 12 (3.1) 5 (1.9) 7 (2.5)	198 (3.1) 218 (5.6) 208 (3.6) 211 (3.6) 210 (7.2) 218 (4.6)	0 (0.0) 0 (0.0) 0 (0.0) 1 (0.6) 1 (1.2) 0 (0.0)	*** (***) *** (***) *** (***) *** (***) *** (***)		
TERRITORY Guam	25 (0.2)	197 (1.5)	43 (0.2)	187 (1.4)	32 (0.2)	192 (1.4)	0 (0.0)	*** (***)		

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Trial State Mathematics Assessment.

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TABLE A.6 | Schools' Reports on the Percentage of Students Absent on an Average Day (continued)

				Grade	8 - 1992			
	0 - 2 Pe	ercent	3 - 5 P	ercent	6 - 10 F	Percent	More than 1	10 Percent
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	14 (2.9)	275 (3.6)	54 (4.2)	268 (1.5)	28 (3.4)	262 (2.2)	4 (1.6)	245 (7.0)
Northeast	10 (6.6)	289(10.6)	40(10.6)	271 (4.3)	41(10.2)	265 (5.1)	3 1	- ' '
Southeast	20 (5.7)	267 (3.7)	58 (7.3)	257 (2.5)	21 (5.5)		, ,	231 (2.6)
Central	15 (5.7)	282 (2.9)	58 (9.0)	277 (3.0)	28 (6.7)		2 (1.6)	*** /***
West	12 (5.1)	271 (8.4)	56 (7.3)	270 (3.2)	26 (5.1)	263 (4.7)	0 (0.0)	( )
STATES	'2 (0)	211 (0.4)	30 (7.3)	270 (3.2)	20 (3.1)	264 (3.3)	6 (4.5)	258 (4.6)
Alabama	22 (4.0)	247 (5.4)	62 (4.9)	254 (2.2)	15 (3.8)	248 (3.3)	1 (1.5)	*** /***)
Arizona	10 (3.4)	274 (6.5)	50 (5.2)	266 (2.1)	39 (4.6)	261 (1.9)	1 (0.9)	*** }***(
Arkansas	10 (2.7)	256 (4.0)	51 (5.0)	257 (1.8)	36 (4.6)	256 (1.6)	3 (1.6)	1. /
California	20 (3.8)	271 (4.2)	37 (5.0)	265 (2.9)	40 (4.9)	252 (2.2)	3 (1.6)	232 (8.8)
Colorado	8 (2.5)	277 (2.3)	66 (4.7)	274 (1.2)	22 (3.7)	266 (2.9)	, ,	244 (8.7)
Connecticut	14 (3.2)	283 (2.7)	50 (4.0)	284 (1.2)	32 (3.9)	255 (3.0)	4 (1.5) 3 (1.8)	253 (2.1)
Delaware	1 ' '	, ,	` '				•	240(11.8)
Dist. Columbia	6 (0.1)	285 (4.3)	33 (0.2)	260 (1.6)	58 (0.2)	261 (1.3)	3 (0.1)	257 (5.8)
Florida	12 (0.5)	238 (2.2)	31 (0.6)	239 (1.6)	42 (0.4)	226 (1.4)	15 (0.4)	221 (1.6)
	7 (2.5)	258 (4.7)	46 (5.5)	264 (2.6)	43 (5.3)	255 (2.4)	5 (2.5)	258 (5.6)
Georgia	14 (3.9)	260 (5.5)	49 (5.3)	257 (1.9)	35 (5.2)	259 (2.2)	2 (1.4)	*** (***)
Hawaii	6 (0.2)	258 (2.4)	53 (0.3)	264 (1.2)	30 (0.3)	251 (1.5)	10 (0.2)	235 (2.9)
ldaho	16 (2.8)	277 (1.9)	71 (3.4)	275 (0.9)	11 (2.7)	271 (1.7)	2 (1.5)	*** (***)
Indiana	8 (2.7)	282 (4.8)	73 (4.2)	272 (1.2)	19 (3.6)	256 (3.7)	4 (0.0)	*** (***)
Iowa	16 (3.6)	283 (2.1)	71 (4.3)	285 (1.1)	13 (2.5)	```````````````````	1 (0.8)	*** (***)
Kentucky	7 (2.7)	269 (5.3)	71 (4.3)	263 (1.4)	1 1	271 (2.6)	0 (0.0)	( )
Louisiana	13 (3.7)	257 (6.7)	49 (4.8)	249 (2.4)	21 (4.0)	257 (2.6)	1 (1.2)	( )
Maine	19 (4.2)	279 (2.2)	'		35 (4.3)	247 (2.1)	3 (1.8)	228(20.2)
Maryland	5 (2.5)	275 (9.8)	• •	279 (1.3)	17 (3.2)	273 (2.0)	0 (0.0)	( )
•	` ′		49 (4.9)	272 (2.3)	40 (5.0)	259 (2.6)	6 (2.2)	226 (5.3)
Massachusetts	12 (3.6)	282 (5.1)	52 (5.0)	279 (1.5)	34 (4.5)	262 (3.1)	3 (1.9)	*** (***)
Michigan	9 (3.2)	267 (8.7)	66 (4.9)	270 (2.2)	22 (3.9)	257 (4.0)	3 (1.0)	252 (2.7)
Minnesota	14 (4.0)	283 (3.4)	73 (5.1)	282 (1.1)	13 (3.2)	277 (3.1)	0 (0.0)	*** (***)
Mississippi	15 (3.6)	249 (3.7)	61 (4.9)	246 (2.1)	24 (4.0)	244 (2.2)	0 (0.0)	*** (***)
Missouri	9 (2.6)	276 (1.5)	54 (5.3)	272 (1.5)	32 (5.3)	271 (1.7)	4 (1.3)	237 (8.5)
Nebraska	15 (3.1)	284 (3.6)	74 (4.1)	278 (1.3)	11 (3.2)	272 (3.4)	0 (0.0)	*** (***)
New Hampshire	17 (3.1)	279 (1.8)	68 (4.0)	277 (1.2)	14 (2.6)		0 (0 0)	*** /***)
New Jersey	19 (4.4)	277 (4.9)	53 (5.4)	279 (2.2)	(,	· - /	0 (0.0)	*** (***)
New Mexico	7 (2.6)	258 (5.8)	47 (4.7)		, ,	254 (5.6)	2 (1.3)	*** (***)
New York	11 (3.0)	277 (7.9)	47 (5.5)	, ,	,	259 (1.4)	2 (1.3)	( )
North Carolina	9 (2.7)	252 (3.4)	60 (5.6)	279 (1.5) 260 (1.6)	31 (5.0)	257 (4.1)	11 (3.7)	221 (3.8)
North Dakota	31 (4.8)	283 (2.6)	68 (4.7)	282 (1.0)	30 (5.0) 1 (0.9)	255 (2.0) *** (***)	0 (0.0)	*** (***)
	\ ·-/		` '		1 (0.9)	( )	0 (0.0)	()
Ohio Oklahama	6 (2.5)	287 (8.3)	56 (6.1)	274 (1.8)	30 (4.9)	263 (5.2)	7 (2.1)	227 (5.3)
Oklahoma	24 (4.7)	269 (2.2)	62 (5.4)	267 (1.5)	13 (3.8)	264 (3.5)	1 (1.0)	*** (***)
Pennsylvania	13 (3.2)	282 (2.7)	59 (4.5)	275 (1.7)	22 (4.1)	261 (3.2)	6 (2.1)	238 (7.2)
Rhode Island	4 (0.1)	277 (3.8)	60 (0.2)	270 (1.0)	30 (0.2)	262 (1.3)	6 (0.2)	240 (2.1)
South Carolina	16 (3.4)	255 (3.2)	76 (4.0)	262 (1.4)	9 (3.0)	255 (7.7)	0 (0.0)	*** (***)
Tennessee	14 (3.3)	259 (3.7)	56 (4.9)	259 (2.0)	26 (4.5)	258 (3.1)	4 (1.2)	244 (3.8)
Texas	20 (4.6)	272 (4.8)	65 (5.1)	264 (1.6)	15 (3.5)			*** /***)
Utah	14 (3.4)	273 (1.6)	55 (4.9)	276 (1.0)	29 (4.1)	252 (2.9)	1 (0.7)	*** (***)
Virginia	15 (3.6)	274 (4.3)	51 (5.5)	270 (1.0)		271 (1.6) 262 (2.4)	2 (0.1)	*** (***)
West Virginia	8 (2.8)	261 (3.9)	50 (4.8)	259 (1.3)	32 (4.7)		2 (1.2)	\ ,
Wisconsin	21 (4.9)	279 (3.5)	55 (5.4)		42 (4.7)	256 (1.5)	0 (0.0)	\ ,
Wyoming	15 (2.9)	275 (3.3)	_ : : : :	281 (1.9) 276 (1.1)	18 (3.4)	271 (3.8)	6 (1.8)	258 (9.0)
TERRITORIES	10 (2.3)	210 (2.2)	63 (4.4)	276 (1.1)	22 (3.6)	269 (2.6)	0 (0.0)	*** (***)
Guam	0 (0.0)	*** (***)	30 (0.3)	222 (2.5)	36 (D 3)	005 (4.4)	24 (2.0)	004 (0.7)
Virgin Islands	21 (0.1)	216 (2.3)	30 (0.2) 45 (0.1)	232 (2.5)	36 (0.3)	235 (1.1)	34 (0.2)	234 (2.7)
9	- (0.1)	210 (2.3)	<del>~~</del> (0.1)	230 (1.4)	34 (0.1)	214 (1.5)	0 (0.0)	*** (***)

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#### TABLE A.7 Students' Reports on Days Absent from School During the Last Month

	Grade 8 - 1992											
<u> </u>	Three Day:	s or More	One or To	wo Days	Nos	ne						
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency						
NATION	23 (0.6)	257 (1.4)	34 (0.9)	268 (1.1)	42 (1.0)	271 (1.1)						
Northeast	27 (1.7)	260 (3.7)	35 (2.6)	269 (2.4)	38 (2.3)	271 (3.7)						
Southeast	21 (1.2)	244 (1.6)	35 (1.1)	261 (1.7)	44 (1.9)	264 (1.8)						
Central	22 (0.9)	265 (3.7)	35 (2.0)	274 (2.9)	43 (1.9)	277 (1.6)						
West	, , ,		33 (1.4)	270 (2.2)	44 (1.9)	271 (2.5)						
STATES	24 (1.1)	257 (2.6)	33 (1.4)	210 (2.2)	44 (1.5)	2/ / (2.0)						
L L	10 (0.0)	0.40 (0.0)	00 (4.4)	055 (0.0)	50 (1.1)	254 (1.7)						
Alabama	18 (0.9)	240 (2.6)	32 (1.1)	255 (2.0)								
Arizona	26 (1.0)	255 (1.8)	35 (0.9)	269 (1.6)>	40 (1.2)	267 (1.4)						
Arkansas	23 (1.0)	245 (1.9)	34 (0.8)	257 (1.5)	43 (1.0)	260 (1.6)						
California	24 (0.9) <	250 (2.3)	34 (1.0)	262 (1.9)	42 (1.2)	267 (1.8)						
Colorado	24 (0.9)	263 (1.7)	34 (0.9)	274 (1.5)>	42 (1.2)	275 (1.1)						
Connecticut	21 (0.9)	259 (1.6)	35 (1.1)	276 (1.5)	44 (1.3)	278 (1.6)						
Delaware	29 (1.0)	250 (1.4)	33 (1.0)	266 (1.5)	38 (1.3)	269 (1.8)						
Dist. Columbia				236 (1.5)	34 (1.3)	238 (1.9)						
	34 (1.1)	230 (1.6)	32 (1.2)	, ,	• •	: -:						
Florida	25 (1.1)	249 (2.2)	33 (1.1)	263 (2.0)	42 (1.1)	263 (1.6)						
Georgia	23 (0.9)	248 (1.8)	32 (1.0)	261 (1.4)	46 (1.2)	263 (1.7)						
Hawaii	25 (0.8)	243 (1.7)	31 (0.9)	258 (1.5)	45 (1.0)	264 (1.2) <b>»</b>						
Idaho	21 (1.0)	265 (1.8)	37 (1.2)	276 (1.1)	42 (1.2)	278 (1.1) <b>&gt;&gt;</b>						
Indiana	10 (0 0)	255 (2.1)	33 (0.9)	267 (1.4)	48 (1.3)>>	277 (1.4)						
lowa	19 (0.9) <			, ,	52 (1.1) >>	287 (1.1)>						
	16 (0.7) <	271 (1.6)	32 (1.0)	282 (1.4)>	· · ·	1 1						
Kentucky	21 (0.9)	249 (1.9)	33 (1.0)	261 (1.4)	46 (0.9)	268 (1.4)>						
Louisiana	24 (1.0)	241 (2.2)	36 (1.1)	251 (1.7)	39 (1.2)	253 (1.9)						
Maine <sup>1</sup>	17 (0.8)	267 (1.8)	35 (1.0)	279 (1.5)	47 (1.1)	282 (1.3)						
Maryland	23 (1.1) <	250 (1.8)	35 (1.0)	269 (1.7)>	42 (1.1)**	268 (1.6)						
Massachusetts1	23 (1.0)	259 (2.0)	35 (1.1)	273 (1.6)	42 (1.2)	279 (1.2)						
Michigan	- ' '	255 (1.7)	33 (1.1)	268 (1.6)	43 (1.2)	273 (1.9)						
Minnesota	24 (1.0)			282 (1.5)	50 (1.1)>>	285 (1.0)>>						
	16 (0.7)≪	272 (1.9)>	34 (0.9)	, , ,	49 (0.9)	248 (1.1)						
Mississippi¹	20 (0.9)	237 (1.8)	31 (1.0)	248 (2.0)								
Missouri'	21 (0.9)	258 (1.9)	33 (1.0)	273 (1.4)	46 (1.1)	275 (1.3)						
Nebraska	17 (0.9)	266 (2.1)	34 (0.9)	277 (1.4)	49 (1.1)	281 (1.5)						
New Hampshire	20 (0.9)	267 (1.7)>	38 (1.1)	279 (1.3)	42 (1.0)	281 (1.3)						
New Jersey	22 (1.1)	261 (2.5)	36 (1.2)	274 (1.8)	42 (1.3)	275 (1.9)						
New Mexico	29 (1.0)	248 (1.4)	36 (0.9)	262 (1.2)	35 (1.0)	265 (1.3)						
New York		252 (3.1)	32 (1.2)	269 (2.3)	43 (1.3)	273 (2.2)						
North Carolina	25 (1.3)		32 (1.2)	269 (2.5)	46 (1.0)>	260 (1.5) <b>»</b>						
North Dakota	21 (0.9) <b>«</b>	248 (1.7)>	35 (1.1) 35 (1.2)	284 (1.6)	52 (1.2)	284 (1.5)						
NOTHI DAKOLA	14 (0.8)	273 (2.4)	35 (1.2)	204 (1.0)	32 (1.2)	204 (1.5)						
Ohio	21 (1.2)	254 (2.1)	34 (1.1)	268 (1.8)	45 (1.3)	274 (1.7)>						
Oklahoma	18 (0.9) <	260 (2.0)	33 (1.2)	269 (1.5)	49 (1.4)	270 (1.3)						
Pennsylvania	21 (0.8)	259 (2.3)	34 (1.1)	270 (1.8)	45 (1.1)>	277 (1.4)>						
Rhode Island	23 (1.1) <	253 (1.7)	36 (1.1)	267 (1.3)	41 (1.6)	271 (1.1)>>						
South Carolina¹	18 (0.8)	253 (1.7) 251 (1.9)	32 (1.0)	261 (1.3)	50 (1.2)	263 (1.3)						
Tennessee¹		• •	36 (1.0)	260 (1.7)	41 (1.0)	263 (1.6)						
1	22 (1.0)	247 (1.8)	, ,	, ,	, ,	` '						
Texas	19 (0.8)	251 (2.6)	31 (1.1)	264 (1.6)	51 (1.2)	269 (1.5) >>						
Utah¹	23 (0.8)	266 (1.5)	36 (1.0)	275 (1.1)	41 (1.0)	278 (1.0)						
Virginia	22 (1.0)	256 (1.7)	34 (0.9)	271 (1.5)	44 (1.3)	270 (1.5)						
West Virginia	25 (1.0)	245 (1.4)	36 (1.1)	261 (1.3)	40 (1.2)	265 (1.3)>						
Wisconsin	17 (0.9) <	265 (2.7)	35 (1.0)	279 (1.6)	47 (1.0)>	281 (1.5)						
Wyoming	21 (0.9)	263 (1.4)	35 (1.0)	276 (1.1)>	44 (1.1)	279 (1.0)						
TERRITORIES	21 (0.5)	200 (1.7)	~ (1.0)	-1 - (111/-		()						
Guam	37 (1.3)>>	229 (1.7)>>	30 (1.0)	240 (2.1)	33 (1.2)≪	244 (1.9)						
Virgin Islands	- 1					225 (1.4)						
virgin islanus	24 (0.9)	218 (1.9)	30 (1.1)	223 (1.8)	46 (1.3)	223 (1.4)						

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Trial State Mathematics Assessment.



The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

\*Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

\*The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. \*The value for 1992 was significantly lower than the value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated. indicated.

TABLE A.8

Students' Reports on Number of Times They Changed Schools During the Past Two Years
Because They Changed Where They Lived

	Grade 4 - 1992								
	No	ne	One or	r Two	Three o	r More			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	60 (0.9)	224 (0.9)	28 (0.7)	212 (1.3)	13 (0.5)	199 (1.6)			
Northeast	65 (1.9)	229 (2.3)	26 (1.3)	215 (3.7)	, ,				
Southeast	56 (2.1)				10 (1.3)	203 (4.8)			
Central	, ,	215 (2.4)	29 (1.5)	203 (2.5)	15 (1.1)	197 (2.1)			
	63 (1.9)	228 (1.7)	27 (1.5)	216 (3.3)	10 (0.7)	203 (4.7)			
West	<b>5</b> 6 (1.3)	224 (1.9)	29 (1.2)	214 (2.0)	14 (0.8)	198 (2.7)			
STATES			, ,	` '	(/	,			
Alabama i	62 (1.4)	211 (1.7)	26 (1.1)	202 (2.1)	11 (0.7)	405 (0.0)			
Arizona	54 (1.5)	- , ,	• •		, ,	195 (2.2)			
Arkansas		218 (1.3)	30 (1.1)	211 (1.5)	16 (0.9)	203 (1.9)			
	62 (1.2)	212 (1.0)	26 (1.1)	206 (1.6)	13 (0.7)	200 (2.3)			
California	54 (2.0)	214 (2.0)	31 (1.3)	203 (1.6)	15 (1.1)	193 (2.5)			
Colorado	58 (1.3)	225 (1.1)	28 (1.0)	216 (1.5)	14 (0.9)	204 (2.1)			
Connecticut	68 (1.2)	233 (1.1)	23 (1.0)						
	00 (1.2)	233 (1.1)	23 (1.0)	215 (1.9)	9 (0.7)	204 (2.5)			
Delaware	58 (1.3)	224 (0.8)	28 (0.9)	210 (1,6)	14 (0.9)	200 (1.9)			
Dist. Columbia	52 (1.0)	199 (1.1)	35 (1.1)	, ,	, ,				
Florida	, , ,	, ,		184 (1.2)	13 (0.7)	181 (1.8)			
	50 (1.6)	217 (1.6)	33 (1.2)	210 (2.3)	16 (0.9)	202 (1.6)			
Georgia	58 (1.9)	220 (1.3)	29 (1.4)	210 (1.9)	13 (0.9)	199 (1.8)			
Hawaii	55 (1.3)	218 (1.6)	29 (1.0)	208 (1.6)	15 (0.9)	204 (2.1)			
Idaho	63 (1.3)	224 (0.9)	25 (1.0)	218 (1.5)	• •	, ,			
1	00 (1.0)	224 (0.5)	25 (1.0)	210 (1.3)	12 (0.7)	207 (2.0)			
Indiana	64 (1.2)	225 (1.0)	25 (1.0)	215 (1.5)	10 (0.8)	201 (1.8)			
lowa	71 (1.2)	233 (1.1)	21 (0.9)	225 (1.9)	,				
Kentucky	, ,		` '	, ,	8 (0.7)	208 (2.3)			
Louisiana	64 (1.3)	217 (1.1)	25 (1.0)	212 (1.7)	11 (0.8)	202 (2.5)			
	59 (1.5)	207 (1.5)	28 (1.2)	200 (1.9)	13 (0.8)	192 (2.4)			
Maine ]	72 (1.4)	234 (1.1)	19 (1.1)	226 (2.3)	9 (0.7)	214 (2.5)			
Maryland	58 (1.5)	224 (1.4)	31 (1.2)	209 (1.9)	11 (0.7)	196 (2.2)			
	, ,		J. (1.12)	200 (1.0)	11 (0.1)	130 (2.2)			
Massachusetts	71 (1.3)	230 (1.3)	22 (1.1)	215 (1.8)	6 (0.6)	210 (3.1)			
Michigan	63 (1.5)	225 (1.7)	26 (1.2)	212 (2.4)	11 (0.7)	197 (3.0)			
Minnesota	70 (1.2)	232 (1.0)	21 (1.0)						
Mississippi		* *	, ,	221 (1.8)	9 (0.7)	209 (2.4)			
, ,	64 (1.3)	203 (1.4)	25 (1.0)	195 (1.6)	11 (0.9)	194 (2.2)			
Missouri	64 (1.4)	225 (1.2)	24 (1.3)	219 (2.1)	12 (0.8)	203 (2.3)			
Nebraska	68 (1.1)	228 (1.4)	22 (0.9)	220 (1.9)	10 (0.7)	205 (3.1)			
New Homoshire	5. (4.5)		` .		, ,	200 (01.7)			
New Hampshire	74 (1.2)	231 (1.3)	19 (1.2)	225 (1.8)	7 (0.6)	214 (2.5)			
New Jersey	69 (1.3)	232 (1.4)	23 (1.0)	216 (1.9)	8 (0.8)	205 (2.8)			
New Mexico	57 (2.3)	217 (2.1)	28 (1.8)	207 (1.7)	14 (0.9)				
New York	67 (1.3)			3 1		202 (2.2)			
North Carolina		223 (1.2)	25 (1.2)	210 (1.9)	8 (0.7)	197 (2.8)			
_	61 (1.3)	215 (1.3)	26 (0.9)	210 (1.7)	13 (0.8)	197 (2.1)			
North Dakota	74 (1.5)	230 (0.9)	18 (1.1)	223 (1.8)	8 (0.9)	212 (2.6)			
Ohio	CC (4.0)		` '	, ,		` '			
	66 (1.0)	222 (1.1)	23 (0.8)	213 (1.8)	12 (0.7)	202 (2.0)			
Oklahoma	59 (1.3)	224 (1.2)	27 (1.0)	215 (1.6)	14 (0.9)	207 (1.6)			
Pennsylvania	69 (1.4)	229 (1.4)	22 (1.0)	215 (1.8)	9 (0.6)	200 (2.7)			
Rhode Island	66 (1.5)	219 (1.6)	_ ; ,	, ,	` ,				
South Carolina			25 (1.2)	207 (2.2)	9 (0.8)	198 (3.6)			
	62 (1.2)	214 (1.3)	27 (1.0)	208 (1.5)	11 (0.7)	201 (1.7)			
Tennessee	61 (1.4)	214 (1.3)	27 (1.0)	206 (2.1)	12 (0.8)	196 (2.5)			
Texas	EE /4 7\	000 (4.4)	00 (4.0)	045 (4.0)	` '	` '			
	55 (1.7)	222 (1.4)	30 (1.3)	215 (1.9)	15 (0.9)	204 (2.5)			
Jtah	67 (1.1)	226 (1.0)	23 (0.9)	219 (1.7)	9 (0.7)	208 (2.2)			
/irginia	61 (1.3)	225 (1.5)	26 (1.1)	215 (1.9)	13 (0.8)	203 (2.1)			
West Virginia	72 (1.0)	217 (1.1)	20 (0.9)	208 (1.7)					
Wisconsin				, ,	9 (0.7)	199 (2.2)			
	71 (1.2)	232 (1.1)	20 (0.9)	222 (1.6)	9 (0.6)	208 (2.6)			
Wyoming ERRITORY	61 (1.3)	228 (0.9)	24 (0.8)	221 (1.5)	14 (0.9)	213 (2.0)			
Suam	45 /4 41	400 (4.0)	07 (4.4)	400 (5.5)	44 /				
-uu:11	45 (1.1)	192 (1.2)	37 (1.1)	192 (1.6)	18 (0.8)	189 (2.0)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.



# TABLE A.8 Students' Reports on Number of Times They Changed Schools During the Past Two Years Because They Changed Where They Lived (continued)

	Grade 8 - 1992								
ŀ	Nor	10	One o	r Two	Three o	r More			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	78 (0.7)	270 (1.0)	18 (0.6)	258 (1.8)	4 (0.3)	244 (2.4)			
Northeast	81 (1.3)	271 (3.0)	16 (1.3)	254 (4.5)	2 (0.5)	*** (***)			
Southeast	76 (1.5)	261 (1.4)	20 (1.3)	254 (2.5)	4 (0.6)	240 (3.6)			
Central	82 (0.7)	277 (2.1)	15 (0.6)	262 (3.6)	3 (0.7)	*** (***)			
West	, ,			• •	5 (0.6)	248 (3.4)			
	74 (1.5)	271 (2.2)	22 (1.2)	261 (3.6)	3 (0.0)	240 (3.4)			
STATES		(4 -)	40.00	0.10.40.0\	4 (0.5)	0.40 (4.0)			
Alabama	77 (0.8)	253 (1.8)	19 (0.8)	249 (2.3)	4 (0.5)	242 (4.0)			
Arizona	71 (1.2)	267 (1.3)	24 (1.1)	260 (2.3)	5 (0.5)	258 (3.2)			
Arkansas	76 (1.0)	258 (1.2)	19 (0.8)	248 (2.0)	5 (0.5)	249 (4.0)			
California	73 (1.5)	266 (1.7)	22 (1.2)	254 (2.3)	5 (0.6)	240 (4.1)			
Colorado	74 (0.7)	275 (1.0)	20 (0.6)	264 (1.9)	5 (0.4)	253 (3.1)			
Connecticut	81 (1.0)	277 (1.0)	16 (0.9)	261 (2.0)	3 (0.4)	*** (***)			
Delaware	74 (0.9)	266 (1.0)	21 (0.8)	254 (2.5)	4 (0.4)	250 (4.9)			
Dist. Columbia	74 (0.5) 75 (1.2)	238 (1.2)	21 (1.1)	227 (1.8)	4 (0.4)	220 (6.0)			
Florida	, ,			· · · · · · · · · · · · · · · · · · ·	5 (0.5)				
	69 (1.2)	262 (1.5)	26 (1.0)	256 (1.8)		251 (3.2)			
Georgia	76 (1.1)	261 (1.3)	21 (1.0)	255 (2.0)	4 (0.4)	247 (3.6)			
Hawaii	74 (1.0)	260 (1.0)	21 (0.8)	252 (2.0)	5 (0.4)	242 (4.4)			
Idaho	79 (0.7)	276 (0.9)	16 (0.6)	273 (1.6)	4 (0.5)	258 (2.9)			
Indiana	81 (0.9)	271 (1.2)	16 (0.8)	263 (2.3)	3 (0.3)	252 (4.5)			
lowa	86 (0.7)	284 (1.0)	12 (0.6)	277 (2.0)	2 (0.3)	*** (***)			
Kentucky	80 (0.8)	264 (1.2)	16 (0.8)	257 (1.6)	3 (0.4)	245 (3.9)			
Louisiana		3 7	19 (1.0)	245 (2.5)	4 (0.4)	244 (3.5)			
Maine	77 (1.1)	251 (1.7)		, ,	2 (0.3)	*** (***)			
Maryland	86 (0.8) 78 (1.4)	279 (1.0) 267 (1.4)	12 (0.7) 19 (1.3)	272 (2.4) 259 (2.6)	2 (0.3) 3 (0.4)	245 (4.5)			
· 1		, ,	, ,		, ,	*** (***)			
Massachusetts	86 (0.7)	274 (1.2)	11 (0.7)	261 (2.0)	2 (0.3)	` '			
Michigan	80 (1.0)	270 (1.6)	17 (0.8)	256 (2.2)	4 (0.4)	246 (4.3)			
Minnesota	85 (0.8)	284 (1.0)	13 (0.7)	273 (2.5)	2 (0.3)	*** (***)			
Mississippi	79 (0.9)	247 (1.3)	18 (0.9)	241 (2.1)	3 (0.4)	246 (4.3)			
Missouri	79 (0.8)	273 (1.1) ·	18 (0.8)	264 (2.3)	4 (0.3)	256 (2.9)			
Nebraska	82 (1.0)	279 (1.2)	15 (0.9)	271 (1.8)	3 (0.4)	252 (4.2)			
New Hampshire	85 (0.8)	279 (1.1)	13 (0.8)	273 (2.1)	2 (0.3)	*** (***)			
New Jersey	80 (1.0)	275 (1.3)	17 (0.9)	257 (3.1)	2 (0.3)	*** (***)			
New Mexico			20 (0.7)	256 (1.8)	4 (0.4)	249 (3.2)			
New York	75 (0.9)	261 (0.9)	, ,	· · · · · · · · · · · · · · · · · · ·		*** (***)			
	83 (0.9)	270 (2.0)	15 (0.9)	255 (3.5)	2 (0.3)	, ,			
North Carolina	78 (1.0)	260 (1.2)	17 (0.8)	253 (1.8)	5 (0.5)	244 (3.6)			
North Dakota	86 (0.9)	284 (1.2)	13 (0.8)	275 (1.7)	1 (0.3)	*** (***)			
Ohio	80 (0.9)	271 (1.5)	17 (0.8)	259 (3.0)	3 (0.4)	242 (4.9)			
Oklahoma	77 (0.9)	270 (1.2)	19 (0.8)	262 (2.1)	4 (0.4)	255 (3.6)			
Pennsylvania	86 (0.9)	273 (1.4)	12 (0.8)	261 (2.9)	2 (0.3)	*** (***)			
Rhode Island	81 (1.3)	268 (0.9)	17 (1.3)	259 (1.8)	2 (0.3)	*** (***)			
South Carolina	78 (1.0)	261 (1.0)	19 (0.9)	257 (2.0)	4 (0.4)	251 (3.7)			
Tennessee	79 (1.0) 79 (1.0)	261 (1.6)	17 (1.0)	249 (2.0)	4 (0.4)	250 (3.1)			
Texas	74 (0.9)	267 (1.5)	22 (0.7)	258 (2.0)	4 (0.5)	248 (3.3)			
Utah	80 (0.8)	276 (0.7)	17 (0.7)	270 (1.8)	4 (0.4)	256 (3.9)			
Virginia									
	75 (1.2)	269 (1.3)	21 (1.1)	263 (2.2)	4 (0.4)	260 (3.1)			
West Virginia	85 (0.7)	260 (1.1)	13 (0.7)	252 (2.1)	3 (0.3)	248 (3.8)			
Wisconsin	84 (0.8)	279 (1.4)	13 (0.7)	273 (2.6)	2 (0.3)	248 (5.6)			
Wyoming TERRITORIES	78 (0.9)	276 (1.0)	18 (0.8)	271 (1.6)	4 (0.4)	257 (3.9)			
Guam	69 (1.3)	240 (1.2)	24 (1.2)	238 (2.1)	7 (0.8)	229 (4.6)			
Virgin Islands	78 (1.2)	224 (1.3)	19 (1.1)	220 (2.0)	3 (0.4)	*** (***)			

<sup>\*\*\*</sup>Sample size insufficient to permit reliable estimate. There were fewer than 62 students.



TABLE A.9 | Schools' Reports on the Degree of Students' Tardiness in the School

	Grade 4 - 1992								
	Serious or	Moderate	Min	or	Not a P	roblem			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	12 (1.8)	199 (2.6)	57 (3.1)	219 (1.3)	30 (3.3)	202 /4 0			
Northeast	16 (5.7)	205 (6.7)	41 (7.9)			222 (1.9)			
Southeast	, ,	, ,	` '	223 (4.5)	43 (8.0)	228 (3.3)			
Central	10 (3.6)	193 (6.0)	59 (4.2)	211 (2.8)	31 (5.3)	210 (3.4)			
	7 (2.4)	204 (5.3)	60 (7.1)	222 (2.2)	33 (7.3)	227 (3.6)			
West	16 (3.4)	196 (3.4)	66 (5.7)	220 (2.2)	17 (5.5)	219 (2.6)			
STATES					` ,	` ,			
Alabama	13 (3.3)	205 (2.9)	61 (5.1)	205 (2.3)	25 (4.2)	211 (3.5)			
Arizona	29 (4.9)	214 (2.7)	57 (4.9)	213 (1.9)	14 (3.4)				
Arkansas	12 (3.1)	208 (7.3)	57 (5.2)	, ,	` '	216 (4.5)			
California			, ,	208 (1.4)	31 (4.6)	211 (1.5)			
Colorado	26 (4.9)	200 (3.4)	63 (4.9)	207 (2.4)	11 (2.7)	222 (4.8)			
•	19 (3.5)	209 (2.7)	46 (5.2)	219 (1.7)	35 (4.8)	226 (1.8)			
Connecticut	7 (2.5)	200 (6.5)	44 (4.8)	220 (2.3)	49 (4.5)	236 (1.5)			
Delaware	10 (0.2)	218 (2.1)	51 (0.2)		, ,				
Dist. Columbia		, , , , , , , , , , , , , , , , , , ,	51 (0.2)	219 (1.0)	39 (0.3)	213 (1.7)			
Florida	35 (0.3)	185 (1.1)	<b>55</b> (0.3)	192 (0.8)	11 (0.2)	209 (1.9)			
	24 (3.9)	207 (3.2)	55 (4.6)	213 (2.6)	21 (3.5)	217 (3.2)			
Georgia	24 (4.1)	214 (2.7)	53 (4.7)	214 (2.1)	22 (4.3)	214 (4.0)			
Hawaii	18 (4.1)	206 (3.1)	62 (5.2)	212 (1.9)	20 (4.2)	221 (2.8)			
Idaho	6 (1.9)	219 (3.4)	60 (4.7)	220 (1.2)	35 (4.9)				
14-41-4-			, ,	220 (1.2)	SS (4.9)	222 (1.8)			
Indiana	15 (3.6)	215 (3.8)	48 (5.2)	219 (1.4)	37 (4.6)	223 (1.5)			
lowa	8 (2.3)	222 (3.9)	36 (4.1)	228 (2.1)	56 (4.3)	231 (1.2)			
Kentucky	12 (2.7)	208 (3.4)	53 (4.5)	215 (1.4)	, ,				
Louisiana	16 (3.6)	, , ,			35 (4.1)	213 (1.5)			
Maine		188 (6.1) *** (***)	60 (4.7)	206 (1.7)	25 (4.4)	207 (3.9)			
Maryland	2 (1.3)	\ /	36 (4.9)	231 (1.7)	62 (4.8)	230 (1.4)			
Mai yiailu	14 (3.5)	200 (5.3)	56 (5.3)	214 (2.3)	30 (4.5)	228 (2.6)			
Massachusetts	11 (3.1)	208 (6.5)	45 (4.8)	227 (2.1)	44 (5.2)	229 (2.1)			
Michigan	12 (3.1)	199 (7.0)		, ,					
Minnesota	3 (1.8)		49 (5.4)	216 (2.5)	39 (5.0)	228 (2.7)			
Mississippi		212 (8.0)	39 (5.0)	224 (2.2)	58 (4.7)	230 (1.1)			
	11 (2.1)	195 (3.0)	65 (4.9)	201 (1.8)	24 (4.7)	199 (3.0)			
Missouri	13 (3.8)	210 (4.2)	48 (5.1)	219 (1.9)	39 (4.8)	228 (1.7)			
Nebraska	11 (3.6)	215 (4.2)	47 (4.1)	224 (1.9)	42 (4.6)	227 (2.2)			
New Hampshire	5 (2.3)	004 (9.7)	10 (5.1)						
New Jersey	, ,	224 (8.7)	43 (5.4)	230 (1.9)	52 (5.8)	229 (1.3)			
	14 (3.1)	201 (4.6)	36 (5.1)	230 (3.1)	51 (5.4)	230 (2.2)			
New Mexico	18 (4.1)	207 (2.7)	48 (5.3)	211 (1.9)	35 (5.1)	215 (3.7)			
New York	17 (3.9)	207 (4.1)	39 (5.1)	213 (3.1)	44 (5.4)	225 (2.4)			
North Carolina	20 (4.1)	205 (3.2)	56 (4.9)	214 (1.7)	23 (4.0)	212 (3.0)			
North Dakota	1 (0.8)	*** (***)	41 (5.0)	225 (1.3)	58 (5.0)	229 (1.0)			
Ohio	, ,	` '	, ,	220 (1.0)	33 (3.5)	229 (1.0)			
- · · · · · · · · · · · · · · · · · · ·	13 (2.8)	204 (2.8)	55 (4.7)	217 (1.6)	32 (5.2)	223 (2.8)			
Oklahoma	12 (3.3)	214 (3.4)	61 (5.1)	219 (1.3)	26 (4.5)	220 (2.1)			
Pennsylvania	14 (3.2)	201 (5.0)	33 (5.3)	223 (3.1)	54 (5.5)	229 (1.5)			
Rhode Island	8 (2.7)	198 (5.7)	48 (5.3)	216 (2.4)	44 (5.6)	214 (2.6)			
South Carolina	23 (3.9)	210 (2.6)	55 (4.9)	211 (1.7)		3 1			
Tennessee	15 (3.5)	201 (4.1)	, , ,		22 (4.6)	211 (3.1)			
			69 (5.0)	210 (1.6)	16 (3.8)	216 (4.4)			
Texas	12 (3.2)	209 (3.0)	64 (5.1)	219 (1.8)	23 (4.2)	215 (3.7)			
Utah	20 (3.8)	221 (2.7)	62 (4.7)	222 (1.4)	19 (3.9)	225 (2.2)			
Virginia	7 (2.5)	212 (4.4)	50 (5.4)	217 (2.1)	, ,				
West Virginia	7 (2.2)				43 (5.3)	224 (2.5)			
Wisconsin		216 (4.5)	58 (4.9)	215 (1.6)	35 (4.4)	212 (1.6)			
	7 (2.4)	211 (4.4)	48 (4.8)	226 (1.5)	45 (4.8)	231 (1.6)			
Wyoming FERRITORY	11 (3.2)	219 (2.8)	47 (4.6)	224 (1.6)	42 (4.6)	226 (1.3)			
Guam	32 (0.2)	196 (1.3)	68 (0.2)	188 (1.1)	0 (0.0)	*** (***)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.



# TABLE A.9 | Schools' Reports on the Degree of Students' Tardiness in the School (continued)

	Grade 8 - 1992								
PUBLIC SCHOOLS	Serious or Moderate		Min	or	Not a P	roblem			
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	23 (3.1)	254 (3.0)	57 (4.0)	269 (1.4)	20 (3.6)	274 (2.8)			
Northeast	18 (4.4)	233 (3.7)	54 (9.8)	270 (3.3)	28 (8.6)	282 (6.8)			
Southeast	27 (6.9)	251 (4.1)	54 (8.2)	259 (2.3)	19 (7.8)	266 (2.6)			
Central	29 (7.0)	265 (4.9)	58 (8.4)	276 (2.1)	14 (7.3)	280 (4.7)			
West	18 (5.4)	260 (7.2)	62 (6.5)	269 (2.9)	20 (5.6)	271 (2.5)			
STATES	10 (3.4)	200 (1.2)	02 (0.5)	200 (2.0)	20 (0.0)	()			
Alabama	28 (4.3)	249 (3.3)	62 (4.8)	252 (2.4)	10 (3.2)	253 (4.8)			
Arizona	44 (5.1)	259 (1.8)	42 (5.3)	269 (1.7)	14 (3.6)	266 (5.4)			
Arkansas		, ,	53 (5.1)	256 (1.6)	9 (2.9)	256 (3.2)			
California	39 (5.1)	256 (2.1)		265 (2.4)	12 (2.8)	268 (4.7)			
	30 (4.1)	248 (3.4)	58 (4.8)	3 7	, ,	1. 1			
Colorado	30 (4.4)	263 (2.3)	55 (4.6)	- 275 (1.5)	15 (2.9)	273 (2.4)			
Connecticut	17 (3.2)	254 (4.9)	57 (5.3)	274 (2.3)	26 (4.7)	284 (2.4)			
Delaware	28 (0.2)	264 (2.1)	57 (0.2)	259 (1.2)	15 (0.1)	269 (3.2)			
Dist. Columbia	67 (O.7)	225 (1.1)	26 (0.8)	245 (1.8)	7 (0.2)	233 (1.7)			
Florida	40 (4.4)	252 (3.0)	50 (4.9)	262 (1.6)	10 (3.1)	274 (4.3)			
Georgia	21 (4.4)	255 (2.9)	70 (4.8)	260 (1.9)	9 (2.8)	260 (3.2)			
Hawaii	21 (0.3)	249 (1.8)	72 (0.3)	258 (1.1)	8 (0.1)	268 (3.6)			
Idaho	31 (4.6)	275 (1.4)	59 (4.7)	274 (1.0)	11 (1.6)	278 (1.7)			
Indiana	, ,	• •	, ,	070 (4.5)	15 (3.5)	277 (3.5)			
	33 (5.3)	261 (2.6)	52 (5.2)	272 (1.5)	, ,	288 (2.2)			
lowa	15 (3.3)	275 (2.8)	60 (4.5)	283 (1.2)	25 (3.9)	1			
Kentucky	17 (4.2)	260 (3.2)	64 (5.8)	262 (1.5)	19 (4.4)	263 (2.8)			
Louisiana	33 (5.3)	244 (3.4)	52 (5.4)	249 (2.5)	16 (4.3)	258 (4.4)			
Maine	5 (2.7)	270 (4.5)	59 (4.6)	276 (1.0)	36 (4.6)	283 (2.0)			
Maryland	23 (4.3)	248 (4.8)	61 (5.4)	267 (2.2)	16 (3.7)	276 (4.0)			
Massachusetts	23 (4.7)	260 (4.7)	54: (5.7)	275 (1.9)	23 (4.0)	280 (2.3)			
Michigan	33 (3.9)	255 (2.8)	56 (4.5)	271 (2.0)	11 (3.1)	279 (7.0)			
Minnesota	12 (2.7)	278 (3.1)	70 (4.4)	282 (1.2)	18 (3.7)	282 (2.1)			
Mississippi	37 (5.1)	247 (2.2)	53 (5.2)	246 (2.0)	10 (3.2)	237 (6.3)			
Missouri	27 (4.3)	267 (3.0)	52 (4.9)	271 (1.6)	21 (4.3)	273 (1.5)			
Nebraska	20 (3.1)	272 (3.0)	54 (5.2)	279 (1.5)	27 (4.8)	279 (1.7)			
1	, ,	, ,	, ,	, ,	38 (3.9)	278 (1.9)			
New Hampshire	15 (3.4)	279 (2.0)	47 (4.4)	277 (1.1)	, ,				
New Jersey	14 (3.4)	243 (4.1)	49 (5.7)	271 (3.2)	38 (4.5)	282 (1.5)			
New Mexico	35 (3.8)	258 (1.6)	54 (4.1)	258 (1.3)	11 (3.0)	262 (3.4)			
New York	27 (4.9)	241 (5.9)	53 (5.4)	271 (2.5)	20 (3.8)	285 (2.3)			
North Carolina	22 (3.4)	253 (2.7)	65 (4.5)	258 (1.5)	13 (3.4)	263 (3.2)			
North Dakota	12 (2.7)	281 (2.0)	52 (3.8)	282 (1.3)	36 (3.9)	284 (2.4)			
Ohio	24 (3.9)	254 (4.1)	60 (5.0)	272 (2.5)	16 (3.3)	272 (3.3)			
Oklahoma	23 (4.9)	267 (2.5)	64 (5.3)	267 (1.7)	14 (3.1)	270 (3.6)			
Pennsylvania	19 (3.8)	260 (3.2)	55 (5.2)	270 (2.5)	26 (4.2)	280 (2.5)			
Rhode Island	30 (0.2)	255 (1.1)	60 (0.2)	270 (1.2)	9 (0.1)	275 (2.0)			
South Carolina	38 (5.2)	259 (1.1)	53 (5.2)	261 (1.7)	9 (3.1)	260 (6.2)			
Tennessee	24 (4.1)	250 (2.2)	68 (4.8)	261 (2.0)	8 (2.9)	254 (5.7)			
	, ,		, ,	, ,	, ,				
Texas	47 (5.6)	262 (2.6)	47 (5.5)	266 (2.3)	6 (2.4)	262 (6.1) 275 (2.6)			
Utah	35 (3.9)	272 (1.4)	59 (4.4)	275 (1.1)	6 (2.1)				
Virginia	23 (4.3)	260 (3.1)	62 (5.2)	269 (1.7)	15 (3.5)	271 (4.2)			
West Virginia	27 (4.7)	257 (1.7)	54 (5.0)	258 (1.5)	19 (4.2)	260 (2.4)			
Wisconsin	15 (3.0)	256 (4.6)	48 (5.4)	280 (1.2)	37 (5.9)	282 (2.8)			
Wyoming	23 (3.2)	268 (2.1)	67 (3.4)	276 (1.1)	10 (1.6)	278 (1.6)			
TERRITORIES	70 (0.0)	005 (4.4)	00 (0.0)	000 (0.5)	0 (0 0)	*** (***)			
Guam	70 (0.2)	235 (1.4)	30 (0.2)	232 (2.5)	0 (0.0)	, ,			
Virgin Islands	44 (0.2)	225 (1.4)	37 (0.2)	221 (1.4)	19 (0.1)	215 (2.4)			



TABLE A.10 | Schools' Reports on the Degree of Students' Cutting of Classes in the School

	Grade 4 - 1992								
	Serious or	Moderate	Min	or	Not a P	roblem			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	0 (0.0)	*** (***)	3 (1.1)	197 (4.7)	97 (1.1)	048 (0.0)			
Northeast	0 (0.0)	*** }***\	1 (1.4)	*** (***)	99 (1.4)	218 (0.9)			
Southeast	0 (0.0)	*** /***	4 (2.7)	*** /***/		223 (2.3)			
Central	0 (0.0)	*** /***	5 (2.8)	<b>y</b> ,	96 (2.7)	209 (2.0)			
West	0 (0.0)	*** /***	3 (2.6)	200 (7.7)	95 (2.8)	223 (2.2)			
STATES	0 (0.0)	( )	3 (1.6)	192 (9.2)	97 (1.6)	217 (1.7)			
Alabama	0 (0.0)	*** /***\	10 (0.0)	000 (5.0)	22 (2.2)				
Arizona	0 (0.0)	*** (***)	12 (3.0)	209 (5.3)	88 (3.0)	207 (1.6)			
Arkansas	· '	*** /***	19 (3.8)	208 (3.4)	81 (3.8)	215 (1.3)			
California	1 (1.1)	*** (***)	8 (2.5)	212 (3.4)	91 (2.7)	209 (1.0)			
Colorado	1 (0.6)	*** (***)	11 (2.6)	192 (5.5)	88 (2.7)	209 (1.8)			
Connecticut	0 (0.0)	\ /	7 (2.4)	221 (3.4)	93 (2.4)	220 (1.1)			
	0 (0.0)	*** (***)	2 (1.1)	*** (***)	98 (1.1)	226 (1.3)			
Delaware	5 (0.1)	*** (***)	10 (0.2)	218 (3.3)	85 (0.2)	216 (0.9)			
Dist. Columbia	2 (0.0)	*** (***)	14 (0.2)	179 (1.3)	83 (0.2)	194 (0.7)			
Florida	1 (0.9)	*** (***)	4 (2.0)	192 (4.5)	95 (2.3)	214 (1.4)			
Georgia	o (o.o)	*** (***)	5 (2.1)	216 (8.5)	95 (2.1)	214 (1.4)			
Hawaii	0 (0.0)	*** }***	3 (1.4)	205 (5.3)	97 (1.4)	, , ,			
Idaho	0 (0.0)	*** }***	5 (2.0)	217 (3.4)	97 (1.4) 95 (2.0)	213 (1.4)			
Indiana	, ,		• •	, ,	, ,	220 (1.0)			
	0 (0.0)	*** (***)	3 (2.0)	204 (2.8)	97 (2.0)	220 (1.1)			
lowa	0 (0.0)	*** (***)	2 (1.3)	234 (4.9)	98 (1.3)	229 (1.1)			
Kentucky	0 (0.0)	*** (***)	4 (1.8)	227 (5.4)	96 (1.8)	213 (1.0)			
Louisiana	0 (0.0)	*** (***)	10 (3.1)	192 (6.1)	90 (3.1)	205 (1.6)			
Maine	0 (0.0)	*** (***)	2 (1.6)	*** (***)	98 (1.6)	231 (1.0)			
Maryland	0 (0.0)	*** (***)	3 (1.9)	203(22.0)	97 (1.9)	217 (1.3)			
Massachusetts	0 (0.0)	*** (***)	2 (1.3)	*** /***)	98 (1.3)	000 (4.0)			
Michigan	1 (0.9)	*** /***	5 (2.1)	, , , , , , , , , , , , , , , , , , ,		226 (1.2)			
Minnesota	0 (0.0)	*** /***	` '	208 (7.4)	94 (1.9)	219 (1.9)			
Mississippi	0 (0.0)	*** /***	5 (2.3) 9 (3.1)	212 (9.2)	95 (2.3)	228 (1.0)			
Missouri	0 (0.0)	*** /***		194 (6.9)	91 (3.1)	201 (1.2)			
Nebraska	0 (0.0)	*** /***	6 (2.4)	216 (3.9)	94 (2.4)	221 (1.3)			
	0 (0.0)	( )	5 (2.4)	235 (3.8)	95 (2.4)	224 (1.3)			
New Hampshire	0 (0.0)	*** (***)	0 (0.0)	*** (***)	100 (0.0)	229 (1.1)			
New Jersey	0 (0.0)	*** (***)	4 (2.2)	205(13.9)	96 (2.2)	227 (1.6)			
New Mexico	1 (1.0)	*** (***)	10 (3.1)	213 (6.5)	89 (3.3)	212 (1.6)			
New York	0 (0.0)	*** (***)	5 (2.5)	201 (8.0)	95 (2.5)	218 (1.5)			
North Carolina	0 (0.4)	*** (***)	8 (2.5)	207 (4.1)	91 (2.5)	212 (1.2)			
North Dakota	0 (0.0)	*** ( <del>***</del> )	4 (2.1)	225 (3.1)	96 (2.1)	228 (0.8)			
Ohio	0 (0.0)	*** (***)	. ,	*** (***)	• •	• •			
Oklahoma	0 (0.0)	*** (***)	1 (0.8)	( )	99 (0.8)	218 (1.3)			
Pennsylvania	, , ,	*** /***	7 (1.6)	212 (4.6)	93 (1.6)	219 (1.1)			
Rhode Island	0 (0.0)	*** (***)	2 (1.4)	202(15.4)	98 (1.4)	224 (1.4)			
South Carolina	0 (0.0)	*** (***)	1 (0.9)	*** (***)	99 (0.9)	214 (1.6)			
Tennessee	0 (0.0)	*** (***)	5 (2.3)	200 (9.8)	95 (2.3)	212 (1.2)			
ł	1 (0.9)	()	7 (2.4)	199 (4.7)	92 (2.6)	210 (1.4)			
Texas	0 (0.0)	*** (***)	6 (2.1)	213 (5.4)	94 (2.1)	217 (1.3)			
Utah	1 (1.0)	*** (***)	20 (3.3)	218 (2.1)	79 (3.5)	224 (1.1)			
Virginia	0 (0.0)	*** (***)	1 (0.9)	*** (***)	99 (0.9)	220 (1.5)			
West Virginia	o (o.o)	*** (***)	2 (1.1)	*** (***)	98 (1.1)	214 (1.1)			
Wisconsin	o (o.o)	*** (***)	8 (2.6)	220 (3.0)	92 (2.6)	228 (1.2)			
Wyoming	0 (0.0)	*** (***)	4 (1.7)	219 (6.4)	96 (1.7)				
TERRITORY	- 11	` '	, 1111	210 (0.4)	30 (1.7)	224 (1.0)			
Guam I	0 (0.0)	*** (***)	0 (0.0)	*** (***)	100 (0.0)	191 (0.9)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.



#### TABLE A.10 | Schools' Reports on the Degree of Students' Cutting of Classes in the School (continued)

	Grade 8 - 1992								
ļ	Serious or	Moderate	Mir	nor	Not a Pi	roblem			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	5 (1.5)	249 (6.3)	37 (4.1)	261 (1.9)	58 (4.3)	272 (1.6)			
Northeast	8 (4.2)	255(17.4)	14 (7.1)	238 (6.4)	78 (7.1)	272 (3.7)			
Southeast	7 (4.1)	243 (7.0)	43 (9.3)	255 (3.4)	49(10.1)	264 (3.3)			
Central	0 (0.0)	*** (***)	32 (8.7)	265 (4.2)	68 (8.7)	278 (1.4)			
West	6 (2.5)	248(11.8)	51 (6.8)	267 (3.0)	43 (7.1)	272 (3.3)			
STATES	0 (2.5)	240(11.0)	O. (0.0)	20. (0.0)	(111)	, ,			
Alabama	6 (2.5)	239 (8.0)	39 (5.4)	252 (2.3)	55 (5.5)	252 (2.5)			
Arizona	11 (3.3)	257 (2.9)	42 (4.5)	264 (1.7)	47 (4.6)	266 (2.7)			
Arkansas	4 (2.1)	251 (9.0)	58 (5.1)	256 (1.6)	38 (4.7)	256 (2.4)			
California	6 (2.1)	239 (9.7)	45 (4.8)	256 (2.6)	48 (4.5)	268 (2.8)			
Colorado		1	56 (4.4)	271 (1.6)	38 (4.4)	275 (1.6)			
Connecticut	6 (2.0) 6 (2.6)	252 (3.2) 260(11.8)	17 (4.3)	264 (6.3)	77 (4.6)	276 (1.4)			
	0 (2.0)	200(11.0)	, ,	, ,	` '				
Delaware	16 (0.2)	260 (2.2)	45 (0.3)	260 (1.3)	39 (0.2)	265 (2.0)			
Dist. Columbia	7 (0.2)	218 (2.0)	51 (0.6)	227 (1.3)	42 (0.6)	237 (1.4)			
Florida	17 (3.6)	251 (5.2)	51 (5.6)	260 (2.1)	32 (4.9)	262 (2.7)			
Georgia	7 (3.3)	255 (7.7)	42 (5.4)	256 (2.2)	51 (5.6)	262 (2.0)			
Hawaii	11 (0.3)	249 (2.4)	57 (0.4)	253 (1.2)	32 (0.2)	265 (1.4)			
ldaho	0 (0.0)	*** (***)	60 (3.8)	275 (1.1)	40 (3.8)	274 (1.1)			
Indiana	3 (1.6)	241 (4.9)	30 (4.1)	263 (2.2)	67 (4.3)	273 (1.6)			
lowa	2 (1.3)	261(10.7)	21 (3.4)	280 (2.0)	77 (3.5)	284 (1.1)			
Kentucky	, ,	250 (8.9)	35 (5.0)	258 (2.0)	61 (5.3)	264 (1.5)			
Louisiana	4 (1.9)		42 (5.7)	243 (2.8)	52 (6.0)	255 (2.2)			
Maine	5 (2.4)	237 (7.3)	27 (4.3)	278 (1.5)	73 (4.3)	278 (1.2)			
Maryland	0 (0.0) 5 (2.1)	232 (7.1)	27 (4.3)	261 (3.5)	68 (5.0)	268 (1.6)			
Wai yiaila	3 (2.1)	` '	` '	• •					
Massachusetts	2 <sub>.</sub> (1.0)	*** (***)	27 (5.2)	264 (3.3)	72 (5.0)	276 (1.5)			
Michigan	3 (1.6)	223 (2.2)	36 (5.3)	261 (2.7)	61 (5.4)	272 (2.1)			
Minnesota	2 (1.2)	*** (***)	50 (5.2)	283 (1.3)	49 (5.3)	280 (1.4)			
Mississippi	7 (2.8)	244 (6.0)	46 (4.6)	246 (2.2)	47 (4.1)	245 (1.9)			
Missouri	5 (0.9)	247 (8.3)	35 (5.1)	269 (2.1)	60 (5.1)	273 (1.2)			
Nebraska	0 (0.0)	*** (***)	26 (3.5)	273 (2.3)	74 (3.5)	279 (1.3)			
New Hampshire	0 (0.0)	. *** (***)	21 (3.2)	276 (2.0)	79 (3.2)	278 (1.0)			
New Jersey	- \/	253 (4.5)	21 (3.4)	245 (5.0)	76 (3.6)	279 (2.0)			
New Mexico	1 1 1 1	257 (3.3)	50 (3.6)	256 (1.3)	35 (3.7)	263 (1.2)			
New York	15 (3.5)	236 (5.7)	40 (5.4)	257 (4.1)	50 (5.6)	279 (1.9)			
North Carolina	10 (3.6)	260 (8.0)	40 (5.4)	254 (2.4)	57 (5.2)	260 (1.5)			
North Dakota	4 (1.8) 5 (1.6)	284 (2.7)	31 (3.8)	281 (1.4)	65 (3.8)	284 (1.5)			
	3 (1.0)		` '		, ,				
Ohio	4 (2.1)	225(13.6)	23 (3.9)	266 (4.0)	74 (3.8)	271 (2.1)			
Oklahoma	5 (1.6)	254 (9.1)	40 (5.4)	269 (1.9)	55 (5.4)	267 (1.5)			
Pennsylvania	3 (1.6)	252(11.2)	40 (4.8)	265 (2.5)	57 (4.9)	276 (1.9)			
Rhode Island	4 (0.0)	257 (3.2)	28 (0.2)	254 (1.0)	68 (0.2)	271 (1.0)			
South Carolina	5 (2.2)	242 (3.9)	49 (5.3)	262 (1.8)	46 (4.9)	260 (1.5)			
Tennessee	4 (1.6)	236 (5.8)	39 (4.8)	257 (2.3)	57 (4.7)	260 (2.1)			
Texas	5 (1.7)	247 (3.7)	47 (4.6)	257 (2.1)	48 (4.4)	272 (2.0)			
Utah	17 (3.2)	272 (1.6)	68 (4.3)	274 (1.0)	15 (3.4)	276 (2.2)			
Virginia	10 (3.2)	258 (5.3)	48 (4.8)	265 (2.0)	42 (4.5)	272 (2.1)			
West Virginia		*** (***)	39 (5.0)	257 (1.6)	59 (5.1)	259 (1.4)			
Wisconsin	2 (1.6) 3 (1.5)	250 (5.8)	37 (4.9)	272 (2.6)	60 (4.7)	282 (1.6)			
Wyoming	3 (1.5) 1 (0.8)	*** (***)	44 (3.8)	275 (1.2)	56 (3.9)	274 (1.4)			
ERRITORIES	1 (0.8)	( )	<del>++</del> (3.0)	2.3 (1.2)	55 (5.5)	,			
Guam	61 (0.2)	236 (1.6)	26 (0.3)	238 (2.1)	13 (0.3)	216 (3.6)			
Virgin Islands	79 (0.1)	223 (1.1)	2 (0.0)	*** (***)	19 (0.1)	215 (2.4)			



TABLE A.11 | Schools' Reports on the Degree of Physical Conflicts among Students in the School

	Grade 4 - 1992								
	Serious or	Moderate	Min	or	Not a P	roblem			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	11 (2.3)	208 (4.0)	59 (3.9)	216 (1.2)	30 (3.4)	004 (0.0)			
Northeast	5 (2.8)	211 (5.4)	58 (8.3)			224 (2.2)			
Southeast	5 (2.5)	191 (6.7)	66 (7.1)	220 (3.7)	37 (8.0)	227 (4.4)			
Central	13 (5.6)	216 (9.2)		207 (2.3)	29 (6.4)	216 (4.1)			
West	18 (5.5)	205 (4.0)	49 (8.5)	221 (2.0)	38 (8.2)	225 (3.6)			
STATES	10 (5.5)	200 (4.0)	65 (7.3)	216 (1.6)	18 (4.8)	226 (6.1)			
Alabama	9 (3.0)	199 (3.0)	E4 (E E)	000 (0.0)					
Arizona	20 (4.1)		54 (5.5)	206 (2.2)	37 (4.9)	210 (2.8)			
Arkansas	18 (3.7)	206 (2.9)	65 (4.8)	215 (1.5)	15 (3.8)	217 (3.7)			
California	1 '	200 (3.1)	54 (5.2)	210 (1.3)	28 (4.4)	213 (2.7)			
Colorado	14 (3.6)	195 (5.1)	67 (4.1)	205 (1.8)	19 (3.7)	222 (3.1)			
Connecticut	18 (3.1)	214 (2.6)	58 (4.9)	220 (1.4)	24 (3.9)	222 (2.0)			
Commoditati	2 (1.4)	180 (3.5)	46 (5.3)	218 (2.1)	51 (5.2)	235 (1.5)			
Delaware	31 (0.3)	216 (1.8)	47 (0.2)	217 (1.0)	, ,	: : :			
Dist. Columbia	25 (0.2)	180 (1.2)	57 (0.2)		22 (0.2)	216 (1.9)			
Florida	15 (3.5)	191 (3.9)	58 (5.6)	192 (0.7)	18 (0.3)	206 (1.6)			
Georgia	15 (3.2)	210 (3.6)		214 (2.1)	28 (4.4)	221 (2.3)			
Hawaii	15 (3.5)		52 (5.6)	211 (2.1)	34 (4.9)	222 (2.9)			
Idaho		207 (2.8)	68 (4.7)	212 (1.7)	17 (3.4)	224 (2.8)			
	12 (3.4)	216 (2.5)	68 (5.0)	220 (1.2)	20 (4.1)	223 (2.1)			
Indiana	6 (2.2)	211 (5.6)	63 (5.3)	219 (1.4)	31 (5.0)	004 (4.0)			
lowa	5 (2.1)	211 (4.5)	58 (4.9)	229 (1.5)	37 (4.5)	224 (1.2)			
Kentucky	15 (̀3.9)́	209 (4.1)	51 (4.2)	214 (1.5)		231 (1.2)			
Louisiana	21 (3.7)	190 (3.8)	62 (4.7)	205 (1.7)	34 (3.8)	216 (1.5)			
Maine	10 (2.8)	230 (5.8)	59 (6.2)	, ,	17 (3.5)	212 (4.2)			
Maryland	15 (3.2)	200 (5.1)	53 (4.3)	230 (1.5) 216 (1.9)	31 (6.0)	232 (1.8)			
Massachusetts	• •	• •	, ,	210 (1.5)	31 (3.3)	226 (2.0)			
Michigan	9 (2.4)	214 (6.2)	38 (4.1)	225 (2.0)	53 (4.7)	228 (1.7)			
Minnesota	21 (4.0)	206 (4.1)	60 (4.5)	220 (2.5)	20 (4:0)	228 (2.4)			
1	14 (3.5)	220 (4.1)	48 (5.5)	227 (1.9)	38 (5.0)	229 (1.2)			
Mississippi	17 (4.2)	200 (3.0)	67 (5.2)	199 (1.7)	17 (3.6)	205 (3.0)			
Missouri	9 (2.5)	210 (3.5)	67 (4.8)	223 (1.7)	23 (4.3)	223 (2.5)			
Nebraska	6 (2.4)	219 (6.3)	59 (5.1)	224 (1.6)	35 (4.9)	226 (2.6)			
New Hampshire	8 (3.0)	224 (6.8)	49 (5.4)	• •	` .				
New Jersey	7 (2.5)	209 (9.2)	48 (5.1)	228 (1.7)	44 (5.4)	231 (1.8)			
New Mexico	16 (4.0)	207 (2.8)	44 (5.9)	224 (2.8)	48 (6.1)	231 (2.3)			
New York	9 (2.6)		57 (5.7)	212 (2.0)	26 (5.3)	215 (3.9)			
North Carolina		202 (4.2)	57 (5.3)	217 (1.9)	34 (5.6)	222 (3.5)			
North Dakota	13 (2.3)	204 (3.8)	57 (4.9)	211 (1.6)	30 (4.4)	216 (2.9)			
ľ	5 (2.4)	227 (2.6)	41 (5.1)	226 (1.3)	54 (5.4)	229 (1.2)			
Ohio	19 (3.7)	206 (3.8)	49 (5.7)	216 (1.7)	33 (5.3)	206 (4.9)			
Oklahoma	15 (3.5)	216 (3.4)	57 (4.3)	219 (1.7)		226 (1.8)			
Pennsylvania	14 (3.0)	205 (6.8)	52 (5.1)	223 (2.1)	28 (4.5) 34 (5.3)	220 (1.5)			
Rhode Island	10 (3.5)	200 (6.1)	62 (5.0)	223 (2.1) 215 (2.3)	34 (5.3)	232 (1.4)			
South Carolina	12 (2.8)	204 (2.6)	68 (4.9)	` '	28 (4.7)	217 (3.6)			
Tennessee	14 (3.6)	201 (3.8)	66 (4.9)	211 (1.5) 211 (1.8)	20 (4.0)	215 (2.5)			
Texas	, ,	` ,	• •	211 (1.8)	21 (4.1)	211 (3.5)			
Utah	10 (3.2)	209 (2.9)	55 (5.0)	214 (1.9)	35 (5.2)	222 (2.7)			
Virginia	18 (3.8)	216 (2.5)	65 (4.7)	224 (1.2)	17 (3.4)	226 (2.0)			
	5 (1.8)	202 (1.8)	56 (4.6)	216 (2.1)	39 (4.4)	226 (2.4)			
West Virginia	7 (2.0)	206 (2.4)	47 (4.5)	214 (1.7)	46 (4.6)	215 (1.5)			
Wisconsin	12 (3.2)	218 (5.2)	53 (4.7)	228 (1.4)	35 (5.3)	231 (1.5)			
Wyoming	13 (3.2)	221 (2.1)	57 (5.3)	224 (1.3)	31 (4.6)	226 (1.5)			
ERRITORY		• •	<b>\/</b>	· ( · · · · )	O ( \ \ \ \ )	220 (1.5)			
Guam	10 (0.1)	192 (2.5)	65 (0.3)	193 (1.2)	25 (0.2)	186 (1.6)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.



TABLE A.11

# Schools' Reports on the Degree of Physical Conflicts among Students in the School (continued)

	Grade 8 - 1992								
PUBLIC SCHOOLS	Serious or Moderate		Mir	ior	Not a Pi	roblem			
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	21 (3.3)	256 (2.8)	64 (3.3)	268 (1.2)	15 (2.2)	274 (3.5)			
Northeast	28 (7.8)	256 (6.4)	57 (8.6)	268 (4.2)	15 (6.1)	279 (9.8)			
Southeast	25 (6.9)	257 (3.8)	59 (5.8)	258 (2.3)	16 (5.0)	262 (5.3)			
	, ,		66 (5.5)	275 (1.6)	17 (3.0)	281 (2.7)			
Central	17 (6.4)	261 (9.2)		1 1	11 (4.1)	273 (6.8)			
West	17 (6.0)	252 (4.5)	72 (6.7)	271 (2.2)	11 (4.1)	2/3 (0.0)			
STATES				/>	0 (0 0)	057 (0.0)			
Alabama	16 (3.4)	239 (4.6)	76 (4.0)	253 (1.9)	8 (2.3)	257 (3.8)			
Arizona	20 (4.4)	257 (2.1)	74 (4.4)	266 (1.7)	6 (2.1)	274 (8.8)			
Arkansas	15 (3.9)	254 (3.7)	69 (5.0)	256 (1.4)	16 (3.3)	255 (2.8)			
California	19 (3.7)	253 (4.2)	60 (4.4)	259 (2.1)	21 (3.9)	272 (4.6)			
			67 (4.8)	273 (1.4)	15 (3.6)	274 (3.2)			
Colorado	19 (4.0)	262 (2.4)		274 (2.7)	31 (4.7)	283 (2.0)			
Connecticut	19 (3.8)	258 (4.8)	50 (5.3)	214 (2.1)	31 (4.7)	200 (2.0)			
Delaware	37 (0.2)	264 (1.4)	57 (0.2)	261 (1.4)	5 (0.0)	258 (7.3)			
Dist. Columbia	, , ,	222 (1.9)	71 (0.6)	228 (1.1)	13 (0.7)	258 (1.8)			
	16 (0.5)	, ,	63 (4.9)	260 (1.7)	9 (3.0)	267 (5.2)			
Florida	28 (4.6)	254 (3.5)	1 1 1	3	17 (3.5)	268 (3.3)			
Georgia	23 (4.9)	255 (3.1)	60 (5.2)	258 (1.9)					
Hawaii	40 (0.3)	255 (1.6)	52 (0.3)	258 (1.1)	8 (0.2)	263 (2.4)			
idaho	17 (2.5)	274 (1.6)	58 (3.6)	275 (1.1)	25 (3.4)	274 (1.1)			
	, ,		70 (0.0)	070 (4.3)	14 (3.7)	275 (3.9)			
Indiana	14 (2.8)	263 (3.1)	73 (3.9)	270 (1.3)	, , ,				
lowa	13 (3.5)	273 (3.3)	60 (4.5)	284 (1.3)	27 (4.2)	285 (1.8)			
Kentucky	16 (3.6)	257 (3.5)	63 (5.1)	261 (1.3)	21 (4.2)	268 (3.4)			
Louisiana	27 (4.5)	239 (3.5)	60 (5.0)	252 (2.1)	13 (3.5)	254 (6.8)			
Maine	10 (3.5)	272 (2.8)	57 (5.0)	278 (1.4)	33 (4.8)	280 (1.9)			
Maryland	32 (4.3)	256 (3.1)	58 (4.8)	265 (2.1)	10 (2.5)	285 (5.7)			
wai yiailo	32 (4.3)	200 (0.1)		, ,		070 (0.0)			
Massachusetts	15 (3.7)	257 (5.7)	55 (5.8)	273 (1.8)	29 (4.7)	279 (2.3)			
Michigan	26 (3.2)	253 (3.4)	57 (4.4)	270 (1.7)	16 (4.2)	277 (5.8)			
Minnesota	9 (2.8)	282 (3.4)	60 (3.9)	283 (1.3)	31 (4.0)	278 (1.7)			
Mississippi	1 1	238 (2.8)	72 (5.2)	248 (1.7)	9 (3.0)	246 (3.3)			
	19 (4.3)	, ,	65 (4.9)	270 (1.6)	18 (4.2)	275 (1.8)			
Missouri	17 (3.6)	267 (3.3)		278 (1.3)	29 (4.2)	280 (2.0)			
Nebraska	7 (2.2)	266 (4.9)	64 (4.7)	270 (1.3)	25 (4.2)				
New Hampshire	11 (1.9)	269 (1.3)	62 (4.1)	277 (1.3)	27 (3.8)	283 (2.0)			
New Jersey	, ,	252 (5.0)	55 (4.9)	271 (2.4)	27 (4.5)	284 (2.6)			
, ,	18 (3.6)	* · · · · · ·	65 (4.4)	260 (1.0)	8 (2.4)	254 (6.6)			
New Mexico	27 (4.0)	257 (2.3)		, ,	21 (4.0)	282 (3.9)			
New York	17 (4.3)	240 (7.0)	62 (5.6)	267 (2.9)	• •	258 (2.9)			
North Carolina	26 (4.4)	252 (2.6)	59 (4.7)	260 (1.4)	15 (3.3)	: :			
North Dakota	1 (1.0)	*** (***)	41 (4.0)	280 (1.3)	58 (4.2)	285 (1.5)			
Ohio	, ,	050 (7.0)	60 (4.6)	269 (2.4)	18 (4.0)	276 (3.2)			
Ohio	13 (3.5)	250 (7.2)	69 (4.6)	• •	24 (4.1)	268 (2.0)			
Oklahoma	12 (3.2)	269 (4.2)	64 (4.6)	267 (1.6)					
Pennsylvania	16 (3.6)	257 (3.1)	60 (4.5)	271 (2.0)	23 (4.0)	281 (2.5)			
Rhode Island	21 (0.2)	255 (1.7)	64 (0.2)	268 (0.9)	15 (0.1)	272 (2.4)			
South Carolina	16 (3.5)	258 (3.2)	70 (4.6)	260 (1.4)	15 (4.0)	261 (3.3)			
Tennessee	22 (4.1)	256 (3.4)	66 (5.0)	258 (2.0)	11 (3.3)	260 (5.2)			
	• •				19 (4.1)	366 (3 O)			
Texas	22 (3.9)	261 (3.2)	59 (5.2)	264 (2.1)	1 1	266 (3.9)			
Utah	17 (3.3)	270 (1.8)	67 (4.1)	274 (1.0)	16 (3.8)	278 (2.4)			
Virginia	21 (4.4)	261 (3.7)	66 (4.9)	269 (1.6)	12 (2.7)	269 (5.0)			
West Virginia	18 (3.7)	256 (2.0)	68 (4.3)	258 (1.3)	15 (3.4)	264 (1.6)			
Wisconsin	15 (3.3)	260 (4.3)	62 (4.9)	279 (1.6)	23 (4.5)	284 (3.0)			
		1 1	55 (3.5)	276 (1.1)	24 (2.7)	275 (2.4)			
Wyoming	21 (2.9)	271 (1.4)	SS (3.5)	2.0 (1.1)	_ ·	17			
TERRITORIES	04 (0.0)	004 (0.7)	SE (0.0)	234 (1.2)	0 (0.0)	*** (***)			
Guam	34 (0.2)	234 (2.7)	66 (0.2)			215 (2.4)			
Virgin Islands	61 (0.1)	226 (1.4)	20 (0.1)	215 (1.6)	19 (0.1)	213 (2.4)			

When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.



TABLE A.12 | Schools' Reports on the Degree of Teacher Absenteeism in the School

	Grade 4 - 1992								
DUD. 10	Serious or	Moderate	Mir	nor	Not a P	roblem			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	5 (1.4)	201 (6.9)	33 (3.3)	046 (0.0)					
Northeast	2 (1.9)	*** (***)		216 (2.2)	63 (3.5)	219 (1.4)			
Southeast	7 (3.5)	\ /	29 (7.4)	223 (6.3)	69 (7.7)	223 (3.4)			
Central		206(13.4)	40 (5.7)	206 (3.8)	54 (5.5)	212 (2.9)			
West	1 (0.9)		31 (5.0)	220 (4.1)	68 (4.9)	223 (3.0)			
STATES	8 (3.5)	200(13.1)	31 (7.4)	217 (3.4)	61 (8.1)	218 (2.1)			
				` ,	o. (o,	210 (2.1)			
Alabama	10 (2.9)	203 (4.0)	41 (5.6)	206 (2.8)	49 (5.1)	000 (0.0)			
Arizona	7 (2.5)	213 (4.7)	40 (4.8)	210 (2.4)		209 (2.2)			
Arkansas	10 (2.7)	202 (4.2)	34 (4.5)		53 (4.8)	216 (1.9)			
California	6 (2.4)	188 (5.3)	37 (5.2)		56 (4.6)	211 (1.6)			
Colorado	2 (1.2)	*** (***)		199 (3.4)	57 (5.2)	214 (1.8)			
Connecticut			32 (4.4)	216 (2.2)	66 (4.4)	222 (1.2)			
-	3 (1.4)	204(10.4)	26 (4.3)	219 (3.7)	71 (4.5)	230 (1.3)			
Delaware	2 (0.1)	*** (***)	41 (0.2)	046 (4.6)	• •	` '			
Dist. Columbia	7 (0.1)	١ /		216 (1.6)	57 (0.2)	217 (0.9)			
Florida	9 (2.9)		60 (0.3)	190 (0.7)	33 (0.3)	196 (1.3)			
Georgia		197 (5.9)	35 (4.5)	212 (2.2)	56 (5.0)	215 (2.6)			
Hawaii	8 (2.9)	207 (7.2)	42 (4.9)	212 (2.5)	50 (5.2)	217 (2.4)			
	5 (2.4)	204 (4.4)	36 (5.2)	214 (2.2)	59 (5.1)	213 (2.0)			
Idaho	4 (2.1)	226 (4.9)	34 (4.8)	220 (1.4)	62 (5.0)				
Indiana	0 (4.5)			• •	02 (5.0)	220 (1.3)			
lowa	3 (1.5)	200 (8.3)	44 (4.4)	. 221 (1.5)	54 (4.6)	220 (1.5)			
	1 (0.5)	*** (***)	28 (4.4)	228 (2.0)	72 (4.5)	230 (1.4)			
Kentucky	6 (2.1)	212 (5.1)	31 (4.5)	209 (1.9)	63 (4.2)				
Louisiana	20 (4.3)	195 (6.2)	54 (5.6)	203 (2.1)	26 (4.6)	216 (1.3)			
Maine	4 (2.2)	230 (3.3)	19 (5.1)	230 (2.1)		210 (3.1)			
Maryland	4 (2.1)	212 (4.5)	31 (4.4)	· · ·	77 (5.2)	231 (1.3)			
Massachusetts	• • • • • • • • • • • • • • • • • • • •	L.L (4.0)	31 (4.4)	209 (3.4)	64 (4.8)	220 (1.9)			
	2 (1.4)	188 (5.1)	27 (4.5)	227 (3.6)	70 (4.4)	226 (1.3)			
Michigan	5 (2.3)	206 (9.3)	37 ( <b>5</b> .1)	216 (2.7)					
Minnesota	2 (1.6)	*** (***)	27 (5.0)	229 (2.4)	58 (5.1)	221 (3.0)			
Mississippi	16 (3.7)	200 (3.9)	51 (5.1)	· ,	71 (5.1)	227 (1.3)			
Missouri	4 (1.4)	194 (6.7)		198 (2.3)	33 (4.4)	204 (2.2)			
Nebraska	0 (0.0)	*** (***)	33 (4.6)	220 (2.1)	63 (4.8)	224 (1.6)			
	0 (0.0)	()	28 (4.6)	228 (2.3)	72 (4.6)	223 (1.6)			
New Hampshire	4 (2.2)	225(12.1)	35 (5.3)	000 (0.4)		• •			
New Jersey	3 (1.7)	192 (6.2)		232 (2.1)	61 (5.4)	228 (1.3)			
New Mexico	9 (2.7)		27 (4.8)	225 (3.5)	71 (4.9)	228 (1.9)			
New York	, ,	209 (3.8)	38 (6.2)	213 (2.6)	53 (6.4)	211 (1.7)			
North Carolina	7 (2.5)	187 (7.1)	31 (5.3)	217 (2.6)	62 (5.5)	221 (2.0)			
North Dakota	8 (2.7)	210 (5.0)	44 (5.2)	210 (1.7)	48 (5.1)	213 (2.0)			
TOTAL DAKOLA	2 (1.3)	*** (***)	17 (3.8)	225 (2.3)	81 (4.1)	228 (0.9)			
Ohio	2 /4 4)	404 (0.7)		, ,	01 (4.1)	220 (0.9)			
Oklahoma	2 (1.4)	194 (3.7)	35 (4.9)	214 (1.8)	62 (4.9)	220 (1.9)			
Pennsylvania	4 (1.8)	212 (3.2)	33 (4.6)	217 (2.0)	63 (4.5)	220 (1.3)			
	5 (2.2)	213(14.1)	24 (4.2)	219 (3.5)	71 (4.6)	226 (1.7)			
Rhode Island	4 (1.8)	193 (9.4)	21 (4.5)	215 (4.6)	76 (4.8)				
South Carolina	10 (3.2)	204 (4.9)	45 (5.3)	209 (1.9)		215 (1.9)			
Tennessee	8 (2.6)	197 (3.9)	41 (4.8)		45 (5.5)	214 (2.0)			
Tavas	• •	.0. (0.0)	41 (4.0)	208 (2.4)	51 (5.0)	212 (2.0)			
exas	10 (3.8)	211 (7.1)	48 (5.5)	213 (2.1)	42 (5.7)	222 /2 01			
Jtah (	2 (1.4)	228 (4.3)	41 (5.0)	224 (1.6)	57 (4.9)	223 (2.0)			
/irginia	3 (1.7)	202 (3.4)	28 (4.3)	214 (2.4)		222 (1.2)			
Vest Virginia	9 (2.3)	208 (2.9)			69 (4.6)	222 (1.9)			
Visconsin	4 (1.9)		47 (5.2)	215 (1.9)	44 (5.2)	214 (1.3)			
Vyoming		210(14.4)	27 (4.7)	225 (2.2)	69 (5.0)	230 (1.2)			
ERRITORY	4 (2.1)	227 (4.1)	27 (4.5)	223 (1.6)	68 (4.7)	224 (1.2)			
Suam	0 (0.4)				- •	7			
	6 (0.1)	195 (3.7)	51 (0.2)	189 (1.2)	42 (0.2)	193 (1.4)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.



# TABLE A.12 | Schools' Reports on the Degree of Teacher Absenteeism in the School (continued)

	Grade 8 - 1992							
<u> </u>	Serious or Moderate		Min	ior	Not a P	roblem		
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency		
NATION	7 (1.6)	252 (4.4)	50 (3.9)	266 (1.6)	43 (3.5)	269 (2.0)		
Northeast	5 (2.8)	241 (4.1)	46 (5.6)	267 (4.1)	49 (4.8)	268 (3.7)		
Southeast	11 (3.0)	254 (4.9)	51 (4.7)	259 (2.1)	39 (4.3)	259 (3.1)		
Central	6 (4.6)	*** (***)	43(11.3)	273 (3.4)	51 (8.8)	276 (4.3)		
West	6 (1.3)	248 (3.2)	57 (7.6)	268 (2.4)	37 (8.0)	272 (4.3)		
STATES	0 (1.5)	240 (0.2)	J. ()		- ',			
Alabama	9 (2.3)	258 (3.7)	43 (5.5)	251 (2.6)	48 (5.4)	251 (2.9)		
Arizona	10 (2.8)	263 (5.8)	47 (5.4)	264 (1.8)	43 (5.3)	265 (2.6)		
Arkansas	13 (3.7)	255 (4.2)	52 (5.6)	255 (1.9)	35 (4.7)	257 (1.9)		
California	7 (2.6)	254 (6.8)	38 (5.1)	255 (2.7)	55 (5.7)	265 (2.6)		
Colorado	6 (2.3)	253 (5.2)	40 (4.8)	273 (2.1)	54 (4.5)	272 (1.4)		
Connecticut	5 (2.2)	271 (9.1)	46 (5.4)	269 (3.1)	49 (5.3)	278 (2.2)		
Delaware	• •		42 (0.2)	264 (1.5)	52 (0.2)	262 (1.4)		
Dist. Columbia	6 (0.1)	• • •	37 (0.5)	226 (1.4)	54 (0.5)	234 (1.1)		
Florida	8 (0.2)	233 (2.2)	57 (5.0)	257 (1.8)	25 (4.1)	267 (3.4)		
	18 (4.0)	257 (5.2)	1 1		34 (5.4)	262 (3.0)		
Georgia	12 (3.2)	255 (4.1)	55 (5.8) 65 (0.3)	257 (2.1) 254 (1.2)	30 (0.2)	262 (3.0)		
Hawaii	5 (0.2)	258 (2.2)	65 (0.3)	, ,	50 (3.6)	273 (1.0)		
Idaho	8 (2.0)	277 (4.0)	42 (3.4)	276 (1.3)	. ,	, ,		
Indiana	7 (2.6)	266 (3.3)	52 (5.5)	268 (1.8)	41 (5.2)	272 (2.3)		
lowa	5 (2.2)	273 (8.1)	39 (4.7)	284 (1.6)	56 (4.9)	283 (1.4)		
Kentucky	13 (3.5)	258 (3.6)	43 (4.8)	263 (1.8)	44 (5.2)	262 (1.9)		
Louisiana	20 (4.4)	241 (4.3)	55 (4.5)	252 (2.1)	25 (3.9)	249 (3.7)		
Maine	3 (0.9)	274 (1.7)	41 (5.0)	278 (1.2)	56 (5.0)	278 (1.5)		
Maryland	6 (2.4)	262 (8.5)	48 (5.2)	259 (2.5)	45 (5.0)	270 (2.5)		
Massachusetts	4 (1.9)	270(14.5)	49 (4.8)	267 (2.5)	47 (4.8)	279 (1.6)		
Michigan	9 (3.0)	265 (5.4)	50 (5.9)	267 (2.7)	41 (5.9)	267 (3.4)		
Minnesota	6 (3.2)	285 (3.2)	47 (4.9)	282 (1.6)	47 (5.1)	280 (1.4)		
Mississippi	17 (3.3)	243 (2.6)	53 (4.6)	246 (2.0)	29 (4.7)	245 (3.3)		
Missouri	7 (2.6)	268 (5.0)	39 (4.9)	269 (2.3)	54 (4.7)	272 (1.4)		
Nebraska	6 (1.9)	275 (4.1)	30 (4.7)	272 (1.8)	65 (4.7)	281 (1.4)		
	` '				` '	279 (1.5)		
New Hampshire	8 (2.5)	280 (3.1)	50 (3.9)	277 (1.4)	42 (3.9) 43 (5.9)	282 (2.0)		
New Jersey	8 (3.1)	263(11.1)	49 (5.9)	263 (3.6)		260 (1.7)		
New Mexico	22 (3.3)	257 (2.7)	49 (4.5)	259 (1.4)	29 (3.8) 34 (5.3)	280 (1.7)		
New York	10 (3.5)	241 (8.0)	56 (5.6)	262 (3.4)	34 (5.3) 40 (5.1)	257 (1.9)		
North Carolina	16 (3.8)	259 (4.5)	44 (5.0)	258 (2.0) 282 (1.8)	40 (5.1) 77 (3.9)	283 (1.4)		
North Dakota	0 (0.0)	*** (***)	23 (3.9)	282 (1.8)	, ,			
Ohio	10 (3.1)	254 (8.7)	45 (6.6)	265 (2.4)	45 (5.6)	274 (3.0)		
Oklahoma	6 (2.5)	258 (9.0)	45 (5.5)	267 (1.9)	50 (5.6)	269 (1.6)		
Pennsylvania	10 (3.2)	257 (7.2)	45 (5.0)	269 (2.1)	45 (5.4)	275 (1.7)		
Rhode Island	9 (0.1)	253 (2.2)	56 (0.2)	268 (0.8)	36 (0.2)	265 (1.5)		
South Carolina	25 (4.9)	253 (2.7)	52 (5.3)	262 (1.7)	23 (4.9)	263 (3.3)		
Tennessee	5 (2.4)	252(11.3)	62 (5.1)	257 (1.8)	33 (5.1)	260 (2.9)		
Texas	17 (3.5)	257 (4.3)	54 (4.8)	264 (2.2)	28 (4.6)	267 (3.0)		
Utah	1 (0.9)	*** (***)	50 (5.2)	274 (1.2)	50 (5.3)	274 (1.2)		
Virginia	8 (2.6)	257 (5.5)	52 (5.2)	267 (1.9)	41 (5.0)	269 (2.5)		
West Virginia		257 (3.3) 257 (1.7)	47 (5.6)	258 (1.5)	32 (5.0)	260 (1.7)		
Wisconsin	21 (4.2) 6 (2.5)	273 (6.5)	28 (3.8)	274 (2.9)	66 (4.1)	279 (1.9)		
Wyoming	6 (2.5)	2/3 (0.3) *** (***)	50 (4.1)	276 (1.2)	49 (3.9)	273 (1.5)		
TERRITORIES	1 (0.8)	( )	JU (4.1)	213 (1.2)	(5.5)	,		
Guam	44 (0.3)	240 (1.5)	56 (0.3)	229 (1.8)	0 (0.0)	*** (***)		
Virgin Islands	53 (0.2)	219 (1.2)	0 (0.0)	*** (***)	47 (0.2)	225 (1.4)		



TABLE A.13 | Schools' Reports on the Degree of Racial or Cultural Conflicts in the School

	Grade 4 - 1982								
	Serious or	Moderate	Min	or	Not a P	roblem			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	2 (0.7)	202 (6.7)	06 (0.0)	040 (0.1)	<u> </u>				
Northeast	0 (0.0)	202 (0.7) *** (***)	26 (3.3)	212 (2.4)	73 (3.3)	220 (1.3)			
Southeast	0 (0.0)	*** /***	23 (5.9)	222 (6.3)	77 (5.9)	223 (2.9)			
Central	, ,	( )	26 (5.1)	211 (2.4)	74 (5.1)	208 (2.5)			
West	1 (1.4)		25 (8.0)	213 (7.2)	74 (8.8)	225 (2.6)			
STATES	4 (2.0)	199 (6.6)	29 (6.1)	207 (3.9)	67 (5.9)	222 (2.2)			
Alabama	<b>.</b> (1 =)				` '	()			
Arizona	3 (1.7)	207 (3.5)	26 (4.4)	202 (2.8)	71 (4.7)	209 (2.0)			
Arkansas	4 (1.9)	200 (2.0)	38 (4.5)	211 (1.9)	58 (4.9)	217 (1.7)			
	4 (1.9)	193 (2.6)	20 (4.0)	205 (2.8)	76 (4.5)	210 (1.4)			
California	6 (2.3)	195 (5.6)	44 (5.2)	203 (3.2)	<b>50</b> (4.8)	,			
Colorado	2 (1.3)	203 (4.0)	31 (4.0)	215 (2.2)	67 (3.7)	211 (1.8)			
Connecticut	1 (0.8)	*** (***)	16 (3.7)	211 (4.5)		223 (1.2)			
Delaware	0 (0.4)	` ,	, ,	, ,	83 (3.7)	229 (1.2)			
Dist. Columbia	8 (0.1)	225 (3.5)	40 (0.3)	216 (1.5)	53 (0.3)	216 (1.1)			
Florida	2 (0.1)	*** (***)	14 (0.2)	209 (1.9)	85 (0.2)	189 (0.6)			
	2 (1.2)	184 (8.1)	31 (5.0)	209 (2.7)	67 (5.1)	215 (1.8)			
Georgia	5 (3.1)	205(11.6)	26 (4.1)	213 (2.5)	69 (5.3)				
Hawaii	5 (2.5)	198 (6.9)	38 (5.5)	213 (2.0)	56 (5.8)	215 (1.8)			
idaho	2 (1.1)	*** (***)	16 (3.6)	216 (1.7)		214 (1.9)			
Indiana	` '	` '	• •	210 (1.7)	83 (3.5)	221 (1.1)			
lowa	2 (1.3)	*** (***)	20 (4.4)	217 (3.4)	78 (4.2)	220 (1.2)			
	1 (0.7)	*** (***)	9 (2.4)	221 (4.0)	91 (2.3)	230 (1.1)			
Kentucky	3 (1.5)	215 (6.0)	21 (3.7)	212 (3.4)	76 (3.8)				
Louisiana	2 (1.5)	*** (***)	36 (5.2)	206 (2.4)	62 (5.2)				
Maine	1 (1.1)	*** (***)	7 (3.0)	227 (3.8)	92 (3.1)	203 (2.0)			
Maryland	3 (1.7)	213 (9.7)	23 (4.1)	216 (3.6)	74 (4.6)	231 (1.1)			
Massachusetts	0 (4 0)	, ,	, ,	210 (5.0)	74 (4.6)	217 (1.8)			
Michigan	2 (1.2)	( )	18 (4.6)	223 (5.2)	80 (4.6)	227 (1.2)			
Minnesota	0 (0.0)	*** (***)	25 (4.1)	217 (2.7)	75 ( <b>4.</b> 1)	219 (2.3)			
Mississippi	3 (1.8)	*** (***)	27 (4.2)	222 (2.2)	71 (4.1)	230 (0.9)			
,,	8 (2.5)	197 (6.1)	22 (3.8)	201 (3.2)	70 (4.2)	200 (1.4)			
Missouri	2 (1.3)	208(13.7)	20 (4.9)	219 (3.2)	77 (5.1)	222 (1.5)			
Nebraska	1 (1.3)	*** (***)	21 (3.8)	217 (3.4)	78 (4.0)				
New Hampshire	0 (0.0)	*** /***\	, ,	` '	70 (4.0)	226 (1.6)			
New Jersey		*** (***)	9 (2.9)	235 (3.3)	91 (2.9)	228 (1.2)			
New Mexico	2 (1.4)	<b>,</b> ,	18 (4.1)	222 (5.0)	80 (4.2)	227 (1.7)			
New York	6 (2.4)	207 (4.2)	36 (5.1)	214 (2.8)	59 (5.1)	211 (2.2)			
North Carolina	3 (1.9)	207 (4.5)	24 (4.2)	218 (2.7)	73 (4.5)	218 (1.8)			
North Dakota	6 (2.3)	209 (5.7)	32 (4.0)	210 (2.0)	63 (4.3)	212 (1.6)			
TOTAL DAKOLA	2 (1.5)	*** (***)	7 (2.4)	224 (3.1)	91 (3.3)	228 (0.8)			
Ohio	1 (1.2)	*** /***\			, ,	220 (0.0)			
Oklahoma	2 (1.3)	*** /***	27 (4.1)	212 (2.6)	72 (4.2)	219 (1.4)			
Pennsylvania	, ,	*** (***)	19 (3.7)	221 (2.4)	79 (3.8)	219 (1.1)			
Rhode Island	1 (0.8)	*** (***)	21 (3.7)	222 (4.9)	78 (3.7)	224 (1.5)			
South Carolina	2 (1.2)	( )	18 (4.1)	210 (3.6)	80 (4.3)	215 (1.9)			
ennessee	2 (1.1)	*** (***)	33 (5.4)	211 (2.4)	65 (5.4)	212 (1.7)			
5.1103306	4 (2.3)	194 (9.5)	22 (3.7)	216 (3.0)	74 (4.1)	209 (1.7)			
exas	3 (1.9)	206 (3.3)		, ,	•				
Jtah	2 (1.5)	200 (3.3)	22 (4.1)	214 (2.4)	75 (4.3)	218 (1.6)			
/irginia		*** /***)	23 (4.4)	219 (2.2)	75 (4.3)	225 (1.1)			
Vest Virginia	1 (0.6)	<b>\</b>	21 (3.8)	217 (2.8)	78 (3.9)	220 (1.8)			
Visconsin	0 (0.0)	*** (***)	6 (2.3)	218 (9.1)	94 (2.3)	214 (1.0)			
Vyomina	1 (0.8)	*** (***)	17 (3.6)	219 (3.7)	82 (3.7)	229 (1.2)			
ERRITORY	2 (1.1)	*** (***)	11 (3.3)	222 (2.3)	87 (3.4)	225 (1.0)			
				<b>\-</b> /	(511)	220 (1.0)			
Suam	5 (0.1)	197 (1.7)	44 (0.2)	192 (1.5)	51 (0.2)	190 (1.0)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.



# TABLE A.13 | Schools' Reports on the Degree of Racial or Cultural Conflicts in the School (continued)

	Grade 8 - 1992								
	Serious or	Moderate	Min	ior	Not a Pi	roblem			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	3 (1.5)	258 (5.2)	42 (4.5)	266 (2.0)	54 (4.5)	268 (1.6)			
Northeast	3 (2.1)	245 (2.7)	43 (8.7)	263 (4.3)	<b>54</b> (8.5)	270 (4.7)			
Southeast	1 (1.2)	*** (***)	40(11.6)	258 (3.0)	58(11.7)	259 (2.6)			
Central	7 (5.3)	*** /***	36 (6.7)	271 (5.4)	57 (6.7)	276 (1.7)			
West	3 (1.5)	262 (5.2)	49 (8.3)	269 (3.2)	48 (8.4)	267 (3.2)			
TATES	3 (1.3)	202 (0.2)	(0.0)		` '	, .			
Alabama	5 (2.0)	247(12.1)	37 (4.9)	255 (2.7)	58 (5.0)	250 (2.3)			
Arizona	6 (1.7)	248 (3.8)	54 (4.9)	267 (1.7)	40 (5.1)	263 (3.2)			
Arkansas		249 (3.5)	35 (3.6)	251 (2.5)	61 (3.7)	259 (1.6)			
	4 (1.3)	1	44 (5.0)	258 (2.5)	48 (4.9)	261 (2.9)			
California	8 (2.8)	268 (2.6)	46 (4.9)	271 (1.9)	45 (4.7)	274 (1.7)			
Colorado	9 (2.6)	262 (3.2)	1 . 1	270 (3.4)	58 (5.4)	277 (1.8)			
Connecticut	5 (2.1)	253(10.9)	38 (5.3)	. ,	• • •				
Delaware	3 (0.1)	266 (4.3)	59 (0.2)	263 (1.3)	38 (0.2)	261 (1.4)			
Dist. Columbia	4 (0.4)	*** (***)	13 (0.3)	241 (2.0)	84 (0.5)	229 (0.9)			
Florida	8 (3.1)	260 (4.0)	59 (4.8)	258 (2.1)	33 (4.7)	262 (2.2)			
Georgia	14 (3.6)	253 (3.4)	38 (5.5)	260 (2.3)	48 (5.4)	259 (1.7)			
Hawaii	14 (0.3)	249 (2.3)	66 (0.3)	256 (1.1)	19 (0.1)	267 (1.6)			
Idaho	3 (1.1)	272 (1.4)	34 (3.9)	274 (1.9)	63 (3.7)	275 (0.9)			
		*** /***\		004 (0.0)	66 (3.7)	272 (1.7)			
Indiana	2 (1.1)	· ( )	32 (3.7)	264 (2.0)		283 (1.1)			
lowa	2 (1.6)	*** (***)	31 (4.0)	282 (2.3)	67 (4.0)	262 (1.4)			
Kentucky	1 (1.0)	*** (***)	33 (4.9)	262 (2.2)	65 (4.9)				
Louisiana	10 (2.8)	244 (3.4)	42 (4.5)	250 (2.7)	48 (4.8)	249 (2.4)			
Maine	0 (0.0)	*** (***)	20 (4.2)	279 (1.9)	80 (4.2)	278 (1.2)			
Maryland	3 (1.9)	261(17.5)	44 (5.3)	264 (2.6)	53 (5.1)	264 (2.3)			
Massachusetts	4 (2.0)	248 (3.6)	29 (4.4)	269 (3.5)	67 (4.5)	275 (1.6)			
Michigan	4 (2.0)	268 (9.2)	27 (4.1)	268 (3.7)	69 (4.3)	266 (2.0)			
Minnesota	, ,	*** (***)	34 (4.9)	283 (2.1)	63 (4.5)	281 (1.2)			
Mississippi	3 (2.4)	246 (3.5)	49 (4.7)	250 (2.0)	42 (4.5)	240 (1.9)			
: '	8 (2.9)	240 (3.3)	39 (5.2)	270 (2.7)	60 (5.0)	271 (1.1)			
Missouri	1 (0.9)	*** (***)	36 (4.2)	273 (1.7)	62 (3.9)	281 (1.3)			
Nebraska	2 (1.5)	( )	30 (4.2)						
New Hampshire	0 (0.0)	*** (***)	21 (2.2)	276 (1.9)	79 (2.2)	278 (1.2)			
New Jersey	3 (2.0)	262(11.9)	25 (4.7)	269 (3.6)	71 (5.1)	272 (2.2)			
New Mexico	8 (2.8)	264 (5.6)	66 (4.3)	258 (1.1)	26 (3.9)	259 (2.4)			
New York	6 (2.8)	239 (8.8)	42 (5.1)	265 (3.9)	52 (4.6)	269 (3.3)			
North Carolina	3 (1.2)	257(11.1)	54 (5.1)	258 (1.5)	43 (5.0)	257 (2.0)			
North Dakota	3 (1.1)	275 (3.3)	14 (2.0)	277 (2.0)	82 (2.3)	284 (1.3)			
Ohio	4 (1.8)	259 (6.6)	34 (4.4)	259 (2.4)	62 (4.6)	273 (2.2)			
Oklahoma	7 (2.6)	273 (5.1)	35 (5.4)	269 (1.7)	58 (5.5)	266 (1.7)			
	` _:	*** (***)	29 (5.0)	268 (2.7)	70 (5.0)	272 (1.9)			
Pennsylvania Rhode Island	1 (0.7)	249 (2.4)	34 (0.2)	260 (1.1)	58 (0.2)	271 (1.0)			
South Carolina	8 (0.0)	249 (2.4) *** (***)	60 (5.0)	263 (1.5)	38 (4.8)	255 (2.1)			
_	2 (1.5)	( )	37 (5.5)	262 (1.9)	56 (5.8)	256 (2.1)			
Tennessee	6 (2.9)	` '			,	• •			
Texas	10 (3.1)	255 (5.6)	48 (4.9)	266 (2.1)	42 (4.8)	264 (2.3)			
Utah	4 (1.7)	265 (4.4)	35 (4.0)	272 (1.2)	61 (4.0)	275 (1.0)			
Virginia	5 (2.3)	263 (6.8)	51 (5.2)	268 (2.0)	43 (4.7)	267 (2.0)			
West Virginia	2 (1.3)	*** (***)	24 (4.1)	258 (1.9)	75 (4.1)	258 (1.2)			
Wisconsin	1 (1.1)	*** (***)	33 (4.5)	270 (2.9)	66 (4.6)	281 (1.5)			
Wyoming	0 (0.3)	*** (***)	22 (1.9)	272 (1.6)	77 (1.9)	275 (1.0)			
TERRITORIES	` '	, ,				0			
Guam	61 (0.2)	236 (1.6)	22 (0.3)	221 (2.1)	17 (0.3)	244 (3.2)			
Virgin Islands	16 (0.1)	213 (2.2)	2 (0.0)	*** (***)	82 (0.1)	223 (1.2)			



TABLE A.14 | Schools' Reports on the Degree of Student Health Problems in the School

		<del></del>	Grade 4	- 1992		
	Serious or	Moderate	Mir	nor	Not a P	roblem
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	12 (1.9)	206 (4.2)	50 (3.1)	218 (1.5)	39 (2.6)	000 (4.0)
Northeast	16 (5.5)	209 (7.7)	40 (6.9)	228 (3.6)	38 (3.6)	220 (1.9)
Southeast	11 (3.5)	205(12.1)	51 (5.1)		43 (9.8)	224 (4.2)
Central	4 (2.2)	203 (8.0)	52 (7.0)	208 (2.8)	38 (5.1)	212 (3.3)
West	17 (3.8)	206 (6.7)	<b>55</b> (6.2)	223 (1.9)	43 (7.7)	223 (3.2)
STATES	, , , ,	200 (0.7)	33 (0.2)	217 (2.9)	28 (6.6)	222 (3.9)
Alabama	7 (2.6)	199 (4.1)	<b>5</b> 4 (5.5)	207 (0.5)	00 (5 1)	
Arizona	23 (4.3)	210 (3.2)	52 (5.0)	207 (2.5)	39 (5.4)	208 (2.6)
Arkansas	9 (3.0)	203 (3.9)	55 (4.5)	213 (2.1)	24 (4.5)	219 (2.3)
California	22 (3.4)	191 (3.1)	52 (4.7)	208 (1.4)	36 (4.8)	212 (2.3)
Colorado	12 (2.8)	208 (2.9)		208 (2.3)	26 (4.7)	216 (3.2)
Connecticut	6 (1.6)	202 (4.4)	49 (4.5) 27 (5.2)	221 (1.5)	39 (4.7)	222 (2.2)
Delaware	• •	` '	37 (5.2)	223 (3.0)	57 (5.3)	231 (1.8)
Dist. Columbia	·3 (0.0)	215 (3.0)	69 (0.3)	215 (1.1)	28 (0.3)	220 (1.3)
Florida	21 (0.3)	184 (1.8)	43 (0.3)	192 (0.9)	36 (0.3)	194 (0.9)
_	11 (3.1)	200 (5.1)	53 (5.3)	212 (2.1)	36 (5.3)	217 (3.0)
Georgia Hawaii	10 (2.3)	209 (3.5)	51 (5.0)	211 (1.9)	39 (4.9)	219 (2.8)
	13 (3.3)	205 (4.2)	57 (4.9)	213 (1.4)	30 (4.8)	217 (2.5)
Idaho	6 (2.0)	221 (4.9)	53 (4.6)	219 (1.3)	41 (5.0)	222 (1.7)
Indiana	7 (2.3)	220 (6.8)		• •	, ,	
lowa	10 (2.7)	217 (2.9)	52 (4.3)	219 (1.6)	42 (4.5)	221 (1.5)
Kentucky	14 (3.2)	203 (2.7)	43 (4.2)	231 (1.6)	47 (4.5)	230 (1.5)
Louisiana	12 (3.1)		47 (5.0)	214 (1.5)	40 (5.0)	217 (1.5)
Maine	4 (1.7)	194 (4.9)	51 (4.7)	200 (2.2)	37 (4.8)	210 (2.8)
Maryland	13 (3.2)	231 (3.0) 206 (4.5)	51 (5.3)	229 (1.6)	45 (5.3)	233 (1.5)
Massachusetts	, ,	` '	48 (5.1)	218 (2.2)	39 (5.1)	219 (3.4)
Michigan	5 (1.9)	192 (3.8)	36 (5.4)	224 (2.8)	59 (5.6)	229 (1.6)
Minnesota	8 (2.5)	214 (4.8)	53 (4.8)	216 (2.1)	40 (4.7)	223 (4.1)
	10 (3.4)	225 (5.5)	41 (4.7)	225 (1.9)	49 (4.7)	230 (1.0)
Mississippi	11 (2.9)	198 (5.2)	55 (4.5)	199 (1.9)	34 (4.6)	203 (2.3)
Missouri	10 (3.4)	218 (4.0)	50 (5.2)	222 (1.8)	40 (5.2)	222 (2.6)
Nebraska	3 (1.8)	227 (7.3)	51 (4.7)	224 (1.6)	45 (4.9)	225 (2.1)
New Hampshire	5 (2.4)	227 (9.8)	57 (5.6)	228 (1.6)	, ,	` '
New Jersey	3 (1.6)	196(10.6)	38 (4.7)	220 (1.6)	38 (5.1)	231 (1.5)
New Mexico	23 (3.9)	204 (2.7)	37 (5.0)		60 (4.9)	230 (1.8)
New York	14 (3.3)	204 (4.3)	39 (5.4)	214 (2.6)	40 (5.5)	214 (2.6)
North Carolina	9 (2.9)	203 (4.7)	62 (4.4)	215 (3.0)	47 (5.7)	223 (2.0)
North Dakota	2 (1.3)	*** (***)	34 (4.4)	212 (1.6) 226 (1.3)	29 (4.2)	213 (2.2)
Ohio	` '	` '		226 (1.3)	64 (4.5)	229 (1.1)
Oklahoma	7 (2.4)	207 (1.9)	45 (4.6)	213 (2.2)	48 (4.6)	224 (1.7)
Pennsylvania	4 (1.7)	209 (2.4)	53 (4.8)	220 (1.5)	43 (4.9)	218 (1.7)
Rhode Island	13 (2.6)	198 (4.9)	44 (4.3)	226 (1.9)	44 (4.6)	228 (2.0)
South Carolina	6 (2.5)	208 (4.0)	41 (5.6)	211 (3.2)	53 (5.4)	217 (2.6)
Tennessee	9 (2.8)	205 (4.9)	59 (4.9)	209 (1.7)	33 (4.8)	216 (2.4)
i i	8 (2.3)	205 (2.1)	57 (5.3)	211 (2.0)	<b>35</b> (5.3)	207 (3.0)
Texas	14 (3.8)	214 (3.7)	48 (4.9)			
Utah	9 (3.1)	216 (5.4)	47 (5.1)	214 (2.2) 223 (1.6)	38 (4.9)	221 (2.5)
Virginia	5 (2.2)	209 (5.2)	52 (4.5)		43 (5.0)	224 (1.5)
West Virginia	10 (2.7)	215 (5.4)	57 (4.5)	217 (2.1)	42 (4.4)	225 (2.6)
Wisconsin	5 (2.5)	222 (9.5)		214 (1.4)	33 (4.4)	214 (1.4)
Wyoming	7 (2.8)	217 (3.5)	49 (4.9) 41 (4.7)	224 (1.6)	46 (4.7)	232 (1.3)
TERRITORY	(===)	2.1. (0.0)	41 (4.7)	224 (1.5)	52 (5.0)	225 (1.2)
Guam	10 (0.1)	197 (1.9)	62 (0.3)	190 (1.2)	27 (0.2)	400 (4.0)
<del></del>	<u>`</u> ,				27 (0.3)	190 (1.6)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.



# TABLE A.14 | Schools' Reports on the Degree of Student Health Problems in the School (continued)

<del></del> -	Grade 8 - 1992								
j-	Serious or Moderate		Min	nor	Not a P	roblem			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
IATION	11 (2.4)	260 (4.4)	49 (4.1)	266 (1.9)	40 (3.2)	269 (2.0)			
Northeast	10 (3.2)	239 (3.3)	38 (9.2)	262 (4.6)	52 (8.3)	274 (5.0)			
Southeast	10 (4.1)	254 (4.2)	45 (5.3)	255 (3.1)	46 (6.9)	262 (2.9)			
Central	13 (6.4)	271 (8.0)	51 (9.0)	272 (3.9)	35 (5.9)	277 (2.4)			
1	3 1	267(10.1)	59 (8.4)	270 (2.6)	31 (5.2)	264 (5.0)			
Vest TATES	10 (4.5)	207 (10.1)	00 (0.1)	,	- , ,				
	0 (0 4)	243 (9.1)	48 (5.1)	252 (2.1)	44 (4.9)	252 (2.8)			
labama	8 (2.4)	, ,	61 (5.5)	265 (1.7)	25 (5.1)	267 (3.2)			
rizona	14 (3.6)	256 (4.5)		254 (1.7)	41 (4.9)	257 (2.1)			
Arkansas	7 (2.5)	261 (4.0)	52 (4.9)	1. (	39 (5.2)	267 (3.3)			
California	15 (3.7)	249 (4.7)	46 (5.0)	258 (2.4)	35 (4.4)	277 (1.7)			
Colorado	13 (3.0)	259 (2.1)	52 (5.1)	271 (1.9)	1 1	278 (1.9)			
Connecticut	11 (3.2)	242 (5.6)	33 (4.8)	276 (2.2)	56 (5.2)	, ,			
Delaware	0 (0.4)	274 (3.1)	47 (0.2)	259 (1.3)	44 (0.3)	263 (1.6)			
	9 (0.1)	1. 1	61 (0.5)	227 (1.3)	25 (0.5)	242 (1.3)			
Dist. Columbia	14 (0.3)	228 (2.0)	55 (5.2)	255 (2.4)	32 (4.8)	263 (2.3)			
lorida	13 (3.6)	268 (2.8)		1 _ (	36 (5.1)	258 (2.6)			
Seorgia	5 (1.6)	251 (3.0)	59 (5.1)	260 (1.9)	25 (0.3)	264 (1.4)			
lawaii	15 (0.2)	253 (2.5)	60 (0.3)	255 (1.1)		277 (1.2)			
daho	1 (1.1)	*** (***)	62 (4.4)	273 (1.2)	37 (4.2)	211 (1.2)			
ndiana	7 (0.0)	250(10.2)	54 (5.7)	270 (1.6)	39 (6.0)	271 (2.1)			
ndiana	7 (2.9)		53 (5.0)	282 (1.4)	38 (4.4)	284 (1.7)			
owa	9 (3.0)	279 (4.9)		262 (1.7)	44 (5.1)	264 (2.0)			
Centucky	13 (3.8)	256 (4.0)	43 (5.3)	250 (2.3)	38 (4.9)	251 (2.9)			
Louisiana	8 (2.5)	233 (3.5)	53 (5.0)		52 (4.6)	280 (1.4)			
Maine	12 (3.1)	272 (2.3)	36 (4.1)	277 (1.5)	1 1	265 (2.7)			
Maryland	13 (3.3)	255 (6.2)	51 (4.8)	266 (2.2)	36 (4.2)	200 (2.1)			
Massachusetts	7 (2.8)	253 (6.6)	39 (4.5)	272 (3.0)	54 (4.7)	276 (1.6)			
		1 1	49 (4.7)	270 (2.5)	37 (4.8)	269 (2.9)			
Michigan	13 (3.0)	250 (5.1)	54 (5.2)	281 (1.4)	43 (5.2)	282 (1.4)			
Minnesota	3 (1.4)	278 (5.1)		249 (2.1)	38 (4.7)	242 (2.1)			
Mississippi	6 (2.4)	241 (3.9)	56 (5.1)	1 1	33 (5.2)	273 (1.4)			
Missouri	6 (2.5)	263 (4.9)	61 (5.7)	270 (1.9)		281 (1.8)			
Nebraska	3 (1.9)	268(11.4)	53 (5.5)	276 (1.5)	44 (5.1)	201 (1.0)			
New Hampshire	0 (4 0)	281 (5.9)	56 (4.2)	276 (1.2)	42 (4.4)	280 (1.5)			
•	2 (1.0)	, ,	31 (5.0)	264 (4.9)	59 (5.3)	278 (2.3)			
New Jersey	10 (3.3)	254 (6.0)	54 (4.3)	259 (1.1)	22 (3.4)	256 (2.7)			
New Mexico	24 (3.9)	260 (2.5)		259 (3.7)	43 (5.0)	279 (2.1)			
New York	10 (3.3)	239 (9.9)	47 (5.4)	· · · · · · · · · · · · · · · · · · ·	33 (4.4)	257 (2.3)			
North Carolina	8 (2.7)	261 (3.3)	59 (4.6)	258 (1.6) 280 (1.1)	67 (3.9)	284 (1.6)			
North Dakota	1 (0.9)	*** (***)	32 (3.8)	200 (1.1)	07 (3.9)				
Ohio	7 (2.0)	252 (5.0)	43 (5.1)	262 (2.7)	50 (5.1)	275 (2.1)			
Oklahoma	- Y	*** (***)	40 (5.3)	269 (1.9)	58 (5.4)	266 (1.6)			
	2 (1.3)	\!	50 (5.5)	268 (2.2)	46 (5.3)	276 (1.9)			
Pennsylvania	3 (1.1)	239 (7.4)	57 (0.2)	263 (0.8)	34 (0.2)	274 (1.7)			
Rhode Island	9 (0.1)	253 (2.8)	1 1	261 (1.5)	25 (4.8)	261 (3.1)			
South Carolina	17 (3.4)	255 (3.1)	58 (4.8)	257 (1.8)	39 (5.3)	258 (3.0)			
Tennessee	8 (2.9)	259 (4.6)	53 (5.4)	237 (1.0)					
exas	11 (2.9)	258 (3.4)	52 (5.1)	264 (2.3)	37 (4.9)	265 (2.7)			
Jtah	3 (1.6)	269 (2.3)	52 (4.3)	273 (1.2)	45 (4.3)	275 (1.1)			
		263 (4.1)	56 (5.2)	266 (1.7)	39 (5.0)	271 (2.4)			
/irginia	5 (2.0)		58 (4.8)	257 (1.3)	34 (4.9)	260 (1.9)			
West Virginia	8 (2.7)	259 (2.7)	48 (5.2)	278 (2.1)	46 (5.1)	279 (2.5)			
Wisconsin	7 (2.4)	260 (5.4)		274 (0.9)	37 (3.0)	275 (2.0)			
Wyoming	0 (0.0)	*** (***)	63 (3.0)	214 (0.8)	J/ (J.U)	(2.0)			
ERRITORIES			00 (0.0)	004 (4.0)	0 (0 0)	*** (***)			
Guam	34 (0.2)	234 (2.7)	66 (0.2)	234 (1.2)	0 (0.0)	\ ,			
Virgin Islands	16 (0.1)	213 (2.2)	48 (0.1)	230 (1.4)	36 (0.1)	215 (1.6)			

When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent.

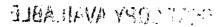
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Schools' Reports on the Morale of Teachers

	Grade 4 - 1992								
	Very P	ositive	Somewha	t Positive	Somewhat Negativ	e or Very Negative			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	60 (3.7)	220 (1.4)	36 (3.6)	045 (4.0)					
Northeast	62 (8.3)	222 (2.9)	, ,	215 (1.6)	5 (1.2)	208 (7.9)			
Southeast	61 (7.2)	_ , , , ,	33 (7.7)	222 (3.2)	4 (3.1)	*** (***)			
Central	1	211 (2.9)	31 (7.5)	206 (2.4)	7 (2.5)	200(11.2)			
West	53 (8.1)	224 (3.0)	42 (8.2)	221 (3.5)	5 (3.1)	214 (6.5)			
STATES	62 (6.1)	221 (2.3)	35 (6.1)	210 (2.4)	<b>3</b> (1.6)	190 (3.3)			
Alabama				` '	- ()	150 (5.5)			
	45 (5.3)	209 (2.8)	45 (5.3)	206 (2.6)	10 (2.9)	000 (0.8)			
Arizona	53 (4.2)	216 (1.4)	44 (4.5)	212 (2.4)	3 (1.6)	200 (3.8)			
Arkansas	43 (4.7)	214 (2.1)	47 (5.4)		, ,	211 (4.3)			
California	60 (5.4)	209 (2.0)	33 (5.2)	\ · · /	10 (2.7)	197 (3.7)			
Colorado	58 (4.9)	221 (1.5)	: ·	206 (3.3)	7 (2.7)	197(10.0)			
Connecticut	62 (4.7)	V /	40 (4.9)	218 (1.9)	2 (1.3)	*** (***)			
	02 (4.7)	228 (1.8)	36 (4.5)	223 (2.8)	2 (1.4)	235 (4.2)			
Delaware	55 (0.2)	215 (1.2)	39 (0.3)	248 (4.0)	, ,				
Dist. Columbia	40 (0.3)	196 (1.2)		218 (1.2)	7 (0.1)	224 (3.4)			
Florida	60 (5.1)	· · ·	52 (0.3)	190 (0.7)	8 (0.2)	177 (2.4)			
Georgia		T 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	36 (4.8)	210 (2.7)	4 (1.9)	182 (8.1)			
Hawaii	53 (4.7)	218 (2.4)	43 (4.4)	210 (2.1)	4 (1.8)	204 (5.5)			
Idaho	33 (4.7)	215 (2.4)	62 (5.1)	213 (1.7)	4 (2.3)	201 (7.5)			
luario	61 (4.5)	221 (1.1)	35 (4.7)	218 (1.7)	4 (2.1)				
Indiana	54 (4.6)	004 (4.5)		, , , ,	→ (2.1)	225 (5.7)			
lowa		221 (1.5)	45 (4.6)	219 (1.8)	1 (1.0)	*** (***)			
Kentucky	61 (4.5)	231 (1.6)	32 (4.7)	226 (1.7)	7 (1.9)	226 (4.1)			
Louisiana	38 (4.7)	213 (1.8)	57 (4.7)	214 (1.6)	5 (2.2)	212 (5.4)			
	35 (5.1)	209 (2.7)	57 (5.0)	201 (2.0)	8 (3.0)				
Maine	49 (6.5)	231 (1.5)	47 (6.6)	229 (1.6)	- ()	194 (7.8)			
Maryland	40 (4.8)	218 (2.5)	52 (4.5)		Y/	( )			
Massachusetts	• •	,	<i>52</i> (4.5)	216 (2.5)	8 (3.0)	207 (7.8)			
	50 (5.2)	226 (1.8)	44 (5.0)	226 (2.2)	7 (2.5)	219 (8.2)			
Michigan	50 (5.2)	221 (2.5)	42 (5.3)	217 (3.4)	8 (2.9)	, , ,			
Minnesota	48 (4.8)	229 (1.7)	47 (4.9)	226 (1.3)		214 (5.5)			
Mississippi	45 (4.3)	204 (1.9)	48 (4.3)		4 (1.8)	214 (8.2)			
Missouri	50 (5.1)	223 (2.0)	47 (5.1)		7 (2.3)	204 (4.0)			
Nebraska	59 (4.6)	225 (2.0)		221 (1.8)	3 (1.1)	193(14.1)			
	00 (4.0)	223 (1.7)	37 (4.6)	223 (2.4)	4 (2.3)	226 (2.1)			
New Hampshire	52 (5.3)	230 (1.7)	44 (5.2)	228 (1.8)	4 (4 0)	, ,			
New Jersey	64 (4.9)	229 (2.0)	32 (4.5)		4 (1.8)	227 (6.0)			
New Mexico	61 (5.5)	213 (2.0)		. , ,	4 (2.1)	193 (3.8)			
New York	37 (4.9)	` '	32 (5.3)	210 (2.6)	6 (2.9)	211 (2.3)			
North Carolina	35 (4.5)	217 (3.2)	55 (5.5)	218 (2.0)	8 (3.0)	210 (7.4)			
North Dakota	, , ,	215 (2.5)	60 (5.1)	210 (1.4)	4 (2.1)	207 (6.7)			
	50 (5.3)	229 (1.2)	47 (5.1)	226 (1.2)	4 (1.9)	227(10.9)			
Ohio	66 (4.6)	221 (1.4)	22 (4.7)	040 (0.5)	` '				
Oklahoma	57 (5.1)	221 (1.4)	33 (4.7)	212 (2.5)	1 (0.8)	*** (***)			
Pennsylvania	43 (5.2)	```	40 (5.0)	217 (1.6)	3 (1.6)	208 (6.6)			
Rhode Island	, , , , , , , , , , , , , , , , , , ,	230 (1.8)	51 (4.9)	218 (1.5)	5 (2.4)	223(14.2)			
South Carolina	55 (5.4)	211 (2.3)	39 (5.2)	218 (2.5)	6 (2.2)	214 (9.4)			
Tennessee	45 (5.3)	216 (1.9)	52 (5.3)	207 (1.9)	2 (1.4)	202 (3.6)			
	41 (4.9)	211 (2.5)	45 (4.9)	209 (2.0)	14 (3.9)	202 (3.0)			
Гехаѕ	49 (5.2)	000 (4.0)	• •		14 (3.8)	207 (4.8)			
Jtah	49 (5.3)	220 (1.8)	47 (5.1)	213 (2.3)	4 (2.3)	215 (4.2)			
/irginia	47 (4.4)	224 (1.7)	47 (4.5)	222 (1.5)	5 (2.3)	220 (3.0)			
	57 (4.5)	218 (2.0)	39 (4.8)	220 (2.5)	4 (2.1)				
West Virginia	42 (5.0)	216 (2.0)	54 (4.9)	213 (1.4)		221 (5.9)			
Wisconsin	55 (4.2)	229 (1.6)	41 (4.4)		4 (1.7)	208 (2.4)			
Myoming	50 (4.7)	224 (1.3)		226 (1.9)	4 (1.8)	227 (3.8)			
ERRITORY	( )	224 (1.0)	43 (4.9)	224 (1.2)	8 (2.6)	227 (4.3)			
Suam	43 (0.3)	105 (4.4)	FO (C A)			· · ·			
	<del>-</del> -3 (0.3)	195 (1.1)	50 (0.3)	189 (1.5)	7 (0.1)	185 (2.6)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.





# TABLE A.15 |

# Schools' Reports on the Morale of Teachers (continued)

	Grade 8 - 1992								
	Very Positive		Somewha	t Positive	Somewhat Negative	or Very Negative			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	31 (3.4)	269 (1.9)	59 (4.0)	266 (1.8)	11 (3.0)	264 (3.5)			
Northeast	37 (9.7)	275 (3.5)	<b>57</b> (10.1)	261 (5.3)	6 (3.3)	*** (***)			
	_ ! !	256 (3.5)	61 (4.8)	260 (2.8)	12 (5.4)	257 (6.3)			
Southeast	27 (6.2)	1 1	67 (6.5)	272 (2.6)	9 (5.8)	275(12.3)			
Central	24 (6.7)	277 (2.7)	1 1	269 (4.3)	14 (7.3)	262 (4.4)			
West TATES	35 (5.4)	269 (3.3)	51 (9.4)	209 (4.3)	14 (1.5)	202 ()			
Alabama	36 (5.4)	253 (4.1)	59 (5.5)	250 (1.8)	5 (2.4)	254 (2.5)			
	, ,	266 (2.3)	46 (5.4)	264 (2.0)	5 (2.7)	256 (5.0)			
Arizona	48 (5.0)	1	66 (5.6)	255 (1.6)	8 (2.9)	257 (3.7)			
Arkansas	25 (5.0)	257 (3.0)		1	4 (1.9)	242(10.8)			
California	45 (5.1)	261 (3.1)	51 (5.2)	261 (2.2)		_ `			
Colorado	33 (4.9)	273 (2.0)	59 (5.4)	271 (1.6)	9 (2.5)	265 (4.2)			
Connecticut	44 (5.7)	275 (2.5)	48 (5.6)	271 (3.1)	7 (2.7)	275 (6.6)			
Delaware	48 (0.3)	265 (1.2)	52 (0.3)	259 (1.6)	0 (0.0)	*** (***) *** (***)			
Dist. Columbia	35 (0.4)	229 (1.8)	64 (0.4)	232 (1.0)	1 (0.1)	, ,			
Florida	37 (4.4)	261 (2.6)	55 (4.7)	257 (2.1)	8 (3.1)	271 (2.2)			
Georgia	44 (5.9)	259 (2.7)	52 (5.6)	257 (1.9)	4 (2.3)	268 (4.9)			
Hawaii	`	253 (1.9)	64 (0.3)	257 (1.0)	9 (0.2)	270 (3.2)			
Idaho	26 (0.3) 59 (4.1)	276 (0.9)	39 (4.3)	273 (1.5)	2 (1.6)	*** (***)			
	` '	1 1	54 (5.9)	269 (1.8)	8 (2.1)	252 (3.4)			
ndiana	38 (5.9)	274 (1.8)		281 (1.3)	3 (1.5)	275 (8.5)			
lowa	42 (5.0)	285 (1.9)	55 (5.1)	: -:	13 (3.4)	264 (2.9)			
Kentucky	28 (4.9)	264 (2.4)	59 (4.6)	260 (1.6)		248 (4.2)			
Louisiana	40 (5.0)	251 (3.2)	51 (5.0)	247 (2.1)	8 (2.9)	• •			
Maine	34 (4.9)	281 (2.1)	62 (5.1)	277 (1.2)	4 (2.0)	276 (6.0)			
Maryland	27 (4.8 <b>)</b>	269 (3.7)	52 (5.3)	262 (2.6)	20 (4.1)	262 (3.4)			
Massachusetts	27 (4.7)	270 (2.7)	55 (5.1)	273 (2.3)	19 (4.6)	276 (3.9)			
Michigan	28 (4.8)	271 (4.8)	54 (5.1)	264 (1.9)	18 (3.4)	267 (4.1)			
Minnesota	38 (5.1)	283 (1.5)	56 (5.0)	281 (1.4)	6 (2.6)	283 (3.4)			
Mississippi	34 (4.9)	248 (2.2)	56 (5.4)	244 (1.8)	10 (3.0)	244 (2.7)			
	· · ·	274 (1.7)	51 (5.1)	268 (1.9)	15 (4.0)	270 (2.7)			
Missouri Nebraska	33 (5.0) 45 (4.4)	274 (1.7)	52 (4.8)	277 (1.7)	3 (1.8)	276 (5.6)			
New Hampshire	45 (3.9)	278 (1.6)	42 (4.0)	278 (1.2)	13 (3.0)	277 (2.8)			
New Jersey	1 1 1	278 (3.0)	55 (6.0)	269 (2.7)	5 (3.1)	267 (4.6)			
• •	40 (5.8)		48 (4.0)	260 (1.2)	12 (2.4)	258 (2.1)			
New Mexico	40 (4.0)	257 (2.1)	, , , , , , , , , , , , , , , , , , ,	1 1	11 (3.7)	239 (8.8)			
New York	36 (4.7)	279 (2.4)	53 (4.7)	262 (3.3)	` '	261 (3.9)			
North Carolina	26 (4.0)	253 (2.1)	59 (5.1)	258 (1.7)	14 (3.6)				
North Dakota	37 (4.8)	285 (1.6)	60 (5.0)	281 (1.3)	3 (1.9)	277 (3.4)			
Ohio	24 (4.4)	267 (3.7)	67 (5.1)	268 (2.4)	10 (3.2)	267 (6.9)			
Oklahoma	42 (4.8)	269 (1.6)	53 (4.9)	266 (1.6)	5 (2.1)	267 (7.1)			
Pennsylvania	30 (4.3)	278 (2.2)	53 (5.1)	265 (2.0)	17 (4.0)	274 (3.6)			
Rhode Island	40 (0.2)	272 (1.3)	56 (0.2)	261 (0.9)	4 (0.1)	264 (3.4)			
South Carolina		260 (2.2)	56 (5.5)	261 (1.9)	7 (2.5)	258 (4.3)			
Tennessee	37 (5.7) 35 (4.9)	262 (2.7)	51 (5.1)	257 (2.0)	15 (3.6)	254 (3.7)			
Texas	40 (5.0)	269 (2.6)	55 (5.2)	262 (2.2)	5 (2.1)	247(11.3)			
Utah		275 (1.3)	45 (3.6)	272 (1.0)	9 (2.1)	278 (2.6)			
	46 (4.2)		49 (5.6)	266 (2.2)	9 (2.9)	277 (6.6)			
Virginia	43 (5.3)	266 (2.4)		257 (1.3)	15 (3.9)	259 (2.6)			
West Virginia	29 (4.0)	261 (1.5)	56 (4.9)			276 (3.1)			
Wisconsin	27 (4.9)	279 (2.2)	58 (5.6)	277 (2.6)	15 (3.7)	1			
Wyoming	49 (3.8)	272 (1.4)	44 (3.2)	276 (1.3)	8 (2.4)	277 (3.1)			
TERRITORIES Guam	13 (0.3)	216 (3.6)	87 (0.3)	237 (1.3)	0 (0.0)	*** (***)			
			72 (0.2)	218 (1.2)	o (o.o)	*** (***)			
Virgin Islands	28 (0.2)	232 (1.3)	12 (0.2)	210 (1.2)		<u></u>			

When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent.



TABLE A.16

Schools' Reports on the Students' Attitudes toward Academic Achievement

	Grade 4 - 1992								
PUBLIC	Very Po	ositive	Somewha	t Positive	Somewhat Negative	or Very Negative			
SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	34 (3.3)	222 (1.9)	63 (3.6)	216 (1.3)					
Northeast	47 (9.1)	228 (4.1)	53 (9.1)		3 (1.1)	198(10.3)			
Southeast	35 (5.5)	217 (3.8)	60 (5.6)	218 (3.4)	0 (0.0)	*** (***)			
Central	29 (5.0)	221 (3.6)	_ ; ,	206 (2.4)	5 (2.1)	194 (4.1)			
West	30 (6.5)	222 (3.2)	71 (5.0)	223 (3.0)	0 (0.0)	*** (***)			
STATES	1	222 (3.2)	64 (8.0)	215 (2.4)	5 (3.3)	202(22.6)			
Alabama	16 (3.8)	222 (4.5)	67 (4.8)	005 (0.5)					
Arizona	32 (4.7)	216 (2.5)	67 (4.8)	205 (2.0)	17 (3.5)	200 (2.9)			
Arkansas	18 (3.5)	216 (2.3)	58 (5.0)	215 (1.8)	10 (3.0)	203 (5.4)			
California	42 (4.6)		68 (4.4)	208 (1.3)	15 (3.5)	204 (2.8)			
Colorado	35 (4.0)		57 (4.7)	198 (2.0)	1 (0.9)	*** (***)			
Connecticut	52 (4.6)	223 (1.8)	60 (4.1)	218 (1.4)	5 (2.1)	212 (3.1)			
Delawara	' '	234 (1.7)	48 (4.6)	218 (2.4)	0 (0.0)	*** (***)			
Delaware	26 (0.1)	216 (1.6)	67 (0.2)	216 (1.1)	7 (0.1)	000 (0.0)			
Dist. Columbia	39 (0.3)	200 (1.3)	54 (0.3)	187 (0.9)	7 (0.1) 7 (0.2)	220 (3.0)			
Florida	40 (4.8)	216 (2.4)	56 (4.8)	212 (2.7)	` ,	180 (2.8)			
Georgia	35 (4.5)	226 (2.9)	56 (4.7)	208 (1.5)	4 (1.4)	188 (8.5)			
Hawaii	16 (3.8)	224 (3.1)	82 (3.9)	211 (1.4)	9 (2.3)	208 (2.9)			
Idaho	30 (4.6)	224 (1.9)	69 (4.6)	219 (1.2)	2 (1.3)	\ /			
Indiana	06 (4.8)	` ,	• •	219 (1.2)	1 (0.3)	*** (***)			
lowa	26 (4.8)	223 (2.1)	69 (5.1)	219 (1.5)	5 (2.3)	215(10.8)			
Kentucky	39 (4.2)	234 (1.1)	57 (4.5)	227 (1.2)	4 (1.5)	211 (3.9)			
Louisiana	18 (3.4)	222 (2.4)	72 (4.0)	213 (1.1)	10 (2.9)	202 (3.3)			
Maine	20 (4.0)	218 (3.2)	65 (4.8)	201 (2.1)	14 (3.3)	192 (4.2)			
Maryland	22 (4.7)	234 (2.5)	71 (4.9)	230 (1.4)	6 (2.9)	221 (2.0)			
-	35 (4.1)	225 (2.4)	62 (4.4)	213 (2.0)	3 (1.8)	186 (8.8)			
Massachusetts	44 (5.5)	229 (2.0)	53 (5.4)	223 (1.6)	• •				
Michigan	23 (3.9)	230 (3.9)	74 (4.2)	, , ,	3 (1.7)	219(15.1)			
Minnesota	37 (5.0)	231 (1.3)	63 (5.0)	216 (2.0)	3 (1.7)	199(12.2)			
Mississippi	12 (3.2)	205 (5.4)	78 (4.1)	225 (1.4)	0 (0.4)	*** (***)			
Missouri	31 (4.5)	228 (1.8)	64 (4.8)	201 (1.4)	9 (2.9)	190 (4.5)			
Nebraska	30 (4.7)	228 (2.1)	66 (4.5)	219 (1.6)	6 (3.1)	204 (6.8)			
New Hampshire			• •	223 (1.7)	4 (1.8)	212 (7.1)			
New Jersey	37 (4.7)	232 (2.0)	61 (4.8)	227 (1.6)	2 (1.6)	*** (***)			
New Mexico	57 (5.1)	232 (2.3)	39 (5.1)	221 (2.5)	4 (2.0)	199(12.8)			
New York	26 (5.4)	218 (3.3)	72 (5.6)	210 (1.4)	2 (1.5)	*** (***)			
North Carolina	30 (5.3)	226 (3.8)	65 (5.7)	213 (1.5)	5 (2.1)	223 (4.1)			
North Dakota	29 (4.1)	217 (3.0)	59 (4.3)	210 (1.6)	11 (1.8)	204 (2.8)			
	31 (4.6)	229 (1.4)	68 (4.7)	227 (1.0)	1 (0.8)	*** (***)			
Ohio	33 (5.0)	226 (2.2)	58 (5.1)	, ,	, ,				
Oklahoma	26 (4.4)	222 (1.9)		215 (1.6)	9 (2.8)	203 (4.0)			
Pennsylvania	33 (4.7)	229 (2.8)	66 (4.2)	219 (1.3)	8 (2.6)	212 (2.4)			
Rhode Island	32 (5.2)	220 (3.2)	60 (5.1)	222 (1.8)	8 (2.5)	205 (6.4)			
South Carolina	24 (4.8)		64 (5.1)	211 (2.4)	4 (1.8)	202(15.4)			
rennessee	27 (4.7)	224 (1.8) 214 (3.8)	69 (5.1)	207 (1.4)	7 (2.6)	201 (3.5)			
Tevas		214 (3.0)	64 (5.0)	208 (1.8)	10 (3.3)	202 (3.8)			
rexas Jtah	24 (4.3)	224 (2.8)	71 (4.4)	215 (1.6)	5 (2.8)	209 (6.3)			
	32 (4.0)	231 (1.7)	59 (4.6)	220 (1.3)	9 (3.0)				
/irginia	33 (4.4)	228 (2.9)	64 (4.8)	215 (1.5)	4 (1.9)	217 (3.3)			
West Virginia	25 (4.0)	220 (2.4)	66 (4.8)	213 (1.0)		213 (3.7)			
Wisconsin	39 (5.4)	230 (1.5)	58 (5.5)	227 (1.3)	9 (2.6)	203 (2.8)			
Wyoming	38 (4.4)	226 (1.7)	59 (4.4)	227 (1.3)	3 (1.6) 2 (1.4)	200 (5.8)			
ERRITORY		· · · · · · · · · · · · · · · · · · ·	( ****)	223 (1.1)	2 (1.4)	*** (***)			
Guam	17 (0.2)	190 (2.0)	83 (0.2)	191 (1.0)	0 (0.0)	*** (***)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate.



#### TABLE A.16 |

#### Schools' Reports on the Students' Attitudes toward Academic Achievement (continued)

	Grade 8 - 1992								
ŀ	Very Pe	ositive	Somewhat	Positive	Somewhat Negative	e or Very Negative			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	20 (3.1)	277 (2.4)	59 (3.5)	265 (1.2)	20 (2.8)	259 (2.6)			
Northeast	28 (8.4)	281 (6.0)	51 (9.5)	259 (4.5)	22 (7.5)	263 (4.0)			
Southeast	16 (6.2)	268 (3.8)	62 (7.3)	260 (1.7)	22 (5.6)	247 (3.7)			
Central				273 (2.4)	10 (5.8)	267 (6.9)			
	16 (5.3)	279 (2.2)	74 (6.6)	1 1					
West	22 (5.2)	277 (4.3)	52 (4.9)	266 (3.0)	27 (5.3)	264 (5.1)			
STATES			4. 4						
Alabama	4 (1.8)	268 (9.7)	73 (4.8)	254 (2.0)	23 (4.6)	241 (3.2)			
Arizona	22 (5.0)	274 (3.2)	62 (5.5)	264 (1.5)	15 (3.4)	251 (3.6)			
Arkansas	5 (2.1)	258 (7.4)	74 (4.1)	257 (1.4)	21 (3.5)	251 (2.6)			
California	24 (4.0)	276 (3.6)	62 (4.6)	257 (2.1)	14 (3.4)	249 (5.5)			
Colorado	15 (3.3)	278 (3.0)	68 (4.4)	272 (1.5)	17 (3.3)	260 (2.9)			
Connecticut	24 (4.7)	281 (4.6)	69 (5.4)	272 (1.9)	7 (2.7)	259 (6.0)			
	, ,				• •	, ,			
Delaware	14 (0.2)	277 (2.2)	81 (0.2)	260 (1.2)	5 (0.1)	261 (3.3)			
Dist. Columbia	20 (0.7)	244 (1.3)	62 (0.4)	228 (1.2)	18 (0.5)	226 (2.3)			
Florida	16 (3.9)	264 (4.1)	75 (4.4)	260 (1.7)	10 (2.9)	252 (5.5)			
Georgia	11 (3.1)	275 (3.1)	74 (4.2)	258 (1.4)	15 (3.7)	247 (3.5)			
Hawaii	11 (0.2)	265 (3.6)	70 (0.2)	257 (1.0)	19 (0.2)	252 (2.0)			
ídaho	14 (3.0)	279 (2.1)	78 (3.7)	274 (0.9)	8 (2.9)	271 (2.7)			
Indiana	14 (3.8)	276 (4.2)	75 (4.8)	270 (1.4)	12 (3.5)	257 (3.8)			
lowa	1 1		63 (3.9)	282 (1.1)	9 (2.8)	275 (3.8)			
	27 (4.2)	287 (2.2)				1 1			
Kentucky	7 (2.3)	274 (4.2)	75 (3.9)	263 (1.4)	17 (3.5)	252 (2.5)			
Louisiana	12 (3.7)	262 (5.8)	62 (5.5)	250 (2.1)	26 (4.6)	239 (2.8)			
Maine	15 (3.5)	286 (4.1)	76 (3.8)	276 (0.9)	10 (2.5)	280 (3.2)			
Maryland	19 (3.8)	283 (3.5)	67 (5.3)	263 (1.8)	14 (3.8)	246 (4.1)			
Massachusetts	19 (3.8)	281 (3.4)	72 (4.7)	272 (1.8)	9 (3.5)	260 (7.0)			
Michigan	14 (3.7)	277 (9.1)	71 (4.7)	266 (1.6)	15 (3.7)	260 (5.3)			
Minnesota	23 (4.7)	285 (1.6)	73 (5.2)	281 (1.3)	4 (2.2)	280 (1.2)			
Mississippi	9 (2.7)	254 (6.4)	70 (4.7)	246 (1.7)	21 (4.1)	240 (2.8)			
Missouri				1	13 (3.4)	265 (3.7)			
Nebraska	10 (2.9)	275 (2.4)	76 (4.2)	271 (1.3) 278 (1.5)	10 (3.5)	272 (3.5)			
i	31 (4.6)	278 (1.7)	59 (5.7)	278 (1.5)	, ,	• •			
New Hampshire	26 (3.6)	282 (2.0)	64 (3.9)	276 (1.2)	11 (2.4)	278 (1.9)			
New Jersey	24 (4.5)	284 (5.1)	63 (5.7)	268 (2.4)	13 (3.8)	264 (4.4)			
New Mexico	2 (1.5)	252 (3.5)	82 (3.6)	260 (1.2)	15 (3.5)	252 (2.0)			
New York	12 (3.2)	284 (2.2)	74 (4.5)	268 (2.0)	14 (3.4)	238 (8.5)			
North Carolina	6 (2.7)	262 (6.3)	74 (4.5)	260 (1.4)	20 (3.5)	248 (2.9)			
North Dakota	35 (4.1)	286 (1.8)	57 (4.2)	281 (1.5)	8 (2.4)	281 (1.7)			
Ohio		• •		, ,		256 (6.0)			
	11 (3.0)	287 (4.6)	74 (4.5)	267 (2.2)	15 (3.3)	, ,			
Okłahoma	15 (2.9)	271 (2.4)	76 (4.0)	268 (1.1)	9 (3.0)	258 (5.3)			
Pennsylvania	15 (3.4)	280 (2.9)	74 (4.5)	270 (2.0)	11 (3.1)	260 (4.1)			
Rhode Island	21 (0.2)	280 (1.1)	67 (0.2)	262 (1.0)	13 (0.2)	262 (1.6)			
South Carolina	10 (3.1)	273 (2.7)	70 (5.0)	259 (1.3)	20 (4.1)	257 (2.6)			
Tennessee	12 (3.3)	273 (3.9)	67 (4.7)	258 (1.7)	21 (3.9)	249 (3.4)			
Texas	9 (3.0)	276 (8.4)	73 (4.3)	264 (1.6)	18 (3.8)	257 (3.8)			
Utah	21 (4.1)	278 (2.1)	71 (4.3)	273 (0.9)	9 (2.6)	268 (2.7)			
Virginia	20 (3.6)	278 (3.1)	70 (4.2)	264 (1.4)	10 (2.4)	266 (5.4)			
West Virginia			74 (4.7)	257 (1.3)	14 (3.7)	259 (1.4)			
<b>–</b>	12 (3.0)	262 (2.8)							
Wisconsin	20 (4.6)	285 (3.4)	68 (5.2)	277 (1.8)	12 (3.1)	265 (4.5)			
Wyoming TERRITORIES	14 (2.9)	276 (3.3)	77 (3.6)	274 (1.1)	9 (2.5)	277 (2.6)			
Guam	0 (0.0)	*** (***)	91 (0.2)	235 (1.3)	9 (0.2)	228 (1.1)			
Virgin Islands		*** (***)	66 (0.1)	226 (1.4)	34 (0.1)	214 (1.5)			
+ g ,5.a.iu3	0 (0.0)	( )	<del>00</del> (0.1)	220 (1.4)	<u> </u>	- · <del>-</del> ( · · · · )			

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TABLE A.17 | Schools' Reports on the Teachers' Attitudes toward Academic Achievement

	Grade 4 - 1992								
	Very Po	ositive	Somewhat	Positive	Somewhat Negative	e or Very Negative			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	75 (2.5)	219 (1.0)	23 (2.3)	213 (2.1)	1 (0.6)	191 (4.0)			
Northeast	81 (6.9)	225 (2.9)	19 (6.9)	214 (8.3)	0 (0.0)	*** (***)			
Southeast	80 (3.6)	212 (2.0)	18 (3.2)	196 (4.0)	1 (1.2)	*** /***			
Central	69 (5.2)	223 (2.0)	30 (5.1)	221 (2.9)	1 (0.9)	*** (***)			
West	72 (3.7)	218 (2.1)	25 (3.0)	214 (3.1)	, , ,	( )			
STATES	_ (,	- 10 (2.1)	20 (0.0)	214 (3.1)	3 (1.7)	191 (2.0)			
Alabama	51 (4.6)	212 (2.2)	46 (4.7)	202 (2.3)	0 (4.0)	400 (0.5)			
Arizona	58 (4.6)	216 (1.5)	39 (4.5)	, ,	3 (1.9)	199 (8.5)			
Arkansas	62 (5.1)	211 (1.6)	34 (5.1)	212 (2.6)	3 (1.8)	207 (4.6)			
California	73 (4.0)	212 (1.9)		206 (2.3)	4 (1.7)	193 (3.4)			
Colorado	68 (3.7)	212 (1.9)	27 (4.2)	191 (3.6)	1 (0.9)	*** (***)			
Connecticut	79 (3.9)	227 (1.4)	31 (3.8)	218 (1.8)	1 (0.9)	*** (***)			
Delaware	, ,		20 (3.7)	221 (4.3)	1 (1.2)	*** (***)			
Dist. Columbia	65 (0.3)	214 (1.1)	30 (0.3)	220 (1.6)	5 (0.1)	*** (***)			
Florida	59 (0.3)	195 (0.9)	40 (0.3)	187 (1.1)	2 (0.1)	*** (***)			
Georgia	72 (4.2)	215 (2.0)	27 (4.2)	206 (3.2)	1 (0.8)	178 (9.3)			
Hawaii	68 (4.1)	218 (1.8)	32 (4.1)	207 (1.8)	0 (0.0)	*** (***)			
	56 (4.4)	214 (2.2)	44 (4.4)	211 (1.6)	0 (0.0)	*** (***)			
idaho	67 (4.6)	221 (1.3)	32 (4.6)	219 (1.5)	1 (0.5)	*** (***)			
Indiana	65 (5.3)	221 (1.4)	33 (5.4)	220 (2.2)	2 (1.2)	*** (***)			
lowa	69 (4.3)	231 (1.1)	27 (4.5)	225 (2.0)	4 (2.0)	\ /			
Kentucky	72 (4.4)	215 (1.2)	28 (4.4)	211 (2.2)	0 (0.0)	216 (9.0)			
Louisiana	57 (5.0)	210 (2.1)	42 (5.1)	195 (2.4)	1 (0.9)	*** /***			
Maine	56 (5.1)	232 (1.2)	44 (5.1)	229 (1.9)	` <i>'</i>	*** /***			
Maryland	74 (4.2)	218 (1.6)	24 (3.9)	215 (4.0)	0 (0.0) 2 (1.6)	*** (***)			
Massachusetts	82 (4.3)	226 (1.3)	18 (4.3)		, ,	` '			
Michigan	70 (4.8)	219 (2.4)		222 (4.5)	0 (0.0)	( )			
Minnesota	75 (4.5)	228 (1.3)	28 (4.8)	218 (3.3)	2 (1.3)	*** (***)			
Mississippi	60 (4.5)		25 (4.5)	226 (2.2)	0 (0.0)	*** (***)			
Missouri	76 (3.9)	202 (1.7)	39 (4.6)	197 (2.2)	1 (1.1)	*** (***)			
Nebraska	80 (4.5)	224 (1.5) 224 (1.4)	22 (3.9) 20 (4.5)	216 (2.8)	2 (0.5)	*** (***)			
New Hampshire				224 (3.1)	0 (0.0)	()			
New Jersey	75 (5.1)	229 (1.4)	25 (5.1)	229 (1.9)	0 (0.0)	*** (***)			
New Mexico	81 (3.9)	229 (1.8)	17 (3.7)	217 (4.5)	2 (1.3)	*** (***)			
New York	65 (6.2)	215 (1.8)	33 (6.0)	207 (1.9)	2 (1.5)	*** (***)			
North Carolina	67 (5.5)	219 (2.2)	33 (5.5)	214 (2.9)	0 (0.0)	*** (***)			
North Dakota	65 (4.4)	214 (1.6)	33 (4.5)	206 (1.5)	2 (1.4)	*** (***)			
	73 (3.8)	228 (1.0)	27 (3.8)	226 (1.8)	0 (0.0)	*** (***)			
Ohio	74 (4.4)	220 (1.4)	25 (4.3)	212 (2.9)	1 (0.6)	*** (***)			
Oklahoma	67 (4.1)	219 (1.3)	31 (4.3)	218 (1.7)	2 (1.3)	*** /***			
Pennsylvania	68 (5.2)	226 (1.6)	30 (5.2)	218 (3.4)	2 (1.2)	*** /***			
Rhode Island	66 (5.1)	214 (2.1)	34 (5.1)	214 (3.5)	0 (0.0)	*** /***			
South Carolina	65 (4.9)	214 (1.6)	33 (4.7)	207 (2.3)	1 (1.1)	*** /***(			
Tennessee	62 (4.4)	211 (1.9)	36 (4.4)	206 (2.6)	2 (1.3)	*** /***			
Texas	63 (5.0)	220 (1.6)	33 (5.1)	212 (2.4)		004 (4.4)			
Utah	66 (4.8)	225 (1.2)	32 (4.7)		4 (2.0)	204 (4.4)			
Virginia	82 (3.5)	221 (1.5)		219 (1.6)	2 (1.3)	*** (***)			
West Virginia	71 (4.1)	216 (1.3)	18 (3.5) 27 (4.2)	212 (2.8)	0 (0.0)	*** (***)			
Wisconsin	76 (3.8)			209 (1.8)	2 (1.4)	205 (2.9)			
Wyoming	68 (4.4)	227 (1.4) 224 (1.2)	24 (3.8)	229 (1.9)	0 (0.0)	*** (***)			
TERRITORY	OU (+.+)	224 (1.2)	29 (4.2)	224 (1.7)	2 (1.3)	223 (8.3)			
Guam	64 (0.2)	194 (1.0)	36 (0.2)	186 (1.6)	0 (0.0)	*** (***)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Trial State Mathematics Assessment.

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#### TABLE A.17 | Schools' Reports on the Teachers' Attitudes toward Academic Achievement (continued)

. 1	Grade 8 - 1992								
<u>}</u>	Very Po	ositive	Somewha	t Positive	Somewhat Negative	or Very Negative			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	53 (3.7)	270 (1.6)	43 (3.4)	262 (1.7)	4 (1.6)	263 (8.9)			
Northeast	62 (6.8)	275 (3.9)	34 (5.1)	249 (5.1)	4 (3.5)	*** (***)			
Southeast	54 (7.5)	263 (3.0)	46 (7.5)	253 (2.1)	o (o.o)	*** (***)			
Central	50(10.4)	276 (2.7)	45 (9.3)	272 (4.2)	5 (5.3)	*** /***			
West			3 - 1	269 (3.5)	5 (1.6)	*** /***			
STATES	49 (4.3)	268 (2.8)	46 (4.2)	209 (3.3)	3 (1.0)	\ /			
Alabama	51 (4.9)	255 (2.7)	44 (5.4)	248 (2.5)	5 (2.4)	248 (5.4)			
Arizona	60 (5.3)	267 (1.8)	32 (5.1)	262 (2.5)	8 (2.4)	256 (3.4)			
Arkansas	52 (4.0)	256 (1.8)	43 (4.3)	256 (1.8)	6 (2.5)	247 (7.1)			
California	54 (5.0)	265 (2.5)	45 (5.1)	256 (2.4)	1 (1.1)	*** (***)			
Colorado	: ::::::::::::::::::::::::::::::::::	1	37 (4.6)	268 (2.3)	7 (2.2)	260 (6.5)			
Connecticut	57 (4.9) 65 (4.1)	275 (1.2) 278 (2.3)	34 (4.0)	265 (2.7)	1 (0.8)	*** (***)			
_		1	- (,			266 (4.3)			
Delaware	75 (0.3)	263 (1.2)	22 (0.3)	260 (1.8)	3 (0.1) 6 (0.2)	266 (4.3) 230 (3.6)			
Dist. Columbia	45 (0.5)	233 (1.4)	49 (0.5)	229 (1.1)	1 1				
Florida	53 (4.9)	264 (2.1)	43 (4.8)	254 (2.5)	4 (1.9)	263(12.2)			
Georgia	56 (5.3)	259 (1.8)	38 (4.9)	259 (1.9)	6 (2.4)	258 (7.3)			
Hawaii	30 (0.3)	263 (1.7)	60 (0.3)	254 (1.1)	10 (0.2)	259 (2.3)			
Idaho	59 (3.8)	275 (1.1)	41 (3.8)	274 (1.2)	0 (0.0)	*** (***)			
Indiana	56 (5.3)	273 (1.6)	41 (4.5)	265 (1.9)	3 (2.5)	*** (***)			
lowa	57 (5.4)	284 (1.4)	41 (5.2)	282 (1.7)	3 (1.5)	268 (4.6)			
Kentucky	54 (5.1)	264 (1.5)	45 (5.2)	260 (1.7)	2 (1.1)	*** (***)			
Louisiana	57 (4.8)	252 (2.3)	38 (4.5)	245 (2.7)	5 (2.3)	241 (5.8)			
Maine	60 (5.3)	278 (1.4)	40 (5.3)	278 (1.6)	0 (0.0)	*** (***)			
Maryland	50 (5.0)	273 (2.2)	47 (5.1)	256 (2.1)	2 (1.5)	236 (9.7)			
Massachusetts	53 (4.8)	278 (1.6)	46 (4.9)	266 (2.4)	1 (0.6)	*** (***)			
Michigan	, ,	267 (3.8)	58 (5.2)	267 (2.5)	4 (2.0)	256 (9.5)			
Minnesota	, , ,	! !	34 (5.3)	282 (1.9)	0 (0.0)	*** (***)			
	66 (5.3)	282 (1.1)		1	0 (0.0)	*** /***			
Mississippi	54 (5.5)	247 (2.1)	46 (5.5)	· · · · · · · · · · · · · · · · · · ·	- ' '	254(14.6)			
Missouri	50 (5.6)	272 (2.0)	47 (5.6)	270 (1.6)	2 (1.4)				
Nebraska	54 (5.1)	279 (1.3)	44 (5.4)	277 (1.8)	2 (1.7)	*** (***)			
New Hampshire	61 (4.4)	280 (1.3)	32 (4.3)	275 (1.7)	7 (1.5)	278 (1.7)			
New Jersey	54 (5.3)	278 (2.1)	45 (5.5)	263 (2.7)	1 (0.9)	*** (***)			
New Mexico	57 (4.5)	258 (1.1)	39 (4.2)	260 (2.0)	4 (1.6)	252 (5.2)			
New York	47 (5.7)	275 (2.6)	46 (5.6)	262 (3.5)	7 (3.0)	226 (9.3)			
North Carolina	56 (5.1)	257 (1.7)	43 (5.1)	259 (2.0)	1 (0.8)	*** (***)			
North Dakota	69 (4.3)	283 (1.3)	31 (4.3)	281 (1.6)	0 (0.0)	*** (***)			
Ohio	40 (5.1)	272 (3.2)	55 (5.8)	266 (1.9)	5 (2.5)	251 (6.5)			
Oklahoma	69 (5.3)	268 (1.4)	30 (5.2)	265 (2.7)	2 (1.2)	*** (***)			
Pennsylvania	48 (3.7)	275 (2.3)	50 (4.0)	267 (2.1)	2 (1.6)	*** (***)			
Rhode Island	57 (0.2)	269 (0.8)	43 (0.2)	262 (1.3)	0 (0.0)	*** (***)			
South Carolina	53 (6.1)	261 (1.7)	45 (5.8)	259 (2.2)	2 (1.5)	*** (***)			
Tennessee	71 (4.4)	260 (1.8)	26 (4.3)	253 (2.8)	3 (0.8)	*** (***)			
Texas	48 (5.0)	268 (2.6)	49 (4.9)	260 (1.9)	3 (1.5)	252(11.0)			
Utah	72 (4.4)	274 (0.9)	27 (4.5)	273 (1.5)	1 (0.9)	*** (***)			
Virginia	67 (5.3)	269 (1.9)	30 (5.1)	266 (2.8)	3 (1.5)	255 (2.8)			
West Virginia			50 (5.5)	256 (1.5)	2 (1.4)	*** (***)			
Wisconsin	48 (5.5)	260 (1.5)	46 (5.3)		0 (0.0)	*** /***			
	54 (5.3)	279 (2.3)	46 (5.3)	275 (2.4)		*** (***)			
Wyoming FERRITORIES	63 (4.4)	275 (1.3)	35 (4.2)	274 (1.4)	2 (1.2)	( )			
Guam	70 (0.2)	235 (1.4)	30 (0.2)	232 (2.5)	0 (0.0)	*** (***)			
Virgin Islands	28 (0.2)	232 (1.3)	56 (0.2)	219 (1.4)	16 (0.1)	213 (2.2)			



TABLE A.18

#### Schools' Reports on the Parental Support for Student Achievement

	Grade 4 - 1992								
	Very P	ositive	Somewha	Positive	Somewhat Negativ	e or Very Negative			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	41 (3.2)	224 (1.8)	54 (3.2)	214 (1.3)	F (4.0)	000 (5.0)			
Northeast	52 (7.5)	230 (4.1)	<b>,</b> ,		5 (1.2)	200 (5.0)			
Southeast	42 (6.2)		47 (6.9)	215 (3.0)	1 (1.1)	*** (***)			
Central		219 (3.8)	48 (6.0)	203 (2.1)	10 (3.7)	193 (7.2)			
West	33 (5.1)	224 (3.2)	62 (5.3)	222 (2.4)	5 (1.9)	213(11.7)			
STATES	41 (6.9)	223 (2.4)	<b>5</b> 6 (7.4)	213 (2.8)	4 (1.6)	198`(4.0)			
					` '	` '			
Alabama	26 (4.6)	218 (3.9)	57 (5.2)	205 (2.0)	18 (3.7)	196 (2.8)			
Arizona	32 (4.7)	221 (2.1)	57 (5.1)	212 (2.0)	11 (3.0)	202 (4.8)			
Arkansas	19 (3.4)	212 (3.1)	68 (4.2)	209 (1.3)	14 (3.2)	• •			
California	47 (4.8)	218 (2.3)	46 (5.1)	` '		202 (2.6)			
Colorado	46 (4.5)	226 (1.5)	` '	, ,	7 (2.5)	191 (6.3)			
Connecticut	53 (4.8)		43 (4.6)	216 (1.6)	11 (2.9)	210 (3.6)			
	JJ (4.0)	231 (1.9)	47 (4.8)	220 (2.2)	0 (0.0)	*** (***)			
Delaware	27 (0.2)	222 (1.8)	73 (0.2)	214 (0.9)	0 (0.0)	*** (***)			
Dist. Columbia	41 (0.3)	201 (0.9)	53 (0.3)	185 (0.8)	• •	( )			
Florida	45 (5.4)	216 (2.5)	48 (5.0)	, ,	6 (0.1)	182 (2.7)			
Georgia	41 (4.6)	<b>1</b>	, ,	211 (2.0)	7 (2.3)	199 (4.7)			
Hawaii	, ,	226 (2.4)	50 (5.1)	206 (1.8)	9 (2.8)	207 (3.4)			
Idaho	34 (4.7)	219 (2.5)	62 (4.8)	211 (1.5)	4 (1.6)	200 (5.4)			
Idano	36 (4.1)	223 (1.9)	60 (4.3)	219 (1.0)	4 (2.0)	215 (9.8)			
Indiana	40 (4.8)	223 (1.9)	EE (E 0)	040 (4.0)	, ,				
lowa		V /	55 (5.2)	218 (1.6)	5 (2.3)	212 (8.8)			
Kentucky	46 (4.3)	235 (1.2)	47 (4.4)	224 (1.5)	7 (2.3)	222 (5.1)			
	26 (4.0)	221 (2.1)	58 (5.1)	213 (1.2)	16 (3.5)	204 (2.4)			
Louisiana	28 (4.0)	218 (2.6)	57 (4.5)	200 (2.2)	15 (3.6)	190 (3.2)			
Maine	29 (5.5)	234 (1.8)	64 (5.9)	231 (1.1)	7 (3.0)	218 (3.7)			
Maryland	44 (4.5)	224 (2.0)	53 (4.8)	212 (2.4)	3 (1.9)	· · · · · · · · · · · · · · · · · · ·			
Massachusetts		` ,	• •	212 (2.4)	3 (1.9)	185 (8.4)			
	43 (4.8)	231 (2.2)	56 (4.9)	222 (1.6)	1 (1.1)	*** (***)			
Michigan	39 (4.4)	224 (3.7)	56 (4.7)	217 (2.1)	6 (2.2)	201 (8.3)			
Minnesota	57 (4.7)	229 (1.2)	41 (5.0)	225 (2.0)	2 (1.7)	*** (***)			
Mississippi	17 (3.6)	212 (4.0)	74 (4.1)	199 (1.5)	10 (3.2)				
Missouri	40 (4.6)	228 (1.8)	50 (5.0)	219 (1.8)		190 (4.8)			
Nebraska	39 (4.2)	228 (1.8)			10 (3.4)	207 (4.6)			
1	00 (4.2)	220 (1.0)	55 (4.0)	223 (1.7)	6 (1.9)	212 (7.3)			
New Hampshire	45 (4.6)	231 (1.9)	52 (4.7)	227 (1.7)	4 (1.9)	222 (8.8)			
New Jersey	56 (4.4)	235 (1.9)	39 (4.5)	217 (2.9)	5 (2.1)	, ,			
New Mexico	39 (6.1)	220 (2.3)	46 (6.0)	207 (1.8)		203(10.3)			
New York	40 (5.1)	220 (3.4)	, ,	, ,	15 (3.6)	203 (2.8)			
North Carolina	29 (4.5)	, , ,	53 (5.0)	216 (1.9)	7 (2.8)	212 (5.2)			
North Dakota	, ,		59 (5.4)	209 (1.5)	12 (2.8)	202 (1.8)			
	44 (4.7)	230 (1.1)	53 (4.5)	226 (1.3)	4 (1.7)	225 (9.0)			
Ohio	32 (4.1)	228 (2.2)	55 (4.0)	215 /4 5\	42 (0.0)	, ,			
Oklahoma	29 (4.6)	223 (1.7)		215 (1.5)	13 (3.0)	203 (3.2)			
Pennsylvania	39 (5.0)		64 (4.6)	218 (1.4)	7 (2.3)	209 (2.0)			
Rhode Island	39 (3.0)	229 (2.5)	53 (5.1)	222 (2.0)	8 (2.4)	207 (7.2)			
South Carolina	32 (4.7)	218 (3.4)	63 (4.7)	213 (2.0)	5 (2.1)	197 (8.6)			
	31 (4.8)	221 (2.0)	59 (5.3)	207 (1.6)	9 (2.9)	205 (2.7)			
Tennessee	32 (4.1)	212 (3.2)	53 (4.9)	210 (1.9)	15 (3.4)	203 (2.8)			
Texas	28 (4.6)		` '	` '	` ,				
Utah		225 (3.3)	61 (5.2)	214 (1.7)	11 (3.6)	210 (4.7)			
	38 (4.5)	229 (1.5)	53 (4.7)	220 (1.3)	9 (2.9)	214 (3.3)			
Virginia	40 (4.8)	230 (2.8)	52 (5.3)	213 (1.8)	9 (2.5)	210 (3.5)			
West Virginia	25 (4.0)	221 (2.3)	64 (4.8)	212 (1.1)	11 (2.9)	206 (2.3)			
Wisconsin	47 (4.6)	231 (1.5)	49 (4.5)	225 (1.7)	4 (1.9)				
Wyoming	41 (4.7)	226 (1.6)	52 (4.8)	224 (0.9)		220 (3.3)			
TERRITORY	,	()	SE (4.0)	224 (0.3)	6 (2.2)	212 (4.8)			
Guam	29 (0.2)	187 (4.0)	74 (0.0)	400 (4.4)	<b>-</b> /				
		187 (1.2)	71 (0.2)	193 (1.1)	0 (0.0)	*** (***)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.



# TABLE A.18 | Schools' Reports on the Parental Support for Student Achivement (continued)

PUBLIC SCHOOLS	Grade 8 - 1992								
	Very Positive		Somewha	t Positive	Somewhat Negative	or Very Negative			
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	28 (3.0)	276 (2.2)	62 (3.2)	264 (1.2)	10 (2.3)	257 (2.4)			
Northeast	27 (7.5)	278 (5.9)	67 (7.8)	264 (3.1)	6 (2.3)	238 (4.7)			
Southeast	28 (4.6)	271 (3.2)	61 (6.1)	254 (1.8)	11 (6.3)	252 (5.9)			
Central	25 (7.9)	279 (2.3)	61 (7.9)	273 (2.8)	14 (4.8)	268 (3.3)			
West	31 (5.1)	277 (4.2)	60 (4.8)	265 (2.5)	9 (3.6)	257 (5.3)			
STATES	o , (o.,,		( ,	, ,	, ,				
Alabama	12 (3.4)	265 (5.5)	65 (4.7)	251 (2.1)	23 (4.4)	244 (3.5)			
Arizona	35 (5.4)	271 (2.3)	56 (5.5)	262 (1.8)	9 (2.7)	255 (3.3)			
Arkansas	17 (3.4)	261 (3.3)	67 (5.4)	257 (1.5)	16 (4.3)	247 (3.5)			
California	33 (4.1)	271 (3.0)	58 (4.4)	258 (2.2)	9 (2.8)	239 (4.2)			
Colorado	42 (4.6)	276 (1.5)	49 (4.6)	269 (1.8)	9 (2.6)	259 (4.4)			
Connecticut	, ,	281 (2.9)	51 (4.9)	269 (2.6)	9 (2.9)	260 (5.2)			
Connecticut	41 (4.4)	201 (2.9)	• •	• •		, ,			
Delaware	37 (0.3)	266 (1.3)	63 (0.3)	260 (1.4)	0 (0.0)	*** (***)			
Dist. Columbia	28 (0.7)	242 (1.2)	51 (0.4)	225 (1.3)	21 (0.5)	230 (2.0)			
Florida	29 (4.8)	268 (2.9)	64 (5.3)	255 (2.0)	6 (2.8)	260 (4.3)			
Georgia	25 (4.7)	267 (3.3)	56 (5.5)	256 (1.9)	18 (4.6)	255 (3.3)			
Hawaii	29 (0.3)	263 (1.8)	59 (0.3)	254 (1.0)	11 (0.2)	257 (2.1)			
Idaho	29 (3.4)	279 (1.4)	68 (3.6)	273 (0.9)	3 (1.4)	265 (5.1)			
Indiana		,	E9 (4 E)	269 (1.7)	13 (3.6)	255 (4.7)			
Indiana	30 (5.2)	276 (2.2)	58 (4.5)	1 1	6 (2.4)	270 (5.0)			
lowa	35 (4.9)	286 (1.8)	59 (4.9)	282 (1.2)		255 (2.4)			
Kentucky	18 (4.0)	273 (2.9)	63 (4.7)	261 (1.4)	18 (3.8)	243 (3.2)			
Louisiana	15 (3.8)	265 (5.4)	66 (5.2)	247 (2.0)	19 (4.2)				
Maine	27 (5.0)	283 (2.6)	65 (5.3)	276 (1.0)	9 (2.2)	281 (4.2)			
Maryland	35 (4.7)	275 (3.0)	52 (4.6)	261 (2.1)	13 (3.0)	247 (4.4)			
Massachusetts	32 (3.8)	285 (1.8)	63 (4.4)	268 (1.7)	5 (2.6)	249 (7.5)			
Michigan	25 (4.1)	277 (4.4)	65 (4.8)	263 (1.9)	10 (3.0)	268 (2.0)			
Minnesota	36 (4.6)	284 (1.8)	63 (4.7)	281 (1.2)	1 (0.8)	*** (***)			
Mississippi	13 (3.0)	257 (3.4)	71 (3.9)	244 (1.6)	16 (3.5)	243 (3.2)			
Missouri	20 (4.2)	274 (2.4)	67 (4.9)	271 (1.3)	12 (3.6)	259 (5.4)			
Nebraska	40 (4.6)	280 (1.5)	54 (4.7)	277 (1.5)	6 (2.7)	273 (6.9)			
	• •	, ,							
New Hampshire	24 (3.2)	284 (1.9)	70 (3.4)	276 (1.2)	6 (1.7)	276 (1.7)			
New Jersey	39 (5.1)	283 (2.6)	53 (5.6)	264 (3.0)	9 (2.7)	262 (7.1)			
New Mexico	34 (4.1)	265 (1.3)	53 (4.4)	257 (1.5)	13 (3.0)	250 (2.3)			
New York	28 (4.5)	279 (3.1)	62 (4.8)	264 (2.9)	10 (3.3)	249 (8.1)			
North Carolina	18 (3.3)	265 (3.1)	70 (4.6)	257 (1.4)	12 (3.5)	249 (4.1)			
North Dakota	41 (4.6)	286 (1.4)	53 (4.5)	280 (1.4)	6 (1.7)	279 (3.2)			
Ohio	23 (3.8)	280 (3.8)	66 (5.3)	265 (2.0)	11 (3.5)	258 (5.9)			
Oklahoma	30 (4.8)	270 (2.2)	64 (4.7)	267 (1.6)	7 (2.4)	262 (5.6)			
Pennsylvania	23 (3.6)	277 (4.9)	71 (4.2)	269 (1.5)	6 (2.2)	265 (5.7)			
Rhode Island		270 (1.4)	60 (0.2)	266 (0.9)	7 (0.1)	241 (1.9)			
South Carolina	33 (0.2) 23 (3.9)	270 (1.4)	61 (5.0)	258 (1.5)	16 (3.5)	251 (3.0)			
Tennessee			66 (4.7)	257 (1.7)	15 (3.3)	255 (2.0)			
	19 (4.2)	265 (4.2)	, ,	, ,	• •	, ,			
Texas	25 (4.5)	274 (4.3)	59 (5.1)	263 (1.8)	16 (2.7)	252 (3.2)			
Utah	41 (4.2)	277 (1.2)	48 (4.5)	272 (1.1)	10 (3.7)	268 (2.2)			
Virginia	32 (4.7)	278 (2.3)	57 (4.8)	263 (1.8)	11 (3.0)	258 (4.3)			
West Virginia	22 (3.8)	263 (2.4)	62 (4.8)	257 (1.4)	16 (3.8)	254 (1.7)			
Wisconsin	32 (5.2)	284 (2.5)	60 (5.8)	277 (1.9)	8 (2.3)	252 (5.3)			
Wyoming	25 (3.4)	274 (1.5)	73 (3.7)	275 (1.2)	2 (1.3)	*** (***)			
TERRITORIES	1/	, ,	, ,	• •					
Guam	0 (0.0)	*** (***)	13 (0.3)	216 (3.6)	87 (0.3)	237 (1.3)			
Virgin Islands	0 (0.0)	*** (***)	66 (O.1)	226 (1.4)	34 (0.1)	214 (1.5)			



TABLE A.19 | Schools' Reports on the Regard for School Property

	Grade 4 - 1992								
	Very Positive		Somewhat	Positive	Somewhat Negative	or Very Negative			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	48 (3.2)	222 (1.6)	47 (3.1)	214 (1.4)	4 (1.2)	204 (6.1)			
Northeast	51(10.1)	226 (3.7)	43 (9.4)	220 (3.1)	6 (3.4)				
Southeast	41 (4.8)	213 (3.8)	53 (5.3)	209 (2.3)	7 (2.6)	210(19.3)			
Central	63 (4.7)	223 (2.2)	34 (4.7)	220 (4.0)	3 (2.4)	189 (4.6) *** (***)			
West	38 (5.5)	224 (3.6)	59 (5.7)	212 (2.7)		\ /			
STATES	(/	( (0.0)	00 (0.7)	212 (2.1)	3 (1.7)	203 (4.1)			
Alabama	39 (5.1)	212 (3.0)	52 (5.1)	204 (2.1)	9 (0.7)	000 (0.7)			
Arizona	49 (5.0)	215 (1.8)	38 (4.9)	217 (2.2)	8 (2.7)	202 (3.7)			
Arkansas	35 (4.4)	211 (2.4)	46 (4.4)		14 (3.5)	202 (4.5)			
California	44 (4.9)	215 (2.4)	47 (5.1)	209 (1.5)	19 (3.9)	204 (2.2)			
Colorado	54 (4.4)	222 (1.6)	` '	203 (2.5)	9 (2.8)	187 (7.0)			
Connecticut	69 (4.5)	230 (1.8)	39 (4.2) 30 (4.4)	218 (1.8)	6 (2.4)	214 (4.6)			
Delaware		, ,		217 (2.9)	1 (0.9)	*** (***)			
Dist. Columbia	35 (0.2)	215 (1.6)	56 (0.2)	217 (1.1)	9 (0.1)	217 (2.3)			
Florida	44 (0.3)	198 (1.0)	53 (0.3)	186 (0.8)	4 (0.1)	176 (3.8)			
Georgia	55 (4.6)	216 (1.7)	35 (4.5)	212 (3.8)	10 (2.5)	196 (5.5)			
Hawaii	51 (4.7)	221 (2.5)	40 (5.0)	207 (2.3)	9 (2.9)	208 (3.4)			
Idaho	35 (4.4)	216 (2.5)	60 (4.6)	212 (1.6)	5 (1.5)	207 (5.4)			
luano	34 (4.5)	222 (1.9)	60 (4.9)	220 (1.3)	6 (2.3)	217 (2.5)			
Indiana	52 (5.6)	221 (1.6)	45 (5.5)	219 (1.9)	3 (1.7)				
lowa	53 (4.1)	232 (1.3)	45 (4.2)		- 1 7	210 (7.3)			
Kentucky	31 (4.8)	219 (2.0)	' '	226 (1.5)	3 (1.3)	221 (4.7)			
Louisiana	34 (5.2)	213 (2.9)	,	212 (1.3)	6 (2.5)	203 (3.7)			
Maine	48 (5.4)	232 (1.2)		201 (2.3)	12 (3.3)	191 (4.4)			
Maryland	54 (4.8)	220 (2.2)	49 (5.4) 42 (4.7)	230 (1.8) 214 (2.3)	4 (1.8)	230 (5.7)			
Massachusetts	48 (5.1)		, ,		4 (2.3)	192(10.0)			
Michigan	· · · · · · · · · · · · · · · · · · ·	228 (1.8)	47 (5.2)	224 (2.1)	5 (2.3)	221 (9.6)			
Minnesota	49 (5.4)	220 (3.0)	48 (5.4)	219 (2.2)	4 (1.8)	199(10.4)			
Mississippi	52 (4.5)	229 (1.3)	45 (4.5)	226 (1.5)	3 (2.0)	211(12.6)			
Missouri	31 (4.7)	203 (2.5)	57 (4.9)	201 (1.7)	12 (3.3)	189 (3.9)			
Nebraska	47 (5.0)	224 (2.0)	47 (5.5)	220 (2.4)	7 (2.2)	216 (3.4)			
	56 (5.3)	225 (1.7)	39 (5.3)	224 (1.9)	5 (2.3)	226 (7.4)			
New Hampshire	54 (5.1)	231 (1.5)	41 (5.0)	227 (1.8)	5 (2.3)	224 (6.8)			
New Jersey	54 (5.0)	232 (1.8)	43 (5.0)	219 (2.8)	2 (0.9)	207(16.6)			
New Mexico	37 (5.0)	215 (3.1)	55 (5.0)	212 (1.9)	9 (2.9)				
New York	42 (5.3)	220 (3.1)	54 (5.2)	216 (1.6)	4 (1.9)	199 (4.7)			
North Carolina	39 (4.6)	211 (2.3)	55 (4.6)	212 (1.4)	5 (1.7)	214 (4.7)			
North Dakota	47 (5.1)	229 (1.2)	49 (4.8)	227 (1.2)	4 (1.8)	212 (6.3) 220 (4.3)			
Ohio	43 (5.4)	222 (1.7)	` ,	, ,					
Oklahoma	42 (4.9)		47 (5.1)	215 (2.0)	9 (3.0)	208 (5.5)			
Pennsylvania		221 (1.6)	50 (5.0)	218 (1.6)	9 (2.8)	218 (3.6)			
Rhode Island	}- !	228 (1.9)	50 (5.2)	222 (2.2)	8 (2.4)	203 (6.6)			
South Carolina	1 /	217 (3.4)	62 (5.2)	214 (2.1)	6 (2.5)	200 (8.6)			
Tennessee	39 (4.7) 40 (5.2)	216 (1.8) 209 (2.6)	51 (4.7)	208 (1.8)	10 (3.1)	206 (2.7)			
Texas	, ,	` ,	51 (5.6)	211 (1.8)	9 (3.2)	202 (3.8)			
Utah	42 (5.8)	219 (2.5)	51 (5.5)	215 (2.1)	6 (2.9)	211 (5.2)			
[	36 (4.5)	226 (1.8)	55 (4.8)	221 (1.4)	10 (3.2)	219 (3.3)			
Virginia Wost Virginia	51 (4.7)	225 (2.3)	46 (4.8)	214 (2.1)	3 (1.6)	197 (3.5)			
West Virginia	36 (4.1)	217 (1.9)	55 (4.4)	214 (1.3)	9 (2.8)	203 (2.9)			
Wisconsin	54 (5.3)	230 (1.4)	43 (5.3)	226 (1.7)	3 (1.8)	214(16.9)			
Wyoming	50 (4.9)	225 (1.2)	44 (4.7)	224 (1.4)	6 (2.4)	224 (4.2)			
TERRITORY Guam	45 (5.4)			` '		· \ ··-/			
Guaill	30 (0.2)	192 (2.0)	56 (0.2)	191 (1.1)	14 (0.1)	189 (2.1)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.



TABLE A.19 | Schools' Reports on the Regard for School Property (continued)

	Grade 8 - 1992								
	Very Po	ositive	Somewha	t Positive	Somewhat Negative	or Very Negative			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	32 (3.3)	273 (1.7)	57 (3.2)	264 (1.5)	11 (2.2)	260 (4.2)			
Northeast	40 (6.4)	274 (4.1)	57 (6.9)	260 (4.6)	3 (3.3)	*** (***)			
Southeast	29 (6.6)	264 (2.0)	56 (7.4)	256 (2.4)	15 (4.5)	258 (5.0)			
Central	34 (7.8)	277 (1.5)	54 (6.3)	273 (3.5)	13 (6.6)	265 (5.4)			
West	28 (5.1)	275 (3.5)	60 (4.7)	268 (2.1)	12 (2.0)	252 (9.5)			
STATES	20 (01.)		( ,	` '	` ,	, ,			
Alabama	5 (2.2)	269 (7.3)	69 (4.6)	253 (1.7)	27 (4.8)	243 (4.1)			
Arizona	33 (5.2)	268 (3.1)	48 (5.6)	265 (2.0)	19 (3.8)	256 (2.5)			
Arkansas	16 (4.2)	261 (3.5)	60 (5.2)	256 (1.7)	24 (4.3)	254 (2.8)			
California	29 (5.1)	274 (3.3)	54 (5.2)	256 (2.3)	16 (3.9)	251 (3.5)			
Colorado	35 (4.8)	273 (1.9)	53 (5.2)	272 (1.7)	12 (3.3)	264 (4.0)			
Connecticut	41 (5.3)	276 (2.6)	54 (5.4)	271 (3.0)	5 (2.3)	274 (8.9)			
Delaware	34 (0.2)	263 (1.8)	55 (0.2)	262 (1.2)	11 (0.1)	262 (3.9)			
Dist. Columbia	31 (0.7)	235 (1.1)	<b>56</b> (0.7)	231 (1.3)	12 (0.2)	218 (1.6)			
Florida	28 (4.9)	266 (3.0)	54 (5.2)	259 (2.3)	18 (4.0)	249 (4.1)			
Georgia	29 (5.2)	266 (2.6)	61 (5.8)	257 (1.6)	9 (2.8)	248 (6.1)			
Hawaii	8 (0.2)	260 (3.1)	68 (0.3)	258 (1.0)	24 (0.3)	253 (2.1)			
Idaho	25 (3.8)	276 (1.8)	61 (4.1)	274 (1.1)	14 (2.7)	274 (1.5)			
Indiana	41 (5.7)	270 (2.1)	49 (5.8)	269 (2.0)	11 (2.9)	270 (5.1)			
lowa	36 (5.2)	285 (1.9)	56 (5.4)	283 (1.2)	8 (2.7)	271 (4.5)			
Kentucky	23 (4.1)	267 (2.4)	60 (5.2)	260 (1.5)	16 (3.3)	261 (2.7)			
Louisiana	22 (4.4)	262 (3.4)	55 (5.3)	247 (2.0)	23 (4.4)	241 (4.0)			
Maine	39 (4.7)	280 (1.8)	56 (4.8)	277 (1.3)	6 (2.3)	275 (3.8)			
Maryland	29 (4.8)	276 (3.0)	58 (5.9)	261 (2.4)	13 (3.8)	252 (6.5)			
Massachusetts	29 (5.1)	276 (2.3)	61 (4.9)	274 (1.7)	10 (2.3)	250 (4.9)			
Michigan	28 (4.6)	276 (4.8)	59 (4.9)	263 (2.2)	13 (2.8)	263 (4.0)			
Minnesota	36 (4.9)	283 (1.5)	59 (5.1)	281 (1.4)	5 (2.6)	277 (2.2)			
Mississippi	13 (2.7)	254 (2.8)	69 (4.5)	246 (1.8)	18 (3.2)	239 (2.8)			
Missouri	38 (4.9)	272 (2.6)	57 (5.3)	270 (1.4)	5 (2.3)	267 (2.3)			
Nebraska	41 (3.9)	278 (1.6)	48 (5.1)	278 (1.8)	11 (3.6)	277 (2.9)			
New Hampshire	51 (4.2)	279 (1.4)	45 (4.3)	276 (1.5)	4 (1.9)	280 (3.2)			
New Jersey	40 (6.0)	278 (3.2)	48 (6.1)	271 (2.6)	12 (3.8)	251 (9.4)			
New Mexico	12 (3.3)	259 (2.4)	68 (4.5)	258 (1.2)	20 (3.1)	261 (2.5)			
New York	38 (5.2)	278 (3.1)	49 (5.6)	262 (3.6)	13 (4.0)	245 (8.3)			
North Carolina	40 (4.8)	259 (1.9)	47 (4.7)	259 (2.0)	13 (2.9)	249 (3.7)			
North Dakota	33 (4.6)	284 (2.2)	54 (4.6)	282 (1.2)	13 (2.9)	281 (1.4)			
Ohio	32 (3.5)	274 (3.0)	59 (4.0)	268 (2.4)	9 (2.3)	243 (7.2)			
Oklahoma	23 (4.2)	266 (3.0)	64 (4.8)	269 (1.4)	13 (3.4)	265 (3.9)			
Pennsylvania	36 (4.9)	274 (3.3)	57 (5.7)	269 (1.5)	7 (3.0)	269 (4.8)			
Rhode Island	31 (0.1)	273 (1.4)	58 (0.2)	265 (1.0)	11 (0.2)	254 (1.6)			
South Carolina	22 (3.9)	266 (3.0)	56 (5.1)	259 (1.5)	22 (4.3)	257 (3.1)			
Tennessee	16 (4.0)	265 (3.0)	68 (4.6)	257 (1.8)	16 (3.4)	256 (2.0)			
Texas	25 (4.9)	262 (2.8)	60 (5.1)	266 (2.3)	14 (2.8)	256 (3.2)			
Utah	18 (3.3)	279 (2.1)	75 (4.2)	273 (0.9)	7 (2.8)	269 (3.7)			
Virginia	39 (4.8)	266 (2.4)	55 (4.7)	269 (1.6)	6 (2.6)	263 (5.9)			
West Virginia	19 (3.5)	262 (2.5)	59 (5.2)	258 (1.2)	22 (4.5)	255 (2.0)			
Wisconsin	37 (5.8)	283 (2.2)	52 (6.1)	274 (2.3)	10 (3.1)	270 (5.9)			
Wyoming TERRITORIES	35 (3.8)	276 (1.5)	51 (4.3)	274 (1.5)	14 (2.4)	272 (1.9)			
Guam	17 (0.3)	244 (3.2)	13 (0.3)	216 (3.6)	70 (0.2)	235 (1.4)			
Virgin Islands	o (o.o)	*** (***)	21 (0.1)	216 (2.3)	79 (0.1)	223 (1.1)			

When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent.



TABLE A.20 | Schools' Reports on the Relations between Students and Teachers

		Grade 4 - 1992									
PUBLIC SCHOOLS	Very Po	sitive	Somewhat	Positive	Somewhat Negative	e or Very Negative					
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency					
NATION	75 (1.9)	219 (1.1)	25 (2.0)	213 (1.8)	0 (0.2)	*** /***)					
Northeast	84 (5.3)	224 (2.7)	16 (5.3)	214 (8.8)	0 (0.0)	***					
Southeast	75 (3.7)	210 (2.3)	24 (4.1)	206 (2.8)	1 (0.9)	*** /***(					
Central	73 (3.5)	222 (1.8)	27 (3.5)	222 (4.2)	0 (0.0)	*** /***\					
West	71 (3.4)	219 (2.2)	29 (3.4)	209 (2.9)	0 (0.0)	*** (***)					
STATES	` ′	(,	25 (51.)	200 (2.0)	0 (0.0)	( )					
Alabama	47 (4.8)	212 (2.6)	52 (4.8)	202 (1.9)	1 (0.9)	*** /***)					
Arizona	68 (4.4)	215 (1.5)	30 (4.2)	211 (2.4)	1 (1.3)	*** /***					
Arkansas	51 (4.5)	211 (1.9)	46 (4.5)	207 (1.5)	, ,	\ /					
California	76 (4.1)	211 (1.9)	23 (4.0)		2 (1.4)	194 (5.7) *** (***)					
Colorado	73 (4.3)	222 (1.2)	26 (4.3)	195 (3.8)	1 (1.2)	*** (***)					
Connecticut	84 (3.8)	229 (1.4)	16 (3.8)	215 (2.3) 212 (3.9)	1 (0.5)	*** (***)					
Delaware	` ·		, ,	212 (3.9)	0 (0.0)	*** ()					
Dist. Columbia	66 (0.2)	216 (1.1)	32 (0.2)	218 (1.3)	2 (0.1)	*** (***)					
Florida	<b>56</b> (0.3)	196 (0.9)	43 (0.3)	186 (0.8)	2 (0.1)	*** (***)					
Georgia	71 (4.2)	216 (1.4)	28 (4.3)	205 (5.3)	1 (0.5)	*** (***)					
- 1	64 (4.9)	218 (2.3)	36 (4.9)	207 (2.2)	0 (0.0)	*** (***)					
Hawaii Idaho	45 (5.1)	214 (2.1)	55 (5.1)	213 (1.9)	0 (0.0)	*** (***)					
luano	72 (4.5)	221 (1.1)	27 (4.5)	217 (2.1)	1 (0.5)	*** (***)					
Indiana	74 (4.8)	220 (1.2)	26 (4.8)	218 (2.8)	0 (0.0)	*** /***					
iowa	74 (4.0)	230 (1.2)	26 (4.0)	224 (2.4)	0 (0.0)	*** /***					
Kentucky	59 (5.1)	216 (1.4)	41 (5.1)		0 (0.0)	( )					
Louisiana	44 (5.0)	210 (2.6)	53 (4.9)	211 (1.6)	0 (0.0)	*** (***)					
Maine	70 (5.6)	231 (1.1)		199 (2.3)	3 (1.7)	188 (5.5)					
Maryland	69 (4.2)	219 (1.8)	30 (5.6) 29 (4.4)	230 (2.2) 212 (2.0)	0 (0.0)	*** (***)					
Massachusetts				212 (2.0)	2 (1.6)	` '					
Michigan	82 (4.1)	227 (1.3)	18 (4.1)	217 (4.0)	0 (0.0)	*** (***)					
Minnesota	70 (4.9)	221 (2.3)	30 (4.9)	213 (2.8)	0 (0.0)	*** (***)					
Mississippi	80 (3.7)	229 (1.0)	20 (3.7)	221 (3.1)	0 (0.0)	*** (***)					
Missouri	45 (4.3)	204 (1.8)	54 (4.2)	198 (1.6)	1 (0.8)	*** (***)					
Nebraska	68 (4.3)	224 (1.7)	31 (4.3)	217 (2.4)	2 (1.3)	*** ( <del>***</del> )					
Nebraska	77 (4.7)	224 (1.4)	22 (4.7)	227 (2.9)	1 (0.6)	*** (***)					
New Hampshire	86 (3.6)	229 (1.3)	14 (3.6)	226 (2.7)	0 (0.0)	*** /***\					
New Jersey	80 (4.1)	229 (1.7)	20 (4.1)	216 (5.3)	0 (0.0)	*** (***)					
New Mexico	73 (5.7)	215 (1.7)	27 (5.7)	204 (2.2)	0 (0.0)	*** (***)					
New York	68 (S.O)	218 (2.0)	32 (5.0)	214 (2.3)	0 (0.0)	*** (***)					
North Carolina	57 (4.2)	214 (2.0)	43 (4.2)	208 (1.6)		*** (***)					
North Dakota	70 (4.4)	228 (1.0)	30 (4.4)	226 (1.7)	0 (0.0) 0 (0.0)	*** (***)					
Ohio	• •		, ,	220 (1.7)	0 (0.0)	()					
Okiahoma	72 (4.6)	220 (1.5)	28 (4.6)	210 (3.0)	0 (0.0)	*** (***)					
Pennsylvania	68 (4.3)	220 (1.3)	31 (4.2)	218 (1.9)	1 (0.8)	*** (***)					
Rhode island	69 (5.0)	227 (1.7)	30 (4.9)	216 (3.4)	2 (1.2)	*** (***)					
South Carolina	70 (4.7)	215 (2.1)	29 (4.6)	214 (3.5)	1 (0.9)	*** (***)					
Tennessee	57 (5.2)	214 (1.7)	42 (5.2)	207 (2.2)	1 (0.5)	*** (***)					
l.	56 (4.9)	210 (2.0)	41 (4.6)	210 (2.2)	3 (1.5)	184 (̀5.4)́					
Texas	65 (5.4)	219 (1.9)	31 (5.0)	213 (2.3)	4 (2.3)	215 (8.6)					
Utah	71 (4.2)	224 (1.1)	27 (4.0)	220 (1.7)		215 (6.6) *** (***)					
Virginia	78 (4.4)	221 (1.7)	22 (4.4)	212 (3.7)	2 (1.3)	*** (***)					
West Virginia	63 (4.5)	215 (1.2)	36 (4.5)	212 (3.7)	0 (0.0)	\ ,					
Wisconsin	76 (3.8)	228 (1.4)	24 (3.8)	, ,	1 (0.6)	*** (***)					
Wyoming	72 (4.4)	224 (1.2)	28 (4.4)	225 (1.9) 224 (1.6)	0 (0.0)	. ,					
TERRITORY	1/	, , , , _ ,	20 (4.4)	224 (1.6)	0 (0.1)	*** (***)					
Guam	71 (0.2)	191 (1.0)	29 (0.2)	190 (1.8)	0 (0.0)	*** (***)					

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.



#### TABLE A.20 | Schools' Reports on the Relations between Students and Teachers (continued)

		Grade 8 - 1992								
<u> </u>	Very P	ositive	Somewha	t Positive	Somewhat Negative	or Very Negative				
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency				
NATION	44 (3.6)	271 (1.6)	55 (3.6)	263 (1.6)	1 (0.5)	240 (9.5)				
Northeast	51 (7.5)	276 (4.4)	46 (8.0)	258 (5.2)	3 (2.2)	*** (***)				
Southeast	40 (7.6)	263 (3.1)	60 (7.6)	255 (2.1)	0 (0.0)	*** (***)				
Central	36 (8.3)	276 (2.3)	64 (8.3)	272 (3.1)	0 (0.0)	*** /***				
West	49 (6.3)	270 (2.5)	50 (6.4)	266 (4.3)	1 (1.0)	*** /***				
STATES	49 (0.3)	210 (3.1)	30 (0.4)	200 (4.5)	1 (1.0)	( )				
Alabama	20 (4.4)	258 (3.2)	77 (4.5)	250 (2.0)	3 (1.8)	242(10.8)				
Arizona				· · · · · · · · · · · · · · · · · · ·	1 (1.0)	*** (***)				
Arkansas	56 (4.9)	269 (1.7)	44 (5.0)	, , , , , , , , , , , , , , , , , , ,		. \ '				
	24 (4.6)	259 (2.5)	71 (4.5)	255 (1.5)	4 (1.5)	250(10.3) *** (***)				
California	54 (4.3)	266 (2.5)	44 (4.4)	255 (2.3)	2 (1.5)	` '				
Colorado	47 (5.0)	273 (1.4)	49 (4.9)	270 (1.8)	4 (1.4)	260 (9.0)				
Connecticut	61 (4.6)	276 (2.0)	39 (4.6)	269 (3.0)	0 (0.0)	*** (***)				
Delaware	47 (0.3)	265 (1.2)	53 (0.3)	260 (1.5)	0 (0.0)	*** (***)				
Dist. Columbia		, ,		229 (1.2)	, ,	*** /***				
Florida	45 (0.6)	233 (1.2)	55 (0.6)	, ,	0 (0.0)	*** /***				
	50 (5.4)	265 (2.2)	48 (5.3)	255 (2.4)	2 (1.2)	*** (***)				
Georgia	34 (4.9)	266 (2.5)	63 (5.0)	255 (1.4)	2 (1.4)	*** (***)				
Hawaii	17 (0.2)	259 (2.4)	81 (0.3)	257 (0.9)	2 (0.2)	( )				
Idaho	49 (3.9)	274 (1.1)	49 (4.0)	275 (1.1)	3 (0.6)	275 (1.4)				
Indiana	48 (5.8)	273 (1.8)	51 (5.8)	267 (1.6)	1 (0.8).	*** /***)				
lowa		, ,	42 (5.1)	• • •	3 (1.7)	260 (5.6)				
Kentucky	55 (5.1)	285 (1.3)	· · · · · · · · · · · · · · · · · · ·	282 (1.4)	Y /	` ' '				
	33 (4.9)	261 (1.8)	64 (5.1)	262 (1.7)	3 (1.6)	258 (4.4)				
Louisiana	39 (4.7)	257 (2.8)	60 (4.9)	244 (2.2)	1 (1.2)	*** (***)				
Maine	52 (4.9)	280 (1.7)	47 (4.9)	276 (1.2)	1 (0.5)	\ /				
Maryland	51 (5.3)	271 (2.4)	47 (5.1)	257 (2.5)	2 (1.2)	*** (***)				
Massachusetts	48 (5.4)	278 (1.8)	52 (5.4)	267 (2.3)	0 (0.0)	*** (***)				
Michigan	36 (5.6)	269 (3.6)	58 (5.7)	265 (2.5)	6 (2.3)	271 (5.5)				
Minnesota	57 (3.8)	284 (1.1)	43 (3.8)	279 (1.6)	0 (0.0)	*** (***)				
Mississippi	: :	, ,	_ ' '	243 (1.4)	2 (1.4)	242 (6.5)				
Missouri	29 (4.6)	251 (3.1)	68 (4.9)		1 7	, , , , , , , , , , , , , , , , , , ,				
	39 (5.0)	272 (1.9)	57 (4.8)	270 (1.5)	3 (1.9)	265 (5.3)				
Nebraska	57 (4.6)	279 (1.3)	42 (4.7)	276 (1.9)	1 (0.6)	()				
New Hampshire	68 (4.1)	278 (1.1)	32 (4.1)	277 (1.8)	0 (0.0)	*** (***)				
New Jersey	45 (5.4)	279 (3.4)	53 (5.6)	266 (2.6)	2 (1.5)	*** /***				
New Mexico	39 (4.2)	257 (2.1)	58 (4.3)	260 (1.1)	4 (1.2)	249 (2.8)				
New York	45 (5.4)	275 (3.1)	51 (5.5)	261 (3.6)	4 (2.4)	227 (5.1)				
North Carolina		259 (1.7)	55 (5.3)	257 (2.0)	3 (1.8)	256 (8.4)				
North Dakota	42 (5.3)	, , ,		280 (1.6)	4 (2.0)	276 (1.9)				
HOITII DAKOLA	62 (4.8)	284 (1.5)	35 (4.5)	280 (1.0)	4 (2.0)	270 (1.9)				
Ohio	36 (4.9)	274 (3.3)	64 (4.9)	264 (2.1)	0 (0.0)	*** (***)				
Oklahoma	47 (5.6)	267 (1.7)	52 (5.6)	268 (1.7)	1 (0.8)	*** (***)				
Pennsylvania	39 (5.3)	276 (3.3)	59 (5.4)	268 (1.5)	2 (1.8)	*** (***)				
Rhode Island	41 (0.2)	271 (1.3)	59 (0.2)	261 (1.0)	0 (0.0)	*** (***)				
South Carolina	38 (4.6)	262 (1.9)	60 (5.0)	260 (1.6)	2 (1.4)	***				
Tennessee	34 (5.1)	261 (2.4)	63 (5.3)	257 (1.8)	3 (1.7)	245(10.2)				
	• •	, ,	, ,	,	, ,					
Texas	43 (5.1)	268 (2.5)	54 (5.1)	261 (1.9)	3 (1.5)	257 (9.9)				
Utah	58 (4.4)	274 (1.2)	40 (4.2)	273 (1.0)	2 (1.3)	*** (***)				
Virginia	49 (4.9)	268 (2.2)	47 (5.0)	267 (1.5)	3 (1.7)	256 (6.1)				
West Virginia	37 (5.0)	260 (1.7)	60 (4.8)	257 (1.2)	3 (1.7)	260 (2.0)				
Wisconsin	38 (5.3)	280 (1.6)	57 (5.5)	276 (2.7)	5 (2.2)	269 (7.2)				
Wyoming	53 (3.4)	273 (1.1)	44 (3.6)	276 (1.6)	3 (1.7)	272 (8.0)				
TERRITORIES	33 (3.4)	213 (1.1)	<del>++</del> (0.0)	2.0 (1.0)	J (,	2.2 (0.0)				
Guam	0 (0 0)	*** (***)	100 (0.0)	234 (1.2)	0 (0.0)	*** (***)				
Virgin Islands	0 (0.0)	*** (***)				` '				
VII GIII ISIAIIUS	0 (0.0)	()	84 (0.1)	223 (1.1)	16 (0.1)	213 (2.2)				



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TABLE A.21 Schools' Reports on the Extent to Which District or School Testing Programs Had Served as an Impetus to Change Curriculum and Instructional Practices within the School

	Grade 4 - 1992									
	To a Grea	at Extent	To Some	e Extent	Not A	t Ali				
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency				
NATION	25 (3.1)	217 (2.2)	58 (3.0)	220 (1.4)	17 (2.2)	040 (0.0)				
Northeast	33 (6.2)	222 (5.4)			17 (2.2)	213 (2.0)				
Southeast	, ,	· · ·	46 (8.4)	230 (3.2)	21 (5.4)	213 (3.5)				
Central	18 (4.2)	205 (4.9)	63 (4.6)	212 (2.6)	19 (4.8)	205 (3.0)				
West	27 (8.1)	222 (3.8)	56 (5.5)	223 (2.7)	16 (3.8)	222 (1.9)				
STATES	22 (5.5)	213 (4.1)	63 (5.9)	218 (2.6)	15 (3.3)	214 (5.7)				
Alabama	18 (3.3)	202 (3.6)	73 (3.9)	208 (1.9)	9 (2.6)	207 (6.5)				
Arizona	30 (4.4)	215 (2.8)	52 (5.0)	212 (1.9)	18 (4.1)	218 (2.9)				
Arkansas	30 (4.4)	203 (2.5)	61 (4.4)	212 (1.4)	9 (3.0)	206 (3.4)				
California	17 (4.1)	209 (3.9)	63 (5.0)	205 (2.1)	20 (4.3)	208 (5.7)				
Colorado	18 (3.5)	218 (2.7)	54 (4.4)	218 (1.4)	, ,					
Connecticut	41 (4.9)	221 (2.8)	48 (4.6)	229 (2.2)	27 (4.2) 11 (3.7)	224 (2.8) 234 (4.8)				
Delaware	` ,		• •	` '	` '					
Dist. Columbia	19 (0.2)	211 (2.1)	48 (0.3)	217 (1.4)	33 (0.2)	216 (1.4)				
Florida	36 (0.3)	186 (1.3)	49 (0.3)	194 (0.9)	15 (0.2)	194 (1.6)				
	19 (3.8)	205 (4.0)	64 (4.6)	214 (2.4)	17 (3.9)	214 (3.3)				
Georgia	24 (4.3)	212 (4.6)	67 (4.8)	214 (1.7)	9 (3.2)	223 (5.4)				
Hawaii	14 (3.3)	218 (3.5)	75 (4.3)	213 (1.6)	11 (3.5)	206 (4.7)				
Idaho	12 (3.2)	223 (2.4)	61 (5.1)	219 (1.3)	26 (4.7)	223 (1.9)				
Indiana	30 (4.6)	215 (2.4)	64 (5.2)		` '	` ,				
lowa	12 (3.2)	228 (3.1)	` ·	223 (1.2)	6 (2.6)	219 (5.0)				
Kentucky			62 (5.0)	228 (1.5)	26 (4.1)	233 (1.6)				
Louisiana	32 (4.9)	214 (1.7)	57 (5.4)	213 (1.8)	10 (2.8)	216 (3.6)				
Maine	38 (4.9)	201 (2.9)	57 (5.0)	205 (2.3)	5 (1.8)	199 (4.5)				
	10 (2.5)	231 (2.6)	64 (5.5)	230 (1.4)	26 (5.6)	231 (2.3)				
Maryland	58 (5.0)	215 (2.0)	38 (4.8)	220 (3.1)	5 (2.3)	207 (3.1)				
Massachusetts	8 (2.7)	233 (8.8)	50 (5.5)	223 (1.9)	42 (5.3)	227 (1.8)				
Michigan	21 (3.8)	204 (5.4)	64 (5.1)	221 (1.9)	14 (3.8)	227 (4.7)				
Minnesota	6 (2.1)	233 (4.1)	69 (4.5)	225 (1.3)	25 (4.5)	229 (1.9)				
Mississippi	53 (4.7)	199 (1.5)	42 (4.2)	203 (2.5)	6 (2.8)	1 1				
Missouri	33 (5.0)	220 (2.9)	58 (5.8)	1	, ,	203 (4.8)				
Nebraska	16 (3.7)	219 (3.9)	61 (5.1)	220 (1.8) 227 (1.9)	8 (3.2) 23 (4.7)	229 (4.4) 222 (2.6)				
New Hampshire	, ,	, ,	, ,	•	, ,					
New Jersey	6 (2.5)	234 (3.9)	62 (5.2)	229 (1.7)	31 (4.8)	227 (2.1)				
New Mexico	24 (4.2)	215 (4.4)	65 (4.6)	228 (1.9)	11 (3.1)	237 (3.3)				
	10 (3.1)	198 (4.2)	69 (4.8)	214 (2.0)	20 (4.5)	210 (2.8)				
New York	16 (4.5)	220 (5.0)	68 (5.3)	218 (2.0)	16 (3.5)	212 (3.9)				
North Carolina	37 (4.1)	208 (1.9)	58 (4.1)	214 (1.7)	5 (2.3)	209 (8.2)				
North Dakota	19 (3.7)	226 (2.0)	54 (4.7)	229 (1.3)	27 (4.3)	227 (1.7)				
Ohio	41 (5.9)	214 (2.4)	56 (6.1)	221 (1.7)	3 (1.7)	, ,				
Oklahoma	32 (3.9)	215 (2.0)	58 (4.4)	220 (1.2)	, ,	204(14.4)				
Pennsylvania	, ,			, ,	10 (2.0)	231 (3.4)				
Rhode Island	18 (3.7)	220 (3.7)	61 (4.9)	224 (2.2)	21 (4.2)	229 (3.1)				
South Carolina	5 (2.2)	202 (5.1)	63 (5.5)	214 (2.5)	32 (5.0)	217 (3.2)				
Tennessee	19 (4.4)	206 (3.5)	72 (4.7)	213 (1.6)	9 (2.9)	209 (4.7)				
1	24 (4.7)	206 (3.5)	64 (5.1)	211 (1.8)	12 (3.3)	210 (4.6)				
Texas	40 (5.2)	214 (2.2)	50 (5.2)	218 (2.1)	10 (3.4)	220 (5.1)				
Utah	31 (5.0)	222 (2.3)	59 (5.4)	223 (1.2)	10 (3.2)	224 (3.5)				
Virginia	24 (4.0)	211 (3.1)	61 (4.8)	221 (1.7)	15 (3.7)	223 (4.7)				
West Virginia	23 (3.5)	212 (2.3)	65 (4.1)	214 (1.3)	13 (3.3)	215 (2.7)				
Wisconsin	13 (3.1)	224 (3.5)	66 (5.2)	228 (1.6)	21 (4.0)	227 (2.6)				
Wyoming FERRITORY	23 (4.5)	223 (1.7)	60 (4.5)	225 (1.0)	17 (3.4)	227 (2.6) 222 (2.4)				
Guam	41 (0.3)	195 (1.8)	55 (0.3)	192 (1.1)	4 (0.1)	188 (2.3)				

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.



#### TABLE A.21

# Schools' Reports on the Extent to Which District or School Testing Programs Had Served as an Impetus to Change Curriculum and Instructional Practices within the School (continued)

			Grade 8	3 - 1992									
	To a Grea	at Extent	To Som	e Extent	Not A	t All							
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency							
NATION	22 (3.3)	259 (2.3)	52 (4.0)	264 (1.5)	26 (3.5)	276 (3.0)							
Northeast	24 (7.2)	260 (4.5)	33 (7.4)	258 (4.1)	43 (8.2)	275 (6.0)							
Southeast	, ,		61 (7.8)	258 (1.9)	14 (6.8)	261 (2.2)							
+	25 (7.5)	259 (3.6)			• • •	, ,							
Central	12 (3.8)	264 (8.6)	67 (6.6)	272 (3.1)	21 (7.1)	284 (2.9)							
West	26 (6.8)	257 (3.8)	44 (8.2)	267 (2.7)	29 (6.9)	279 (6.1)							
STATES													
Alabama	20 (3.8)	247 (6.0)	54 (5.6)	253 (2.2)	26 (4.4)	252 (3.7)							
Arizona	17 (4.2)	261 (4.6)	70 (4.9)	266 (1.8)	13 (3.5)	262 (6.1)							
Arkansas	29 (4.5)	253 (2.8)	64 (4.6)	256 (1.5)	7 (2.6)	254 (3.5)							
California			• •			264 (3.9)							
	23 (3.6)	259 (3.8)	51 (5.2)	260 (2.2)	26 (5.0)	, ,							
Colorado	16 (3.6)	268 (3.0)	64 (5.4)	272 (1.5)	20 (4.5)	274 (2.9)							
Connecticut	29 (4.4)	265 (4.0)	61 (4.5)	276 (2.1)	10 (2.8)	283 (3.1)							
Delaware		055 (0.7)	E4 (0.0)	250 /4 5	38 (0.2)	268 (1.7)							
	8 (0.1)	255 (2.7)	54 (0.2)	258 (1.5)	` '	· · · · · · · · · · · · · · · · · · ·							
Dist. Columbia	28 (0.5)	229 (1.9)	66 (0.5)	226 (1.2)	7 (0.3)	236 (4.4)							
Florida	12 (3.5)	259 (4.2)	69 (4.7)	258 (2.2)	19 (3.9)	262 (3.0)							
Georgia	19 (3.8)	258 (4.2)	68 (4.8)	258 (1.6)	13 (4.2)	261 (5.6)							
Hawaii	14 (0.3)	246 (2.3)	67 (O.3)	257 (1.2)	19 (0.2)	265 (2.0)							
Idaho	6 (2.6)	276 (2.4)	74 (4.1)	275 (1.0)	21 (3.6)	273 (1.6)							
idano	0 (2.0)	270 (2.4)	74 (4.1)	273 (1.0)	21 (3.0)	270 (1.0)							
Indiana	13 (3.6)	276 (2.3)	70 (4.2)	269 (1.5)	17 (2.5)	267 (3.4)							
lowa	9 (3.1)	278 (3.8)	66 (5.9)	284 (1.2)	26 (5.5)	280 (2.7)							
Kentucky		, , ,		261 (1.7)	16 (4.1)	261 (1.8)							
, ,	23 (4.4)	263 (3.3)	61 (5.3)	, ,		= - ' ' '							
Louisiana	23 (3.8)	243 (4.4)	65 (4.1)	250 (2.0)	12 (3.4)	251 (4.0)							
Maine	18 (4.1)	280 (2.6)	51 (5.2)	278 (1.7)	31 (4.8)	276 (1.6)							
Maryland	45 (5.8)	264 (2.6)	47 (5.8)	266 (2.8)	8 (2.6)	260 (4.8)							
Massashusatta		075 (4.0)	64 (4.6)	070 (0.0)	20 /4 4)	273 (2.6)							
Massachusetts	10 (3.1)	275 (4.8)	61 (4.9)	270 (2.0)	29 (4.1)	3 ,							
Michigan	19 (3.8)	257 (3.9)	60 (5.4)	267 (2.1)	21 (4.0)	272 (3.5)							
Minnesota	10 (3.7)	282 (3.7)	66 (5.1)	280 (1.3)	23 (4.3)	285 (2.0)							
Mississippi	34 (4.3)	244 (2.5)	60 (4.0)	248 (1.8)	6 (2.1)	249 (4.3)							
Missouri	30 (4.6)	267 (2.7)	56 (4.7)	273 (1.5)	14 (3.9)	268 (3.5)							
Nebraska	16 (3.2)	269 (3.1)	61 (5.3)	280 (1.4)	23 (4.5)	277 (2.2)							
	10 (3.2)	203 (3.1)	01 (5.5)	200 (1.4)	20 (4.0)	211 (2.2)							
New Hampshire	5 (2.1)	274 (5.4)	55 (4.4)	276 (1.2)	39 (4.5)	281 (1.6)							
New Jersey	40 (5.4)	264 (3.2)	52 (5.6)	275 (2.5)	8 (3.4)	287 (3.7)							
New Mexico	12 (2.8)	258 (3.7)	69 (4.1)	256 (1.0)	20 (3.7)	267 (2.5)							
New York	· · ·				27 (5.2)	273 (4.6)							
	17 (4.0)	247 (8.2)	56 (6.1)	269 (3.2)									
North Carolina	34 (5.0)	253 (1.7)	58 (5.3)	262 (1.5)	8 (2.8)	256 (4.7)							
North Dakota	23 (3.9)	278 (2.6)	47 (3.8)	285 (1.5)	29 (3.7)	282 (1.4)							
Ohio	44 (5.6)	264 (3.0)	52 (5.6)	272 (2.3)	4 (2.2)	268 (5.2)							
Oklahoma	, , ,		, ,	1 1	, ,								
	19 (3.8)	260 (3.2)	71 (4.5)	269 (1.5)	10 (2.8)	270 (2.9)							
Pennsylvania	11 (3.6)	266 (6.7)	64 (5.1)	271 (2.0)	25 (4.5)	275 (3.3)							
Rhode Island	8 (0.1)	267 (3.1)	59 (0.2)	264 (0.9)	33 (0.2)	269 (1.3)							
South Carolina	31 (4.3)	259 (2.2)	55 (4.8)	261 (1.7)	13 (3.2)	262 (2.9)							
Tennessee	18 (4.3)	260 (2.4)	64 (4.8)	255 (2.1)	17 (4.3)	264 (3.6)							
Taura				• •	` '								
Texas	32 (4.8)	262 (2.4)	56 (4.6)	264 (1.9)	12 (3.9)	268 (9.1)							
Utah	23 (4.2)	271 (1.3)	66 (4.8)	274 (0.9)	11 (2.9)	276 (2.4)							
Virginia	18 (3.5)	259 (3.3)	61 (5.4)	269 (1.8)	21 (4.5)	271 (3.6)							
West Virginia	15 (3.4)	257 (2.8)	63 (4.5)	257 (1.2)	22 (4.1)	261 (1.6)							
Wisconsin		, ,	71 (5.2)	278 (2.1)	21 (4.4)	278 (2.9)							
	8 (2.7)	268 (5.6)											
Wyoming	10 (2.6)	270 (2.0)	72 (4.3)	276 (0.9)	18 (3.7)	273 (3.3)							
TERRITORIES													
Guam	0 (0.0)	*** (***)	56 (0.2)	235 (1.4)	44 (0.2)	233 (2.1)							
Virgin Islands	34 (0.2)	232 (1.3)	66 (0.2)	219 (1.5)	0 (0.0)	*** (***)							

When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.

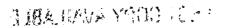




TABLE A.22 |

# Schools' Reports on the Extent to Which State Testing Mandates Had Served as an Impetus to Change Curriculum and Instructional Practices within the School

	Grade 4 - 1992									
	To a Grea	at Extent	To Some	Extent	Not A	t All				
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency				
NATION	31 (3.3)	216 (2.1)	54 (3.3)	219 (1.5)	15 (2.3)	217 (2.8)				
Northeast	30 (6.6)	218 (5.1)	53 (6.0)		` '					
Southeast	22 (6.9)		1. 1		17 (5.5)	218 (5.8)				
Central	, , ,	204 (6.8)	64 (5.4)	210 (2.3)	14 (4.2)	212 (3.5)				
West	38 (6.0)	223 (3.2)	46 (6.8)	222 (3.5)	16 (4.3)	225 (5.1)				
STATES	33 (7.2)	216 (3.8)	52 (7.4)	217 (2.8)	15 (4.2)	214 (3.7)				
I I										
Alabama	26 (4.5)	210 (3.1)	58 (5.1)	206 (1.8)	16 (3.9)	207 (6.4)				
Arizona	33 (4.7)	213 (2.7)	62 (4.9)	215 (2.0)	6 (2.5)	214 (6.6)				
Arkansas	55 (4.9)	207 (1.4)	44 (4.9)	211 (1.8)	1 (0.8)	*** (***)				
California	25 (4.9)	207 (3.8)	65 (5.3)	206 (2.2)	10 (3.4)	211 (9.8)				
Colorado	11 (3.0)	227 (3.5)	42 (4.9)	215 (1.7)	· · · · · · · · · · · · · · · · · · ·					
Connecticut	56 (5.1)	225 (2.4)	1 1	, ,	47 (5.3)	223 (1.9)				
i	30 (3.1)	223 (2.4)	41 (4.9)	228 (1.9)	3 (1.9)	240 (4.2)				
Delaware	28 (0.3)	213 (2.3)	47 (0.3)	217 (0.9)	25 (0.2)	216 (1.8)				
Dist. Columbia	35 (0.4)	184 (1.2)	39 (0.3)	197 (1.1)	27 (0.3)	193 (1.2)				
Florida	19 (4.7)	208 (6.5)	64 (5.3)	213 (1.8)	` '					
Georgia	35 (4.8)	211 (3.0)		, ,	16 (4.0)	215 (4.0)				
Hawaii	· · · · · · · · · · · · · · · · · · ·		50 (5.5)	216 (1.9)	15 (4.4)	217 (7.3)				
Idaho	28 (4.6)	215 (2.6)	63 (4.9)	212 (1.9)	9 (3.1)	208 (5.0)				
Idano	14 (3.4)	222 (2.3)	46 (4.4)	220 (1.4)	40 (4.2)	221 (1.6)				
Indiana	49 (5.2)	218 (1.8)	49 (5.2)	222 (1.5)	0 (4.4)	*** (***)				
lowa	6 (2.4)	, ,			2 (1.4)	( )				
Kentucky	٠, ,	232 (1.9)	28 (4.2)	228 (2.5)	66 (4.6)	229 (1.4)				
Louisiana	56 (5.3)	, ,	. 42 (5.3)	215 (1.7)	3 (1.7)	220 (7.4)				
	46 (4.3)	203 (2.6)	52 (4.3)	203 (2.6)	2 (1.2)	202 (3.2)				
Maine	24 (4.8)	230 (1.4)	71 (5.0)	230 (1.4)	5 (2.2)	236 (5.5)				
Maryland	74 (4.6)	216 (1.7)	26 (4.6)	218 (4.5)	0 (0.0)	*** (***)				
Massachusetts	6 (0.0)	000 (0.0)	50 (5 1)	• •	, ,					
Michigan	6 (2.3)	226 (8.3)	56 (5.4)	224 (1.7)	38 (5.6)	228 (2.3)				
- 1	43 (5.8)	217 (2.4)	54 (5.9)	219 (3.1)	3 (2.1)	225(11.9)				
Minnesota	7 (2.7)	228 (2.9)	45 (5.6)	226 (2.1)	47 (5.4)	227 (1.6)				
Mississippi	67 (5.2)	200 (1.4)	30 (5.0)	201 (3.4)	3 (1.6)	208 (4.3)				
Missouri	50 (5.5)	220 (2.2)	46 (5.4)	222 (1.8)	4 (2.2)	230 (4.6)				
Nebraska	7 (2.1)	222 (3.8)	41 (5.1)	227 (2.3)	52 (5.3)	223 (1.8)				
Marri III	, ,	, ,	41 (3.1)	221 (2.0)	32 (3.3)	223 (1.0)				
New Hampshire	3 (1.5)	*** (***)	47 (5.8)	228 (2.0)	51 (5.9)	229 (1.6)				
New Jersey	32 (5.2)	221 (3.9)	58 (5.6)	226 (2.2)	10 (3.0)	238 (3.6)				
New Mexico	16 (5.3)	208 (3.3)	65 (5.6)	212 (1.9)	19 (4.8)	215 (4.4)				
New York	32 (5.1)	224 (3.4)	60 (5.8)	215 (2.2)	8 (3.5)	212 (9.4)				
North Carolina	62 (4.4)	209 (1.1)	36 (4.3)	215 (2.2)	· ·					
North Dakota	17 (3.9)	226 (2.4)	60 (5.4)	• •		221(22.3)				
ļ	17 (3.3)	220 (2.4)	60 (5.4)	229 (1.0)	23 (4.3)	226 (2.1)				
Ohio	49 (4.8)	215 (1.9)	48 (5.0)	221 (2.2)	3 (1.9)	204(14.7)				
Okłahoma	42 (4.3)	216 (1.3)	50 (4.9)	220 (1.5)	8 (2.5)	235 (2.7)				
Pennsylvania	12 (3.3)	224 (3.9)	65 (4.8)	224 (2.0)	24 (4.1)	1 1				
Rhode Island	9 (2.8)	200 (6.1)	, , ,			224 (3.5)				
South Carolina		, ,	61 (5.4)	217 (2.0)	30 (4.8)	214 (4.7)				
Tennessee	34 (5.1)	210 (2.4)	62 (5.1)	210 (1.7)	4 (1.8)	228 (6.5)				
, 5,11103366	35 (5.2)	205 (2.6)	59 (5.3)	212 (1.9)	6 (2.6)	210 (5.5)				
Texas	66 (5.0)	217 (1.8)	29 (4.8)	216 (3.4)	5 (1.6)	245 (7.5)				
Utah	35 (5.0)					215 (7.5)				
Virginia		224 (2.1)	55 (4.6)	222 (1.2)	10 (3.1)	226 (3.4)				
West Virginia	30 (4.1)	208 (2.3)	58 (5.0)	223 (1.7)	12 (3.6)	229 (4.3)				
	26 (4.1)	213 (2.3)	60 (4.3)	214 (1.4)	14 (3.2)	214 (2.4)				
Wisconsin	20 (4.2)	227 (3.0)	59 (5.8)	226 (1.6)	21 (4.0)	232 (2.4)				
Wyoming	8 (2.9)	219 (2.8)	34 (4.2)	225 (1.4)	58 ( <b>5.2</b> )	224 (1.3)				
TERRITORY	•	, ,	• •	1 /	·/	:				
Guam										

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Trial State Mathematics Assessment.

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TABLE A.22 | Schools' Reports on the Extent to Which State Testing Mandates Had Served as an Impetus to Change Curriculum and Instructional Practices within the School (continued)

		Grade 8 - 1992								
ļ	To a Grea	it Extent	To Some	Extent	Not A	t Ali				
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency				
NATION	33 (3.8)	261 (1.8)	48 (4.0)	267 (1.8)	19 (3.1)	274 (4.1)				
Northeast	40 (7.3)	254 (2.4)	47 (9.0)	275 (4.1)	14 (6.8)	268(12.7)				
Southeast	30 (6.4)	260 (2.9)	60 (7.4)	260 (2.3)	10 (4.5)	246 (6.3)				
Central	31 (6.5)	268 (5.0)	41 (7.4)	270 (2.2)	28 (6.8)	284 (3.0)				
West	34 (9.2)		: :	269 (4.4)	23 (7.0)	277 (6.9)				
STATES	34 (9.2)	261 (4.0)	43 (7.9)	209 (4.4)	23 (7.0)	211 (0.9)				
Alabama	24 (3.9)	250 (5.0)	64 (4.5)	252 (2.1)	12 (3.5)	252 (4.2)				
Arizona		, ,		267 (2.1)	8 (2.8)	259(10.8)				
Arkansas	36 (5.0)	Y 1	56 (5.6)	• •	· , ,	239(10.0)				
	59 (4.7)	252 (1.7)	41 (4.7)	260 (2.0)	0 (0.0)	\ /				
California	30 (4.2)	259 (3.5)	58 (5.1)	260 (2.0)	11 (3.7)	270 (6.9)				
Colorado	10 (3.0)	266 (3.3)	46 (5.1)	270 (1.9)	44 (5.1)	275 (1.9)				
Connecticut	40 (5.0)	269 (3.0)	56 (5.1)	276 (2.5)	4 (1.8)	286 (5.0)				
Delaware	16 (0.2)	257 (2.2)	63 (0.2)	261 (1.4)	21 (0.2)	267 (3.0)				
Dist. Columbia	34 (0.4)	231 (1.6)	50 (0.5)	225 (1.4)	16 (0.4)	228 (2.8)				
Florida	, ,	· · · · · · · · · · · · · · · · · · ·	• •	257 (2.2)	20 (4.2)	261 (3.6)				
1	15 (3.8)	263 (4.1)	65 (5.2)	3 1		, ,				
Georgia	24 (4.6)	255 (3.6)	65 (4.6)	259 (1.7)	11 (3.4)	264 (6.6)				
Hawaii	29 (0.4)	248 (1.9)	57 (0.4)	261 (1.2)	15 (0.1)	259 (1.8)				
Idaho	9 (2.8)	275 (1.5)	69 (3.9)	275 (1.0)	22 (2.9)	273 (1.7)				
Indiana	26 (5.0)	271 (2.8)	60 (5.8)	270 (1.6)	14 (3.1)	268 (4.9)				
lowa	9 (3.0)	278 (2.1)	23 (4.4)	283 (2.1)	68 (5.4)	283 (1.5)				
Kentucky	, ,	· · · · · · · · · · · · · · · · · · ·	49 (4.9)	262 (1.7)	3 (1.8)	265 (7.4)				
Louisiana	48 (5.1)	262 (1.9)		, ,						
	41 (4.9)	247 (3.3)	54 (4.6)	250 (2.1)	4 (2.1)	247 (5.0)				
Maine	32 (5.2)	277 (1.9)	49 (5.5)	279 (1.5)	19 (3.6)	278 (2.2)				
Maryland	63 (5.8)	266 (2.1)	32 (5.4)	265 (3.2)	5 (3.0)	252 (3.9)				
Massachusetts	13 (3.6)	270 (3.8)	62 (5.3)	271 (2.2)	25 (4.7)	275 (3.1)				
Michigan	46 (5.6)	260 (2.6)	50 (5.6)	270 (2.7)	4 (2.0)	282 (4.9)				
Minnesota	2 (1.7)	*** (***)	61 (5.7)	281 (1.3)	37 (5.5)	282 (1.7)				
Mississippi	47 (4.9)	244 (2.3)	48 (5.1)	247 (1.9)	5 (3.1)	258 (6.0)				
Missouri	, ,		51 (4.9)	272 (1.5)	2 (1.4)	*** (***)				
Nebraska	47 (4.9)	` <i>!</i>	50 (5.4)	277 (1.5)	46 (5.2)	279 (1.7)				
ITCDI aska	4 (1.8)	275 (6.2)	, ,	211 (1.5)	40 (3.2)	219 (1.1)				
New Hampshire	2 (1.9)	*** (***)	37 (4.8)	276 (1.4)	61 (5.0)	279 (1.3)				
New Jersey	59 (5:4)	266 (2.6)	37 (5.7)	279 (3.4)	4 (2.4)	279(14.3)				
New Mexico	23 (3.7)	263 (1.8)	60 (4.1)	255 (1.3)	17 (3.1)	265 (2.2)				
New York	35 (5.9)	257 (5.0)	55 (6.4)	272 (2.9)	11 (3.9)	270 (9.3)				
North Carolina	62 (4.7)	255 (1.4)	36 (4.5)	263 (2.1)	2 (1.6)	*** (***)				
North Dakota	16 (2.7)	278 (2.8)	44 (4.7)	283 (1.7)	41 (4.7)	284 (1.4)				
ľ	, ,	` ,								
Ohio	62 (5.7)	266 (2.5)	34 (5.1)	271 (2.3)	4 (2.2)	270 (5.1)				
Oklahoma	40 (5.0)	265 (2.1)	56 (5.3)	269 (1.4)	5 (2.2)	271 (3.7)				
Pennsylvania	13 (3.3)	266 (4.5)	63 (5.3)	269 (1.9)	24 (4.6)	279 (2.2)				
Rhode Island	12 (0.1)	259 (2.1)	66 (0.2)	267 (1.0)	22 (0.2)	267 (1.8)				
South Carolina	41 (4.7)	255 (1.8)	54 (4.8)	263 (1.9)	6 (1.9)	267 (5.3)				
Tennessee	32 (4.6)	261 (2.3)	63 (5.1)	256 (2.1)	5 (2.5)	255 (5.1)				
1	` '	` '	• •	, ,	, ,					
Texas	61 (5.1)	262 (1.9)	35 (4.6)	265 (2.6)	5 (2.8)	284 (9.8)				
Utah	26 (4.0)	274 (1.4)	64 (4.4)	273 (1.0)	10 (2.5)	278 (1.9)				
Virginia	30 (4.7)	266 (3.1)	54 (5.8)	266 (2.3)	16 (4.2)	275 (3.4)				
West Virginia	26 (4.6)	257 (2.0)	57 (4.5)	259 (1.4)	17 (3.8)	257 (2.1)				
Wisconsin	11 (3.0)	272 (5.9)	59 (5.4)	279 (2.3)	30 (4.2)	275 (2.9)				
Wyoming	5 (1.9)	274 (2.5)	28 (3.6)	276 (2.1)	66 (4.1)	275 (1.1)				
TERRITORIES	J ()		\/	\ /	\/	,,				
Guam	0 (0.0)	*** (***)	43 (0.4)	235 (1.1)	57 (0.4)	229 (2.2)				
Virgin Islands	56 (0.2)	225 (1.3)	44 (0.2)	221 (2.0)	0 (0.0)	*** (***)				



TABLE A.23

Schools' Reports on the Extent to Which Public Reporting of School or District Performance Data Had Served as an Impetus to Change Curriculum and Instructional Practices within the School

		Grade 4 - 1992									
	To a Grea	at Extent	To Some	Extent	Not A	t Ail					
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency					
NATION	21 (2.6)	215 (3.0)	59 (3.8)	218 (1.4)	20 (2.7)	219 (2.9)					
Northeast	23 (6.1)	216 (7.9)	60 (8.2)	227 (3.3)	17 (5.8)	220 (8.4)					
Southeast	17 (4.8)	205 (8.9)	62 (8.5)	208 (1.7)	21 (5.5)	, ,					
Central	22 (5.7)	221 (5.5)	63 (8.0)	223 (2.9)		216 (7.0)					
West	21 (4.1)	214 (3.9)	52 (5.3)		14 (6.5)	224 (4.7)					
STATES	1 (/	214 (5.5)	32 (3.3)	217 (2.9)	27 (3.8)	218 (3.3)					
Alabama	20 (4.1)	208 (3.5)	63 (5.0)	006 (4.0)	47 (0.4)	044 (5.0)					
Arizona	21 (3.9)	217 (2.7)	56 (4.6)	206 (1.8)	17 (3.1)	211 (5.6)					
Arkansas	33 (4.4)			213 (2.2)	23 (4.4)	213 (3.7)					
California	, ,	204 (2.0)	59 (4.6)	211 (1.5)	8 (2.9)	206 (2.5)					
Colorado	12 (3.6)	207 (4.4)	62 (5.1)	209 (2.4)	26 (4.6)	201 (4.6)					
Connecticut	18 (3.5)	218 (2.7)	56 (4.8)	220 (1.6)	26 (4.1)	221 (2.5)					
	30 (4.6)	219 (3.1)	50 (5.0)	229 (2.0)	20 (4.0)	234 (3.3)					
Delaware	8 (0.1)	211 (3.0)	68 (0.3)	216 (1.2)	24 (0.2)	217 (1.9)					
Dist. Columbia	32 (0.3)	188 (1.2)	50 (0.4)	190 (1.0)	18 (0.2)	200 (1.6)					
Florida	18 (4.5)	215 (5.2)	64 (5.5)	211 (1.9)	18 (4.2)	217 (3.2)					
Georgia	22 (3.9)	211 (4.4)	64 (4.8)	215 (1.9)	14 (3.6)	216 (3.8)					
Hawaii	22 (4.5)	214 (3.5)	66 (5.1)	213 (1.6)							
Idaho	8 (2.7)	226 (2.8)	60 (4.5)	220 (1.1)	12 (2.5) 32 (4.4)	210 (5.6)					
Indiana	, ,		, ,	220 (1.1)	32 (4.4)	220 (2.0)					
•	23 (4.6)	219 (3.2)	62 (5.0)	221 (1.6)	15 (3.1)	218 (2.7)					
lowa	10 (3.1)	228 (2.4)	39 (4.4)	227 (2.0)	50 (5.0)	231 (1.4)					
Kentucky	21 (4.3)	210 (2.2)	62 (5.3)	214 (1.3)	17 (3.4)	217 (3.1)					
Louisiana	28 (4.6)	204 (3.3)	63 (4.8)	201 (1.8)	9 (2.9)	212 (4.6)					
Maine	14 (3.9)	232 (2.3)	66 (5.3)	231 (1.5)	19 (4.3)	230 (2.2)					
Maryland	42 (4.9)	217 (2.6)	49 (4.9)	215 (2.6)	9 (3.0)	223 (7.1)					
Massachusetts	10 (2.8)	220 (6.6)	59 (5.4)								
Michigan	25 (4.8)	219 (3.5)		224 (1.8)	31 (5.2)	230 (2.2)					
Minnesota	11 (4.0)	219 (3.3)	66 (5.1)	218 (2.4)	9 (3.1)	214 (9.5)					
Mississippi	42 (4.4)	196 (1.7)	56 (5.3)	227 (1.6)	33 (4.7)	226 (1.9)					
Missouri	13 (3.7)	, ,	48 (4.8)	202 (1.9)	10 (3.0)	214 (4.1)					
Nebraska	16 (4.3)	221 (4.8)	59 (5.7)	220 (2.0)	28 (5.1)	223 (2.3)					
	10 (4.3)	227 (4.4)	51 (4.8)	224 (2.0)	33 (5.4)	223 (2.3)					
New Hampshire	5 (2.4)	221 (3.5)	44 (6.1)	230 (1.9)	50 (6.1)	229 (1.6)					
New Jersey	20 (4.7)	220 (5.3)	60 (5.3)	224 (2.2)	20 (4.7)	236 (2.7)					
New Mexico	9 (3.1)	202 (3.9)	61 (5.4)	212 (2.5)	31 (5.0)	214 (2.5)					
New York	20 (4.6)	221 (4.7)	58 (5.4)	216 (2.5)	22 (5.0)	216 (2.6)					
North Carolina	45 (4.8)	209 (1.8)	51 (5.0)	213 (1.6)	4 (2.0)	218 (5.2)					
North Dakota	7 (2.5)	225 (3.9)	53 (5.1)	229 (1.1)	39 (5.3)	226 (1.4)					
Ohio	, ,		• •	` '							
Oklahoma	29 (4.5)	211 (2.9)	64 (4.5)	221 (1.5)	7 (1.8)	216 (5.2)					
Pennsylvania	24 (4.0)	216 (2.2)	62 (5.0)	220 (1.1)	14 (3.7)	224 (3.9)					
Rhode Island	12 (3.3)	224 (4.9)	59 (4.4)	223 (2.0)	28 (4.2)	227 (2.4)					
South Carolina	8 (2.4)	199 (5.2)	60 (5.2)	215 (2.2)	32 (4.7)	216 (4.4)					
Tennessee	23 (4.5)	212 (3.1)	65 (5.4)	210 (1.4)	12 (3.6)	217 (3.5)					
I GIII ICOSEE	15 (4.0)	205 (4.6)	63 (5.1)	212 (1.9)	22 (4.1)	207 (2.7)					
Texas	42 (5.4)	213 (2.0)	51 (5.5)	218 (2.0)	7 (2.4)	225 (6.7)					
Utah	26 (5.0)	223 (2.7)	60 (5.0)	223 (1.0)	14 (3.7)	222 (3.5)					
Virginia	24 (4.5)	210 (3.5)	57 (5.2)	220 (1.7)	18 (4.3)						
West Virginia	22 (3.6)	212 (2.4)	52 (4.6)	214 (1.5)	26 (4.0)	227 (4.1)					
Wisconsin	16 (3.5)	226 (3.5)	64 (5.4)			216 (2.3)					
Wyoming	10 (3.2)	221 (3.9)	61 (5.2)	227 (1.6)	20 (4.1)	231 (2.6)					
TERRITORY	.0 (0.2)	221 (3.3)	01 (3.2)	224 (1.3)	29 (4.9)	225 (1.6)					
Guam	24 (0.2)	193 (2.0)	65 (0.2)	195 (1.1)	11 (0.1)	182 (3.8)					

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.



TABLE A.23

Schools' Reports on the Extent to Which Public Reporting of School or District Performance Data Had Served as an Impetus to Change Curriculum and Instructional Practices within the School (continued)

г - Т	Grade 8 - 1992									
	To a Grea	it Extent	To Some	Extent	Not A	it All				
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency				
NATION	20 (3.0)	261 (2.5)	54 (4.4)	264 (1.8)	26 (3.4)	275 (2.5)				
Northeast	34 (6.9)	256 (4.2)	36 (8.9)	265 (5.9)	30 (9.0)	278 (6.7)				
Southeast	21 (7.2)	259 (3.1)	63(10.4)	258 (2.2)	16 (4.9)	263 (3.6)				
Central	9 (4.7)	265(10.1)	58(10.2)	269 (2.8)	33 (9.0)	284 (2.9)				
West	21 (5.4)	268 (5.0)	52 (5.3)	266 (4.5)	28 (5.0)	270 (5.1)				
STATES	21 (0.4)	200 (0.0)	(,		- , ,					
Alabama	12 (3.6)	243 (9.0)	66 (5.0)	252 (2.1)	22 (4.3)	256 (3.0)				
Arizona	11 (3.8)	259 (5.8)	73 (5.3)	266 (1.8)	16 (4.1)	263 (4.6)				
Arkansas	28 (4.2)	252 (2.8)	62 (4.7)	256 (1.5)	10 (2.9)	257 (4.8)				
California	19 (3.7)	252 (3.8)	58 (5.5)	262 (2.4)	23 (4.9)	264 (4.0)				
Colorado	23 (4.3)	268 (2.2)	64 (5.3)	273 (1.7)	13 (3.8)	272 (4.3)				
Connecticut	23 (4.3)	262 (6.2)	63 (5.1)	278 (1.7)	14 (3.6)	273 (6.7)				
Delaware		· · · · · · · · · · · · · · · · · · ·			13 (0.2)	269 (2.8)				
Dist. Columbia	21 (0.2)	267 (1.7)	66 (0.2)	258 (1.5) 226 (1.4)	0 (0.0)	209 (2.0) *** (***)				
	44 (0.5)	230 (1.5)	56 (0.5)		25 (4.7)	259 (3.9)				
Florida	16 (3.5)	263 (3.9)	60 (5.6)	, , ,	, , , , , , , , , , , , , , , , , , ,	1				
Georgia	10 (3.0)	258 (5.9)	71 (4.9)	257 (1.6)	19 (4.9)	263 (3.6)				
Hawaii	40 (0.3)	254 (1.6)	51 (0.3)	258 (1.1)	9 (0.1)	266 (3.3)				
Idaho	7 (2.8)	273 (2.0)	58 (4.2)	276 (1.2)	35 (3.5)	272 (1.5)				
Indiana	16 (3.6)	268 (4.4)	61 (4.9)	269 (1.4)	23 (4.2)	272 (3.5)				
lowa	1 (0.9)	*** (***)	60 (5.5)	285 (1.1)	39 (5.4)	280 (1.9)				
Kentucky	13 (3.7)	262 (3.8)	72 (4.9)	262 (1.6)	15 (3.9)	261 (2.5)				
Louisiana	28 (4.0)	244 (4.3)	58 (4.9)	249 (2.2)	14 (3.8)	254 (2.9)				
Maine	19 (4.4)	278 (2.2)	64 (5.7)	278 (1.4)	17 (3.7)	279 (2.8)				
Maryland	43 (5.6)	266 (2.7)	48 (5.6)	265 (2.6)	9 (3.4)	257 (7.3)				
Massachusetts	• •	ii.	58 (5.3)	270 (2.3)	26 (4.7)	274 (2.9)				
Michigan	16 (3.7)	• •	!!	267 (2.4)	9 (3.2)	274 (6.0)				
Minnesota	28 (4.9)	261 (3.1)		281 (1.3)	23 (3.9)	285 (1.5)				
Mississippi	8 (3.1)	275 (2.8)	69 (5.0)	247 (1.9)	9 (2.7)	253 (4.8)				
	37 (5.1)	243 (2.5)	54 (5.4)	1	23 (4.3)	271 (1.9)				
Missouri Nebraska	13 (2.6) 6 (2.8)	264 (4.9) 273 (5.4)	64 (4.9) 51 (5.1)	272 (1.4) 276 (1.6)	43 (5.2)	280 (1.5)				
	6 (2.8)	` '		, ,						
New Hampshire	3 (2.0)	*** (***)	63 (4.5)	277 (1.3)	35 (4.6)	280 (1.7)				
New Jersey	37 (5.5)	267 (3.8)	47 (6.0)	272 (2.7)	16 (4.8)	278 (7.4)				
New Mexico	16 (2.7)	258 (2.5)	70 (4.1)	259 (1.2)	13 (3.2)	260 (3.0)				
New York	19 (4.6)	258 (7.9)	71 (5.3)	267 (2.7)	11 (3.3)	277 (4.2)				
North Carolina	37 (4.8)	254 (1.9)	61 (4.9)	261 (1.5)	2 (1.5)	*** (***)				
North Dakota	5 (1.4)	277 (3.8)	54 (4.8)	281 (1.5)	41 (4.8)	285 (1.4)				
Ohio	36 (5.5)	269 (3.4)	56 (5.3)	268 (2.5)	8 (3.0)	266 (7.3)				
Oklahoma	22 (3.6)	261 (3.0)	61 (4.5)	268 (1.6)	16 (3.7)	275 (2.2)				
Pennsylvania	11 (2.9)	262 (7.2)	63 (5.3)	270 (1.5)	26 (4.7)	277 (2.5)				
Rhode Island	6 (0.1)	260 (3.0)	74 (0.2)	266 (0.9)	20 (0.2)	269 (1.3)				
South Carolina	25 (4.7)	259 (2.7)	61 (5.9)	262 (1.9)	14 (4.3)	259 (3.3)				
Tennessee	17 (4.0)	260 (3.6)	64 (5.2)	256 (1.7)	19 (4.5)	263 (3.2)				
Texas	34 (4.4)	261 (2.7)	58 (4.8)	264 (2.0)	7 (2.9)	274(10.1)				
Utah	20 (4.0)	273 (1.5)	60 (5.0)	273 (1.0)	20 (3.9)	275 (2.0)				
Virginia		261 (4.5)	68 (5.2)	267 (1.6)	19 (4.1)	275 (3.7)				
West Virginia	14 (3.5)		64 (4.8)	257 (1.3)	19 (4.0)	260 (2.2)				
Wisconsin	17 (4.0)	258 (2.4) 260 (7.1)	62 (4.6)	278 (2.2)	28 (4.6)	280 (2.1)				
Wyoming	10 (2.3)	260 (7.1)			30 (3.5)	276 (1.2)				
TERRITORIES	13 (2.5)	270 (2.3)	57 (4.1)	276 (1.4)	30 (3.3)	210 (1.2)				
Guam	0 (0.0)	*** (***)	43 (0.4)	235 (1.1)	57 (0.4)	229 (2.2)				
Virgin Islands		225 (1.3)	41 (0.2)	221 (1.7)	0 (0.0)	*** (***)				
The girl Islands	59 (0.2)	223 (1.3)	<u> </u>	221 (1.7)						

When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.



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TABLE A.24 | Schools' Reports on the Extent to Which Budget Changes Had Served as an Impetus to Change Curriculum and Instructional Practices within the School

_		Grade 4 - 1992								
	To a Gre	at Extent	To Some	Extent	Not A	t All				
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency				
NATION	21 (2.5)	215 (2.7)	53 (3.3)	218 (1.1)	27 (3.4)	040 (0.4)				
Northeast	19 (5.9)	213 (5.1)	57 (6.3)	, ,		219 (2.4)				
Southeast	26 (3.7)			225 (3.0)	24 (7.5)	227 (6.5)				
Central	, , ,	215 (5.0)	52 (4.6)	209 (2.3)	22 (6.0)	204 (6.0)				
	12 (4.2)	217 (4.9)	57 (8.4)	223 (2.1)	31 (7.2)	223 (3.5)				
West	25 (5.6)	216 (6.1)	46 (6.0)	215 (2.3)	29 (6.6)	220 (2.3)				
STATES			` '		20 (0.0)	220 (2.0)				
Alabama	30 (4.9)	209 (2.1)	46 (5.3)	207 (2.8)	04 (2.0)	000 (0.0)				
Arizona	22 (4.5)	217 (3.1)		, , ,	24 (3.9)	206 (3.9)				
Arkansas	, ,		63 (5.4)	213 (1.7)	16 (4.0)	216 (5.3)				
California	14 (3.2)	206 (2.6)	48 (4.5)	210 (1.7)	38 (4.1)	208 (1.7)				
	33 (4.6)	202 (3.3)	53 (5.1)	207 (2.5)	14 (3.6)	216 (6.2)				
Colorado	20 (4.2)	220 (2.5)	58 (4.7)	219 (1.6)	22 (4.0)	220 (2.6)				
Connecticut	19 (4.3)	219 (4.7)	48 (5.0)	228 (2.2)	33 (5.3)	, ,				
Delaware	, ,		10 (0.0)	220 (2.2)	33 (3.3)	228 (2.5)				
	29 (0.3)	215 (1.5)	33 (0.3)	212 (1.2)	38 (0.3)	219 (1.9)				
Dist. Columbia	30 (0.3)	194 (1.3)	54 (0.3)	191 (0.9)	16 (0.2)	188 (1.9)				
Florida	38 (5.5)	211 (3.2)	52 (5.7)	213 (2.1)						
Georgia	26 (4.5)	215 (3.3)	1 1		11 (3.2)	214 (4.0)				
Hawaii	` '		53 (5.6)	213 (2.4)	22 (4.5)	218 (3.3)				
	15 (3.6)	206 (4.1)	61 (4.6)	214 (1.8)	24 (4.1)	214 (3.7)				
Idaho	17 (3.6)	215 (2.6)	66 (4.9)	221 (1.1)	16 (3.9)	223 (1.8)				
Indiana	17 (2.0)	045 (0.4)	50 (5.5)	, ,	, ,					
lowa	17 (3.9)	215 (3.1)	52 (5.5)	221 (1.7)	31 (4.5)	221 (1.9)				
	21 (4.0)	225 (2.4)	63 (4.4)	230 (1.3)	15 (3.4)	232 (2.4)				
Kentucky	27 (4.5)	210 (2.3)	54 (5.4)	214 (1.5)	19 (4.3)	216 (2.6)				
Louisiana	18 (3.6)	200 (4.5)	56 (4.9)	205 (2.1)						
Maine i	29 (5.6)	233 (1.8)	53 (5.8)		25 (4.6)	202 (3.5)				
Maryland	37 (4.5)	· · · · · · · · · · · · · · · · · · ·		229 (1.7)	18 (5.0)	232 (2.9)				
	` '	212 (2.7)	48 (5.3)	217 (2.7)	14 (3.4)	226 (4.3)				
Massachusetts	36 (4.1)	218 (2.4)	50 (4.7)	231 (1.7)	14 (3.8)	007 (0.5)				
Michigan	20 (4.3)	216 (3.9)			, ,	227 (3.5)				
Minnesota			59 (5.1)	220 (2.7)	20 (4.1)	216 (4.5)				
	18 (3.9)	225 (3.6)	68 (5.2)	225 (1.3)	13 (3.5)	233 (2.8)				
Mississippi	21 (3.4)	197 (2.2)	60 (4.7)	202 (1.8)	19 (4.4)	202 (3.7)				
Missouri	26 (4.4)	218 (3.0)	48 (4.9)	222 (1.8)	26 (4.2)	222 (3.4)				
Nebraska	21 (3.9)	227 (3.4)	47 (5.1)	226 (1.7)	32 (5.0)					
Now Hampahira	` ,		41 (0.17		32 (3.0)	221 (2.8)				
New Hampshire	31 (5.8)	228 (2.4)	49 (5.6)	229 (1.8)	20 (4.5)	231 (2.3)				
New Jersey	22 (4.4)	221 (4.4)	57 (4.9)	229 (2.2)	21 (4.6)	223 (3.3)				
New Mexico	19 (4.4)	211 (3.3)	66 (5.6)			, ,				
New York	33 (5.9)		• •	212 (2.1)	14 (3.6)	210 (2.4)				
North Carolina		218 (3.4)	50 (5.5)	217 (2.4)	17 (4.1)	215 (4.4)				
	21 (4.0)	210 (3.4)	65 (4.9)	211 (1.4)	14 (3.8)	215 (3.9)				
North Dakota	20 (4.0)	226 (2.2)	55 (5.0)	227 (1.0)	25 (4.4)	229 (1.7)				
Ohio	24 (4.4)	040 (0.4)	50 (5.4)	. ,	, ,					
	21 (4.4)	216 (3.4)	58 (5.1)	217 (2.1)	21 (3.6)	222 (2.3)				
Oklahoma	16 (4.5)	217 (2.5)	66 (5.7)	220 (1.4)	17 (4.3)	220 (2.0)				
Pennsylvania	21 (3.8)	221 (3.7)	54 (4.7)	225 (2.3)	25 (4.5)	225 (2.4)				
Rhode Island	28 (4.5)	213 (3.2)	53 (5.3)	214 (3.2)						
South Carolina	21 (4.5)	214 (2.9)			19 (4.6)	217 (4.0)				
Tennessee	40 (4.6)		60 (5.4)	208 (1.6)	20 (3.9)	217 (2.7)				
	40 (4.6)	210 (2.4)	40 (4.6)	209 (2.5)	20 (4.0)	211 (3.3)				
Texas	12 (4.1)	214 (5.3)	62 (5.7)	217 (1.7)	26 /4 5\	, ,				
Jtah	12 (3.5)	234 (1.9)			26 (4.5)	217 (2.6)				
/irginia			62 (4.9)	222 (1.4)	26 (4.7)	221 (1.8)				
	20 (4.0)	220 (4.0)	56 (5.3)	216 (1.8)	24 (4.3)	224 (3.4)				
West Virginia	21 (3.5)	214 (1.9)	55 (4.2)	213 (1.6)	24 (3.5)	217 (2.1)				
Visconsin	19 (4.4)	225 (2.7)	58 (5.1)	228 (1.7)	23 (3.9)					
Wyoming	21 (3.5)	225 (1.7)	58 (5.4)			229 (2.9)				
ERRITORY	(5.0)	220 (1.1)	30 (3.4)	224 (1.2)	21 (4.2)	224 (2.4)				
Guam	27 (0.2)	407 /4 4)	00 (0.0)							
	37 (0.3)	197 (1.1)	38 (0.3)	194 (1.8)	25 (0.2)	185 (2.0)				

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Trial State Mathematics Assessment.

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TABLE A.24 | Schools' Reports on the Extent to Which Budget Changes Had Served as an Impetus to Change Curriculum and Instructional Practices within the School (continued)

		Grade 8 - 1992								
-	To a Grea	at Extent	To Some	Extent	Not A	t All				
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency				
NATION	20 (3.1)	263 (3.5)	57 (3.6)	264 (1.5)	23 (3.3)	273 (2.7)				
Northeast	25 (9.4)	261 (6.3)	56 (9.4)	258 (4.2)	18 (8.7)	284 (5.3)				
Southeast	21 (3.9)	248 (6.3)	56 (6.7)	262 (2.4)	23 (6.6)	262 (4.1)				
Central	17 (7.0)	274 (4.7)	55 (6.3)	270 (3.8)	28 (6.9)	281 (2.9)				
West		274 (4.7)	62 (5.8)	266 (3.0)	22 (4.1)	269 (5.7)				
STATES	17 (5.1)	2/1 (0.5)	62 (3.6)	200 (3.0)	22 (4.1)	209 (5.1)				
Alabama	24 (5.1)	251 (2.6)	58 (5.4)	250 (2.7)	18 (3.9)	259 (3.7)				
Arizona	18 (4.1)	264 (5.1)	61 (4.8)	267 (1.8)	21 (3.6)	259 (2.5)				
Arkansas	15 (3.8)	250 (3.7)	49 (5.2)	256 (1.9)	36 (5.5)	257 (2.6)				
California	27 (4.4)	257 (3.7)	59 (4.9)	263 (2.3)	14 (3.3)	261 (5.0)				
Colorado	, ,	1	46 (5.3)	271 (2.2)	14 (4.0)	271 (4.2)				
Connecticut	40 (5.7) 34 (4.9)	272 (1.8) 274 (3.3)	55 (4.0)	274 (3.0)	12 (3.4)	271 (4.7)				
Delaware		, ,	, ,	, ,		264 (2.2)				
	25 (0.2)	261 (2.1)	61 (0.2)	261 (1.5)	14 (0.2)					
Dist. Columbia	33 (0.4)	234 (1.4)	55 (0.5)	223 (1.4)	13 (0.2)	229 (2.8)				
Florida	42 (4.7)	259 (2.2)	48 (4.9)	257 (2.5)	11 (3.5)	268 (4.8)				
Georgia	11 (3.4)	258 (5.3)	66 (5.5)	258 (1.6)	23 (5.3)	259 (3.5)				
Hawaii	13 (0.2)	236 (2.5)	63 (0.3)	261 (1.3)	24 (0.3)	259 (1.3)				
Idaho	15 (2.2)	270 (1.8)	64 (4.2)	276 (1.2)	21 (3.6)	273 (1.2)				
Indiana	18 (3.5)	259 (3.4)	49 (5.1)	271 (1.7)	33 (4.3)	274 (2.1)				
lowa	26 (4.9)	283 (1.9)	52 (6.0)	285 (1.4)	22 (5.0)	278 (2.4)				
Kentucky	23 (4.3)	259 (3.4)	52 (4.9)	262 (1.7)	25 (4.1)	263 (2.3)				
Louisiana	18 (3.8)	245 (5.9)	54 (5.2)	250 (2.3)	29 (4.9)	250 (2.9)				
Maine	23 (4.4)	274 (2.0)	57 (4.7)	278 (1.3)	20 (3.5)	281 (3.3)				
Maryland	30 (5.1)	264 (3.9)	48 (5.7)	265 (2.1)	21 (4.7)	267 (3.9)				
Massachusetts	36 (5.2)	268 (3.2)	51 (5.2)	276 (1.6)	13 (3.9)	265 (3.3)				
Michigan		, ,	52 (5.5)	263 (2.6)	25 (4.8)	271 (4.7)				
Minnesota	22 (4.4)	269 (4.6)		3 1	9 (2.8)					
	34 (5.3)	282 (1.7)	57 (5.6)	280 (1.4)	, ,	286 (3.2)				
Mississippi	24 (4.5)	250 (3.2)	56 (5.3)	245 (2.2)	20 (4.5)	244 (2.8)				
Missouri Nebraska	26 (4.6)	267 (3.6) 268 (3.5)	56 (5.4) 60 (5.4)	271 (1.6) 280 (1.4)	18 (4.1) 31 (5.3)	273 (2.0) 276 (2.1)				
	9 (2.4)	• •	, ,	• •	, ,					
New Hampshire	22 (4.4)	276 (1.7)	59 (5.2)	279 (1.4)	19 (3.3)	277 (2.0)				
New Jersey	23 (4.5)	270 (4.5)	50 (4.7)	270 (2.8)	27 (4.4)	274 (3.9)				
New Mexico	29 (3.6)	262 (1.6)	60 (3.8)	258 (1.3)	11 (2.4)	255 (2.6)				
New York	34 (5.5)	251 (5.0)	53 (6.2)	274 (2.9)	13 (3.9)	276 (3.2)				
North Carolina	16 (3.8)	256 (2.3)	68 (4.6)	258 (1.5)	15 (3.8)	264 (3.3)				
North Dakota	14 (3.1)	281 (3.0)	72 (3.6)	282 (1.3)	14 (3.3)	285 (2.7)				
Ohio	21 (3.9)	259 (5.7)	56 (5.8)	272 (2.3)	23 (5.2)	267 (4.2)				
Oklahoma	11 (2.6)	266 (2.5)	65 (3.7)	269 (1.5)	24 (3.8)	263 (2.4)				
Pennsylvania	12 (3.5)	259 (6.5)	49 (5.7)	271 (2.1)	39 (5.2)	275 (2.0)				
Rhode Island	36 (0.2)	266 (1.1)	44 (0.2)	263 (1.2)	20 (0.2)	274 (1.8)				
South Carolina	20 (3.8)	261 (2.7)	63 (4.6)	259 (1.4)	17 (4.2)	264 (3.0)				
Tennessee	20 (5.8) 29 (5.0)	256 (2.1)	50 (5.2)	259 (2.1)	21 (4.3)	258 (3.9)				
Texas	17 (3.2)	263 (3.6)	64 (5.0)	264 (2.2)	19 (4.2)	263 (4.0)				
Utah		203 (3.6) 272 (1.8)	53 (5.2)	274 (1.2)	24 (4.7)	275 (1.8)				
Virginia	22 (3.9)				18 (4.5)	271 (3.2)				
	24 (4.8)	261 (3.4)	58 (5.5)	268 (1.7)						
West Virginia	32 (4.6)	258 (1.8)	43 (4.9)	257 (1.4)	24 (4.6)	261 (2.3)				
Wisconsin	14 (3.8)	268 (5.3)	56 (5.6)	278 (1.8)	30 (5.8)	280 (3.9)				
Wyoming TERRITORIES	12 (2.6)	271 (2.6)	50 (3.6)	277 (1.3)	38 (4.0)	273 (1.6)				
Guam	27 (0.3)	238 (1.5)	51 (0.4)	237 (2.1)	22 (0.3)	221 (2.1)				
Virgin Islands	0 (0.0)	*** (***)	45 (0.2)	215 (1.4)	55 (0.2)	230 (1.4)				

When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.



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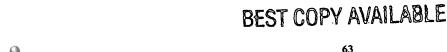
# Students' Home Background



#### TABLE A.25 | Students' Reports on Parents' Highest Level of Education

	Grade 4 - 1992									
	Graduate	d College	Some Educ High S	ation After school	Graduated	High School	Did Not Fi Sch		l Don't	Know
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency								
NATION	40 (1.1)	225 (1.2)	7 (0.4)	223 (1.7)	13 (0.6)	212 (1.6)	4 (0.3)	203 (2.7)	36 (0.8)	212 (0.9)
Northeast	44 (3.2)	231 (3.0)	6 (0.6)	229 (4.7)	11 (0.9)	215 (5.2)	4 (0.7)	*** (***)	35 (2.0)	216 (2.4)
Southeast	37 (1.8)	215 (2.2)	7 (0.8)	217 (3.8)	16 (1.1)	203 (3.3)	6 (0.6)	198 (3.9)	34 (1.2)	205 (1.6)
Central	40 (2.3)	229 (2.2)	8 (0.9)	228 (4.1)	13 (1.6)	218 (3.3)	4 (0.6)	*** (***)	35 (2.1)	216 (2.4)
West	38 (1.9)	224 (2.4)	7 (1.0)	218 (2.3)	12 (1.0)	216 (2.4)	4 (0.5)	202 (5.1)	39 (1.3)	212 (1.9)
STATES						(0.0)	0 (0.7)	000 (4.0)	00 (4.4)	203 (2.0)
Alabama	35 (1.3)	211 (2.3)	9 (0.7)	216 (2.2)	19 (1.0)	203 (2.0)	8 (0.7)	202 (1.9)	28 (1.1)	
Arizona	33 (1.1)	220 (1.4)	8 (0.7)	225 (1.8)	11 (0.7)	210 (2.6)	4 (0.4)	202 (3.3)	44 (1.1) 34 (1.2)	209 (1.4) 206 (1.2)
Arkansas	32 (1.3)	213 (1.7)	9 (0.7)	215 (1.9)	18 (0.9)	208 (1.5)	7 (0.5)	198 (2.2)	1 1	
California	35 (1.5)	216 (2.0)	7 (0.7)	217 (2.9)	8 (0.6)	200 (2.7)	5 (0.5)	189 (4.7)	45 (1.4)	202 (1.7) 213 (1.2)
Colorado	40 (1.0)	228 (1.3)	9 (0.6)	228 (2.0)	10 (0.6)	212 (2.0)	4 (0.3)	200 (2.6)	37 (1.2) 35 (1.3)	
Connecticut	44 (1.2)	235 (1.3)	7 (0.7)	225 (2.8)	10 (0.6)	218 (2.1)	4 (0.4)	205 (2.8)	35 (1.2)	220 (1.7)
Delaware	39 (0.9)	225 (1.6)	7 (0.6)	219 (2.8)	14 (0.9)	213 (1.8)	5 (0.6)	196 (3.3)	35 (0.8)	211 (1.0)
Dist. Columbia	42 (1.0)	196 (1.1)	6 (0.4)	198 (2.7)	14 (0.7)	187 (1.9)	4 (0.4)	186 (3.0)	33 (0.8)	187 (1.1)
Florida	37 (1.5)	219 (2.4)	8 (0.5)	221 (2.3)	13 (0.9)	204 (2.2)	4 (0.5)	199 (2.6)	38 (1.2)	208 (1.5)
Georgia	37 (1.2)	221 (1.8)	7 (0.6)	223 (2.3)	18 (0.8)	205 (1.8)	5 (0.6)	202 (2.5)	32 (1.2)	211 (1.5)
Hawaii	36 (1.3)	218 (2.0)	6 (0.5)	219 (2.7)	14 (0.8)	203 (1.8)	3 (0.4)	199 (4.1)	41 (1.2)	211 (1.4)
Idaho	36 (1.2)	227 (1.3)	9 (0.6)	228 (2.0)	12 (0.8)	215 (1.8)	3 (0.4)	200 (2.9)	39 (1.3)	216 (1.2)
Indiana	, , ,		B (O.6)	230 (2.0)	18 (0.9)	216 (1.5)	6 (0.5)	209 (2.5)	34 (1.1)	214 (1.2)
Indiana	34 (1.2)	226 (1.4)	8 (0.6)	235 (2.0)	13 (0.8)	223 (2.1)	3 (0.4)	211 (2.9)	34 (1.0)	223 (1.3)
lowa	40 (1.3)	236 (1.2)	9 (0.6)	233 (2.0)	20 (1.1)	210 (1.5)	10 (0.6)	203 (1.8)	35 (0.9)	210 (1.2)
Kentucky	27 (1.3)	223 (1.8)	9 (0.7)	214 (2.8)	16 (0.8)	198 (2.3)	6 (0.5)	194 (2.7)	34 (1.1)	201 (1.9)
Louisiana Maine	36 (1.4)	207 (1.8)	8 (0.5) 9 (0.9)	240 (2.1)	16 (1.1)	225 (1.9)	4 (0.4)	215 (3.4)	35 (1.6)	224 (1.3)
Maryland	36 (1.7)	240 (1.5) 224 (1.6)	8 (0.6)	226 (2.5)	12 (0.8)	206 (2.8)	4 (0.5)	201 (2.8)	36 (1.1)	210 (1.5)
war y rand	41 (1.2)	224 (1.0)		, ,						
Massachusetts	46 (1.6)	234 (1.3)	7 (0.8)	230 (2.9)	11 (0.7)	219 (2.0)	2 (0.3)	195 (4.1)	33 (1.4) 36 (1.4)	217 (1.7) 213 (1.9)
Michigan	38 (1.7)	227 (2.1)	9 (0.7)	224 (2.1)	14 (0.8)	212 (2.4)	3 (0.4)	201 (5.3)	41 (1.2)	222 (1.1)
Minnesota	38 (1.2)	236 (1.4)	6 (0.5)	230 (2.8)	12 (0.7)	220 (1.7)	2 (0.3)	Y !	32 (1.3)	197 (1.5)
Mississippi	35 (1.5)	205 (1.6)	6 (0.5)	209 (2.9)	18 (1.3)	197 (2.4)	8 (0.7) 5 (0.7)	193 (2.3) 210 (2.6)	34 (1.1)	215 (1.4)
Missouri	36 (1.3)	228 (1.6)	9 (0.6)	227 (1.8)	15 (0.9)	216 (2.2)	5 (0.7)	*** (***)	34 (1.5)	219 (1.4)
Nebraska	39 (1.4)	230 (1.6)	11 (0.7)	230 (2.4)	13 (0.8)	222 (2.3)	3 (0.3)	( )	• •	
New Hampshire	42 (1.5)	236 (1.5)	9 (0.7)	232 (2.5)	13 (0.8)	222 (1.6)	3 (0.5)	211 (4.0)	33 (1.3)	223 (1.4)
New Jersey	47 (1.7)	234 (1.7)	8 (0.6)	230 (2.8)	11 (0.7)	219 (2.1)	3 (0.4)	210 (3.8)	31 (1.3)	217 (2.1)
New Mexico	31 (1.9)	221 (2.1)	9 (0.7)	223 (2.9)	15 (1.0)	207 (2.4)	7 (0.7)	202 (2.3)	38 (1.4)	206 (1.5)
New York	41 (1.4)	227 (1.8)	7 (0.8)	225 (3.1)	11 (1.0)	211 (2.4)	4 (0.5)	210 (3.0)	37 (1.7)	210 (1.4)
North Carolina	38 (1.5)	219 (1.7)	9 (0.7)	220 (2.5)	16 (0.7)	204 (1.9)	6 (0.5)	201 (2.5)	30 (1.3)	206 (1.4)
North Dakota	43 (1.3)	233 (0.9)	7 (0.7)	234 (2.6)	12 (0.8)	224 (1.7)	3 (0.4)	*** (***)	34 (1.4)	221 (1.3)
Ohio	36 (1.4)	227 (1.5)	8 (0.6)	221 (3.0)	17 (0.9)	215 (2.0)	5 (0.5)	205 (2.6)	34 (1.2)	210 (1.4)
Oklahoma	35 (1.3)	225 (1.4)	10 (0.7)	225 (1.8)	16 (0.9)	215 (1.6)	5 (0.5)	209 (2.8)	34 (1.4)	214 (1.1)
Pennsylvania	37 (1.4)	230 (2.0)	9 (0.8)	236 (2.0)	16 (0.9)	220 (1.6)	4 (0.4)	211 (3.3)	34 (1.2)	215 (1.8)
Rhode Island	36 (1.3)	224 (1.9)	8 (0.6)	220 (2.5)	11 (0.7)	207 (2.6)	5 (0.4)	200 (2.7)	40 (1.3)	208 (2.1)
South Carolina	36 (1.2)	220 (1.6)	7 (0.5)	219 (2.5)	17 (1.0)	204 (1.7)	5 (0.5)	204 (2.3)	35 (1.2)	205 (1.5)
Tennessee	34 (1.4)	217 (2.2)	9 (0.6)	213 (2.8)	18 (0.9)	205 (2.0)	8 (0.6)	201 (2.3)	31 (1.0)	205 (1.4)
Texas	33 (1.6)	224 (2.0)	8 (0.6)	225 (2.5)	13 (0.8)	213 (2.7)	7 (0.6)	211 (2.4)	39 (1.4)	212 (1.6)
Utah	40 (1.4)	230 (1.3)	8 (0.6)	228 (2.0)	10 (0.7)	216 (2.3)	3 (0.4)	205 (4.1)	39 (1.1)	217 (1.3)
Virginia	43 (1.4)	230 (1.8)	8 (0.6)	219 (2.4)	14 (0.8)	210 (1.8)	6 (0.5)	203 (2.6)	30 (1.1)	213 (1.8)
West Virginia	30 (1.3)	230 (1.8)	9 (0.5)	222 (2.2)	21 (0.8)	210 (1.3)	8 (0.6)	201 (2.1)	32 (1.0)	209 (1.4)
Wisconsin	35 (1.3)	234 (1.5)	10 (0.6)	237 (2.0)	15 (0.8)	225 (2.0)	3 (0.4)	219 (4.8)	38 (1.1)	221 (1.2)
Wyoming	37 (1.3)	229 (1.4)	11 (0.9)	232 (1.5)	12 (0.7)	221 (2.0)	4 (0.4)	215 (2.8)	35 (1.1)	219 (1.1)
TERRITORY	] 3, (1.3)	223 (1.4)	, , (0.0)	202 (1.0)	.= ()	(=/	, ,,	. ,	. ,	
IERRIIORI										192 (1.2)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. The percentages for parents' highest level of education may not add to 100 percent because some students responded "I don't know." \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.





### Students' Reports on Parents' Highest Level of Education (continued)

					Grade 8	3 - 1992	<u> </u>	-	<del>_</del>	
Bub. 10		d College	High \$	ation After School	Graduated	High School	Did Not Fi Sch		I Don'	Know
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	40 (1.4)	279 (1.4)	18 (0.6)	270 (1.2)	25 (0.8)	256 (1.4)	8 (0.6)	248 (1.8)	9 (0.5)	251 (1.7)
Northeast	38 (3.1)	282 (4.2)	18 (1.1)	267 (3.0)	26 (2.2)	259 (4.2)	8 (0.9)	246 (4.2)	10 (1.2)	250 (3.3)
Southeast	35 (1.9)	270 (1.9)	17 (0.8)	263 (2.0)	28 (1.4)	249 (1.9)	12 (1.6)	246 (4.2)	8 (1.0)	248 (4.3)
Central West STATES Alabama	42 (2.7) 43 (2.9)	283 (2.9) 279 (2.6)	20 (1.4) 18 (1.2)	273 (1.6) 274 (2.6)	26 (1.7) 19 (1.5)	264 (2.3) 252 (2.9)	4 (0.7) 9 (1.1)	248 (2.4)	7 (0.8) 11 (0.9)	258 (3.8) 248 (2.9)
Arizona Arkansas California Colorado Connecticut	33 (1.6)	261 (2.5)	18 (0.7)	258 (2.0)	29 (1.1)	244 (1.8)	13 (0.9)	239 (2.0)	7 (0.6)	237 (2.9)
	36 (1.5)	277 (1.5)	22 (1.0)	270 (1.5)	21 (0.9)	256 (1.6)	10 (0.7)	245 (2.5)	12 (0.8)	248 (2.7)
	30 (1.1)	264 (1.9)	20 (0.8)	264 (1.7)	31 (1.1)	248 (1.6)	11 (0.7)	246 (2.4)	8 (0.6)	245 (2.7)
	39 (1.8)	275 (2.0)	18 (1.0)	266 (2.1)	17 (0.9)	251 (2.1)	10 (0.9)	241 (2.2)	16 (1.1)	240 (2.9)
	46 (1.2)	282 (1.3)	19 (0.9)	276 (1.6)	21 (0.9)	260 (1.5)>	6 (0.6)	250 (2.4)	7 (0.5)	252 (2.6)
	47 (1.3)	288 (1.0) >	16 (0.8)	272 (1.8)	22 (0.9)	260 (1.8)	6 (0.6)	245 (3.3)	9 (0.6)	251 (2.4)
Delaware	39 (1.2)	274 (1.3)	18 (1.0)	268 (2.3)	30 (1.0)	251 (1.7)	6 (0.5)	248 (4.0)	8 (0.9)	248 (3.4)
Dist. Columbia	32 (1.0)	244 (1.7)	17 (0.8)	240 (1.9)	29 (0.8)	224 (1.6)	9 (0.7)	225 (3.2)	12 (0.6)	229 (2.2)
Florida	39 (1.5)	268 (1.9)	19 (0.7)	266 (1.9)	24 (1.1)	251 (1.8)	8 (0.7)	244 (2.7)	10 (0.7)	244 (3.2)
Georgia	35 (1.7)	271 (2.1)	18 (0.7)	264 (1.7)	30 (1.2)	250 (1.3)	11 (0.8)	244 (2.2)	6 (0.6)	245 (2.6)
Hawaii	38 (1.1)	267 (1.5)	15 (0.9) <	266 (1.9)	25 (1.0)	246 (1.8)	6 (0.5)	242 (3.5)	16 (0.8)	246 (2.1)
Idaho	48 (1.2)	281 (0.9)	20 (0.8)	278 (1.3)	19 (0.9)	268 (1.4)>	7 (0.5)	254 (2.3)	6 (0.5)	254 (2.8)
Indiana	33 (1.5)	283 (1.5)		275 (1.9)	32 (1.1)	260 (1.6)	8 (0.6)	250 (2.6)	6 (0.5)	249 (3.3)
Iowa	44 (1.4)	291 (1.2) >		285 (1.5)	25 (1.1)	273 (1.3)	4 (0.4)	262 (2.4)	5 (0.4)	266 (2.8)
Kentucky	28 (1.4)	278 (1.6) »		267 (1.6)	32 (0.9)	254 (1.6)	15 (0.9)	246 (1.7)	6 (0.4)	242 (2.8)
Louisiana	32 (1.4)	256 (2.5)		259 (1.8)	30 (1.3)	242 (1.6)	10 (0.7)	237 (2.4)	7 (0.6)	236 (3.7)
Maine¹	40 (1.5)	288 (1.4)		281 (1.5)	26 (1.1)	267 (1.1)	6 (0.5)	259 (2.7)	5 (0.5)	266 (2.6)
Maryland	44 (1.7)	278 (1.8)		266 (1.9)	25 (1.2)	250 (1.8)	6 (0.8)	240 (3.7)	7 (0.5)	245 (3.8)
Massachusetts¹	48 (1.5)	284 (1.3)	17 (0.8)	272 (1.8)	21 (1.0)	261 (1.4)	7 (0.6)	248 (3.2)	7 (0.6)	248 (2.6)
Michigan	38 (1.6)	277 (2.2)	23 (0.9)	271 (2.0)	26 (0.9)	257 (1.7)	6 (0.5)	249 (2.0)	7 (0.6)	248 (3.0)
Minnesota	48 (1.3) >	290 (1.0)>	21 (0.9)	284 (1.8)	22 (0.9) «	270 (1.8) >	3 (0.4)	256 (4.2)	7 (0.6)	268 (3.0)
Mississippi¹	36 (1.7)	254 (1.6)	16 (0.7)	256 (2.0)	29 (1.4)	239 (1.6)	13 (0.8)	234 (1.8)	7 (0.6)	231 (2.8)
Missouri¹	36 (1.3)	280 (1.7)	22 (0.9)	275 (1.5)	29 (1.0)	264 (1.6)	8 (0.7)	254 (2.4)	6 (0.5)	252 (2.9)
Nebraska	46 (1.5)	287 (1.2)	20 (1.0)	280 (1.6)	24 (1.2)	267 (1.7)	4 (0.5)	247 (3.3)	6 (0.6)	256 (3.8)
New Hampshire New Jersey New Mexico New York North Carolina North Dakota	46 (1.5) 45 (1.6) 34 (1.4) 44 (1.8) 36 (1.2) 54 (1.2)>	287 (1.4) 283 (1.8) 272 (1.4) 277 (1.9) 271 (1.4)> 289 (1.1)	17 (0.8) 18 (0.8) 20 (0.7) 18 (1.1) 20 (0.8) 18 (0.7)	280 (1.5) 275 (2.1) 264 (1.4) 271 (2.4) 265 (1.6) > 283 (1.9)	24 (1.1) 23 (1.2) 26 (1.1) 23 (1.0) 27 (0.9) < 19 (1.3)	267 (0.9) >> 259 (2.5) 249 (1.4) 256 (2.5) 246 (1.7) 271 (1.7)	6 (0.5) 7 (0.6) 11 (0.7) 6 (0.8) 10 (0.6) 3 (0.5)	259 (2.5) 253 (3.8) 244 (1.9) 243 (4.2) 240 (2.3) 259 (4.5)	7 (0.5) > 8 (0.7) 10 (0.6) 10 (1.0) 6 (0.5) 5 (0.5)	262 (2.5) 250 (3.9) 245 (2.0) 240 (3.8) 240 (3.6) 272 (2.8)
Ohio Oklahoma Pennsylvania Rhode Island South Carolina <sup>1</sup> Tennessee <sup>1</sup>	37 (1.4)	279 (1.8)	19 (0.7)	272 (1.6)	32 (1.1)	260 (2.3)	7 (0.6)	243 (2.6)	5 (0.5)	249 (4.5)
	39 (1.4)	277 (1.5)	21 (0.9)	272 (1.9)	26 (1.0)	257 (1.7)	8 (0.7)	254 (2.9)	6 (0.5)	251 (4.3)
	39 (1.8)	282 (1.6)	19 (0.9)	274 (1.9)	30 (1.2)	262 (1.6)	7 (0.8)	252 (2.8)	5 (0.5)	252 (3.8)
	43 (1.1)	276 (1.1)	18 (1.5)	271 (1.5)	22 (1.4)	256 (1.6)	8 (0.4)	244 (2.1)	8 (0.6)	239 (2.5)
	37 (1.4)	272 (1.5)	16 (0.7)	268 (1.7)	31 (0.9)	248 (1.4)	9 (0.6)	248 (2.1)	7 (0.3)	247 (3.0)
	33 (1.5)	267 (2.1)	21 (0.9)	265 (1.8)	29 (1.0)	251 (1.6)	12 (0.8)	245 (2.0)	5 (0.4)	243 (3.6)
Texas Utah¹ Virginia West Virginia Wisconsin Wyoming TERRITORIES	34 (1.6) 53 (1.3) 41 (1.5) 29 (1.1) 38 (2.4) 42 (0.9)	281 (2.1) > 280 (1.0) 282 (1.5) 270 (1.5) 287 (1.8) 281 (0.9)	18 (0.8) > 22 (1.0) 18 (0.8) 18 (0.8) 24 (0.8) 22 (0.8)	272 (1.6) 278 (1.2) 270 (1.6) 269 (1.4) 282 (1.5) 278 (1.7)	21 (1.0) 15 (0.8) 24 (0.9) 33 (1.1) < 28 (1.8) 23 (0.7)	253 (1.6) 258 (1.8) 252 (1.5) 251 (1.2) 270 (1.9) 266 (1.1)	16 (1.0) 3 (0.3) 9 (0.6) 13 (0.9) 5 (0.6) 5 (0.6)	247 (1.7) 254 (3.2) 248 (2.1) 244 (1.8) 254 (3.4) 258 (3.3)	11 (0.8) 7 (0.5) 8 (0.6) 7 (0.4) 6 (0.6) 7 (0.5)	244 (2.4) 258 (2.7) 251 (2.5) 239 (2.3) 255 (4.0) 260 (2.2)
Guam	28 (1.2)	246 (1.9)	13 (0.7)	244 (2.4)	27 (1.1)	229 (1.9)	10 (0.9)	224 (2.5)	22 (1.2)	226 (2.0)
Virgin Islands	23 (1.1)	224 (2.0)	11 (0.8)	232 (2.4)	29 (0.9)	221 (1.9)	14 (0.9)	219 (2.4)	24 (1.0)	217 (1.4)



The percentages for parents' highest level of education may not add to 100 percent because some students responded "I don't know."

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. "The value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.

### TABLE A.26 | Students' Reports on Number of Parents Living at Home

			Grade 4	- 1992		
-	Both Pa	arents	Single	Parent	Neither	Parent
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	76 (0.7)	222 (0.9)	20 (0.7)	206 (1.4)	5 (0.3)	192 (2.5)
Northeast	76 (2.0)	227 (2.5)	19 (1.7)	212 (3.4)	5 (1.0)	*** (***)
Southeast	73 (1.2)	213 (2.0)	21 (1.4)	199 (2.4)	6 (0.7)	186 (4.2)
Central		226 (1.9)	18 (1.4)	209 (3.9)	4 (0.4)	*** (***)
	78 (1.4)	221 (2.0)	20 (1.4)	207 (1.9)	4 (0.5)	192 (4.7)
Vest	75 (1.7)	221 (2.0)	20 (1.4)	201 (1.0)	. (***)	, ,
TATES	70 (4.0)	044 (4.7)	22 (1.0)	199 (1.5)	5 (0.5)	186 (3.5)
Nabama	73 (1.2)	211 (1.7)		208 (1.6)	5 (0.5)	198 (4.3)
Arizona	75 (1.0)	217 (1.2)	20 (0.8)		5 (0.5)	197 (3.5)
Arkansas	75 (1.0)	212 (1.0)	20 (0.9)	200 (1.9)	, ,	184 (3.7)
California	76 (1.1)	211 (1.7)	18 (0.9)	199 (2.1)	6 (0.5)	
Colorado	79 (1.1)	223 (1.1)	18 (1.0)	212 (1.5)	4 (0.4)	193 (3.0)
Connecticut	78 (1.0)	231 (1.1)	18 (0.9)	211 (1.9)	4 (0.4)	198 (4.0)
Colourer	• •	004 (0.0)	21 (0.9)	205 (2.0)	5 (0.5)	198 (3.6)
Delaware	75 (0.8)	221 (0.9)	42 (0.9)	189 (1.1)	9 (0.5)	178 (2.1)
Dist. Columbia	49 (1.0)	196 (0.8)			5 (0.5) 5 (0.5)	187 (3.1)
Florida	73 (1.1)	217 (1.4)	22 (1.0)	203 (2.6)	4 (0.5)	195 (3.4)
Seorgia	72 (1.4)	219 (1.3)	23 (1.2)	203 (1.8)	• •	194 (2.6)
Hawaii	75 (1.1)	216 (1.4)	17 (1.0)	207 (2.0)	7 (0.6)	
daho	83 (1.0)	223 (1.0)	14 (0.8)	212 (1.9)	3 (0.4)	199 (3.0)
:	70 (0.0)	000 /4 4\	19 (0.9)	211 (1.6)	3 (0.4)	197 (4.0)
ndiana	78 (0.9)	223 (1.1)	• •	220 (1.7)	2 (0.3)	203 (3.8)
owa	83 (0.8)	231 (1.1)	14 (0.8)	207 (1.7)	4 (0.4)	196 (4.1)
Kentucky	78 (1.0)	216 (1.1)	18 (0.9)		5 (0.5)	179 (3.5)
Louisiana	72 (1.3)	207 (1.3)	23 (1.1)	195 (2.2)		*** (***)
Maine	81 (1.2)	232 (1.0)	17 (1.2)	226 (1.9)	2 (0.3)	
Maryland	72 (1.0)	221 (1.3)	23 (0.9)	205 (2.0)	5 (0.4)	193 (3.3)
Massachusetts	80 (0.9)	229 (1.2)	16 (0.9)	216 (1.8)	4 (0.4)	193 (3.9)
Michigan	75 (1.1)	224 (1.6)	22 (1.0)	205 (2.3)	3 (0.4)	189 (4.8)
Minnesota	81 (0.9)	230 (0.9)	15 (0.7)	221 (1.8)	4 (0.5)	203 (3.8)
Mississippi	70 (1.1)	204 (1.2)	25 (1.1)	194 (1.6)	5 (0.5)	182 (3.1)
Missouri	, ,	224 (1.3)	19 (0.9)	212 (1.4)	3 (0.4)	198 (5.0)
Nebraska	78 (1.1)	227 (1.2)	15 (0.9)	215 (2.2)	2 (0.3)	*** (***)
INCDI aska	82 (1.0)	221 (1.2)			• •	*** (***)
New Hampshire	83 (1.0)	230 (1.2)	15 (1.0)	222 (1.9)	2 (0.3)	· · · · · · · · · · · · · · · · · · ·
New Jersey	79 (1.2)	231 (1.4)	18 (1.1)	211 (2.6)	3 (0.5)	203 (3.5)
New Mexico	76 (1.0)	214 (1.5)	20 (0.7)	207 (2.2)	5 (0.5)	191 (3.6)
New York	77 (1.1)	222 (1.2)	19 (0.8)	208 (1.9)	4 (0.6)	190 (3.6)
North Carolina	73 (1.1)	216 (1.1)	23 (1.0)	202 (1.7)	5 (0.4)	189 (3.6)
North Dakota	85 (0.8)	229 (0.9)	12 (0.7)	220 (1.8)	2 (0.3)	*** (***)
·	, ,			206 (1.9)	4 (0.4)	196 (3.7)
Ohio	77 (1.2)	222 (1.1)	20 (1.1)	_ 11	3 (0.4)	206 (3.2)
Oklahoma	77 (1.2)	221 (1.1)	20 (1.0)	215 (1.5)	4 (0.6)	197 (3.9)
Pennsylvania	77 (1.1)	227 (1.4)	19 (0.9)	212 (1.9)		187 (4.8)
Rhode Island	77 (1.3)	218 (1.4)	19 (1.1)	205 (2.2)	4 (0.5)	
South Carolina	72 (1.1)	216 (1.2)	23 (1.0)	201 (1.4)	5 (0.4)	190 (3.0)
Tennessee	72 (1.2)	213 (1.3)	23 (1.2)	201 (2.2)	4 (0.4)	188 (3.5)
Texas		220 (1.2)	18 (1.0)	210 (2.1)	5 (0.6)	194 (3.8)
	77 (1.2)	225 (0.9)	13 (0.9)	214 (2.3)	2 (0.3)	190 (4.7)
Utah	85 (1.0)	, ,	21 (0.9)	207 (1.5)	3 (0.3)	197 (3.8)
Virginia	76 (0.9)	224 (1.4)		209 (1.6)	4 (0.4)	197 (3.5)
West Virginia	80 (1.0)	216 (1.1)	17 (0.9)		3 (0.3)	205 (5.0)
Wisconsin	81 (0.9)	230 (1.0)	16 (0.8)	219 (1.8)		
Wyoming	82 (0.9)	226 (0.9)	16 (0.8)	216 (1.8)	3 (0.4)	208 (3.2)
TERRITORY				400 (4.0)	6 (0.0)	467 (0.7)
Guam	75 (0.8)	195 (1.1)	16 (0.8)	186 (1.9)	9 (0.6)	167 (2.7)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.



TABLE A.26 | Students' Reports on Number of Parents Living at Home (continued)

			Grade 8	- 1992		
	Both Pa	arents	Single	Parent	Neither	Parent
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	75 (0.6)	272 (1.1)	22 (0.7)	259 (1.4)	3 (0.2)	244 (3.2)
Northeast	75 (1.5)	274 (3.1)	22 (1.7)	257 (2.8)	2 (0.4)	*** (***)
Southeast	71 (0.9)	264 (1.5)	25 (1.0)	251 (1.8)		*** /***
Central	79 (1.9)	278 (1.8)	19 (2.0)	264 (3.3)	4 (0.5)	\ /
West	75 (1.2)	272 (2.1)	22 (1.1)		2 (0.4)	*** (***)
STATES	(/	2,2 (2.1)	22 (1.1)	264 (3.9)	3 (0.5)	240 (5.3)
Alabama	72 (1.2)	258 (1.7)	24 (1.1)	044 (0.0)	0 (0 1)	
Arizona	76 (1.0)	269 (1.3)>	24 (1.1)	244 (2.2)	3 (0.4)	233 (4.2)
Arkansas	75 (0.9)		22 (1.0)	264 (1.5) >	3 (0.3)	241 (4.3)
California	74 (1.0) <	261 (1.2)	21 (0.8)	248 (2.1)	4 (0.4)	241 (3.8)
Colorado		268 (1.7)>	22 (0.9)	259 (2.1)	4 (0.5)>>	244 (4.4)
Connecticut	77 (1.0)	275 (1.0)>>	21 (1.0)	268 (1.7)	2 (0.2)	*** (***)
Comicolicat	79 (0.9)	279 (1.2) >	19 (0.9)	263 (1.7)	2 (0.3)	*** (***)
Delaware	73 (1.1)	268 (1.2)	24 (1.1)	255 (1.9)		*** (***)
Dist. Columbia	45 (1.3)	242 (1.2)>	47 (1.3)	` '	3 (0.4)	( )
Florida	71 (1.2)	266 (1.3) >	25 (1.0)>	235 (1.6)	8 (0.8)	230 (4.6)
Georgia	71 (1.1)	265 (1.4)	` '	254 (2.1)	3 (0.4)	238 (3.5)
Hawaii	75 (1.0) <		25 (1.0)	251 (1.6)	3 (0.4)	245 (4.7)
Idaho	83 (0.8)	263 (1.0)>>	21 (0.9) >	254 (1.8)	4 (0.5)	243 (4.6)
	65 (0.6)	278 (0.9) >>	15 (0.8)	270 (1.4)	2 (0.2)	*** (***)
Indiana	78 (0.9)	274 (1.2)	20 (0.8)	259 (2.0)	2 (0.3)	*** (***)
lowa	83 (0.8)	285 (1.0)>	16 (0.7)	278 (2.2)>		*** (***)
Kentucky	78 (1.0)	266 (1.2)»	20 (0.9)		2 (0.3)	\ /
Louisiana	71 (1.1)	256 (1.8)	25 (1.1)	255 (1.7)	3 (0.3)	245 (5.2)
Maine <sup>1</sup>	81 (0.9)	280 (1.0)	17 (0.7)	243 (1.9)	4 (0.4)	233 (4.5)
Maryland	73 (1.3)	273 (1.4)>		275 (1.9)	2 (0.3)	*** (***)
Managahusawal			23 (1.2)	255 (1.8)	3 (0.4)	244 (4.5)
Massachusetts <sup>1</sup>	77 (1.0)	277 (1.1)	21 (0.9)	262 (1.9)	2 (0.3)	*** (***)
Michigan	75 (1.2)	273 (1.5)	23 (1.0)	257 (1.9)	3 (0.3)	250 (4.3)
Minnesota	85 (0.7)	285 (1.0)»	14 (0.7)	275 (2.2)>	1 (0.2)	*** (***)
Mississippi1	70 (1.3)	253 (1.3)	27 (1.2)	239 (1.9)	4 (0.4)	, ,
Missouri <sup>1</sup>	77 (1.0)	276 (1.2)	21 (0.9)	263 (1.8)	3 (0.3)	234 (4.1)
Nebraska	81 (0.9) <	281 (1.2)	17 (0.8)>	267 (1.7)	2 (0.3)	245 (5.1) *** (***)
New Hampshire	04 (0.0)	• •			2 (0.3)	('"')
New Jersey	81 (0.9)	280 (1.1)>	17 (0.8)	273 (1.6)	2 (0.3)	*** (***)
New Mexico	78 (1.4)	278 (1.5)	19 (1.3)	259 (2.2)	3 (0.4)	*** (***)
New York	75 (1.0)	263 (1.1)	22 (0.9)	256 (1.6)	3 (0.3)	240 (4.0)
North Carolina	75 (1.4)	274 (1.5)>>	23 (1.2)	255 (3.5)	2 (0.4)	*** (***)
North Dakota	73 (1.1)	263 (1.1) <b>»</b>	24 (1.1)	253 (1.9)>>	3 (0.4)	241 (5.0)
NOTH DAKOLA	85 (0.8)	284 (1.3)	13 (0.7)	277 (1.6)	1 (0.3)	*** (***)
Ohio	74 (1.5)<	273 (1.6)>	23 (1.5)		, ,	` '
Oklahoma	78 (1.1)	273 (1.0)>		258 (2.0)	2 (0.3)	*** (***)
Pennsylvania	79 (0.9)		20 (1.0)	261 (2.2)	3 (0.4)	*** (***)
Rhode Island		275 (1.4)	19 (0.8)	262 (2.2)	2 (0.3)	*** (***)
South Carolina <sup>1</sup>	78 (1.4)	270 (0.9)>>	20 (1.2)	259 (1.7)	2 (0.4)	*** (***)
Tennessee <sup>1</sup>	73 (1.0)	267 (1.0)	23 (0.9)	251 (1.8)	4 (0.4)	242 (4.5)
1	73 (1.2)	264 (1.4)	24 (1.1)	248 (2.4)	3 (0.3)	243 (3.9)
Texas	75 (1.0)	271 (1.4)>>	22 (0.9)>	258 (2.2)		
Utah <sup>1</sup>	85 (0.8)	277 (0.9)	14 (0.8)		3 (0.3)	243 (4.7)
Virginia	77 (1.3)	272 (1.2)	21 (1.2)	268 (1.8) 269 (1.9)	1 (0.2)	*** (***)
West Virginia	78 (1.0) <	261 (1.1)	19 (1.0)>	259 (1.9) 255 (1.6)	3 (0.4)	253 (4.9)
Wisconsin	80 (1.1)	280 (1.1)		255 (1.6)	3 (0.4)	247 (3.9)
Wyoming	81 (0.7) «	277 (0.9)>	19 (1.0)	272 (2.7)	1 (0.2)	*** (***)
TERRITORIES	01 (0.1)	211 (0.9)	17 (0.8)>	270 (1.5)	2 (0.3)	*** (***)
Guam	79 (1.5)	045 /4 4\>	40 (4.4)	007 (0.7)		
Virgin Islands		245 (1.4)>	16 (1.4)	237 (3.7)	5 (0.7)	*** (***)
	56 (1.4) <b>≪</b>	227 (1.8)>	35 (1.6)>	223 (1.9)	9 (0.9)	214 (4.0)

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. (The value for 1992 was significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.



# TABLE A.27 | Students' Reports on Extent to Which They Discuss Schoolwork with Someone at Home

		<u> </u>	Grade 4	- 1992		
-	Almost Ev	very Day	At Least	Weekly	Never or Ha	ardly Ever
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
IATION	53 (0.7)	219 (1.0)	21 (0.6)	224 (1.1)	26 (0.6)	210 (1.3)
Northeast	55 (1.8)	225 (2.9)	21 (0.9)	228 (2.9)	24 (1.4)	213 (2.2)
Southeast	53 (1.4)	208 (2.1)	20 (1.3)	217 (2.4)	27 (1.1)	202 (2.5)
		223 (2.1)	21 (1.5)	229 (2.5)	25 (1.3)	215 (3.4)
Central	53 (1.5)	• •	20 (1.1)	221 (1.7)	27 (1.0)	210 (2.4)
West TATES	53 (1.4)	219 (1.7)	20 (1.1)	221 (1.17)	21 (110)	•
Alabama	54 (1.3)	207 (1.6)	21 (0.8)	212 (2.0)	25 (1.3)	203 (2.3)
Arizona	50 (1.1)	216 (1.3)	22 (1.0)	218 (1.6)	28 (1.1)	207 (1.7)
		208 (0.9)	22 (0.9)	218 (1.6)	29 (1.0)	202 (1.6)
Arkansas	50 (1.2)		24 (0.9)	208 (2.1)	25 (1.1)	199 (2.0)
California	51 (1.2)	210 (2.0)			23 (0.8)	210 (1.4)
Colorado	55 (1.0)	223 (1.0)	21 (0.8)	-224 (1.8)		217 (1.8)
Connecticut	55 (1.2)	228 (1.2)	24 (0.9)	229 (1.7)	22 (1.0)	
Delaware	55 (1.2)	218 (1.2)	22 (0.9)	219 (1.6)	23 (0.9)	211 (1.7)
Dist, Columbia	65 (0.9)	191 (0.8)	. 20 (0.8)	197 (1.5)	15 (0.8)	184 (1.8)
Florida	56 (1.2)	214 (1.8) <sup>.</sup>	22 (0.7)	216 (1.9)	22 (1.0)	205 (2.1)
Georgia	55 (1.3)	214 (1.3)	23 (1.0)	219 (2.2)	22 (1.0)	209 (1.7)
Hawaii	45 (1.3)	215 (1.6)	25 (1.1)	218 (1.7)	30 (1.1)	206 (1.8) ·
daho	48 (1.2)	222 (1.2)	24 (0.9)	224 (1.4)	28 (1.1)	214 (1.6)
	, ,	, ,	22 (0.9)	225 (1.4)	23 (0.8)	214 (1.7)
ndiana	55 (1.0)	220 (1.3)	, ,	232 (1.6)	23 (1.0)	221 (1.5)
owa	52 (1.2)	231 (1.1)	25 (0.9)	. ! _:	25 (0.9)	208 (1.3)
Kentucky	53 (1.1)	214 (1.3)	22 (0.8)	218 (1.7)		200 (2.1)
Louisiana	54 (1.0)	202 (1.4)	22 (0.9)	208 (2.1)	23 (1.0)	224 (1.2)
Maine	46 (1.6)	233 (1.5)	29 (1.0)	233 (1.6)	24 (1.3)	
Maryland	55 (1.1)	217 (1.5)	22 (0.9)	223 (1.7)	23 (0.9)	208 (2.1)
Massachusetts	56 (1.2)	227 (1.2)	24 (0.8)	228 (1.7)	20 (1.1)	219 (2.2)
Michigan	54 (1.2)	219 (1.7)	23 (1.1)	227 (2.3)	24 (1.3)	211 (2.5)
Minnesota	51 (1.0)	230 (1.1)	25 (0.9)	230 (1.7)	24 (0.9)	221 (1.8)
Mississippi	56 (1.4)	201 (1.3)	20 (1.1)	204 (1.8)	24 (1.1)	196 (1.6)
Missouri	51 (1.4)	223 (1.4)	22 (1.0)	224 (1.7)	27 (1.2)	215 (1.9)
Nebraska	55 (1.3)	227 (1.5)	23 (1.1)	227 (1.7)	22 (1.0)	215 (1.5)
	• •	•	•	233 (1.8)	20 (1.0)	219 (1.8)
New Hampshire	55 (1.3)	231 (1.3)	24 (1.0) 23 (1.1)	231 (1.7)	19 (1.2)	217 (2.4)
New Jersey	58 (1.5)	227 (1.8)	1 1	215 (2.1)	27 (1.4)	205 (1.7)
New Mexico	52 (1.3)	214 (2.1)	21 (0.9)		22 (1.0)	212 (2.2)
New York	55 (1.4)	217 (1.6)	23 (1.1)	222 (1.6)	• •	207 (1.8)
North Carolina	55 (1.1)	212 (1.4)	21 (0.7)	215 (1.7)	24 (1.0)	221 (1.3)
North Dakota	52 (1.5)	229 (1.1)	25 (1.4)	230 (1.1)	22 (1.2)	
Ohio	54 (1.4)	220 (1.4)	21 (0.9)	220 (1.6)	25 (1.4)	211 (1.6)
Oklahoma	52 (1.2)	221 (1.2)	21 (0.9)	221 (1.8)	27 (1.1)	214 (1.4)
Pennsylvania	57 (0.9)	224 (1.6)	25 (0.8)	227 (1.7)	18 (0.7)	215 (1.8)
Rhode Island	53 (1.4)	215 (1.8)	24 (1.0)	217 (1.6)	24 (1.3)	209 (2.5)
South Carolina	56 (1.1)	213 (1.4)	21 (0.9)	213 (1.6)	23 (1.1)	204 (1.5)
Tennessee	55 (1.1)	211 (1.5)	21 (0.9)	214 (2.0)	24 (0.9)	202 (1.9)
Texas	51 (1.2)	219 (1.5)	22 (1.0)	219 (1.8)	27 (1.2)	211 (1.5)
Utah	50 (1.0)	224 (1.0)	24 (0.9)	227 (1.4)	26 (1.1)	217 (1.7)
		220 (1.6)	22 (0.8)	226 (1.7)	22 (1.0)	212 (1.7)
Virginia West Virginia	57 (1.1)		22 (0.8)	218 (1.5)	25 (0.9)	209 (1.5)
West Virginia	54 (1.2)	215 (1.3)		231 (1.6)	22 (1.2)	222 (1.8)
Wisconsin	52 (1.2)	228 (1.3)	26 (0.9)		24 (1.0)	217 (1.6)
Wyoming FERRITORY	56 (1.2)	226 (1.0)	20 (1.0)	228 (1.5)	, .	
Guam	39 (1.2)	191 (1.1)	26 (1.0)	195 (1.6)	35 (1.3)	188 (1.4)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.



# Students' Reports on Extent to Which They Discuss Schoolwork with Someone at Home (continued)

Ì		<del></del>	Grade 8	- 1992		
	Almost Ev	ery Day	At Least	Weekly	Never or H	ardly Ever
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	39 (0.9)	271 (1.5)	28 (0.6)	270 (1.1)	33 (0.7)	050 (4.4)
Northeast	41 (2.0)	274 (4.2)	26 (1.3)			259 (1.1)
Southeast	37 (1.0)			270 (3.0)	32 (1.8)	257 (3.3)
Central		260 (1.9)	28 (1.0)	263 (1.8)	35 (1.4)	254 (1.4)
West	39 (2.0)	276 (2.8)	27 (1.4)	278 (2.0)	33 (1.7)	268 (2.0)
STATES	41 (2.1)	273 (2.4)	28 (1.5)	271 (2.7)	31 (1.3)	258 (2.5)
Alabama	37 (1.0)	253 (1.9)	29 (0.9)	255 (2.2)	04 (4 0)	212 (1.2)
Arizona	39 (1.4)	270 (1.5)		, ,	34 (1.0)	248 (1.8)
Arkansas	38 (1.0)		27 (1.1)	267 (1.7)	34 (1.1)	259 (1.5)
California	, ,	258 (1.5)	26 (0.9)	261 (1.7)	36 (1.0)	251 (1.5)
Colorado	40 (1.1)	268 (1.8)	30 (1.0)	262 (2.2)	30 (0.9)	254 (1.7)
	46 (1.1)	275 (1.2)	28 (0.9)	275 (1.4)	27 (0.9)	264 (1.6)
Connecticut	39 (1.0)	277 (1.5)	<b>30</b> (1.0)	276 (1.7)	31 (1.0)	267 (1.5)
Delaware	37 (1.1)	267 (1.5)	30 (1.2)	265 (1.8)	` '	
Dist. Columbia	44 (1.1)	236 (1.6)	29 (1.1)		34 (1.1)	257 (1.8)
Florida	39 (1.1)	263 (1.8)		237 (1.6)	27 (1.1)	232 (2.2)
Georgia			28 (0.9)	261 (1.9)	33 (1.2)	256 (1.7)
Hawaii	38 (1.2)	263 (1.5)	30 (1.1)	261 (1.5)	33 (0.9)	254 (1.8)
1	31 (0.8)	263 (1.5)	29 (0.8)	260 (1.9)	40 (0.9)	253 (1.3)
Idaho	43 (1.0)	277 (1.0)	28 (1.0)	279 (1.2)	29 (1.0)	268 (1.4)
Indiana	40 (1.0)	272 (1.5)	29 (0.9)	273 (1.7)	31 (0.9)	
lowa	39 (1.1)	286 (1.3)	29 (0.9)	286 (1.2)		263 (1.5)
Kentucky	39 (1.2)	266 (1.6)			32 (0.9)	276 (1.5)
Louisiana	39 (1.1)		29 (0.9)	263 (1.2)	32 (1.0)	256 (1.7)
Maine		250 (2.0)	29 (1.0)	251 (1.9)	32 (1.2)	249 (1.8)
Maryland	41 (1.1)	282 (1.5)	28 (0.9)	279 (1.2)	30 (1.0)	273 (1.4)
	41 (1.2)	267 (1.8)	29 (1.0)	265 (1.8)	30 (1.2)	263 (1.6)
Massachusetts	43 (1.2)	277 (1.3)	27 (1.0)	276 (1.6)	31 (1.1)	264 (1.6)
Michigan	41 (1.2)	268 (1.8)	28 (1.0)	268 (2.0)	31 (0.9)	
Minnesota	39 (1.2)	285 (1.4)	31 (1.1)			267 (1.7)
Mississippi	40 (1.2)	247 (1.6)		283 (1.4)	31 (1.1)	278 (1.6)
Missouri	41 (1.1)		30 (1.1)	248 (1.7)	30 (1.2)	244 (1.7)
Nebraska	, , ,	274 (1.5)	26 (0.9)	273 (1.6)	33 (1.2)	266 (1.3)
i	40 (1.3)	280 (1.4)	29 (1.1)	280 (1.5)	31 (1.2)	272 (1.6)
New Hampshire	42 (1.4)	281 (1.4)	30 (0.9)	280 (1.5)	29 (1.0)	271 (1.4)
New Jersey	40 (1.2)	274 (1.7)	31 (1.2)	274 (1.9)	29 (0.9)	267 (2.1)
New Mexico	39 (1.3)	262 (1.4)	27 (0.9)	259 (1.5)	34 (1.0)	
New York	43 (1.5)	272 (2.2)	28 (1.0)	268 (2.8)		256 (1.3)
North Carolina	40 (1.1)	263 (1.5)	30 (0.9)		28 (1.2)	259 (2.7)
North Dakota	35 (1.0)	284 (1.4)	30 (0.9) 30 (0.9)	258 (1.5) 284 (1.6)	30 (0.9) 35 (1.1)	253 (1.6)
Ohio	39 (1.1)	• •	` '		35 (1.1)	280 (1.5)
Oklahoma		271 (1.7)	31 (0.9)	273 (2.2)	30 (1.1)	259 (1.7)
_	40 (1.1)	270 (1.5)	27 (1.0)	273 (2.0)	33 (0.9)	261 (1.4)
Pennsylvania	42 (1.4)	274 (1.9)	29 (1.0)	271 (1.9)	29 (1.1)	266 (1.9)
Rhode Island	39 (1.2)	269 (1.3)	27 (1.0)	267 (1.4)	34 (1.1)	262 (1.3)
South Carolina	44 (1.0)	263 (1.3)	28 (0.8)	260 (1.5)	29 (1.0)	
Tennessee	39 (1.0)	259 (1.5)	32 (1.2)	261 (1.8)	29 (1.0) 29 (1.0)	257 (1.2) 255 (2.1)
Texas	41 (1.2)	268 (1.7)	` '	, ,		
Jtah	45 (1.1)	276 (1.1)	28 (0.9)	267 (1.9)	31 (1.1)	258 (1.6)
/irginia			29 (1.1)	277 (1.3)	27 (1.1)	268 (1.4)
West Virginia	43 (0.9)	272 (1.3)	28 (0.9)	269 (1.8)	29 (1.2)	260 (1.5)
	38 (1.0)	262 (1.2)	26 (0.9)	263 (1.3)	35 (0.9)	252 (1.4)
Wisconsin	37 (1.3)	281 (2.2)	32 (0.8)	279 (1.5)	32 (1.4)	273 (1.8)
Vyoming ERRITORIES	43 (0.8)	278 (1.1)	27 (0.9)	277 (1.1)	30 (0.9)	268 (1.5)
Suam	26 (1.0)	244 (2.3)	20 (0.0)	040 (4.0)	4.4.6.53	
rgin Islands			30 (0.9)	242 (1.6)	44 (0.9)	236 (1.9)
	36 (1.7)	223 (2.0)	26 (1.2)	226 (1.9)	38 (1.7)	221 (1.4)



### TABLE A.28 | Students' Reports of Types of Reading Materials in the Home

			Grade 4	- 1892		
-	Zero to Tv	vo Types	Three	Types	Four T	уреѕ
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	31 (1.3)	206 (1.1)	35 (0.7)	218 (1.0)	34 (1.2)	227 (1.2)
Northeast	26 (2.8)	205 (2.5)	36 (1.9)	224 (2.3)	38 (2.5)	234 (3.2)
Southeast	36 (2.4)	200 (2.2)	35 (1.4)	209 (2.3)	29 (2.2)	219 (2.2)
Central	29 (3.2)	211 (3.1)	35 (1.5)	223 (2.6)	36 (2.7)	230 (1.9)
			· 34 (1.1)	218 (1.9)	32 (2.3)	226 (2.5)
West STATES	33 (2.4)	208 (1.7)	34 (1.1)	210 (1.0)	02 (2.5)	,
	07 (4.0)	199 (1.6)	34 (1.0)	208 (1.9)	29 (1.2)	216 (2.1)
Alabama	37 (1.2)		35 (0.8)	217 (1.3)	28 (1.1)	222 (1.4)
Arizona	38 (1.3)	205 (1.5)		217 (1.3)	30 (1.1)	217 (1.1)
Arkansas	37 (1.1)	201 (1.3)	33 (0.9)	: :	29 (1.5)	221 (2.1)
California	40 (1.7)	195 (1.9)	32 (1.0)	211 (1.8)		228 (1.3)
Colorado	29 (1.2)	209 (1.4)	34 (1.0)	221 (1.3)	37 (1.1)	
Connecticut	24 (1.2)	210 (2.1)	35 (1.1)	227 (1.4)	41 (1.3)	235 (1.1)
Delaware	31 (1.0)	204 (1.9)	34 (1.0)	217 (1.1)	35 (0.9)	229 (1.4)
Dist. Columbia	39 (0.9)	185 (1.1)	32 (0.9)	192 (1.2)	29 (0.8)	200 (1.2)
		: _:	35 (0.8)	214 (1.6)	29 (1.4)	223 (1.7)
Florida	36 (1.6)	202 (1.6)	34 (1.0)	214 (1.6)	33 (1.2)	224 (1.6)
Georgia	<b>33</b> (1.0)	205 (1.6)	, ,		26 (1.3)	223 (1.7)
Hawaii	42 (1.5)	205 (1.6)	32 (0.9)	216 (1.5)	35 (1.2)	227 (1.1)
Idaho	31 (1.1)	213 (1.5)	34 (1.0)	222 (1.1)	, ,	
Indiana	31 (1.4)	211 (1.3)	34 (0.9)	220 (1.1)	35 (1.4)	228 (1.3)
lowa	24 (1.2)	217 (1.4)	34 (1.0)	230 (1.4)	42 (1.1)	235 (1.1)
Kentucky	39 (1.4)	205 (1.0)	33 (1.1)	217 (1.4)	28 (1.3)	222 (1.6)
Louisiana		195 (1.7)	34 (0.8)	205 (1.7)	27 (1.2)	213 (1.9)
Maine	39 (1.4)	1 1	38 (1.1)	233 (1.3)	36 (1.6)	236 (1.2)
	26 (1.5)	221 (1.5)	33 (1.0)	217 (1.8)	36 (1.2)	226 (1.5)
Maryland	31 (1.1)	204 (1.6)	33 (1.0)	` ´		
Massachusetts	25 (1.2)	214 (1.9)	34 (1.0)	225 (1.6)	41 (1.4)	233 (1.4)
Michigan	31 (1.5)	206 (2.4)	34 (1.0)	222 (1.8)	35 (1.4)	228 (2.0)
Minnesota	23 (1.3)	216 (1.9)	34 (0.9)	229 (1.2)	43 (1.2)	234 (1.1)
Mississippi	40 (1.3)	192 (1.3)	33 (0.9)	202 (1.4)	27 (1.2)	210 (1.9)
Missouri	32 (1.1)	213 (1.5)	34 (1.2)	222 (1.4)	35 (1.3)	228 (1.6)
Nebraska	26 (1.2)	212 (1.5)	34 (1.0)	225 (1.5)	40 (1.5)	232 (1.5)
	• •			228 (1.4)	45 (1.5)	234 (1.6)
New Hampshire	21 (1.1)	219 (1.7)	35 (0.8)	• •	42 (1.8)	235 (1.7)
New Jersey	24 (1.5)	213 (2.4)	34 (1.1)	226 (1.7)		222 (1.7)
New Mexico	41 (1.7)	204 (1.6)	32 (1.5)	213 (1.7)	27 (1.5) 24 (1.4)	228 (1.7)
New York	32 (1.2)	204 (1.7)	34 (1.1)	219 (1.6)	34 (1.4)	
North Carolina	33 (1.1)	201 (1.4)	34 (0.9)	212 (1.3)	33 (1.2)	222 (1.5)
North Dakota	22 (1.1)	218 (1.5)	36 (1.2)	228 (1.3)	42 (1.5)	232 (1.0)
Ohio	32 (1.2)	207 (1.6)	36 (1.0)	218 (1.5)	33 (1.2)	228 (1.4)
Oklahoma	35 (1.4)	213 (1.4)	35 (1.0)	220 (1.3)	30 (1.4)	226 (1.4)
Pennsylvania	35 (1.4) 26 (1.1)	213 (1.5)	35 (0.8)	223 (1.8)	38 (1.3)	230 (1.7)
Rhode Island	= 1 1	201 (2.5)	35 (1.0)	217 (1.8)	32 (1.5)	226 (1.5)
South Carolina	32 (1.4)		34 (0.9)	213 (1.6)	31 (1.1)	220 (1.3)
	35 (1.2) 37 (1.4)	202 (1.1) 199 (1.7)	32 (1.0)	211 (1.8)	31 (1.2)	220 (1.3)
Tennessee	37 (1.4)	199 (1.1)	, ,	, ,	` '	, ,
Texas	40 (1.6)	208 (1.3)	32 (1.1)	221 (1.7)	28 (1.1)	227 (1.8)
Utah	25 (1.3)	213 (1.8)	37 (1.1)	223 (1.1)	37 (1.6)	230 (1.2)
Virginia	30 (1.3)	209 (1.5)	34 (0.9)	220 (1.5)	36 (1.4)	229 (1.8)
West Virginia	34 (1.3)	207 (1.1)	33 (0.9)	216 (1.4)	33 (1.1)	220 (1.4)
Wisconsin	25 (1.2)	216 (1.7)	36 (0.8)	229 (1.2)	38 (1.1)	234 (1.2)
Wyoming	29 (1.3)	217 (1.5)	37 (1.1)	225 (1.1)	34 (1.3)	230 (1.1)
TERRITORY	20 (1.0)	()	=: \****/	- \ /	, ,	
Guam	56 (1.0)	186 (1.2)	28 (1.1)	197 (1.7)	16 (0.9)	200 (1.7)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. Students were asked about four types of reading materials in the home: magazines, daily newspapers, encyclopedias, and 25 or more books.



### TABLE A.28 | Students' Reports of Types of Reading Materials in the Home (continued)

			Grade 8	- 1992		
	Zero to To	wo Types	Three	Types	Four	Types
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	21 (0.7)	247 (1.2)	31 (0.7)	266 (1.3)	48 (4.0)	
Northeast	19 (2.3)	246 (3.6)	32 (1.1)	267 (4.0)	48 (1.0)	275 (1.1)
Southeast	23 (1.1)	243 (2.4)	31 (1.1)		49 (2.6)	276 (3.1)
Central	16 (1.3)	253 (2.9)		257 (1.8)	45 (1.3)	267 (1.5)
West	25 (1.6)		31 (1.7)	270 (3.3)	54 (2.1)	280 (2.2)
STATES	25 (1.0)	249 (2.3)	31 (1.6)	269 (2.4)	44 (1.8)	276 (2.1)
Alabama	24 (1.2)	237 (2.0)	25 (4.0)	A (A (A ()		
Arizona	29 (1.1)		35 (1.2)	249 (2.1)	40 (1.5)<	262 (1.6)
Arkansas		250 (2.2)	33 (1.0)	266 (1.3)>	38 (1.4)	275 (1.3)
California	24 (1.0)	243 (1.7)	32 (1.1)	253 (1.6)	44 (1.2)	264 (1.5)
Colorado	33 (1.4)	241 (2.2)	29 (0.9)	262 (2.0)	38 (1.6)	276 (1.8)>
Connecticut	17 (0.9)	252 (1.8)	32 (0.9)	270 (1.4)>	51 (1.1)	280 (1.0)>>
Connecticut	18 (0.9)>	250 (2.6)	28 (0.9)	269 (1.4)>	54 (1.1)	283 (1.0)>
Delaware	20 (1.0)	248 (1.9)	30 (4.3)		. ,	
Dist. Columbia	27 (1.1)		32 (1.3) 35 (4.4)	259 (1.8)	49 (1.4)	270 (1.2)
Florida	27 (1.1)	226 (2.1)	35 (1.4)	235 (1.7)>	38 (1.3)	240 (1.4)
Georgia		245 (1.8)	34 (1.1)	258 (1.7)	38 (1.4)	271 (1.6)
Hawaii	22 (1.0)	245 (2.2)	32 (0.9)	256 (1.4)	45 (1.2)	267 (1.6)
Idaho	32 (1.0)	245 (1.5) >	32 (0.8)	258 (1.5)>	36 (1.0)	266 (1.4)>
idano	16 (0.8)	259 (1.8)	33 (0.9)	273 (1.1)	51 (1.0)	280 (1.0)
Indiana	18 (0.9)	252 (1.8)	29 (1.0)		` '	
lowa	12 (0.8)	, ,		268 (1.4)	53 (1.3)	276 (1.2)
Kentucky	24 (0.9)	266 (2.2)	28 (0.9)	280 (1.3)>	60 (1.2)	287 (1.0)>
Louisiana	• •	247 (1.6)	31 (1.0)	260 (1.4)>>	45 (1.1)	270 (1.4)
Maine¹	24 (1.2)	239 (2.4)	34 (0.9)	250 (1.9)>	42 (1.5)	<b>254</b> (1.9)
Maryland	13 (0.7)	266 (1.8)	29 (1.0)	274 (1.4)	58 (1.4)	283 (1.1)
· 1	16 (0.9)	247 (2.7)	31 (1.0)	259 (1.8)	<b>52</b> (1.2)	273 (1.4)
Massachusetts <sup>1</sup>	18 (1.1)	250 (2.2)	26 (0.9)		•	
Michigan	19 (0.9)	249 (1.7)		270 (1.5)	56 (1.2)	281 (1.2)
Minnesota	11 (0.8)	268 (2.3)>	32 (0.9)	262 (1.5)	49 (1.2)	277 (1.6)>
Mississippi <sup>1</sup>	24 (0.9)		29 (1.1)	280 (1.3)>	59 (1.3)	285 (1.2)>
Missouri <sup>1</sup>	17 (1.1)	234 (1.9)	33 (0.9)	242 (1.7)	43 (1.1)	254 (1.4)
Nebraska	, ,	253 (1.8)	32 (0.9)	268 (1.6)	51 (1.3)	278 (1.3)
1	12 (0.8)	258 (2.1)	28 (1.2)	274 (1.6)	60 (1.6)	283 (1.1)
New Hampshire	11 (0.7)	264 (2.2)	31 (0.9)>	274 (1.4)	58 (1.0)	
New Jersey	18 (1.0)	250 (2.6)	29 (1.0)	268 (1.8)	, ,	282 (1.0) >
New Mexico	27 (0.9)	248 (1.2)	33 (0.9)		53 (1.3)	280 (1.6)
New York	20 (1.4)	244 (4.0)	31 (0.9)	258 (1.2)	39 (1.0)	267 (1.4)
North Carolina	20 (0.8)	239 (1.9)		261 (2.2)	49 (1.4)	277 (1.5)>
North Dakota	10 (0.6)	272 (2.4) >	30 (0.9)	255 (1.8) <b>»</b>	50 (1.0)>	266 (1.3)>
DE:-	10 (0.0)	212 (2.4)	. 26 (1.3)<	280 (1.7)	64 (1.3)	286 (1.3)
Ohio	18 (1.1)	249 (2.6)	31 (1.0)	265 (2.0)	51 (1.3)	076 (4.6) >
Oklahoma	21 (1.1)	255 (2.0)	32 (1.0)	266 (1.7)>		276 (1.6)>
Pennsylvania	15 (1.0)	252 (2.0)	29 (0.8)	266 (1.7)	47 (1.4)	274 (1.3)
Rhode Island	22 (0.8)	246 (1.9)>	28 (1.1)		56 (1.2)	278 (1.6)
South Carolina1	19 (0.9)	243 (1.7)	33 (1.1)	262 (1.8)	51 (1.1)	276 (1.0)>
Tennessee <sup>1</sup>	22 (1.0)	243 (1.7)		256 (1.3)	49 (1.3)	269 (1.3)
	• •	242 (1.3)	32 (0.9)	257 (1.9)	46 (1.2)	266 (1.5)
Texas	30 (1.4)	249 (1.7)	33 (0.9)>	264 (1.6)>	38 (1.1)	
Jtah¹	14 (0.8)	259 (1.6)	29 (1.0)	273 (1.2)	57 (1.1)	276 (1.6) >
/irginia	19 (1.0)	249 (1.8)	31 (0.9)	264 (1.3)		278 (0.9)
Vest Virginia	<b>22</b> (1.1)	247 (1.4)	31 (0.9)	255 (1.4)	50 (1.2)	276 (1.4)
Visconsin	15 (1.1)	259 (3.5)			46 (1.3)	266 (1.0)>
Vyoming	17 (0.9) >	263 (1.8)	30 (1.0) 34 (0.0)	276 (1.6)	55 (1.6)	283 (1.2)
ERRITORIES	(5.5)	203 (1.0)	34 (0.9)	273 (1.3)	49 (1.2)<	279 (1.0)
Suam	39 (1.1)	006 (4.5)	05 (4.4)			•
/irgin Islands		226 (1.5)	35 (1.1)	237 (1.7)	26 (1.0)	246 (2.3)
3	25 (0.9)	218 (1.7)	37 (1.2)	218 (1.5)	39 (1.0)	228 (1.6)

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

"The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. "The value for 1992 was significantly lower than the value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.

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TABLE A.29

# Students' Reports on Number of Pages Read Each Day for School and Homework for All Subjects

	_		Grade 4	- 1892		
-	More than	10 Pages	Six to 10	Pages	Five or Fev	ver Pages
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	56 (1.2)	221 (0.9)	22 (0.9)	218 (1.3)	22 (0.9)	207 (1.6)
Northeast	53 (2.9)	227 (2.8)	24 (2.3)	223 (3.6)	23 (2.0)	212 (3.7)
Southeast	50 (2.0)	211 (1.6)	24 (1.4)	211 (2.2)	26 (1.8)	201 (3.7)
Central	· · · · · · · · · · · · · · · · · · ·	226 (2.0)	20 (2.4)	223 (2.9)	18 (1.9)	209 (3.3)
1	62 (3.1)	1 1	20 (1.4)	216 (1.9)	23 (1.6)	209 (2.5)
West STATES	57 (1.5)	221 (1.7)	20 (1.4)	210 (1.0)	20 ()	,
Alabama	56 (1.8)	209 (1.8)	21 (1.2)	210 (2.3)	23 (1.5)	200 (2.1)
Arizona	60 (1.6)	217 (1.2)	19 (1.0)	215 (1.9)	22 (12)	206 (1.7)
Arkansas		212 (1.3)	22 (1.1)	212 (1.5)	26 (1.1)	200 (1.5)
t e	51 (1.5)	211 (1.8)	19 (1.1)	205 (2.1)	19 (1.5)	196 (2.4)
California	62 (1.6)		16 (1.0)	219 (1.9)	16 (1.1)	210 (1.6)
Colorado	67 (1.7)	222 (1.2)	20 (1.1)	227 (2.1)	17 (1.2)	211 (2.3)
Connecticut	64 (1.7)	229 (1.2)	, ,	` '	• •	
Delaware	51 (1.2)	221 (1.3)	22 (1.2)	218 (1.4)	27 (1.1)	207 (1.8)
Dist. Columbia	41 (1.0)	194 (0.9)	23 (0.9)	193 (1.3)	36 (0.9)	187 (1.0)
Florida	56 (1.6)	215 (1.7)	23 (0.8)	214 (2.0)	22 (1.4)	204 (1.9)
Georgia	56 (1.5)	218 (1.7)	23 (1.0)	215 (1.6)	21 (1.0)	203 (1.8)
Hawaii	60 (1.4)	215 (1.4)	19 (1.1)	216 (2.0)	21 (1.0)	203 (1.9)
Idaho	68 (1.3)	223 (0.9)	17 (0.9)	219 (1.7)	15 (0.9)	211 (1.8)
i	• •		21 (1.0)	221 (1.5)	16 (1.1)	210 (2.0)
Indiana	63 (1.4)	222 (1.2)	, ,	229 (1.7)	13 (0.9)	217 (2.2)
lowa	69 (1.3)	231 (1.1)	18 (1.0)		23 (1.2)	204 (1.5)
Kentucky	54 (1.5)	217 (1.3)	23 (1.0)	215 (1.4)	` _:	195 (1.9)
Louisiana	47 (1.6)	208 (1.6)	23 (1.0)	205 (2.0)	30 (1.5)	
Maine	60 (1.7)	234 (1.3)	20 (1.3)	231 (1.5)	20 (1.4)	222 (1.9)
Maryland	51 (1.7)	219 (1.4)	23 (1.0)	220 (2.1)	26 (1.3)	207 (1.8)
Massachusetts	65 (2.0)	228 (1.2)	19 (1.2)	226 (1.9)	16 (1.3)	215 (2.6)
Michigan	·58 (1.8)	223 (1.8)	21 (1.1)	217 (2.3)	21 (1.4)	207 (2.7)
Minnesota	64 (1.6)	230 (1.0)	18 (0.9)	227 (1.7)	18 (1.1)	218 (1.9)
Mississippi		202 (1.4)	24 (1.0)	204 (1.5)	28 (1.4)	194 (1.9)
Missouri	49 (1.7)	224 (1.3)	20 (0.9)	221 (1.8)	19 (1.3)	211 (2.0)
	61 (1.5)	: :	17 (1.1)	224 (2.1)	16 (1.1)	210 (1.8)
Nebraska	67 (1.7)	228 (1.4)		• •	• •	, ,
New Hampshire	63 (1.6)	231 (1.1)	20 (1.1)	230 (1.7)	17 (1.1)	218 (2.1) 217 (1.9)
New Jersey	56 (2.2)	229 (1.8)	23 (1.4)	228 (1.9)	21 (1.5)	: :
New Mexico	58 (1.6)	214 (1.6)	21 (1.1)	214 (2.1)	21 (1.1)	204 (1.8)
New York	58 (1.9)	222 (1.5)	21 (1.4)	216 (1.8)	21 (1.4)	205 (2.2)
North Carolina	61 (1.7)	215 (1.2)	18 (1.0)	212 (1.9)	21 (1.2)	201 (1.9)
North Dakota	68 (1.9)	229 (1.0)	18 (1.2)	230 (1.3)	14 (1.3)	218 (1.6)
Ohio	57 (1.6)	222 (1.4)	21 (1.1)	217 (1.8)	22 (1.3)	208 (2.0)
Oklahoma	, ,	221 (0.9)	20 (1.0)	220 (1.8)	18 (1.0)	213 (2.0)
Pennsylvania	61 (1.5) 54 (1.8)	227 (1.8)	25 (1.3)	223 (1.6)	21 (1.0)	215 (2.1)
Rhode Island	54 (1.8) 50 (1.6)		20 (1.0)	216 (2.4)	21 (1.5)	204 (2.2)
South Carolina	59 (1.6)	217 (1.7) 212 (1.5)	20 (0.8)	217 (1.6)	25 (1.4)	205 (1.7)
Tennessee	55 (1.5) 51 (1.5)	212 (1.5) 212 (1.6)	26 (1.1)	212 (1.8)	23 (1.2)	200 (1.8)
	, ,	·	, ;		, ,	209 (2.2)
Texas	57 (1.6)	220 (1.5)	22 (1.0)	217 (1.7)	21 (1.3) 15 (1.1)	212 (2.5)
Utah	70 (1.6)	225 (0.9)	15 (1.2)	223 (2.1)		
Virginia	64 (1.5)	223 (1.6)	19 (1.0)	219 (1.8)	17 (1.1)	206 (2.0)
West Virginia	60 (1.5)	216 (1.1)	22 (1.0)	215 (1.6)	17 (1.0)	205 (1.9)
Wisconsin	65 (1.5)	229 (1.1)	19 (1.0)	228 (1.6)	16 (1.1)	221 (2.0)
Wyoming	64 (1.7)	226 (1.1)	18 (1.0)	225 (1.9)	18 (1.3)	216 (1.5)
TERRITORY			00 (1.0)	404 /4 7\	24 (0.0)	186 (1.5)
Guam	43 (1.1)	193 (1.3)	26 (1.0)	194 (1.7)	31 (0.9)	100 (1.3)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.





TABLE A.29

Students' Reports on Number of Pages Read Each Day for School and Homework for All Subjects (continued)

			Grade 8	- 1992		
	More than	10 Pages	Six to 10	Pages	Five or Fe	ver Pages
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	38 (1.0)	270 (1.3)	29 (0.8)	269 (1.4)	20 (4.0)	050 (4.4)
Northeast	35 (1.9)	271 (3.9)			32 (1.0)	259 (1.1)
Southeast	37 (1.5)		29 (1.7)	275 (3.4)	37 (2.0)	258 (3.4)
Central		263 (1.7)	26 (1.7)	259 (2.6)	37 (2.2)	253 (2.0)
West	38 (2.5)	276 (1.9)	34 (2.2)	275 (3.1)	28 (2.0)	268 (3.1)
STATES	42 (2.3)	271 (3.3)	29 (1.2)	268 (2.9)	30 (1.9)	261 (1.5)
				• •	(,	
Alabama	33 (1.1)	256 (2.1)	32 (1.1)	253 (1.8)	34 (1.3)	246 (2.0)
Arizona	40 (1.5)	268 (1.4)>	28 (0.9)	264 (1.8)	32 (1.1)	· · · · · · · · · · · · · · · · · · ·
Arkansas	34 (1.1)>>	259 (1.5)	31 (1.2)	257 (1.6)	, ,	261 (1.5)
California	42 (1.7)	268 (2.3)	28 (1.0)		35 (1.4) <b>«</b>	251 (1.4)
Colorado	43 (1.5)>			259 (1.9)	29 (1.6)	252 (1.8)
Connecticut		276 (1.5)	27 (0.9)	272 (1.4)	29 (1.2)<	266 (1.5)>
	49 (1.3) >>	279 (1.4)	28 (1.1)	272 (1.8)	23 (0.9)<	262 (1.8)
Delaware	32 (1.0)	269 (1.6)	30 (1.1)	265 (1.7)	29 (4.0)	
Dist. Columbia	26 (1.0)	244 (2.0)	29 (1.2)		38 (1.3)	255 (1.7)
Florida	36 (1.1)>	263 (2.1)		240 (1.7)	45 (1.3)<	226 (1.7)
Georgia	38 (1.2)		31 (1.1)	261 (1.9)	33 (1.1) «	254 (1.7)
Hawaii		264 (1.7)	30 (0.9)	261 (1.3)	32 (1.2)	251 (1.4)
Idaho	40 (0.9) >	260 (1.2)>	27 (0.9)	258 (1.3)	33 (0.9) <	252 (1.7)
NGG110	48 (1.3)	276 (0.9)	27 (0.9)	275 (1.4)	26 (1.0)	271 (1.5)
Indiana	35 (1.2)	275 (1.6)	22 (2.2)	074 (4.4)		
lowa	47 (1.5)		33 (0.9)	271 (1.4)	32 (1.0)	262 (1.6)
Kentucky	, ,	285 (1.2) >	29 (0.9)	283 (1.4)	24 (1.0)	279 (1.9)
Louisiana	37 (1.3)	267 (1.7)	33 (1.0)	261 (1.4)	30 (1.1)	256 (1.5)
Maine¹	35 (1.2)	255 (1.9)	32 (0.9)	249 (1.6)	33 (1.4)	243 (2.4)
	59 (2.2)	282 (1.0)	22 (1.2)	278 (1.6)	19 (1.3)	268 (1.9)
Maryland	39 (1.7)>	273 (1.7)	28 (1.1)	265 (2.1)	33 (1.4)<	254 (1.7)
Massachusetts <sup>1</sup>	48 (1.6)	070 (4.0)	, ,	• •		254 (1.7)
Michigan		279 (1.2)	26 (1.1)	273 (1.7)	26 (1.1)	260 (1.7)
Minnesota	36 (1.1)>	272 (1.7)	30 (0.9)	268 (1.6)	34 (1.1)<	260 (1.9)
	37 (1.7)	284 (1.4)>	31 (1.1)	283 (1.1)>	32 (1.4)	278 (1.4)>
Mississippi <sup>1</sup>	29 (1.4)	250 (2.0)	30 (1.1)	249 (1.7)	42 (1.4)	241 (1.4)
Missouri <sup>1</sup>	35 (1.0)	273 (1.5)	33 (1.0)	273 (1.6)	32 (1.2)	265 (1.5)
Nebraska	45 (1.8)	280 (1.6)	30 (1.2)	278 (1.3)	25 (1.5)	
New Hampshire		• •	, ,	210 (1.5)	25 (1.5)	270 (1.8)
New Jersey	43 (2.0)	282 (1.3)	29 (1.2)	276 (1.3)	27 (1.4)	273 (1.7)>
New Mexico	44 (1.9)	280 (1.5)	31 (1.4)	269 (2.0)	25 (1.3) <b>«</b>	260 (2.3)
	38 (1.1)	261 (1.4)	31 (1.0)	260 (1.4)	31 (1.1)	256 (1.5)
New York	37 (1.8)	274 (2.6)	29 (1.4)	269 (2.4)>	34 (1.4)	256 (2.5)
North Carolina	38 (1.4)	263 (1.8)>	31 (0.9)>	259 (1.4)>	30 (1.2) <	
North Dakota	41 (1.4)	285 (1.4)	33 (1.0)	282 (1.5)	26 (1.4)	249 (1.6) >
Ohio				, ,	20 (1.4)	279 (1.8)
Oklahoma	41 (1.4)>	273 (1.7)	31 (1.0)	269 (1.9)	28 (1.3)	258 (1.7)
	41 (1.2)>	268 (1.6)	30 (1.1)	269 (1.6)	28 (1.2)<	265 (1.6)>
Pennsylvania	34 (1.5)	274 (2.1)	33 (1.0)	273 (1.7)	33 (1.1)	265 (1.8)
Rhode Island	41 (1.0)	271 (1.1)	30 (1.1)	264 (1.4)	29 (1.1)<	
South Carolina1	37 (1.2)	263 (1.4)	31 (1.1)	260 (1.5)		258 (1.3)*
[ennessee1	36 (1.1)	266 (1.8)	34 (1.3)	258 (1.7)	32 (1.1)	256 (1.5)
exas	r		, ,	250 (1.7)	29 (1.3)	249 (1.8)
Jtah¹	40 (1.5) >	266 (1.8)	28 (1.0)	266 (1.9)	32 (1.4)	261 (1.8)>
	54 (1.5)	277 (1.0)	24 (1.1)	273 (1.5)	22 (1.1)	269 (1.3)
/irginia	36 (1.4)	275 (1.7)	30 (1.1)	267 (1.5)	34 (1.2)	
Vest Virginia	38 (1.1)	262 (1.4)	32 (1.0)	260 (1.4)	30 (1.1) <	259 (1.5)
Visconsin	42 (2.5)	280 (2.1)				253 (1.3)
Vyoming	42 (1.4)		31 (1.3)	279 (1.9)	27 (1.6)	271 (1.8)
ERRITORIES	· 76 (1.4)	276 (1.2)	27 (1.1)	274 (1.2)	30 (1.1)	272 (1.3)
Suam	22 /1 4\	044 /4 715	00 (6.1)			•
/irgin Islands	32 (1.4)	244 (1.7)>	30 (1.1)	242 (2.3)	38 (1.6)	226 (1.6)
15141145	27 (1.3)	224 (1.7)	29 (1.2)	228 (1.6)	44 (1.6)<	218 (1.6)

<sup>&</sup>lt;sup>1</sup>Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

\*\*The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. (The value for 1992 was significantly lower than the value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.



### TABLE A.30 |

# Students' Reports on Amount of Time Spent Watching Television Each Day

					Grade	1 - 1992				
	Six Hours	or More	Four to F	ive Hours	Three	Hours	Two	Hours	One Hou	or Less
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency								
NATION	22 (0.8)	203 (1.2)	22 (0.8)	219 (1.3)	17 (0.6)	223 (1.4)	19 (0.7)	224 (1.5)	21 (0.8)	220 (1.6)
Northeast	23 (2.6)	204 (3.3)	22 (2.5)	223 (2.5)	17 (1.8)	230 (4.0)	19 (1.3)	230 (3.6)	20 (1.9)	229 (3.3)
Southeast	28 (1.8)	196 (1.8)	18 (1.2)	210 (2.4)	17 (1.4)	217 (1.5)	17 (0.7)	215 (3.8)	19 (1.7)	212 (3.6)
Central	20 (1.3)	208 (3.4)	25 (1.4)	225 (2.4)	19 (0.8)	227 (3.8)	19 (2.0)	229 (2.9)	18 (1.2)	221 (4.0)
West	20 (1.5)	204 (2.0)	22 (1.5)	218 (2.7)	14 (0.8)	219 (2.1)	19 (1.3)	223 (2.3)	26 (1.5)	220 (2.4)
STATES	(,		, ,							
Alabama	25 (1.6)	199 (1.9)	24 (1.1)	211 (1.9)	16 (0.9)	213 (2.3)	16 (0.9)	211 (2.9)	18 (0.9)	203 (2.2)
Arizona	18 (1.0)	206 (2.0)	21 (0.9)	217 (1.7)	18 (0.8)	220 (1.6)	20 (0.8)	217 (1.7)	24 (1.0)	209 (2.1)
Arkansas	29 (1.4)	200 (1.6)	22 (0.7)	215 (1.4)	15 (0.7)	217 (1.9)	16 (0.8)	215 (1.8)	18 (1.0)	203 (1.8)
California	20 (1.2)	196 (2.2)	20 (0.9)	208 (2.1)	16 (0.8)	215 (2.2)	20 (0.9)	212 (2.5)	23 (1.0)	206 (2.8)
Colorado	15 (1.0)	207 (1.8)	20 (0.7)	218 (1.5)	17 (0.8)	222 (1.7)	21 (0.7)	227 (1.5)	27 (0.9)	221 (1.3)
Connecticut	17 (1.1)	207 (2.0)	22 (0.9)	228 (1.5)	18 (0.8)	229 (1.5)	21 (0.9)	233 (1.5)	22 (1.0)	230 (2.0)
0011110011001	17 (1.17	• •	• • •			• •		000 (0.0)	40 (0.0)	219 (2.2)
Delaware	26 (1.2)	202 (1.0)	21 (1.1)	218 (2.1)	18 (1.0)	225 (2.0)	17 (0.8)	226 (2.0)	19 (0.9)	1 1
Dist. Columbia	37 (1.0)	185 (1.1)	20 (0.8)	194 (1.6)	13 (0.6)	197 (1.9)	13 (0.7)	197 (1.9)	16 (0.8)	193 (1.7)
Florida	26 (1.5)	201 (2.1)	21 (0.8)	215 (2.3)	15 (0.6)	219 (1.8)	17 (0.9)	221 (2.1)	21 (1.2)	212 (2.2)
Georgia	24 (1.1)	201 (1.6)	22 (1.1)	218 (2.1)	16 (0.8)	221 (1.6)	17 (0.8)	222 (2.0)	21 (1.2)	215 (2.2)
Hawaii	23 (1.0)	203 (1.8)	18 (0.8)	216 (1.9)	15 (0.7)	219 (1.9)	17 (0.9)	218 (1.7)	27 (1.2)	212 (2.5)
Idaho	14 (0.9)	210 (2.1)	21 (0.9)	222 (1.3)	18 (0.8)	224 (1.5)	22 (0.8)	224 (1.4)	26 (1.0)	219 (1.4)
	1 : :	, ,	, ,	004 (4.4)	40 (0.0)	005 (4.4)	20 (0.9)	225 (1.5)	18 (1.0)	219 (2.0)
Indiana	20 (1.2)	209 (1.8)	23 (0.9)	221 (1.4)	18 (0.8)	225 (1.4)	3 1	1 1	18 (0.9)	229 (1.8)
lowa	15 (1.1)	214 (2.3)	24 (0.9)	231 (1.3)	20 (0.8)	234 (1.4)	23 (0.9)	233 (1.3)	1	209 (1.9)
Kentucky	24 (1.1)	208 (1.6)	23 (1.0)	217 (1.5)	18 (0.9)	218 (1.8)	18 (0.9)	217 (1.7)	17 (0.9)	204 (2.0)
Louisiana	28 (1.3)	193 (2.0)	21 (1.0)	207 (2.2)	17 (0.8)	208 (2.1)	15 (0.7)	209 (1.9)	18 (0.9)	
Maine	14 (1.2)	216 (1.7)	21 (1.1)	230 (1.6)	20 (1.0)	233 (1.7)	23 (1.0)	237 (2.0)	22 (1.1)	233 (1.7)
Maryland	25 (1.2)	201 (2.0)	23 (0.9)	218 (1.6)	16 (0.6)	224 (2.2)	18 (0.7)	224 (1.9)	18 (0.7)	220 (1.9)
Massachusetts	14 (1.1)	209 (2.2)	22 (0.9)	225 (2.1)	18 (0.8)	231 (1.8)	22 (0.8)	231 (1.7)	24 (1.4)	227 (2.1)
Michigan	. , ,	209 (2.2)	22 (0.9)	221 (2.0)	17 (0.8)	225 (2.0)	20 (1.1)	227 (2.1)	19 (0.9)	220 (2.8)
Minnesota	22 (1.3)		21 (0.9)	229 (1.5)	19 (0.7)	232 (1.7)	23 (1.1)	233 (1.3)	23 (1.1)	226 (1.6)
	14 (0.9)	213 (2.4)	19 (1.0)	205 (1.7)	15 (0.7)	207 (1.7)	16 (0.9)	205 (1.9)	19 (1.0)	196 (2.1)
Mississippi	31 (1.6)	194 (1.5)	, ,	223 (1.4)	19 (0.8)	227 (1.7)	18 (0.9)	228 (1.7)	19 (1.0)	220 (2.0)
Missouri	21 (1.2)	208 (2.1)	23 (0.9)	1 1	20 (0.9)	231 (1.9)	23 (0.9)	227 (2.1)	20 (0.9)	221 (1.9)
Nebraska	14 (0.8)	210 (2.0)	23 (1.0)	227 (1.8)	20 (0.9)	231 (1.3)	, ,			
New Hampshire	13 (1.1)	215 (1.7)	21 (1.0)	227 (1.5)	19 (0.8)	229 (1.7)	22 (1.1)	233 (1.7)	25 (1.2)	233 (1.7)
New Jersey	20 (1.3)	210 (2.2)	22 (1.2)	227 (1.6)	18 (0.9)	230 (2.1)	20 (1.0)	234 (1.9)	20 (1.2)	230 (2.6)
New Mexico	20 (1.1)	201 (2.2)	20 (1.0)	217 (1.6)	16 (0.9)	217 (2.2)	20 (0.8)	215 (2.9)	24 (1.0)	210 (2.0)
New York	24 (1.6)	201 (2.4)	26 (0.9)	220 (1.5)	18 (0.9)	224 (1.9)	16 (0.9)	226 (2.1)	16 (1.0)	219 (2.6)
North Carolina	26 (1.3)	201 (1.6)	22 (0.9)	216 (1.4)	15 (0.7)	218 (1.9)	17 (0.8)	219 (2.0)	20 (1.0)	209 (2.1)
North Dakota	11 (1.3)	214 (2.1)	22 (1.2)	228 (1.1)	19 (0.9)	232 (1.3)	25 (0.9)	232 (1.2)	23 (1.2)	225 (1.7)
	1			, ,	40 (0.0)	223 (2.0)	19 (0.7)	222 (2.1)	19 (1.0)	216 (2.0)
Ohio	21 (1.3)	208 (1.8)	22 (0.9)	220 (1.4)	19 (0.9)	1 - 1	1 1	224 (1.6)	21 (1.0)	217 (1.4)
Oklahoma	17 (1.1)	210 (1.8)	23 (1.0)	221 (1.4)	18 (0.8)	222 (1.6)	21 (0.9)	77 1 1 -1	19 (1.0)	225 (2.4)
Pennsylvania	18 (1.3)	206 (1.8)	21 (0.9)	226 (2.0)	20 (1.0)	227 (1.8)	22 (1.0)	230 (1.5)	: :	214 (2.4)
Rhode Island	19 (1.3)	201 (2.8)	22 (1.1)	217 (1.6)	18 (0.9)	219 (2.5)	20 (0.7)	219 (1.8)	20 (1.0)	214 (2.4)
South Carolina	28 (1.3)	200 (1.5)	22 (0.8)	214 (1.4)	15 (0.9)	216 (1.9)	17 (0.8)	218 (1.7)	19 (1.0)	214 (2.3)
Tennessee	22 (1.2)	195 (1.9)	22 (0.8)	214 (1.5)	19 (0.8)	214 (2.0)	19 (0.8)	214 (1.8)	19 (1.0)	212 (2.0)
Texas	21 (1.2)	205 (1.5)	24 (1.0)	222 (1.4)	17 (0.8)	223 (2.2)	18 (0.9)	224 (2.0)	20 (0.8)	213 (2.0)
Utah	10 (0.9)	211 (2.3)	18 (0.8)	224 (1.6)	16 (0.7)	225 (1.4)	25 (0.8)	226 (1.4)	32 (1.0)	223 (1.5)
Virginia	24 (1.4)	206 (1.4)	22 (1.0)	221 (1.5)	16 (0.7)	225 (2.6)	19 (0.9)	229 (2.4)	19 (0.9)	223 (2.1)
West Virginia	23 (1.2)	206 (1.4)	22 (0.8)	218 (1.4)	19 (0.9)	219 (1.5)	19 (1.0)	217 (1.9)	16 (0.9)	210 (2.0)
Wisconsin	1 1 1	1	22 (0.0)	228 (1.6)	20 (0.7)	231 (1.7)	23 (0.9)	233 (1.4)	20 (1.1)	227 (1.5)
	14 (0.8)	214 (1.9)	1 1	226 (1.3)	}(	228 (1.4)	23 (0.9)	227 (1.3)	1 1	222 (1.5)
Wyoming TERRITORY	13 (0.9)	216 (2.0)	17 (0.8)	220 (1.3)	13 (0.0)	220 (1.4)	23 (0.0)	()	= ' ()	- , -,
1	04 (0.0)	404 /4 01	46 (0.7)	108 (2.5)	13 (0.8)	201 (2.3)	17 (1.0)	196 (1.9)	34 (1.1)	186 (1.3)
Guam	21 (0.9)	184 (1.8)	15 (0.7)	198 (2.5)	13 (0.8)	201 (2.3)	17 (1.0)	100 (1.0)		

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Trial State Mathematics Assessment.



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### Students' Reports on Amount of Time Spent Watching Television Each Day (continued)

					Grade 8	3 - 1992				
	Six Hours	or More	Four to F	ive Hours	Three	Hours	Two I	lours	One Hou	r or Less
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	13 (0.4)	243 (1.5)	26 (0.7)	260 (1.1)	22 (0.6)	270 (1.2)	23 (0.6)	276 (1.6)		L
Northeast	14 (0.8)	241 (3.4)	28 (1.6)	260 (3.2)	21 (1.6)	276 (3.3)	22 (1.4)	276 (1.6)	15 (0.6) 15 (1.1)	276 (2.2)
Southeast	17 (1.2)	239 (2.8)	30 (0.9)	256 (1.1)	22 (1.2)	263 (2.6)	19 (1.0)		, , ,	278 (6.5)
Central	11 (0.9)	249 (2.9)	24 (1.4)	269 (2.7)	24 (1.2)	274 (2.5)	26 (1.4)	268 (2.7) 283 (3.0)	12 (0.9)	267 (2.9)
West	12 (0.9)	243 (3.7)	23 (1.2)	258 (1.9)	22 (1.0)	269 (1.7)			15 (0.9)	279 (3.7)
STATES	(5.5)	(0)	20 (1.2)	200 (1.0)	22 (1.0)	209 (1.7)	25 (1.4)	276 (2.9)	18 (1.4)	277 (4.1)
Alabama	20 (1.0)	236 (2.0)	31 (0.9)	250 (2.0)	22 (1.0)	256 (2.1)	17 (0.9)	060 (0.0)	40 (0.7)	055 (0.0)
Arizona	9 (0.8) <	249 (2.1)	27 (0.9)	261 (1.5)	22 (0.7)	266 (1.9)		262 (2.2)	10 (0.7)	255 (2.9)
Arkansas	20 (1.0)	237 (1.7) <		255 (1.6)	21 (0.9)	261 (1.8)	24 (1.0)	270 (1.9)	17 (0.9)	270 (2.0)
California	10 (0.8)	237 (3.2)	24 (1.0)	255 (1.9)	23 (0.9)	260 (2.2)	18 (0.9)	264 (1.7)	10 (0.7)	265 (2.4)
Colorado	7 (0.6)	252 (2.7)	22 (0.9)	266 (1.4)	24 (0.9)		27 (1.0)	266 (2.2)	17 (1.1)	273 (3.2)
Connecticut	11 (1.0)	244 (2.5)	22 (0.9) <		25 (0.9)	270 (1.4) 275 (1.5)	27 (1.0) 27 (0.9)>	278 (1.5) 282 (1.4)	21 (1.0) > 16 (0.9)	279 (1.9) 285 (2.0)
Delaware	17 (1.1)	245 (2.0)	28 (1.2)	261 (1.8)				, ,		
Dist. Columbia	31 (1.4)	229 (1.4)	33 (1.0)	236 (1.4)	24 (1.1)	265 (1.9)	20 (0.8)	271 (2.5)	11 (0.8)	272 (3.1)
Florida	15 (1.1) <	241 (2.2)	27 (1.1)	256 (1.4)	17 (0.9)	235 (2.4)	12 (0.8)	240 (2.8)	7 (0.6)	238 (3.1)
Georgia	18 (0.9)	244 (1.7)	29 (0.8)		22 (0.9)	263 (1.8)	22 (0.9) >	266 (2.1)	13 (0.9)	269 (2.7)
Hawaii	22 (0.8)	245 (1.5)		256 (1.3)	22 (0.7)	262 (2.0)	19 (0.8)	268 (2.1)	12 (0.7)	266 (2.7)
Idaho	7 (0.7)	256 (2.3)	28 (1.0) 20 (0.8) <	261 (1.6) <sup>29</sup> 268 (1.3)	21 (0.8) 25 (0.8)	258 (1.7) 274 (1.5)	17 (0.9)	264 (2.0)	11 (0.5)	259 (3.0)
Indiana			, ,		, ,		27 (0.9)	278 (1.3)	20 (0.9)	282 (1.8)
lowa	9 (0.7)	250 (2.7)	26 (0.9)	263 (1.5)	23 (0.8)	271 (1.8)	26 (0.8)	275 (1.5)	15 (1.0)	280 (2.2)
Kentucky	7 (0.6)	265 (2.1)	24 (1.0)	278 (1.5)	26 (0.9)	284 (1.4) <b>&gt;&gt;</b>	28 (1.0)	288 (1.3)	16 (0.9)	287 (2.0)
Louisiana	13 (0.8)	245 (1.8)	28 (1.0)	256 (1.5)	26 (0.8)	265 (1.7)	22 (0.8)	270 (1.6)>	12 (0.7)	270 (2.6)
Maine <sup>1</sup>	20 (1.0)	236 (2.1)	32 (1.2)	249 (1.9)	21 (0.8)	254 (2.1)	18 (0.7)	256 (2.3)	10 (0.6)	251 (3.7)
Maryland	8 (0.6) 17 (0.9)	263 (2.8) 242 (1.8)	21 (1.0) 26 (1.1)	273 (1.4) 260 (1.4)	24 (1.0)	277 (1.3)	28 (1.0)	284 (1.6)	18 (0.9)	283 (1.9)
Massachusetts <sup>1</sup>	` '				24 (0.9)>	267 (2.3)	21 (0.8)	276 (2.1)	11 (0.7)	280 (2.7)
Michigan	8 (0.7)	246 (2.6)	22 (0.9)	263 (1.4)	25 (0.9)	274 (1.8)	27 (1.0)	279 (1.6)	18 (1.0)	283 (1.9)
Minnesota	13 (0.7)	240 (2.1)	25 (1.0)	262 (1.7)	24 (0.9)	270 (1.5)	25 (1.1)>	277 (2.2)	12 (0.8)	278 (2.8)
Mississippi <sup>1</sup>	5 (0.6)	262 (3.8)	20 (0.8) «	275 (1.5)	27 (1.1)	280 (1.7)	31 (1.3)>	288 (1.5) >>	18 (0.8) >	288 (1.5)
Missouri <sup>1</sup>	21 (1.0)	230 (2.0)	29 (1.0)	246 (1.4)	22 (0.8)	253 (1.8)	18 (0.8)	254 (2.2)	10 (0.5)	244 (2.9)
Nebraska	12 (0.7)	255 (3.2)	28 (1.0)	266 (1.3)	24 (0.9)	272 (1.5)	25 (0.9)	277 (1.5)	12 (0.7)	280 (2.6)
	8 (0.6)	255 (3.2)	25 (1.2)	275 (1.6)	25 (0.8)	277 (1.3)	28 (1.2)	283 (1.8)	14 (1.0)	282 (2.4)
New Hampshire	7 (0.5)	261 (3.1)	22 (0.9)	272 (1.6)	23 (0.9)	276 (1.5)	29 (0.9)	282 (1.4)	20 (1.1)	284 (2.0)
New Jersey	13 (1.1)	246 (3.1)	26 (0.9)	268 (1.9)	22 (1.1)	274 (2.0)	24 (1.0)	279 (1.7)	15 (1.1)	283 (2.2)
New Mexico	11 (0.7)	246 (2.3)	26 (0.8)	256 (1.3)	22 (0.8)	259 (1.5)	24 (0.9)	263 (1.3)	16 (0.9)	265 (1.8)
New York	15 (1.1)	241 (3.3)	26 (1.0)	260 (2.4)	22 (1.1)	272 (2.1)	23 (1.1)	276 (2.2)	15 (0.8) >	279 (3.1)
North Carolina	16 (0.8) <<	241 (2.0)	29 (0.9)	255 (1.4)>	23 (0.8) >	261 (1.6)	20 (0.7)	267 (2.1)>		264 (2.7)
North Dakota	5 (0.5)	266 (3.1)	21 (1.0) <	274 (1.7)	26 (1.0)	283 (1.8)	31 (1.0)>	287 (1.5)	17 (0.9)	289 (1.4)
Ohio	12 (1.1)	246 (2.6)	24 (0.8) <	264 (2.1)	25 (0.8)	270 (1.7)	24 (1.1)	273 (1.9)	15 (0.9)	279 (3.5)
Oklahoma	11 (0.8) <	252 (1.9)	30 (0.9)	265 (1.6)	25 (0.9)	270 (1.5)	22 (1.1)	274 (1.7)	12 (0.9)	269 (2.4)
Pennsylvania	9 (0.8)	246 (3.4)	22 (0.9) <	264 (1.9)	26 (0.9)	273 (1.5)	28 (1.1)	277 (1.5)	16 (0.9)	280 (2.5)
Rhode Island	9 (0.7) <	247 (2.4) >	25 (0.9)	257 (1.5)	26 (1.1)	269 (1.5)>	26 (1.0)	271 (1.6)	14 (0.8)	274 (2.3)
South Carolina1	17 (0.9)	241 (1.4)	30 (0.9)	256 (1.2)	22 (0.8)	265 (1.8)	18 (0.7)	272 (1.6)	12 (0.7)	269 (2.3)
Tennessee'	14 (1.0)	244 (2.3)	28 (1.0)	255 (1.6)	24 (0.8)	260 (1.6)	22 (0.8)	264 (1.9)	11 (0.9)	265 (4.0)
Texas	12 (0.8)	245 (2.2)	27 (0.9) <	258 (1.4)	24 (0.9)	267 (1.8)	22 (1.0)	271 (2.0)>	15 (0.9)	274 (2.6)
Utah <sup>1</sup>	5 (0.5)	253 (3.0)	16 (0.9)	266 (1.5)	21 (1.0)	269 (1.6)	30 (1.0)	277 (2.0)	28 (1.1)	282 (1.3)
Virginia	15 (1.0)	245 (1.7)	27 (0.9)	261 (1.3)	23 (0.9)	270 (1.8)	22 (0.9)	280 (1.6) >	13 (0.8)	282 (1.3)
West Virginia	13 (0.7)<	244 (1.7)	31 (1.1)	256 (1.4)	23 (1.0)	261 (1.5)	22 (0.9)	266 (1.7)	13 (0.8)	263 (2.1)
Wisconsin	8 (0.7)	257 (2.6)	22 (1.5)	270 (1.9)	23 (0.9)	278 (1.7)	28 (0.8)	282 (1.3)	19 (1.7)	, , ,
Wyoming	8 (0.6)	256 (2.0)	20 (0.8) <	270 (1.4)	23 (0.9)	275 (1.7)	27 (1.1)	280 (1.2)		287 (3.4)
TERRITORIES	,	<b>,</b> ,	== (=:=)	(1147)	-5 (5.5)	2.0 (1.0)	21 (1.1)	200 (1.2)	22 (0.9)>	278 (1.6)
Guam	20 (0.9)	230 (2.6)	20 (1.0)	247 (2.3)	20 (1.0)	246 (2.5)>	19 (0.9)	232 (2.2)	22 (0.8) >	223 (2.3)
Virgin Islands	32 (1.2)>	221 (1.7)	26 (1.3)	225 (1.6)	16 (0.7)	228 (2.3)	13 (0.7)	219 (2.8)	13 (0.9) <	215 (3.0)

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. (The value for 1992 was significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.



# Curricular Emphasis and Coursework in Mathematics



### Schools' Reports on the Identification of Mathematics as a Priority

PUBLIC	Grade 4 - 1992, Yes, Mathe	matics is A Special Priority
SCHOOLS	Percentage of Students	Average Proficiency
NATION	74 (3.4)	217 (1.2)
Northeast	81 (7.1)	221 (2.5)
Southeast	70 (7.6)	209 (2.6)
Central	78 (6.1)	222 (2.7)
West	69 (6.4)	215 (2.0)
STATES	09 (0.4)	210 (2.5)
	70 (0.0)	206 (1.8)
Alabama	78 (3.8)	214 (1.4)
Arizona	80 (3.6)	207 (1.4)
Arkansas	66 (4.3)	
California	67 (5.2)	206 (2.0)
Colorado	· 67 (4.9)	220 (1.3)
Connecticut	81 (4.1)	226 (1.5)
Delaware	74 (0.2)	218 (1.1)
Dist. Columbia	95 (0.2)	191 (0.6)
Florida	76 (5.2)	212 (1.6)
Georgia	77 (4.0)	214 (1.7)
Hawaii	82 (4.0)	213 (1.5)
Idaho	72 (4.3)	221 (1.2)
Indiana	73 (4.8)	219 (1.3)
Iowa	59 (4.5)	229 (1.6)
Kentucky	66 (5.6)	213 (1.3)
Louisiana	86 (2.9)	203 (1.7)
Maine	70 (5.0)	231 (1.3)
Maryland	92 (2.7)	216 (1.4)
Massachusetts	77 (4.0)	225 (1.3)
Michigan	83 (3.8)	217 (1.8)
Minnesota	72 (4.5)	227 (1.4)
Mississippi	92 (2.4)	199 (1.2)
Missouri	56 (5.5)	220 (2.0)
Nebraska	50 (5.0)	223 (1.9)
New Hampshire	76 (4.2)	230 (1.4)
New Jersey	95 (2.5)	225 (1.6)
New Mexico	57 (5.6)	211 (1.8)
New York		216 (1.9)
North Carolina	73 (5.0) 80 (4.1)	211 (1.4)
North Dakota	80 (4.1) 57 (5.1)	228 (1.2)
Ohio		218 (1.3)
	86 (3.3)	220 (1.2)
Oklahoma	78 (4.2)	· · · · · · · · · · · · · · · · · · ·
Pennsylvania	71 (4.6)	221 (1.5)
Rhode Island	64 (4.2)	211 (2.1)
South Carolina Tennessee	89 (3.7) 76 (4.9)	210 (1.3) 208 (1.7)
Texas	, , ,	215 (1.4)
	79 (4.8)	213 (1.4) 222 (1.1)
Utah	74 (4.7)	· · · · · · · · · · · · · · · · · · ·
Virginia	78 (3.7)	219 (1.7)
West Virginia	85 (3.2)	214 (1.2)
Wisconsin	67 (4.9)	227 (1.7)
Wyoming TERRITORY	69 (4.2)	224 (1.2)
Guam	94 (0.1)	191 (0.9)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

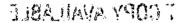




TABLE A.31 | Schools' Reports on the Identification of Mathematics as a Priority (continued)

PUBLIC	Grade 8 - 1992, Yes, Mathe	matics Is A Special Priority
SCHOOLS	Percentage of Students	Average Proficiency
NATION Northeast Southeast Central West	68 (3.7) 80 (8.4) 71 (7.8) 65 (7.6)	264 (1.3) 263 (2.9) 255 (1.7) 270 (2.9)
STATES Alabama Arizona Arkansas California Colorado Connecticut	59 (6.9)  73 (4.9) 69 (4.7) 65 (4.6) 62 (4.3) 47 (4.6)	267 (3.2)  252 (1.9)  264 (1.8)  254 (1.5)  257 (2.2)  268 (1.5)
Delaware Dist. Columbia Florida Georgia Hawaii Idaho	77 (4.3) 68 (0.2) >> 100 (0.0) 66 (4.6) 69 (5.1) 75 (0.2) >> 59 (4.7)	270 (1.7) 259 (1.2) 231 (0.9) 258 (2.0) 257 (1.3) 254 (1.0) > 274 (1.1)
Indiana Iowa Kentucky Louisiana Maine <sup>1</sup> Maryland	46 (4.8) 42 (5.4) 54 (5.3) 74 (4.6) 50 (5.2) 85 (4.0)	269 (1.9) 283 (1.7) > 262 (1.7) 247 (2.2) 278 (1.3) 264 (1.7)
Massachusetts¹ Michigan Minnesota Mississippi¹ Missouri¹ Nebraska	56 (5.2) 78 (4.8) 43 (5.7) 77 (3.8) 44 (5.4) 26 (4.6) <	274 (1.9) 264 (1.9) 280 (1.5) > 244 (1.5) 268 (2.1) 273 (2.4)
New Hampshire New Jersey New Mexico New York North Carolina North Dakota	61 (4.1) >> 84 (4.7) 50 (4.6) < 66 (4.4) 67 (5.0) 38 (4.4)	277 (1.2) 269 (2.0) 256 (1.5) 258 (3.6) 255 (1.5) > 282 (1.7)
Ohio Oklahoma Pennsylvania Rhode Island South Carolina <sup>1</sup> Tennessee <sup>1</sup>	80 (4.8) > 51 (4.8) 64 (4.7) 73 (0.2) >> 83 (4.2) 69 (5.3)	266 (2.0) 265 (2.0) 271 (1.7) 267 (0.9) >> 261 (1.3) 254 (1.6)
Texas Utah¹ Virginia West Virginia Wisconsin Wyoming TERRITORIES	86 (3.8) 64 (4.1) 77 (4.7) 63 (4.8) 59 (5.4) 51 (3.3) >	262 (1.4) > 274 (1.0) 265 (1.5) 258 (1.1) 277 (2.5) 273 (1.3)
Guam Virgin Islands	66 (0.2) 100 (0.0)	234 (1.2) 222 (1.1) <b>»</b>

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. The value for 1990 as significantly lower than the value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent.

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### Students' Reports on Current Mathematics Course TABLE A.32 |

				Grade	8 - 1992			
-	Alge	bra	Pre-Al	gebra	Eighth-Grade	Mathematics	Other Mat	hematics
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	19 (1.2)	299 (2.0)	28 (2.5)	271 (1.7)	50 (2.9)	253 (1.5)	3 (0.4)	248 (4.5)
Northeast	26 (3.0)	296 (4.9)	22 (2.5)	272 (3.5)	47 (3.0)	252 (3.9)	4 (0.8)	*** (***)
Southeast	16 (2.2)	292 (2.9)	31 (5.2)	265 (3.8)	50 (5.7)	246 (2.9)	3 (1.1)	*** (***)
Central	17 (2.6)	305 (2.3)	27 (4.6)	275 (2.0)	53 (5.8)	263 (3.1)	3 (0.5)	( )
West	18 (1.7)	302 (4.1)	29 (5.7)	273 (2.6)!	49 (6.3)	253 (2.6)	3 (0.6)	*** (***)
STATES		(0.1)	40 (4.0)	004 (0.0)	00 (0.0)	044 (4.0)	4 (0.7)	005 (5.0)
Alabama	15 (1.4)	283 (3.4)	18 (1.8)	264 (2.9)	63 (2.2)	241 (1.8)	4 (0.7)	235 (5.2)
Arizona	20 (1.4)	289 (3.0)	31 (2.6)	269 (1.5)	44 (2.9)	252 (1.6)>	5 (0.4)	248 (4.0)
Arkansas	15 (1.2)>	290 (2.5)	19 (2.0)	265 (2.0)	64 (2.4) <	246 (1.1)	2 (0.4)	· · · · · · · · · · · · · · · · · · ·
California	21 (1.1)>	290 (2.2)	21 (1.7)	271 (2.9)	53 (1.7)	247 (1.9)	4 (0.7) 4 (0.6)	234 (5.0) < 265 (5.7)
Colorado	21 (1.2)	297 (1.8)	36 (2.3)	269 (1.6)	38 (2.5)	261 (1.9) >	, , ,	• • •
Connecticut	20 (1.1)	305 (1.8)	31 (1.9)	280 (1.7)	46 (2.2)	257 (1.4)>	3 (0.6)	255 (8.6)
Delaware	23 (1.1)	294 (1.8)	34 (1.0)>>	264 (1.2)	41 (1.3) <<	244 (1.0)	2 (0.3)	*** (***)
Dist. Columbia	35 (1.1)	251 (1.4)	19 (1.1) >>	236 (2.0)	42 (1.2) <<	219 (1.3)	3 (0.5)	*** (***)
Florida	23 (2.3) >	290 (2.5)	25 (1.8)>	267 (1.9)	49 (2.3) <b>«</b>	242 (1.5)	4 (0.5)	234 (7.2)
Georgia	18 (1.5)	291 (3.9)	31 (2.0)	2 <b>65</b> (1.6) <	49 (2.5)	244 (1.6)	2 (0.4)	*** (***)
Hawaii	12 (0.6)	297 (2.1)	27 (0.8)	273 (1.3)	55 (1.0) <b>«</b>	244 (1.0) >>	6 (0.5)	223 (4.1)
Idaho	18 (1.3)	303 (1.5)	41 (1.9) >>	275 (1.3)>	36 (2.2) <b>«</b>	263 (1.2)	5 (0.5)	247 (4.1)
Indiana	16 (1.0)	306 (1.9)	15 (2.0)	282 (2.0)	67 (1.9)	258 (1.2)	2 (0.3)	*** (***)
lowa	14 (1.5)	313 (2.0)	24 (2.6)	287 (1.8)	60 (3.3)	275 (1.5)	2 (0.3)	*** (*** <b>)</b>
Kentucky	16 (1.3)	295 (2.6)	22 (1.7)	270 (1.9)	60 (2.2) <	251 (1.3)	3 (0.4)	241 (7.4)
Louisiana	12 (1.3)	273 (3.6)	61 (3.0)»	247 (1.9)	26 (3.2) «	243 (2.3)	1 (0.2)	*** (***)
Maine <sup>1</sup>	18 (1.5)	306 (2.0)	28 (1.9)	281 (1.4)	51 (2.3)	268 (1.5)	3 (0.5)	*** (***)
Maryland	32 (1.7)>	288 (2.1)	31 (1.4)	261 (1.6)	33 (1.8)	243 (1.7)	4 (0.5)	277 (6.9)
Massachusetts¹		000 (1.0)	33 (1.9)	276 (1.7)	38 (2.2)	254 (1.6)	3 (0.6)	252 (7.5)
Michigan	26 (1.6)	298 (1.9)	23 (2.2)	274 (2.3)	55 (2.2) 55 (2.9)	255 (1.4)	3 (0.5)	261 (5.8)
Minnesota	19 (2.2)	293 (3.7)	33 (3.0)	274 (2.3) 279 (1.6)	42 (3.1) <	270 (1.3)	3 (0.5)	281 (9.2)
Mississippi <sup>1</sup>	23 (2.1). 13 (1.0)	307 (2.1) 282 (2.6)	19 (2.1)	259 (1.9)	67 (2.4)	235 (1.2)	2 (0.4)	*** (***)
Missouri <sup>1</sup>	1 ! !	305 (2.5)	26 (1.9)	278 (2.0)	59 (2.6)	261 (1.3)	2 (0.4)	238 (6.3)
Nebraska	13 (1.2) 17 (1.9)>	303 (2.6)	25 (2.5)	272 (2.5)	55 (3.3) <	272 (1.4)	3 (0.7)	262 (4.8)!
		, ,	, ,				` ,	*** (***)
New Hampshire	18 (1.3)	307 (2.2)	35 (2.3)	279 (1.2)	45 (2.4) **	266 (1.2)>	2 (0.3)	\ ,
New Jersey	19 (1.3)	304 (2.5)	23 (2.0)	278 (2.3)	54 (2.1)	258 (2.0)	3 (0.4)	261 (5.3) <
New Mexico	13 (1.0)	287 (2.1)	25 (2.2)	267 (2.0)	58 (2.5)	250 (1.2) 258 (2.1)	4 (0.3) 8 (0.8)	249 (3.6) < 280 (5.9)
New York North Carolina	13 (1.3)	295 (4.1)	9 (1.2)	282 (3.6)	70 (1.8) 45 (2.9)≪	241 (1.8)>	3 (0.4)	231 (7.0)
North Dakota	22 (1.4)	291 (1.7)	30 (2.6) <i>&gt;</i> 30 (2.8) <i>»</i>	261 (1.6) 283 (1.7)	- 57 (3.3) <b>«</b>	278 (1.7)	2 (0.3)	*** (***)
North Dakota	12 (1.5)	309 (2.4)	30 (2.0)**	203 (1.7)	, ,	• •	, ,	, ,
Ohio	13 (1.1)	304 (1.6)	24 (2.9)	277 (2.8)	61 (3.2)	256 (2.1)	1 (0.4)	*** (***)
Oklahoma	16 (1.2)	296 (1.7)	36 (2.8)	272 (1.7)	45 (3.0)	256 (1.8)	3 (0.4)	*** (***)
Pennsylvania	27 (1.7)	296 (1.9)	27 (2.4)	271 (2.0)	42 (2.5)	256 (1.7)>	3 (0.4)	239 (7.6)
Rhode Island	21 (0.9) >>	295 (1.5)	31 (0.9)	268 (1.2) <	45 (0.9) «	250 (0.8)>>	2 (0.3)	*** (***)
South Carolina	17 (0.9)	301 (1.9)	17 (1.4)	272 (2.9)	63 (1.5)	248 (1.1)	3 (0.6)	235 (3.7)
Tennessee'	11 (1.4)	290 (3.0)	14 (1.5)	271 (2.6)	73 (2.4)	252 (1.5)	3 (0.6)	*** (***)
Texas	17 (1.2)>	302 (2.5)	18 (1.8)	273 (1.9)	62 (2.5) <	252 (1.1)	2 (0.3)	*** (***)
Utah <sup>1</sup>	32 (1.2)	296 (1.3)	38 (1.6)	270 (1.2)	25 (1.8)	251 (1.9)	5 (0.6)	275 (5.2)
Virginia	19 (1.1)	303 (1.8)	41 (2.3)	269 (1.7)	38 (2.2) <	248 (1.4)	2 (0.4)	*** (***)
West Virginia	21 (1.5)	288 (1.7)	27 (1.9) >	264 (1.5)	50 (2.0) **	244 (1.0)	2 (0.3)	*** (***)
Wisconsin	14 (1.5)	304 (3.0)	20 (2.6)	284 (3.6)	63 (3.0)	271 (1.9)	3 (0.4)	253 (7.1)
Wyoming	18 (1.2)	301 (1.6)	33 (1.4)	273 (1.2)	44 (2.0)	266 (1.4)	4 (0.4)	253 (2.3)
TERRITORIES				(2)		000 (1.0)	0 (0 1)	*** (***)
Guam	11 (0.7) >>	270 (3.0)	22 (1.1)**	258 (2.0)	64 (1.2) <	222 (1.2) <	3 (0.4)	
Virgin Islands	6 (0.5)	249 (3.9)	14 (0.7) >>	231 (2.5)	.78 (0.9) <b>«</b>	219 (1.2)	2 (0.4)	*** (***)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. The percentages may not add to 100 percent because a small number of students reported not taking a mathematics course.

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. "The value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



TABLE A.33 | Students' Reports on Which Mathematics Class They Plan to Take in Ninth Grade

					Grade 8 - 1992						
	I Don't	Know	Basic, C Business or Mathe	Consumer	Pre-Al	igebra	Algebra I or Alge	Elementary bra	Geor	netry	
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	
NATION Northeast	21 (1.2)	254 (1.8)	9 (0.8)	239 (2.1)	16 (1.0)	253 (1.4)	35 (1.6)	275 (1.0)	14 (0.9)	294 (1.9)	
Southeast	28 (4.0)	260 (4.9)	11 (0.9)	241 (2.9)	9 (1.7)	251 (4.8)	30 (2.5)	275 (2.6)	11 (1.7)	288 (5.1)	
Central	19 (1.5)	244 (1.7)	9 (1.4)	235 (4.4)	17 (1.9)	244 (2.1)	38 (3.1)	268 (2.0)	13 (1.3)	287 (3.3)	
West	17 (1.9)	263 (3.1)	10 (1.7)	239 (4.0)	18 (2.0)	261 (3.1)	36 (2.7)	280 (2.1)	16 (2.3)	302 (2.7)	
STATES	21 (2.0)	251 (2.4)	7 (1.6)	240 (4.5)!	19 (1.9)	253 (1.8)	34 (3.6)	277 (1.7)	16 (1.7)	297 (3.9)	
Alabama	25 (1.1)	240 (1.7)	13 (0.9)	235 (2.2)	17 (1.1)	243 (2.2)	29 (1.1)	264 (1.9)	12 (1.2)	278 (3.7)	
Arizona	21 (1.1)	253 (1.9)	9 (0.7)	242 (2.4)	19 (1.2)	252 (1.5)	36 (1.6)	272 (1.2)	11 (1.0)	295 (3.0)	
Arkansas	25 (1.3)	244 (1.5)	7 (0.7)	233 (2.4)	20 (1.1)	246 (1.7)	32 (1.5)	264 (1.7)	11 (1.1)	286 (2.9)	
California	25 (1.2)	246 (2.3)	9 (0.6)	236 (2.5)	17 (1.0)	249 (2.7)	28 (1.4)	273 (2.3)	18 (1.1)	286 (2.5)	
Colorado	19 (1.1)	257 (1.8)	5 (0.5)	248 (3.6)	15 (0.9)	257 (2.2)	38 (1.7)	276 (1.4)	19 (1.1)	294 (1.8)	
Connecticut	19 (1.2)	253 (2.1)	8 (0.8)	241 (3.0)	13 (1.1)	256 (2.1)	40 (1.6)	283 (1.0)	16 (1.1)	304 (2.0)	
Delaware	23 (1.0)	251 (2.1)	9 (0.8)	237 (2.7)	15 (1.0)	247 (1.7)	34 (1.1)	267 (1.5)	16 (0.8)	292 (2.2)	
Dist. Columbia	25 (1.0)	226 (1.8)	6 (0.7)	214 (3.0)	10 (0.6)	217 (2.9)	19 (1.0)	239 (2.1)	36 (1.1)	245 (1.4)	
Florida	20 (1.1)	246 (1.9)	8 (0.6)	232 (2.8)	23 (1.3)	245 (1.5)	28 (1.4)	269 (1.5)	18 (1.5)	286 (2.3)	
Georgia	22 (1.2)	249 (1.6)	7 (0.7)	233 (2.5)	19 (1.4)	247 (2.2)	33 (1.2)	268 (1.2)	15 (1.3)	281 (2.6)	
Hawaii	25 (1.0)	235 (1.9)	9 (0.5)	238 (2.0)	25 (0.9)	254 (1.1)	25 (0.8)	276 (1.5)	11 (0.6)	293 (2.1)	
Idaho	20 (1.0)	265 (1.5)	5 (0.5)	249 (2.5)	17 (1.0)	259 (1.6)	41 (1.2)	279 (1.1)	14 (1.1)	303 (1.6)	
Indiana	17 (1.1)	254 (2.2)	13 (0.7)	242 (1.8)	21 (1.1)	259 (1.4)	33 (1.4)	281 (1.2)	13 (1.0)	303 (2.4)	
Iowa	18 (1.7)	273 (1.9)	9 (0.8)	256 (2.5)	16 (1.1)	269 (1.4)	42 (1.6)	290 (1.5)	10 (1.3)	310 (2.2)	
Kentucky	24 (1.2)	249 (1.6)	10 (0.8)	238 (1.9)	18 (1.0)	251 (1.7)	32 (1.3)	272 (1.4)	10 (0.9)	292 (2.8)	
Louisiana	23 (0.9)	243 (2.2)	6 (0.6)	234 (3.7)	7 (0.7)	237 (3.3)	49 (1.5)	252 (1.6)	14 (1.1)	263 (3.4)	
Maine	21 (1.3)	271 (1.5)	10 (0.6)	251 (2.4)	14 (0.9)	266 (2.0)	38 (1.9)	282 (1.3)	13 (0.9)	307 (2.1)	
Maryland	16 (1.1)	243 (2.4)	8 (0.6)	233 (2.4)	12 (1.0)	247 (2.0)	34 (1.3)	269 (1.5)	23 (1.6)	287 (3.0)	
Massachusetts	23 (1.3)	261 (2.3)	8 (0.7)	245 (2.2)	10 (0.9)	257 (2.3)	38 (1.5)	278 (1.1)	15 (1.1)	297 (2.2)	
Michigan	27 (1.5)	258 (1.9)	10 (0.8)	248 (2.0)	15 (1.2)	250 (2.1)	30 (1.4)	277 (1.4)	15 (1.4)	293 (2.3)	
Minnesota	18 (1.4)	269 (1.5)	4 (0.5)	249 (3.4)	11 (1.0)	263 (2.1)	45 (1.9)	283 (1.3)	18 (1.7)	309 (2.3)	
Mississippi	19 (1.1)	236 (1.9)	10 (0.9)	226 (2.5)	21 (1.2)	235 (1.6)	35 (1.5)	255 (1.4)	11 (1.0)	266 (3.0)	
Missouri	19 (1.3)	256 (1.9)	10 (0.8)	248 (2.0)	22 (1.1)	260 (1.2)	35 (1.3)	282 (1.4)	11 (1.0)	299 (3.8)	
Nebraska	21 (1.5)	265 (1.8)	5 (0.6)	252 (3.1)	15 (1.2)	263 (2.3)	41 (2.0)	284 (1.5)	15 (1.3)	298 (2.6)	
New Hampshire	20 (1.4)	269 (1.5)	7 (0.7)	253 (2.2)	14 (1.1)	262 (1.7)	43 (1.7)	283 (1.1)	12 (0.8)	308 (2.4)	
New Jersey	19 (1.6)	255 (3.1)	10 (0.9)	240 (3.3)	12 (0.9)	261 (2.2)	39 (1.9)	280 (1.3)	16 (1.2)	297 (3.0)	
New Mexico	27 (1.3)	248 (1.4)	10 (0.8)	241 (1.9)	17 (1.2)	249 (1.6)	32 (1.6)	271 (1.5)	9 (0.8)	284 (2.8)	
New York	47 (1.8)	263 (2.1)	14 (0.9)	250 (2.4)	6 (0.6)	263 (4.7)	12 (1.0)	280 (2.7)	9 (0.9)	273 (5.0)	
North Carolina	17 (1.0)	243 (2.1)	7 (0.6)	233 (2.8)	17 (0.9)	240 (2.1)	37 (1.3)	262 (1.3)	20 (1.1)	287 (1.7)	
North Dakota	21 (1.6)	274 (2.0)	3 (0.6)	262 (2.9)	11 (1.0)	270 (2.1)	53 (1.8)	286 (1.3)	9 (0.8)	308 (2.2)	
Ohio	17 (1.3)	252 (1.7)	13 (1.0)	244 (1.9)	23 (1.9)	259 (3.0)	32 (2.4)	281 (1.7)	11 (1.0)	299 (2.4)	
Oklahoma	22 (1.1)	257 (1.9)	5 (0.6)	236 (4.3)	16 (1.3)	255 (2.5)	43 (1.8)	274 (1.4)	11 (0.8)	295 (2.6)	
Pennsylvania	18 (1.4)	260 (2.2)	10 (0.9)	244 (2.1)	13 (0.9)	254 (2.3)	35 (1.8)	274 (1.6)	18 (1.9)	296 (2.3)	
Rhode Island	22 (0.9)	256 (1.6)	8 (0.5)	240 (2.1)	14 (0.9)	254 (2.0)	38 (1.0)	269 (1.1)	10 (0.6)	287 (2.5)	
South Carolina	20 (1.1)	246 (1.6)	11 (0.8)	234 (2.2)	20 (1.0)	248 (1.6)	30 (1.3)	269 (1.5)	15 (1.0)	290 (2.4)	
Tennessee	23 (1.0)	249 (2.1)	9 (0.8)	236 (1.8)	22 (1.1)	249 (1.9)	33 (1.3)	271 (1.4)	9 (1.2)	281 (3.4)	
Texas Utah Virginia West Virginia Wisconsin Wyoming TERRITORIES	25 (1.3)	250 (1.7)	6 (0.5)	239 (3.4)	22 (1.2)	251 (1.8)	30 (1.6)	274 (1.8)	15 (1.0)	299 (2.6)	
	13 (0.8)	259 (2.1)	3 (0.4)	237 (4.0)	16 (1.0)	254 (1.5)	38 (1.0)	272 (1.1)	25 (0.9)	297 (1.2)	
	15 (0.9)	243 (1.6)	6 (0.6)	235 (2.4)	11 (0.9)	247 (1.9)	47 (1.6)	271 (1.1)	17 (0.9)	302 (2.1)	
	21 (1.0)	244 (2.1)	9 (0.6)	237 (1.6)	15 (1.2)	244 (1.5)	34 (1.4)	264 (1.1)	17 (1.2)	286 (1.7)	
	17 (1.4)	263 (3.8)	9 (0.9)	252 (3.2)	17 (1.1)	265 (2.5)	41 (1.6)	286 (1.3)	12 (1.2)	304 (2.2)	
	25 (1.1)	266 (1.7)	5 (0.6)	249 (2.1)	16 (1.0)	262 (1.6)	38 (1.1)	279 (0.8)	13 (1.0)	301 (2.1)	
Guam	41 (1.5)	225 (1.5)	10 (0.6)	224 (2.9)	18 (0.9)	231 (2.1)	18 (1.0)	266 (1.9)	9 (0.9)	253 (3.6)	
Virgin Islands	31 (1.0)	219 (1.6)	19 (1.1)	221 (1.8)	20 (0.9)	221 (2.3)	15 (1.3)	227 (2.3)	10 (0.8)	231 (3.0)	

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. The percentages may not add to 100 percent because a small number of students reported planning to take other mathematics courses. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



### TABLE A.34 | Teachers' Reports on the Amount of Time Spent on Mathematics Instruction Each Week

	Grade 4 - 1992										
	Two and One-Half H		More than Two an but Less than Four		Four Hours or M	ore Each Week					
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency					
NATION	5 (1.0)	223 (3.8)!	21 (2.1)	221 (2.7)	74 (2.5)	216 (1.1)					
Northeast	6 (2.8)	*** (***)	21 (5.6)	218 (3.7)!	73 (6.8)	221 (3.7)					
Southeast	4 (1.2)	210 (6.0)!	8 (2.2)	203 (3.5)!	88 (2.7)	208 (2.2)					
Central	4 (1.6)	*** (***)	34 (5.0)	222 (4.0)	63 (5.4)	225 (1.8)					
Vest	5 (2.2)	*** (***)	24 (3.6)	227 (5.8)	71 (4.9)	213 (1.7)					
TATES	· (=.=,	` '	_ , , ,	, ,		, .					
Alabama	8 (1.9)	200 (3.9)!	7 (1.3)	209 (5.1)	85 (2.3)	208 (1.7)					
Arizona	5 (1.2)	216 (6.3)!	27 (2.6)	212 (2.5)	68 (2.8)	215 (1.2)					
Arkansas	6 (1.7)	206 (5.1)!	30 (3.7)	208 (1.9)	64 (3.5)	210 (1.3)					
California	3 (1.2)	190 (7.6)!	26 (3.9)	211 (3.3)	70 (3.9)	207 (2.1)					
Colorado	7 (1.7)	217 (4.1)!	30 (3.2)	223 (1.9)	63 (3.8)	219 (1.5)					
Connecticut	1 (0.5)	*** (***)	19 (3.0)	231 (2.6)	80 (3.0)	227 (1.4)					
	1 (0.5)		• •	_ : .:	, ,						
Delaware	7 (0.4)	227 (4.3)	33 (0.7)	215 (1.2)	61 (0.8)	218 (1.1)					
Dist. Columbia	9 (0.4)	198 (2.9)	16 (1.0)	189 (2.7)	75 (1.1)	190 (1.0)					
Florida	3 (1.0)	211 (4.9)!	21 (2.7)	215 (2.0)	75 (2.8)	212 (1.6)					
Georgia	4 (1.1)	215 (6.0)!	10 (1.6)	217 (3.0)	86 (1.8)	213 (1.5)					
Hawaii	6 (1.3)	213 (4.8)!	38 (2.8)	213 (2.0)	55 (3.1)	213 (1.7)					
ldaho	5 (1.4)	216 (3.1)!	27 (3.5)	221 (1.7)	68 (3.4)	220 (1.2)					
	` '	, ,			EQ (0.7)						
Indiana	3 (1.0)	231 (5.6)!	39 (3.7)	218 (1.9)	58 (3.7)	220 (1.4)					
lowa	6 (2.1)	223 (4.2)!	38 (3.7)	229 (1.6)	56 (4.0)	230 (1.4)					
Kentucky	7 (1.8)	211 (5.1)!	12 (2.6)	212 (2.3)!	81 (2.8)	214 (1.3)					
Louisiana	7 (1.4)	194 (4.8)!	10 (2.6)	202 (7.8)!	84 (2.9)	204 (1.5)					
Maine	4 (1.3)	236 (3.3)!	39 (4.3)	230 (1.9)	57 (4.1)	231 (1.4)					
Maryland	4 (1.4)	233 (8.2)!	11 (2.4)	219 (9.6)	85 (2.8)	217 (1.5)					
Massachusetts	2 (0.9)	221 (6.4)!	35 (3.9)	224 (2.0)	63 (4.0)	228 (1.5)					
Michigan	5 (1.4)	222 (6.8)!	29 (3.4)	224 (3.0)	66 (3.4)	217 (2.0)					
Minnesota	7 (1.7)	229 (3.5)!	31 (3.8)	228 (1.6)	63 (3.8)	226 (1.7)					
Mississippi	10 (2.2)	194 (3.3)!	14 (2.6)	203 (4.1)	76 (3.2)	200 (1.4)					
Missouri	5 (1.4)	223 (3.8)!	18 (3.2)	221 (3.0)	77 (3.1)	222 (1.6)					
Nebraska	8 (2.3)	219 (3.2)!	37 (4.0)	225 (2.1)	55 (3.3)	226 (1.7)					
New Hampshire	4 (1.2)	233 (5.6)!	37 (4.1)	225 (1.8)	60 (4.1)	231 (1.4)					
New Jersey	3 (1.4)	*** (***)	29 (4.4)	231 (2.4)	69 (4.6)	226 (2.0)					
New Mexico	4 (1.1)	207 (4.5)!	20 (3.0)	211 (2.4)	76 (3.3)	213 (1.5)					
New York	6 (1.4)	214 (6.8)	27 (3.4)	226 (2.2)	67 (3.8)	214 (1.8)					
North Carolina	8 (1.4)	220 (4.3)	32 (3.1)	213 (1.7)	60 (3.2)	211 (1.6)					
North Dakota	6 (1.8)	224 (3.3)!	37 (4.7)	227 (1.3)	56 (4.8)	229 (1.1)					
Ohio	2 (0.8)	*** (***)	34 (4.2)	221 (2.1)	64 (4.2)	216 (1.9)					
Oklahoma	8 (1.6)	219 (3.2)	34 (3.9)	219 (1.6)	58 (4.3)	220 (1.3)					
Pennsylvania	4 (1.2)	224 (5.6)!	30 (3.3)	219 (3.1)	67 (3.4)	225 (1.7)					
Rhode Island	3 (1.1)	*** (***)	24 (3.3)	217 (3.1)	74 (3.6)	213 (1.8)					
South Carolina		205 (3.6)	15 (2.6)	217 (3.1)	81 (3.2)	211 (1.3)					
Tennessee	4 (1.7) 4 (1.3)	210 (5.8)!	17 (2.0)	207 (2.3)	79 (2.3)	210 (1.5)					
					83 (2.6)	218 (1.6)					
Texas	4 (1.0)	214 (4.6)!	12 (2.4)	217 (4.2)	70 (3.1)	224 (1.1)					
Utah Virginia	6 (1.4)	218 (4.3)	23 (2.9)	220 (1.8)	70 (3.1) 79 (3.2)						
Virginia	3 (1.0)	218 (5.1)!	17 (2.9)	215 (3.5)		221 (1.5)					
West Virginia	4 (1.5)	214 (6.2)!	9 (1.9)	217 (2.0)	87 (2.5)	213 (1.3)					
Wisconsin	2 (0.9)	*** (***)	27 (3.2)	228 (1.9)	71 (3.0)	229 (1.3)					
Wyoming FERRITORY	3 (1.2)	228 (5.2)!	22 (3.4)	223 (2.1)	75 (3.4)	225 (1.3)					
Guam	9 (0.5)	195 (2.0)	20 (1.1)	189 (1.8)	71 (1.1)	192 (1.1)					

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



TABLE A.34

# Teachers' Reports on the Amount of Time Spent on Mathematics Instruction Each Week (continued)

	Grade 8 - 1992									
	Two and One-Half H	lours or Less Each ek	More than Two an but Less than Four		Four Hours or M	ore Each Week				
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency				
NATION	13 (2.2)	269 (3.9)	55 (2.7)	268 (1.5)	32 (3.1)	266 (2.3)				
Northeast	7 (3.6)	*** (***)	58 ( <b>5.3</b> )	266 (3.3)	35 (7.9)	271 (5.1)!				
Southeast	10 (3.1)	262 (4.5)!	52 (5.5)	265 (1.7)	37 (4.1)	256 (2.8)				
Central	14 (3.7)	272 (5.2)!	62 (8.6)	275 (3.0)	24 (7.6)	277 (5.2)!				
West	19 (5.6)	271 (6.7)!	51 (1.9)	267 (3.3)	, ,					
STATES	.5 (5.5)	277 (0.7):	31 (1.9)	207 (3.3)	30 (5.4)	266 (3.2)				
Alabama	6 (2.1)	244(19.3)!	34 (3.7)	0.47 (0.0)	60 (0 Å)	0.55 (4.0)				
Arizona	13 (2.2)	, ,		247 (2.2)	60 (3.6)	255 (1.9)				
Arkansas		258 (3.0)	53 (3.7)	266 (1.6)	34 (3.3)	264 (2.5)				
California	13 (2.7)	257 (4.9)!	45 (3.9)	257 (1.5)	42 (4.1)	254 (2.0)				
Colorado	12 (2.1)	253 (3.7)	46 (3.4)	260 (2.4)	43 (3.2)	264 (2.5)				
_ '	18 (2.3)	272 (2.6)	<b>55</b> (3.4)	272 (1.5)	27 (2.8)	269 (2.3)				
Connecticut	6 (1.5)	266 (6.8)!	74 (3.0)	273 (1.4)	21 (2.9)	278 (3.9)				
Delaware	4 (0.4)	254 (5.1)	66 (0.9)	264 (1.2)	30 (0.9)	259 (1.8)				
Dist. Columbia	9 (0.8)	241 (3.5)	39 (1.1)	229 (1.7)	52 (1.1)	237 (1.4)				
Florida	10 (1.7)	253 (4.6)	50 (3.2)	259 (1.6)	40 (3.2)	262 (2.3)				
Georgia	7 (1.3)	252 (3.6)	37 (3.4)	256 (1.9)	56 (3.7)	260 (1.8)				
Hawaii	10 (0.6)	247 (2.5)	56 (1.0)	257 (1.1)	34 (1.0)	261 (1.5)				
Idaho	18 (2.5)	276 (2.3)	55 (3.0)	277 (1.5)	28 (2.6)	269 (1.6)				
Indiana	12 (3.5)	268 (3.4)!	56 (4.2)		` '	, ,				
lowa	21 (4.2)	281 (2.5)!		, ,	32 (3.4)	271 (1.7)				
Kentucky	9 (1.8)	, ,	59 (4.8)	283 (1.3)	20 (3.3)	285 (2.6)				
Louisiana	• •	266 (5.1)!	44 (3.8)	259 (1.8)	47 (3.8)	264 (1.5)				
Maine	10 (2.0)	251 (6.1)!	37 (4.0)	249 (2.5)	54 (4.3)	250 (2.3)				
Maryland	17 (2.8)	280 (3.3)	71 (3.7)	278 (1.3)	12 (2.8)	275 (4.7)!				
	10 (2.1)	258 (5.9)!	44 (3.8)	266 (2.3)	45 (3.7)	267 (2.3)				
Massachusetts	11 (2.1)	271 (4.1)	61 (3.1)	272 (1.6)	28 (3.0)	273 (2.9)				
Michigan	14 (2.3)	266 (4.9)	48 (3.7)	270 (2.6)	39 (3.6)	263 (2.5)				
Minnesota	18 (3.0)	277 (2.3)	41 (3.9)	281 (2.0)	41 (3.5)	284 (1.7)				
Mississippi	6 (2.3)	254 (5.6)!	34 (4.1)	246 (2.2)	60 (4.2)	245 (1.8)				
Missouri	14 (2.6)	267 (2.6)	42 (3.8)	272 (1.7)	44 (4.2)	271 (1.4)				
Nebraska	11 (2.6)	279 (4.2)!	64 (4.2)	275 (1.4)	25 (3.5)	282 (2.5)				
New Hampshire	7 (1.2)	280 (4.0)	55 (3.6)	277 (1.4)	38 (3.6)					
New Jersey	6 (1.8)	272 (5.6)!	65 (3.9)	277 (2.3)		278 (1.7)				
New Mexico	20 (2.6)	254 (2.5)	55 (3.0)		28 (3.8)	259 (3.8)				
New York	8 (1.7)	258 (8.1)!		260 (1.4)	26 (2.9)	261 (1.5)				
North Carolina	6 (1.3)	, ,	71 (3.7)	272 (2.1)	20 (3.1)	250 (5.6)				
North Dakota	19 (3.1)	253 (4.4)! 285 (1.9)	42 (3.7)	257 (2.1)	52 (3.5)	258 (1.8)				
Ohio	• •	` '	37 (4.0)	282 (2.0)	44 (4.9)	282 (1.6)				
Oklahoma	9 (1.8)	270 (4.1)	65 (5.1)	268 (1.5)	26 (4.8)	271 (4.4)				
	17 (2.6)	270 (2.8)	46 (3.5)	267 (1.7)	37 (3.4)	267 (2.7)				
Pennsylvania	8 (2.0)	267 (3.8)!	68 (3.2)	271 (1.9)	24 (2.9)	271 (2.7)				
Rhode Island	8 (0.4)	246 (2.6)	49 (1.0)	266 (1.1)	43 (0.9)	267 (1.5)				
South Carolina	8 (1.7)	253 (5.4)!	33 (2.8)	260 (2.4)	59 (2.9)	262 (1.6)				
Tennessee	8 (1.9)	248 (5.1)!	32 (3.6)	261 (2.4)	60 (3.9)	258 (2.0)				
Texas	10 (2.2)	265 (3.4)!	52 (3.6)	263 (2.0)	38 (3.4)	266 (2.5)				
Jtah	19 (2.0)	272 (2.4)	53 (2.2)	275 (1.3)	28 (1.9)	272 (1.3)				
/irginia	12 (2.3)	262 (3.7)	50 (3.1)	269 (1.5)	38 (2.9)	267 (1.7)				
West Virginia	10 (2.4)	258 (3.1)!	50 (4.2)	257 (1.4)	40 (3.8)					
Wisconsin	10 (2.5)	280 (5.7)!	59 (5.1)	278 (2.4)		261 (1.7)				
Nyoming	17 (2.5)	276 (1.7)	59 (3.4)	276 (2.4) 276 (1.2)	32 (4.6)	278 (1.8)				
ERRITORIES	(2.0)	210 (1.1)	Ja (3.4)	210 (1.2)	24 (3.2)	269 (1.8)				
Suam	4 (0.3)	*** (***)	68 (0.9)	233 (1.5)	28 (0.9)	237 (1.8)				
/irgin Islands	27 (0.8)	218 (2.4)	42 (1.2)	218 (1.7)	31 (0.9)	228 (1.4)				



### TABLE A.35 | Teachers' Reports on the Amount of Mathematics Homework Assigned Each Day

					Grade 4	1 - 1992				
	No	ne	15 M	nutes	30 Mi	nutes	45 Mir	nutes	An Hour	or More
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	
NATION Northeast Southeast Central West	6 (1.4) 2 (2.0) 4 (1.1) 13 (4.4) 5 (2.5)	220 (2.7)! *** (***) *** (***) 226 (3.9)! *** (***)	53 (2.1) 50 (6.2) 41 (3.0) 53 (3.8) 65 (3.6)	220 (1.5) 224 (4.7) 208 (2.8) 224 (2.2) 222 (2.6)	36 (2.6) 44 (5.7) 50 (3.5) 28 (7.0) 24 (3.3)	215 (1.8) 220 (3.1) 208 (2.8) 224 (4.2)! 210 (4.2)	4 (0.9) 3 (1.4) 3 (1.2) 4 (1.9) 4 (2.4)	200 (4.7)! *** (***) *** (***) 199 (4.4)!	1 (0.4) 1 (1.1) 1 (0.9) 1 (0.9) 1 (0.9)	*** (***) *** (***) *** (***) *** (***)
STATES Alabama Arizona Arkansas California Colorado Connecticut	1 (0.3) 8 (1.6) 9 (2.0) 4 (1.2) 11 (1.7) 6 (2.4)	211 (4.3)! 213 (3.4)! 206 (6.3)! 219 (2.7) 231 (3.6)!	37 (3.6) 60 (2.8) 54 (3.3) 46 (3.5) 53 (3.0) 51 (4.0)	207 (2.3) 216 (1.4) 209 (1.3) 212 (2.2) 222 (1.5) 231 (1.4)	54 (3.5) 28 (2.5) 33 (3.3) 42 (2.8) 30 (2.7) 36 (3.1)	209 (2.0) 210 (2.1) 209 (1.5) 205 (2.6) 219 (2.1) 226 (2.6)	5 (1.6) 3 (1.3) 4 (1.6) 6 (1.7) 5 (1.2) 6 (1.5)	205 (4.2)! 209 (8.6)! 210 (5.0)! 201 (4.7)! 207 (3.2)! 215 (7.1)!	3 (1.0) 1 (0.5) 0 (0.0) 2 (0.8) 1 (0.5) 2 (1.1)	197 (6.5); *** (***) *** (***) *** (***) *** (***)
Delaware Dist. Columbia Florida Georgia Hawaii Idaho	3 (0.4) 0 (0.0) 2 (0.8) 1 (0.4) 1 (0.4) 24 (2.4)	*** (***) *** (***) *** (***) *** (***) 220 (1.4)	55 (1.2) 17 (0.9) 41 (3.1) 47 (3.4) 24 (2.4) 58 (3.6)	216 (1.2) 190 (1.8) 214 (1.8) 216 (2.1) 209 (2.7) 221 (1.3)	41 (1.1) 60 (1.2) 47 (3.4) 46 (3.3) 60 (3.0) 17 (3.0)	219 (1.7) 194 (1.2) 212 (1.8) 212 (2.2) 216 (1.6) 219 (2.1)	0 (0.0) 18 (0.8) 7 (1.6) 5 (1.3) 12 (2.1) 0 (0.4)	184 (2.2) 209 (3.7)! 204 (5.4)! 210 (2.7)	1 (0.2) 5 (0.4) 3 (0.9) 2 (0.6) 4 (1.2) 0 (0.3)	187 (3.1) *** (***) *** (***) 208 (5.3)! *** (***)
Indiana Iowa Kentucky Louisiana Maine Maryland	8 (2.0) 18 (3.0) 8 (2.1) 1 (0.9) 5 (1.7) 0 (0.3)	219 (1.9)! 230 (1.9) 210 (3.2)! *** (***) 233 (5.8)! *** (***)	59 (3.4) 63 (4.3) 52 (3.7) 44 (3.8) 62 (3.7) 41 (3.5)	220 (1.6) 230 (1.3) 214 (1.7) 207 (1.9) 230 (1.5) 218 (2.2)	32 (3.4) 18 (2.9) 36 (3.8) 47 (3.6) 31 (3.5) 53 (3.5)	218 (2.2) 225 (1.9) 214 (1.9) 203 (2.0) 231 (1.1) 218 (2.0)	0 (0.2) 0 (0.4) 4 (1.2) 7 (1.7) 2 (0.8) 4 (1.1)	207 (6.6)! 181 (6.9)! *** (***) 211 (7.5)!	1 (0.6) 0 (0.0) 1 (0.8) 0 (0.3) 1 (0.6) 1 (0.6)	*** (***) *** (***) *** (***) *** (***) *** (***)
Massachusetts Michigan Minnesota Mississippi Missouri Nebraska	4 (1.4) 15 (2.0) 15 (2.8) 2 (0.9) 11 (2.0) 21 (3.4)	229 (5.9)! 222 (2.5) 227 (3.2) *** (***) 225 (3.6) 226 (2.4)	49 (4.2) 53 (3.6) 61 (3.6) 43 (3.4) 45 (3.0) 49 (3.6)	229 (1.7) 222 (2.3) 227 (1.4) 200 (2.2) 226 (1.8) 223 (1.8)	44 (4.0) 29 (3.3) 24 (2.9) 50 (3.4) 40 (3.4) 28 (3.4)	225 (2.4) 211 (3.8) 228 (2.3) 200 (1.7) 218 (2.4) 227 (2.6)	2 (0.6) 2 (0.8) 0 (0.3) 3 (1.3) 2 (0.8) 0 (0.2)	*** (***) *** (***) 200 (4.8)! *** (***)	1 (0.7) 1 (0.5) 0 (0.0) 2 (1.1) 2 (1.1) 2 (0.9)	*** (***) *** (***) *** (***) *** (***) *** (***)
New Hampshire New Jersey New Mexico New York North Carolina North Dakota	8 (1.7) 0 (0.0) 9 (2.1) 1 (0.5) 2 (0.8) 10 (2.5)	229 (3.9)! *** (***) 210 (3.6)! *** (***) 230 (1.9)!	61 (3.3) 44 (4.2) 45 (3.7) 41 (3.5) 44 (2.8) 47 (4.3)	229 (1.5) 232 (2.1) 214 (2.0) 222 (2.1) 213 (1.7) 227 (1.4)	29 (3.2) 52 (4.3) 42 (3.3) 51 (3.6) 51 (2.9) 40 (3.8)	230 (2.0) 224 (2.5) 210 (2.2) 214 (1.9) 211 (1.3) 229 (1.5)	1 (1.2) 3 (1.0) 3 (1.1) 6 (1.5) 2 (0.8) 2 (1.0)	222 (9.2)! *** (***) 216 (6.0)! *** (***)	1 (0.4) 1 (0.4) 1 (0.3) 2 (0.6) 1 (0.7) 0 (0.5)	*** (***) *** (***) *** (***) *** (***) *** (***)
Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee	3 (0.9) 16 (2.6) 1 (0.4) 2 (0.9) 1 (0.5) 6 (1.6)	226 (6.6)! 219 (2.2) *** (***) *** (***) 208 (4.4)!	60 (3.5) 45 (3.6) 53 (3.6) 52 (3.4) 48 (3.6) 35 (3.2)	220 (1.5) 222 (1.5) 225 (1.7) 214 (1.9) 211 (1.4) 212 (2.2)	36 (3.3) 33 (3.3) 44 (3.6) 41 (3.3) 48 (3.9) 49 (3.0)	213 (1.8) 217 (1.7) 221 (2.2) 214 (2.6) 212 (1.7) 209 (1.7)	1 (0.8) 5 (1.5) 2 (0.8) 3 (1.1) 2 (0.5) 7 (1.7)	213 (2.7)! *** (***) 217(11.0)! *** (***) 212 (3.2)!	0 (0.2) 1 (0.8) 0 (0.3) 1 (0.7) 2 (0.7) 3 (1.0)	*** (***) *** (***) *** (***) *** (***) 198 (5.3)
Texas Utah Virginia West Virginia Wisconsin Wyoming	7 (2.3) 18 (2.6) 0 (0.4) 12 (1.9) 10 (2.4) 23 (2.9)	217 (4.3)! 219 (2.2) *** (***) 211 (3.1) 235 (2.3)! 223 (1.9)	52 (3.6) 54 (2.9) 51 (2.7) 60 (3.2) 57 (3.5) 58 (3.5)	220 (2.0) 223 (1.3) 221 (1.7) 213 (1.5) 230 (1.5) 225 (1.2)	35 (2.9) 25 (3.0) 46 (2.9) 28 (3.6) 32 (3.0) 17 (2.6)	217 (2.6) 225 (2.0) 219 (2.4) 215 (1.7) 224 (2.0) 225 (1.8)	4 (1.0) 2 (0.8) 3 (0.9) 0 (0.2) 1 (0.4) 2 (0.8)	198 (5.8)! *** (***) 209 (5.3)! *** (***) *** (***)	3 (0.8) 0 (0.0) 0 (0.0) 0 (0.2) 0 (0.0) 0 (0.0)	201 (7.6) *** (***) *** (***) *** (***) *** (***)
TERRITORY Guam	1 (0.1)	*** (***)	28 (1.1)	187 (1.6)	56 (1.0)	193 (1.2)	9 (0.5)	195 (2.5)	6 (0.7)	195 (3.1)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



### TABLE A.35 |

### Teachers' Reports on the Amount of Mathematics Homework Assigned Each Day (continued)

			Grade 8 - 1992								
	No	ne	15 Mi	nutes	30 Mi	nutes	45 Mi	nutes	An Hour	or More	
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	
NATION	3 (0.7)	232 (4.1)!	29 (2.1)	262 (1.8)	48 (2.6)	267 (1.5)	15 (2.0)	282 (3.8)	4 (0.9)	286 (5.4)!	
Northeast	1 (0.5)	*** (***)	29 (5.0)	264 (5.4)!	59 (6.2)	264 (3.6)	9 (4.7)	306 (7.8)!	2 (0.8)	*** (***)	
Southeast	3 (1.5)	*** /***	27 (3.7)	253 (2.2)	51 (5.7)	262 (1.3)	14 (4.6)	272 (7.9)!	4 (1.6)	282 (6.8)!	
Central	2 (1.9)	*** /***	36 (5.9)	267 (2.8)!	· · · · · ·		, ,	, ,	, ,	202 (0.0)!	
West	1 : :	*** }***{		: :	43 (4.6)	278 (3.1)	15 (3.5)	288 (5.9)!	3 (1.7)		
STATES	4 (1.5)	( )	25 (2.7)	261 (3.7)	43 (3.6)	267 (3.0)	22 (3.2)	277 (4.9)	6 (2.2)	290 (8.1)!	
Alabama	2/44	049 /7 4)1	04 (0.0) -	0.40 (0.0)	50 (0.0) >	054 (0.0)	40 (0.7)	004 (0.4)	\		
Arizona	3 (1.1)	248 (7.4)!	24 (3.9) <		56 (3.2)>	251 (2.6)	13 (2.7)	264 (6.1)!	4 (1.5)	262(17.6)!	
	5 (2.0)	258 (5.0)!	32 (2.8)	254 (2.1)	47 (3.3)	265 (2.1)	12 (2.0)	280 (3.3)	5 (1.3)	286 (7.8)!	
Arkansas	4 (1.4)	237 (6.4)!	30 (3.0)	251 (2.5)	51 (2.9)	257 (1.7)	13 (1.7)	264 (4.7)	2 (0.7)	*** (***)	
California	2 (0.6)	*** (***)	29 (2.7)	253 (2.5)	50 (2.9)	260 (2.5)	13 (1.9)	283 (3.7)	6 (1.6)	275 (5.5)!	
Colorado	2 (0.7)	*** (***)	25 (2.8) <	265 (2.7)	53 (3.1)	271 (1.7)	15 (2.0)	278 (3.9)	5 (1.1)	290 (4.5)!	
Connecticut	1 (0.2)	*** (***)	26 (2.9)	260 (2.6)	55 (2.8)	276 (1.7)	15 (2.1)	286 (7.5)	4 (1.0)	291 (5.2)!	
Delaware	0 (0.4)	*** /***)	00 (0.0) (	050 (4.7)	54 (4.0)			• • •	, ,		
Dist. Columbia	2 (0.4)	\ \ \	29 (0.9) **	` '	51 (1.0)*	264 (1.2)	12 (0.9)	279 (3.4)	, , , , , , , , , , , , , , , , , , , ,	287 (2.7)	
	0 (0.1) «	` '	21 (1.0) «	, ,	, , , , , , , , , , , , , , , , , , ,	228 (1.5)	, ,	246 (2.1)	10 (0.6)>>		
Florida	4 (1.0)	233 (5.9)!	30 (2.7)	251 (2.3)	49 (2.9)	261 (2.0)	11 (1.7)	276 (4.4)	6 (1.3)	280 (6.3)!	
Georgia	4 (0.8)	233 (4.5)	31 (2.8)	250 (2.3)	49 (3.1)	260 (1.8)	13 (1.7)	274 (3.6)	2 (0.6)	*** (***)	
Hawaii	3 (0.4)	*** (***)	19 (0.7)	242 (2.0)	50 (0.9)	257 (0.9)	19 (0.7)	265 (1.7)	9 (0.6)	283 (2.8)	
Idaho	6 (1.0)	252 (3.8)	33 (2.1) <<	269 (1.5)	47 (2.7)	278 (1.1)>	, ,	284 (3.4)	1 (0.2)	*** (***)	
Indiana		*** (***)	, ,	` '	1 1			` '			
	1 (0.7)	( )	33 (2.7)	262 (1.5)	55 (2.5)	270 (2.0)	9 (1.4)	292 (4.9)	2 (0.8)	*** (***)	
lowa	2 (0.9)	*** (***)	28 (3.4)	275 (2.1)	58 (3.8)	283 (1.4)	11 (2.5)	301 (5.4)!	1 (1.0)	*** (***)	
Kentucky	3 (0.8)	229 (4.9)!	33 (3.5)	254 (2.0)	46 (3.1)	265 (1.7)	13 (2.6)	275 (4.6)	5 (1.4)	289 (5.9)!	
Louisiana	2 (0.9)	*** (***)	38 (3.5)	250 (2.1)	52 (3.6) >	250 (2.5)	7 (1.3)	252 (8.2)	2 (0.8)	*** (***)	
Maine <sup>1</sup>	1 (0.6)	*** (***)	26 (3.3)	270 (2.0)	60 (3.4)	280 (1.6)	10 (2.1)	291 (3.1)!	2 (0.8)	*** }***{	
Maryland	0 (0.2)	*** (***)	30 (2.7)	252 (2.6)	57 (2.6) >	268 (2.1)	11 (1.7)	290 (4.0)	2 (0.9)	*** }***{	
Massachusetts <sup>1</sup>	'	*** (***)				. ,					
	1 (0.3)	*** (***)	15 (2.3)	261 (3.6)	58 (3.2)	270 (1.8)	20 (2.4)	288 (3.9)	6 (1.7)	277 (4.6)!	
Michigan	1 (0.4)	*** (***)	29 (3.0) <	264 (2.4)	49 (3.4)	267 (2.7)	15 (2.8)	275 (5.9)	7 (1.2)>	263 (5.0)	
Minnesota	2 (1.0)	*** (***)	27 (3.9) <	276 (2.3)	57 (3.7) >	281 (1.5)>	11 (2.5)	295 (4.3)!	2 (0.8)	*** (***)	
Mississippi <sup>1</sup>	3 (1.5)	*** (***)	31 (3.4)	241 (2.7)	49 (3.7)	246 (2.0)	11 (2.2)	257 (5.1)	6 (2.0)	251 (8.9)!	
Missouri <sup>1</sup>	3 (1.0)	245 (8.3)!	27 (3.1)	264 (1.9)	52 (3.9)	270 (1.6)	14 (2.3)	287 (4.0)	4 (0.9)	295 (5.3)!	
Nebraska	1 (0.3)	*** (***)	34 (3.1)	268 (2.4)	50 (3.6)	279 (1.4)	13 (2.6)	295 (3.6)!>		*** (***)	
Now Hampshire					, ,				2 (0.0)	( )	
New Hampshire	1 (0.8)	*** (***)	26 (3.1)	267 (1.6)	60 (2.8)	278 (1.5)	11 (1.5)	297 (3.9)	2 (0.9)	*** (***)	
New Jersey	0 (0.2)	**** (****)	25 (3.3)	267 (3.5)	55 (3.4)	274 (2.5)	15 (2.4)	278 (5.5)	4 (1.6)	246 (9.3)!	
New Mexico	3 (0.8)	233 (3.8)!	33 (3.0)	252 (1.8)	44 (2.6)	261 (1.2) >	17 (2.3)	267 (2.5)	3 (0.6) <	299 (4.3)!	
New York	0 (0.5)	*** (***)	26 (3.2) <	259 (3.8)	59 (2.9)	266 (3.3)	11 (1.9)	279 (5.7)	3 (0.9)	*** (***)	
North Carolina	3 (0.7)	226 (6.5)!	31 (2.9)	247 (2.2)	50 (3.3)	260 (1.9)	15 (2.3)	273 (4.2)	2 (0.6)	*** (***)	
North Dakota	2 (0.9)	*** (***)	20 (2.9) «	278 (1.9)	60 (3.7)	283 (1.3)	15 (2.2)	285 (4.0)	3 (0.8)	*** (***)	
Ohio		*** (***)				• •			, ,		
Oklahoma	2 (0.7)	\ ,	31 (4.7)	264 (4.6)	53 (4.3)	268 (2.1)	11 (1.7)	284 (6.1)	3 (0.8)	296 (6.5)!	
_	4 (1.2)	244 (6.7)!	24 (3.5)	261 (2.2)	50 (3.3)	269 (1.7)>	, ,	275 (3.0)	6 (1.7)	276 (8.9)!	
Pennsylvania	0 (0.1)	**** (****)	33 (3.1)	259 (2.4)	60 (2.9)>	274 (2.0)	6 (1.0)	298 (4.3)>	1 (0.5)	*** (***)	
Rhode Island	2 (0.2)	*** (***)	18 (0.8)≪	247 (1.9)	59 (1.1) >>	266 (1.0)>	15 (0.8) <	279 (2.4)	6 (0.4) >>	288 (2.1)	
South Carolina¹	2 (0.5)	*** (***)	38 (3.1)	249 (1.9)	50 (3.4)	263 (1.9)	9 (1.5)	287 (5.5)	·1 (0.4)	*** (***)	
Tennessee <sup>1</sup>	1 (0.5)	*** (***)	29 (3.5)	254 (2.4)	55 (3.5)	257 (1.8)	11 (2.2)	275 (3.8)!	3 (0.9)	279 (9.3)!	
Texas	2 (0.6)	004 (4.0)	, ,	` '	, ,	• •	` '		` '	• •	
Utah <sup>1</sup>	3 (0.6)	231 (4.2)	32 (3.3) <	1 1	48 (3.0)	265 (2.3)	13 (2.0)	277 (3.9)	5 (1.1)	299 (6.3)!	
	2 (0.5)	**** (****)	29 (2.3)	264 (1.9)	52 (2.4)	277 (1.3)	14 (1.7)	283 (2.4)	2 (0.8)	295 (3.3)!	
Virginia	2 (0.8)	233 (4.5)!	32 (2.6)	253 (1.6)	53 (2.6) >	271 (1.6)	9 (1.2)	295 (3.7)	3 (0.8)	298(11.7)!	
West Virginia	5 (1.1)	236 (2.7)!	< 52 (3.1)	253 (1.1)	39 (3.2)	267 (2.2)	4 (1.1)	280 (6.4)!	1 (0.4)	***`(***)	
Wisconsin	1 (0.5)	*** (***)	34 (3.9)	271 (2.1)	57 (4.3)	281 (2.2)	7 (1.7)	290 (6.2)!	1 (0.5)	*** (***)	
Wyoming	2 (1.3)	*** (***)	42 (2.7)	271 (1.3)	43 (2.8)	277 (1.2)	11 (1.8)	282 (2.4)	2 (1.1)	*** (***)	
ERRITORIES	_ ()	` '	( )	()	.5 (2.5)	( /	()	232 (2.4)	2 (1.1)	ι ,	
Guam	3 (0.3) <	*** (***)	32 (0.9) <<	228 (1.9)	38 (1.1)	234 (1.5)	7 (0.8)	254 (4.8)	19 (1.1)»	246 (2.0)	
Virgin Islands	1 (0.2) <		19 (0.8) «						18 (1.1)	246 (2.0)	
	1 (0.2)**	( )	19 (0.0) "	216 (1.5)	46 (1.2) >>	219 (1.7)	20 (0.9)<	232 (2.1)>	14 (0.9)>>	218 (4.1)	

<sup>1</sup>Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. "The value for 1992 was significantly lower than the value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.



### TABLE A.36 | Students' Reports on the Amount of Time Spent on Mathematics Homework Each Day

					Grade (	4 - 1992				
	No	ne	15 M	inutes	1	nutes	45 Mi	nutes	An Hour	or More
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency								
NATION	7 (0.7)	221 (2.4)	39 (1.1)	220 (1.2)	29 (0.8)	221 (1.1)	12 (0.5)	217 (1.6)	12 (0.7)	204 (1.8)
Northeast	3 (0.5)	*** (***)	45 (3.5)	226 (3.0)	30 (2.7)	229 (3.1)	12 (1.2)	216 (3.9)	11 (1.4)	205 (4.6)
Southeast	5 (0.6)	198 (4.2)	37 (2.0)	211 (2.2)	30 (0.8)	214 (2.4)	12 (1.0)	209 (2.4)	17 (1.6)	199 (3.0)
Central	11 (1.3)	229 (3.5)	36 (1.9)	224 (2.8)	26 (1.5)	223 (2.3)	15 (0.8)	222 (2.9)	12 (1.8)	210 (3.6)
West	8 (1.8)	225 (3.7)!	41 (1.7)	219 (2.2)	30 (1.4)	220 (1.4)	10 (0.9)	217 (3.6)	11 (0.9)	203 (3.0)
STATES										
Alabama	4 (0.4)	201 (4.9)	36 (1.2)	210 (2.2)	28 (0.8)	211 (1.9)	13 (0.7)	207 (2.5)	19 (0.8)	198 (1.7)
Arizona	9 (0.9)	218 (2.9)	39 (1.1)	218 (1.2)	· 28 (1.0)	215 (1.3)	12 (0.7)	210 (2.4)	12 (0.8)	204 (2.7)
Arkansas	7 (0.8)	212 (3.2)	34 (1.1)	211 (1.3)	27 (0.9)	213 (1.7)	15 (0.8)	207 (1.9)	16 (0.9)	199 (1.9)
California	5 (0.6)	209 (5.3)	40 (1.1)	211 (2.1)	29 (1.0)	210 (1.9)	14 (0.8)	207 (2.8)	13 (0.7)	196 (2.8)
Colorado	9 (0.7)	224 (2.5)	36 (1.0)	223 (1.3)	27 (1.0)	223 (1.3)	13 (0.5)	220 (1.9)	15 (0.8)	210 (1.5)
Connecticut	4 (0.5)	228 (5.2)	45 (1.4)	231 (1.5)	29 (1.2)	226 (1.5)	13 (0.7)	221 (2.3)	9 (0.7)	209 (2.5)
Delaware	5 (0.8)	211 (4.3)	46 (1.2)	218 (1.2)	28 (1.1)	223 (1.3)	10 (0.7)	213 (1.9)	11 (0.5)	205 (3.1)
Dist. Columbia	3 (0.3)	176 (3.6)	38 (1.2)	192 (1.1)	27 (1.2)	199 (1.4)	12 (0.7)	194 (2.3)	19 (0.8)	183 (1.6)
Florida	4 (0.6)	207 (3.7)	41 (1.3)	216 (2.0)	29 (1.1)	214 (1.6)	13 (0.7)	211 (2.7)	13 (0.7)	201 (2.4)
Georgia	4 (0.5)	220 (4.2)	42 (1.2)	215.(1.8)	28 (0.8)	219 (1.6)	12 (0.7)	213 (2.3)	14 (0.8)	204 (1.9)
Hawaii	2 (0.4)	193 (6.5)	32 (1.1)	211 (2.1)	27 (1.0)	220 (1.6)	17 (0.8)	219 (1.6)	21 (0.9)	209 (1.7)
Idaho	16 (1.0)	228 (1.3)	36 (1.1)	223 (1.4)	25 (0.9)	219 (1.2)	11 (O.7)	218 (1.9)	11 (0.8)	209 (2.4)
Indiana	8 (0.7)	, ,	37 (1.2)	220 (1.4)	30 (0.9)	223 (1.2)	13 (0.8)	218 (1.8)	13 (0.7)	207 (1.5)
lowa	, ,	232 (3.1)	, ,	, ,	, ,			, , ,	, ,	, ,
Kentucky	11 (0.9)	234 (2.2)	36 (1.0)	233 (1.6)	29 (0.9)	228 (1.3)	12 (0.7)	229 (2.0) 214 (1.9)	12 (0.8)	218 (2.0)
Louisiana	7 (0.7) 4 (0.6)	216 (3.2)	35 (1.1)	217 (1.5) 206 (1.6)	29 (0.9) 24 (0.8)	216 (1.4) 206 (1.6)	13 (0.9) 11 (0.7)	203 (2.3)	16 (0.9) 14 (0.9)	205 (1.6) 191 (2.1)
Maine	1 ' '	209 (5.7)	46 (1.3) 38 (1.2)	235 (1.4)	30 (1.2)	231 (1.4)	13 (0.7)	231 (2.3)	11 (0.8)	220 (2.9)
Maryland	8 (1.2) 3 (0.3)	230 (2.5) 198 (6.6)	45 (1.2)	233 (1.4)	27 (1.0)	222 (1.7)	12 (0.7)	213 (2.9)	13 (0.6)	200 (2.9)
•	3 (0.3)	130 (0.0)		` '	` '	` '	, ,		, ,	, ,
Massachusetts	4 (0.6)	224 (5.2)	45 (1.3)	230 (1.4)	30 (1.0)	226 (1.5)	12 (0.8)	221 (2.1)	10 (0.6)	212 (2.4)
Michigan	9 (0.8)	229 (3.6)	37 (1.4)	221 (2.2)	26 (1.0)	223 (1.8)	13 (0.6)	218 (2.1)	15 (0.9)	203 (2.5)
Minnesota	12 (1.0)	235 (2.5)	37 (1.4)	230 (1.3)	28 (1.1)	229 (1.4)	12 (0.7)	224 (2.5)	12 (1.0)	217 (2.2)
Mississippi	4 (0.4)	195 (4.5)	38 (1.3)	201 (1.5)	27 (0.9)	204 (1.5)	13 (0.7)	203 (2.3)	18 (0.9)	194 (1.6)
Missouri	10 (1.1)	230 (3.2)	36 (1.1)	224 (1.4)	29 (1.1)	222 (1.6)	12 (0.7)	220 (2.0)	13 (0.8)	208 (2.2)
Nebraska	15 (1.3)	234 (2.1)	33 (1.4)	227 (1.9)	27 (1.0)	224 (1.7)	13 (0.8)	222 (1.8)	12 (0.9)	213 (2.4)
New Hampshire	5 (0.8)	231 (3.0)	41 (1.5)	233 (1.5)	30 (1.0)	229 (1.4)	12 (0.7)	227 (2.6)	11 (0.9)	217 (1.9)
New Jersey	2 (0.3)	*** (***)	50 (1.4)	230 (1.6)	27 (1.0)	228 (1.9)	11 (0.7)	223 (2.6)	10 (0.7)	212 (2.7)
New Mexico	8 (0.9)	216 (3.1)	33 (1.5)	215 (1.9)	28 (1.0)	214 (1.9)	15 (0.8)	212 (2.7)	16 (0.7)	202 (2.5)
New York	4 (0.6)	227 (4.8)	43 (1.7)	221 (1.6)	27 (1.0)	220 (1.6)	13 (1.0)	211 (2.8)	13 (0.9)	205 (2.8)
North Carolina	4 (0.8)	210 (5.6)!	40 (1.2)	215 (1.3)	28 (0.8)	217 (1.6)	13 (0.7)	209 (1.9)	14 (0.8)	198 (1.9)
North Dakota	10 (0.9)	239 (2.3)	34 (1.2)	230 (1.2)	29 (1.0)	228 (1.3)	14 (0.8)	228 (1.5)	12 (1.0)	214 (2.2)
Ohio	5 (0.6)	222 (3.7)	40 (0.9)	220 (1.8)	29 (0.9)	222 (1.2)	12 (0.7)	217 (1.9)	14 (0.9)	205 (2.2)
Oklahoma	13 (0.8)	228 (2.0)	32 (1.2)	220 (1.8)	25 (0.9) 26 (0.9)	221 (1.5)	14 (0.6)	217 (1.3)	15 (1.0)	211 (1.8)
Pennsylvania	2 (0.4)	215 (5.4)	50 (1.6)	228 (1.7)	28 (1.1)	224 (1.5)	10 (0.7)	215 (2.2)	10 (0.7)	207 (2.2)
Rhode Island	4 (0.5)	199 (4.3)	47 (1.4)	219 (1.7)	28 (1.1)	214 (2.0)	10 (0.7)	215 (2.2)	12 (0.8)	203 (2.7)
South Carolina	3 (0.3)	204 (6.0)	47 (1.3)	213 (1.4)	25 (1.1)	217 (1.5)	12 (0.6)	208 (2.5)	13 (0.8)	199 (1.8)
Tennessee	4 (0.5)	210 (3.9)	34 (1.1)	211 (1.8)	32 (1.0)	213 (1.5)	14 (0.8)	209 (2.1)	16 (0.8)	203 (1.9)
Teves		` '		, ,	` '		` '	, ,		
Texas Utah	7 (0.9)	217 (3.5)	39 (1.3)	221 (1.6)	28 (1.1)	217 (1.7)	13 (0.8)	216 (2.3)	13 (0.9)	209 (2.2)
	13 (1.1)	227 (2.0)	39 (1.1)	227 (1.2)	25 (1.1)	221 (1.6)	11 (0.7)	220 (2.1)	12 (0.7)	214 (2.3)
Virginia West Virginia	3 (0.4)	216 (5.3)	43 (1.5)	223 (1.4)	29 (1.0)	223 (1.9)	12 (0.6)	217 (2.7)	13 (0.8)	208 (2.0)
West Virginia Wisconsin	8 (0.6)	222 (2.9)	35 (1.3)	217 (1.5)	29 (0.9)	215 (1.2)	12 (0.7)	211 (1.8)	15 (0.8)	204 (1.7)
Wyoming	7 (0.7)	231 (2.9)	38 (1.2)	230 (1.3)	28 (1.0)	229 (1.6)	14 (0.7)	230 (1.8)	13 (0.7)	216 (2.1)
TERRITORY	14 (1.0)	231 (1.6)	36 (1.2)	226 (1.3)	25 (0.9)	224 (1.2)	13 (0.8)	223 (1.9)	12 (0.8)	215 (2.2)
Guam	4 (0.5)	470 /4 01	24 (4 2)	100 (4.5)	07 (4.0)	100 /4 71	44 /0.0\	100 (0.0)	21 /4 0\	195 (0.0)
- Jain	4 (0.5)	178 (4.8)	34 (1.3)	192 (1.5)	27 (1.2)	199 (1.7)	14 (0.8)	192 (2.3)	21 (1.0)	185 (2.2)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



TABLE A.36

# Students' Reports on the Amount of Time Spent on Mathematics Homework Each Day (continued)

_					Grade 8	1992				_
	No	ne	15 Mi	nutes	30 Mi	nutes	45 Mil	nutes	An Hour	or More
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency								
NATION	8 (0.4)	253 (2.4)	28 (0.8)	268 (1.4)	35 (0.7)	268 (1.3)	16 (0.6)	269 (1.7)	13 (0.7)	265 (2.0)
Northeast	7 (0.9)	255 (5.9)	33 (2.5)	267 (3.6)	36 (1.5)	271 (4.5)	15 (1.3)	276 (3.6)	8 (1.3)	265 (6.3)
Southeast	9 (1.1)	245 (4.1)	25 (0.9)	261 (3.0)	34 (1.4)	261 (1.9)	17 (0.9)	260 (2.8)	14 (1.4)	254 (2.9)
Central	6 (0.7)	261 (5.2)	32 (1.5)	278 (2.6)	38 (1.4)	272 (2.8)	15 (1.5)	274 (3.2)	10 (0.8)	270 (3.2)
West	9 (0.8)	255 (4.2)	22 (1.5)	266 (2.1)	33 (1.0)	269 (2.3)	17 (1.0)	269 (4.3)	18 (1.6)	270 (3.5)
STATES	, ,	,	` ,	\/	( /		()		,	2.0 (0.0)
Alabama	8 (0.8)	246 (2.7)	26 (1.2)	254 (2.1)	33 (1.0)	253 (2.0)	16 (0.9)	251 (2.7)	16 (0.9)	246 (2.8)
Arizona	9 (0.9)	259 (3.0)	26 (1.4)	266 (1.6) >	, ,	264 (1.6)	18 (0.8)	268 (2.0)	15 (1.7)	264 (2.5)
Arkansas	9 (0.9)	250 (2.3)	30 (0.9)	259 (1.5)	30 (1.1)	257 (1.6)	17 (0.7)	256 (2.5)	14 (0.9)	249 (2.4)
California	7 (0.6)	249 (3.1)	25 (1.3)	258 (2.2)	38 (1.1)	263 (2.0)	16 (1.0)	263 (2.6)	13 (0.8)	265 (3.2)
Colorado	8 (0.6)	258 (3.3)	26 (1.0)	274 (1.7)	34 (1.1)>	272 (1.5)	17 (0.8)	276 (1.7)>		269 (2.1)
Connecticut	5 (0.7)	254 (4.1)	33 (1.1)	275 (1.6)	40 (1.0)	273 (1.3)	13 (0.8)	283 (2.1) >		264 (4.0)
Dolowara	` `	` `			, ,		• •	, ,	` '	' '
Delaware Dist. Columbla	7 (0.6)	248 (2.9)	36 (1.4)	263 (1.7)	35 (1.1)	265 (1.4)	14 (0.8)	262 (2.9)	8 (0.7)	259 (3.1)
	10 (0.8)	225 (3.3)	27 (0.9)	237 (1.5)	32 (1.0)	237 (1.5)	16 (1.0)	234 (1.8)	15 (0.8)	231 (2.2)
Florida	10 (1.0)	250 (2.6)	28 (1.2)	261 (2.1)	32 (0.9) .	260 (1.8)	15 (0.7)	260 (2.2)	15 (0.8) >>	260 (2.9)
Georgia	8 (0.6)	246 (3.0)	26 (1.1)	259 (1.8)	35 (1.0)>	259 (1.5)	16 (1.0)	263 (2.1)	14 (0.8)	260 (2.4)
Hawaii	7 (0.6)	239 (3.1)	24 (0.8)	250 (1.6)	33 (1.0)	260 (1.3)>	► 16 (1.0)	264 (1.9)	19 (0.9)	262 (1.9)>
Idaho	12 (0.7)	272 (2.0)	24 (0.7) <	277 (1.2)	31 (1.0)	274 (1.2)	17 (0.8)>	275 (1.7)	15 (0.8)	273 (2.3)
Indiana	7 (0.8)	260 (3.5)	31 (1.3)	270 (1.4)	36 (1.3)	271 (1.6)	16 (0.8)	269 (2.3)	10 (0.7)	270 (2.8)
lowa	6 (0.6)	271 (5.1)	32 (1.2)	285 (1.3)	36 (1.1)	283 (1.2)	16 (0.9)	285 (1.9)>		279 (2.0)
Kentucky	11 (0.7)	251 (2.4)	28 (1.2)	261 (1.6)	31 (1.1)	265 (1.4)>				260 (2.3)
Louisiana	8 (0.7)	252 (3.0)	30 (1.2)	254 (2.0)	32 (1.1)	250 (2.4)		264 (2.3) >	, ,	1 1
Maine <sup>1</sup>	5 (0.6)	260 (5.1)	29 (1.3)	276 (1.6)	· · · ·	1 1	15 (0.8)	248 (2.3) 279 (2.1)	15 (0.8)	239 (2.7)
Maryland	5 (0.8)	251 (4.3)	34 (1.3)	263 (1.8)	40 (1.0) 40 (1.2)	281 (1.2) 269 (1.6)	17 (0.8) 12 (0.8)	268 (2.7)	9 (0.7) 8 (0.8)	278 (3.2) 256 (3.3)
Massachusetts¹		` '	, ,	, ,	• •			, ,	, ,	
Michigan	4 (0.5)	248 (3.8)	30 (1.4)	270 (1.6)	42 (1.1)	273 (1.4)	16 (0.9)	278 (1.8)	9 (0.9)	273 (3.7)
Minnesota	8 (0.7)	257 (3.0)	25 (1.1)	270 (2.1)	36 (1.1)>	269 (1.9)	17 (0.8)	269 (2.4)	14 (0.9)	259 (2.5)
_	7 (0.8)	277 (2.8)	28 (1.4) <	283 (1.4)>	1 1	284 (1.3)	· · · · · ·	281 (2.2)	12 (1.0)	278 (2.4)
Mississippi1	7 (1.0)	241 (3.3)	26 (1.2)	248 (1.7)	34 (1.2)	248 (1.4)	17 (1.0)	241 (2.3)	17 (1.0)	243 (2.6)
Missouri¹	7 (0.5)	261 (2.9)	27 (1.3)	273 (1.7)	36 (1.0)	271 (1.6)	16 (0.8)	272 (2.1)	14 (1.0)	268 (2.5)
Nebraska	6 (0.6)	271 (3.1)	25 (1.4)	276 (2.0)	37 (1.1)	280 (1.5)	20 (1.0)>	276 (2.2)	12 (1.1)	275 (2.2)
New Hampshire	4 (0.6)	264 (4.3)	34 (1.0)	276 (1.4)	39 (1.2)	279 (1.4)	15 (0.7)	281 (2.1)	8 (0.7)	279 (2.9)
New Jersey	4 (0.5)	258 (5.2)	34 (1.6)	275 (1.5)	38 (1.3)	273 (1.8)	15 (1.1)	273 (3.0)	9 (0.6)	258 (3.4)
New Mexico	11 (0.9)	253 (2.4)	25 (1.0)	261 (1.3)	33 (1.0)>	257 (1.0)	17 (0.9)	261 (1.8)	15 (1.0)	263 (2.2)
New York	4 (0.5)	248 (6.6)	42 (1.9)	268 (1.7)	36 (1.3)	270 (2.4)	11 (1.1)	265 (3.5)	7 (1.0)	247 (5.7)
North Carolina	7 (0.7)	244 (2.8)	29 (1.3)	257 (1.7)>		262 (1.5)>	, ,	261 (2.1)>		254 (2.7)
North Dakota	6 (0.6) <	283 (2.8)	24 (1.4) <	287 (2.0)	36 (1.4)	283 (1.3)	20 (1.3)>	281 (2.0)	14 (1.1)	277 (2.2)
Ohio	8 (0.8)	248 (2.3) <	31 (2.2)	270 (1.8)	36 (1.3)	272 (1.7)	16 (1.4)	269 (2.3)	10 (0.7)	
Oklahoma	9 (0.9)	263 (2.9)	22 (1.2)	269 (1.7)	30 (1.1)	268 (1.7)	20 (1.0)	270 (1.8)	19 (1.1)	262 (4.5) 264 (2.3)
Pennsylvania	5 (0.6)	251 (3.6)	37 (1.4)	271 (1.5)	38 (1.1)	273 (1.8)	14 (0.7)>	275 (1.8)		
Rhode Island	4 (0.4) <	247 (3.3)	34 (1.5)	266 (1.6)>		: :	3 7	3 7	, ,	261 (4.4)
South Carolina¹	7 (0.6)	254 (2.4)	32 (1.0)	260 (1.5)	36 (0.9)	266 (1.5)	13 (0.8)	267 (2.4)	9 (0.7)	268 (2.8)
Tennessee¹	7 (1.0)	251 (3.7)	26 (1.2)	260 (1.3)	36 (0.9)	262 (1.4) 260 (1.5)	14 (0.7) 18 (0.9)	259 (2.7) 260 (2.5)	11 (0.7) 13 (0.9)	259 (2.3)   251 (3.2)
Texas	• •	, ,		• •	, ,	` '	` '	, ,	, ,	1
Utah <sup>1</sup>	9 (0.8)	252 (2.9)	23 (1.1)	264 (1.7)	30 (0.9)	265 (1.7)	19 (1.0)	268 (2.4)	, ,	265 (2.6)
Virginia	10 (0.7)	269 (1.9)	28 (1.0)	277 (1.1)	32 (0.9)	272 (1.2)	16 (0.7)	275 (1.7)	14 (0.8)	275 (2.1)
West Virginia	6 (0.5)	247 (3.2)	29 (1.1)	267 (1.5)	39 (1.0)	269 (1.3)	15 (0.9)	273 (2.5)	11 (0.8)	268 (3.1)
Wisconsin	15 (1.3)	253 (1.9)	27 (1.1)	262 (1.1)>		260 (1.3)	16 (0.9)	258 (2.0)	10 (0.8)	254 (2.0)
Wyoming	8 (0.8)	271 (2.6)	33 (1.4)	280 (1.7)	36 (1.2)	279 (1.7)	14 (0.8)	279 (2.4)	9 (0.7)	266 (3.3)
TERRITORIES	11 (0.9)	267 (2.3)	30 (1.1)	279 (1.2)	31 (0.9)	275 (1.3)	16 (0.9)	273 (1.5)	13 (0.8)	268 (2.1)
Guam	10 (0.0)	226 (2.0)	20 (4.0)	000 (0.0)	00 (4.4)	000 (0.0)	44 (4.5)	040 (0.0)	05 /4 0\	007 (0.5)
Virgin Islands	10 (0.9) 8 (0.8)	226 (3.9) 221 (2.8)	22 (1.0) 32 (1.1)	233 (2.0)	29 (1.4)	239 (2.0)	14 (1.0)	240 (3.0)	25 (1.2)	237 (2.0)
	0 (0.0)	22   (2.0)	32 (1.1)	222 (1.7)	29 (1.3)	227 (1.6)	14 (1.1)	221 (2.8)	18 (1.0)	216 (1.8)

<sup>1</sup>Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

\*\*The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. \*\*The value for 1992 was significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.



TABLE A.37 | Teachers' Reports on the Instructional Emphasis Placed on Numbers and Operations

	Grade 4 - 1992										
	Heavy E	mphasis	Moderate	Emphasis	Little or No	Emphasis					
PUBLIC SCHOOLS	Percentage of Students	Numbers and Operations Proficiency	Percentage of Students	Numbers and Operations Proficiency	Percentage of Students	Numbers and Operations Proficiency					
NATION	92 (1.3)	214 (1.3)	8 (1.3)	215 (3.1)	0 (0.1)	*** (***)					
Northeast	86 (3.4)	218 (3.4)	14 (3.4)	220 (4.5)!	0 (0.0)	*** (***)					
Southeast	92 (2.9)	204 (2.0)	7 (2.9)	209 (4.6)!	0 (0.4)	*** (***)					
Central	, 95 (1.4)	221 (2.2)	5 (1.4)	*** (***)	0 (0.0)	*** (***)					
West STATES	93 (2.2)	214 (2.6)	7 (2.2)	214 (8.5)!	0 (0.0)	*** (***)					
Alabama	05 (4.0)	000 (4.9)	E (4.9)	040 (6.4)!	0 (0.0)	*** /***\					
Arizona	95 (1.8)	203 (1.8)	5 (1.8)	213 (6.1)!		*** /***/					
	88 (2.1)	211 (1.4)	11 (2.0)	206 (3.7)	1 (0.5)	*** /***/					
Arkansas	95 (1.5)	206 (1.2)	5 (1.5)	205 (5.4)!	0 (0.0)	*** (***)					
California	87 (1.9)	205 (1.8)	12 (1.9)	204 (5.6)	0 (0.2)	*** (***)					
Colorado Connecticut	86 (2.4) 88 (2.0)	216 (1.3) 224 (1.7)	14 (2.4) 12 (2.0)	215 (3.2) 226 (3.9)	0 (0.0) 1 (0.4)	*** (***)					
Delaware	89 (0.5)	215 (1.1)	11 (0.5)	214 (1.7)	0 (0.0)	*** (***)					
Dist. Columbia	84 (0.7)	190 (1.1)	15 (0.7)	184 (2.2)	1 (0.1)	*** }***{					
Florida	88 (2.3)	209 (1.5)	12 (2.3)	207 (3.0)!	0 (0.0)	*** /***					
Georgia	93 (1.3)	210 (1.3)	7 (1.3)	215 (5.5)!	0 (0.0)	*** }***{					
Hawaii	89 (1.7)	210 (1.5)	11 (1.7)	214 (4.6)	0 (0.0)	*** /***					
Idaho	90 (2.2)	216 (1.6)	10 (2.2)	217 (3.4)!	0 (0.0)	*** (***)					
Indiana	89 (2.3)	214 (1.4)	11 (2.3)	221 (3.2)!	0 (0.0)	*** (***)					
lowa	91 (2.1)	227 (1.4)	9 (2.1)	231 (4.6)!	0 (0.0)	*** (***)					
Kentucky	91 (1.9)	211 (1.2)	9 (1.9)	213 (5.9)!	o (o.o)	*** (***)					
Louisiana	90 (1.7)	200 (1.8)	10 (1.6)	196 (2.8)	0 (0.3)	*** (***)					
Maine	81 (2.4)	226 (1.5)	18 (2.5)	231 (3.2)	1 (0.5)	*** (***)					
Maryland	86 (2.0)	214 (1.7)	13 (1.9)	225 (3.1)	1 (0.6)	*** (***)					
Massachusetts	90 (2.6)	225 (1.5)	10 (2.6)	227 (4.0)!	0 (0.0)	*** (***)					
Michigan	88 (2.3)	216 (2.1)	12 (2.3)	214 (5.5)	0 (0.4)	*** (***)					
Minnesota	90 (2.1)	224 (1.4)	10 (2.1)	232 (3.2)!	0 (0.0)	*** (***)					
Mississippi	96 (1.3)	198 (1.6)	4 (1.3)	199 (4.2)!	0 (0.0)	*** (***)					
Missouri	91 (1.8)	218 (1.7)	9 (1.8)	219 (5.0)!	0 (0.0)	*** (***)					
Nebraska	91 (2.1)	220 (1.6)	9 (2.1)	236 (5.5)!	0 (0.0)	*** (***)					
New Hampshire	92 (1.7)	226 (1.3)	8 (1.5)	227 (5.0)!	1 (0.7)	*** (***)					
New Jersey	90 (2.7)	225 (1.5)	10 (2.6)	237 (5.7)!	1 (0.5)	\ <i>,</i>					
New Mexico	92 (2.3)	207 (1.5)	8 (2.3)	207 (8.3)!	0 (0.0)	( )					
New York	91 (2.0)	215 (1.5)	9 (2.0)	217 (5.0)!	0 (0.0)	( )					
North Carolina North Dakota	91 (1.7) 89 (2.9)	209 (1.2) 225 (0.9)	9 (1.5) 11 (2.9)	205 (3.6) 222 (2.8)!	0 (0.4) 0 (0.0)	*** (***)					
Ohio	92 (1.7)	214 (1.3)	8 (1.6)	211 (4.4)!	0 (0.2)	*** (***)					
Okiahoma	92 (1.7) 94 (1.5)	214 (1.3) 217 (1.2)	6 (1.5)	216 (4.3)!	0 (0.2)	*** /***					
Pennsylvania	94 (1.3) 95 (1.3)		5 (1.3) 5 (1.3)	218 (5.8)!	0 (0.0)	***					
Rhode Island	, , ,	221 (1.7) 212 (1.8)	4 (1.1)	208 (7.4)!	1 (0.5)	*** /***					
South Carolina	95 (1.2) 93 (1.7)	212 (1.8) 208 (1.2)	7 (1.7)	205 (7.4)!	0 (0.0)	*** /***(					
Tennessee	93 (1.7) 93 (1.9)	208 (1.2) 207 (1.6)	7 (1.7) 7 (1.9)	210 (4.4)!	0 (0.0)	*** (***)					
Texas	89 (1.7)	214 (1.5)	11 (1.7)	220 (4.4)	0 (0.0)	*** (***)					
Utah	94 (1.4)	220 (1.2)	6 (1.4)	218 (5.6)!	0 (0.0)	*** (***)					
Virginia	95 (1.1)	217 (1.7)	4 (1.0)	201 (5.6)!	0 (0.3)	*** (***)					
West Virginia	93 (1.9)	210 (1.3)	7 (1.9)	203 (3.7)!	0 (0.0)	*** (***)					
Wisconsin	87 (2.3)	225 (1.5)	13 (2.3)	232 (3.9)	0 (0.0)	*** (***)					
Wyoming FERRITORY	94 (1.6)	222 (1.2)	6 (1.6)	216 (3.7)!	0 (0.0)	*** (***)					
Guam	86 (0.9)	190 (1.2)	12 (0.8)	174 (3.9)	2 (0.3)	*** (***)					

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



# Teachers' Reports on the Instructional Emphasis Placed on Numbers and Operations (continued)

	Grade 8 - 1992									
Ì	Heavy E	mphasis	Moderate	Emphasis	Little or No	<b>Emphasis</b>				
PUBLIC SCHOOLS	Percentage of Students	Numbers and Operations Proficiency	Percentage of Students	Numbers and Operations Proficiency	Percentage of Students	Numbers and Operations Proficiency				
NATION	76 (1.9)	269 (1.2)	21 (1.8)	276 (2.0)	4 (0.8)	283 (6.9)!				
Northeast	79 (4.3)	272 (3.8)	18 (3.9)	264 (2.8)!	4 (1.3)	*** (***)				
Southeast	83 (4.6)	265 (1.4)	14 (3.7)	269 (4.3)!	3 (1.9)	267(14. <del>9</del> )!				
Central	69 (3.0)	275 (2.8)	26 (3.7)	285 (4.6)	5 (2.0)	*** (***)				
West	72 (3.0)	268 (1.9)	25 (2.8)	278 (2.7)	3 (1.0)	*** /***/				
STATES		, ,	_		S ()	\ /				
Alabama	79 (2.7)	257 (1.4)	20 (2.7)	264 (3.6)	1 (0.6)	*** (***)				
Arizona	79 (2.3)	266 (1.5)	19 (2.1)	275 (3.0)	2 (0.8)	*** /***				
Arkansas	78 (3.1)	259 (1.5)	19 (2.8)	273 (3.0)	3 (0.9)	283 (4.1)!				
California	67 (2.7)	262 (2.1)	28 (2.5)	266 (3.2)						
Colorado	69 (3.0)	271 (1.4)	28 (2.9)		5 (1.5)	289 (4.4)!				
Connecticut	64 (3.2)	272 (1.6)		276 (2.2)	3 (0.8)	297 (8.3)!				
	O4 (3.2)	212 (1.0)	29 (2.9)	285 (2.6)	7 (1.5)	300 (7.3)!				
Delaware	71 (0.8)	262 (1.1)	23 (0.7)	275 (1.8)	6 (0.5)	295 (3.3)				
Dist. Columbia	59 (1.2)	240 (1.2)	36 (1.1)	249 (1.9)	5 (0.6)	243 (5.8)				
Florida	76 (2.8)	262 (1.4)	21 (2.6)	269 (2.9)	3 (0.7)	290 (8.1)!				
Georgia	80 (3.0)	262 (1.2)	18 (3.0)	271 (3.6)	2 (0.7)	*** (***)				
Hawaii	64 (0.8)	257 (O.9)	31 (0.8)	269 (1.9)	5 (0.3)	282 (4.5)				
Idaho	69 (2.4)	274 (0.9)	29 (2.4)	282 (1.9)	2 (1.0)	*** (***)				
indiana				202 (1.0)	2 (1.0)	• •				
lowa	80 (2.8)	270 (1.6)	18 (2.4)	279 (3.8)	2 (0.8)	*** (***)				
	73 (3.7)	284 (1.2)	22 (3.1)	286 (2.0)	5 (1.6)	307 (5.4)!				
Kentucky	77 (2.8)	267 (1.4)	21 (2.6)	268 (2.5)	3 (0.9)	285 (9.6)!				
Louisiana	81 (3.1)	256 (1.6)	17 (3.1)	264 (4.5)	2 (0.8)	*** (***)				
Maine	67 (3.2)	278 (1.5)	30 (3.2)	283 (2.1)	3 (1.1)	285 (5.8)!				
Maryland	57 (3.7)	262 (1.9)	36 (3.0)	274 (2.6)	7 (1.3)	305 (2.9)				
Massachusetts	77 (2.6)	274 (1.4)	10 (0.0)	000 (0.0)		, ,				
Michigan	63 (3.8)		19 (2.3)	280 (3.0)	4 (1.2)	302 (6.8)!				
Minnesota	, ,	267 (1.7)	33 (3.6)	272 (3.5)	4 (1.1)	292 (8.5)!				
Mississippi	74 (3.1)	279 (1.3)	21 (2.9)	288 (3.1)	5 (1.5)	303 (6.8)!				
Missouri	86 (2.7)	255 (1.3)	14 (2.7)	261 (4.1)	0 (0.0)	*** (***)				
Nebraska	68 (3.4)	270 (1.4)	30 (3.3)	277 (1.9)	2 (0.7)	*** (***)				
ITCDIASKA	71 (4.1)	278 (1.2)	27 (3.8)	281 (2.6)	3 (1.0)	*** (***)				
New Hampshire	71 (2.9)	277 (1.1)	26 (2.5)	285 (2.3)	3 (1.1)	301 (5.2)!				
New Jersey	65 (3.7)	271 (2.2)	32 (3.5)	283 (4.1)	3 (1.0)	, ,				
New Mexico	75 (2.5)	262 (1.1)	23 (2.5)	263 (2.7)	, , ,					
New York	72 (3.3)	267 (2.5)	25 (2.3)		3 (0.6)	301 (6.5)!				
North Carolina	72 (2.7)	257 (1.6)		276 (3.5)	4 (1.0)	297(11.2)!				
North Dakota	73 (3.5)	285 (1.4)	24 (2.7)	266 (2.5)	4 (0.8)	295 (6.2)!				
	, ,	203 (1.4)	22 (3.3)	288 (1.8)	5 (1.0)	290 (3.1)				
Ohio	76 (3.1)	272 (2.0)	22 (3.2)	275 (3.8)	2 (0.5)	*** (***)				
Oklahoma	82 (3.0)	269 (1.5)	17 (2.9)	280 (3.0)	1 (0.5)	*** (***)				
Pennsylvania	72 (2.6)	270 (1.5)	25 (2.4)	278 (3.6)	3 (0.8)	306 (5.2)!				
Rhode Island	65 (0.9)	265 (1.3)	26 (0.8)	274 (2.1)	9 (0.7)	286 (3.2)				
South Carolina	70 (2.7)	261 (1.3)	25 (2.5)	274 (2.4)	5 (1.2)	295 (7.0)!				
Tennessee	81 (3.0)	262 (1.6)	18 (2.9)	271 (2.9)	1 (0.5)	255 (7.0): *** (***)				
Texas						\ /				
Utah	70 (2.7)	264 (1.7)	26 (2.6)	270 (2.9)	4 (1.0)	295 (5.9)!				
Virginia	82 (1.5)	274 (1.0)	17 (1.4)	283 (2.3)	2 (0.5)	*** (***)				
West Virginia	79 (2.4)	270 (1.2)	18 (2.3)	276 (3.4)	3 (0.6)	312 (4.3)				
Wisconsin	83 (2.6)	261 (1.3)	16 (2.5)	271 (3.1)	1 (0.3)	*** (***)				
	66 (3.9)	279 (1.8)	31 (3.7)	281 (2.1)	3 (1.0)	293 (7.3)!				
Wyoming	73 (2.9)	274 (1.1)	22 (2.4)	281 (2.1)	5 (1.4)	290 (9.0)!				
TERRITORIES					• •					
Guam	86 (0.7)	240 (1.3)	14 (0.7)	243 (4.6)	0 (0.0)	*** (***)				
Virgin Islands	71 (1.1)	228 (1.0)	24 (1.0)	228 (1.6)	5 (0.5)	265 (4.4)				



### TABLE A.38 | Teachers' Reports on the Instructional Emphasis Placed on Measurement

NATION Northeast Southeast Central West STATES Alabama Arizona Arkansas California Colorado Connecticut Delaware Dist. Columbia Florida Georgia Hawaii Idaho Indiana Iowa Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	Manua E			Grade 4 - 1992										
NATION Northeast Southeast Central West STATES Alabama Arizona Arkansas California Colorado Connecticut Delaware Dist. Columbia Florida Georgia Hawaii Idaho Indiana Iowa Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	Heavy E	mphasis	Moderate	Emphasis	Little or No	Emphasis								
Northeast Southeast Central West STATES Alabama Arizona Arkansas California Colorado Connecticut Delaware Dist. Columbia Florida Georgia Hawaii Idaho Indiana Iowa Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	rcentage of Students	Measurement Proficiency	Percentage of Students	Measurement Proficiency	Percentage of Students	Measurement Proficiency								
Northeast Southeast Central West STATES Alabama Arizona Arkansas California Colorado Connecticut Delaware Dist. Columbia Florida Georgia Hawaii Idaho Indiana Iowa Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	14 (1.7)	217 (2.6)	80 (1.9)	223 (1.5)	6 (1.2)	221 (3.8)!								
Southeast Central West STATES Alabama Arizona Arkansas California Colorado Connecticut Delaware Dist. Columbia Fiorida Georgia Hawaii Idaho Indiana Iowa Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	11 (2.4)	212 (6.2)!	81 (3.8)	227 (3.3)	8 (3.3)	*** (***)								
Central West STATES Alabama Arizona Arkansas California Colorado Connecticut Delaware Dist. Columbia Florida Georgia Hawaii Idaho Indiana Iowa Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	23 (4.6)	215 (2.7)!	75 (4.7)	213 (2.9)	1 (0.7)	*** (***)								
West STATES Alabama Arizona Arkansas California Colorado Connecticut Delaware Dist. Columbia Florida Georgia Hawaii Idaho Indiana Iowa Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	6 (2.1)	238 (7.7)!	88 (1.9)	231 (2.8)	6 (2.1)	*** (***)								
Alabama Arizona Arkansas California Colorado Connecticut Delaware Dist. Columbia Florida Georgia Hawaii Idaho Indiana Iowa Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	14 (3.3)	214 (4.7)!	77 (3.5)	224 (2.7)	10 (3.1)	216 (5.7)!								
Alabama Arizona Arkansas California Colorado Connecticut Delaware Dist. Columbia Florida Georgia Hawaii Idaho Indiana Iowa Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	14 (3.3)	214 (4.7)	11 (5.5)	224 (2.1)	10 (5.1)	210 (011).								
Arizona Arkansas California Colorado Connecticut Delaware Dist. Columbia Florida Georgia Hawaii Idaho Indiana Iowa Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	00 (0.0)	207 (2.8)	75 (3.3)	216 (2.1)	1 (0.8)	*** /***\								
Arkansas California Colorado Connecticut Delaware Dist. Columbia Florida Georgia Hawaii Idaho Indiana Iowa Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	23 (3.2)			219 (1.3)	8 (1.4)	221 (3.7)								
California Colorado Connecticut  Delaware Dist. Columbia Florida Georgia Hawaii Idaho Indiana Iowa Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	8 (1.6)	219 (5.1)	83 (1.8)	• •	3 (1.2)	205 (5.9)!								
Colorado Connecticut  Delaware Dist. Columbia Florida Georgia Hawaii Idaho Indiana Iowa Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	12 (1.7)	209 (4.7)	84 (2.0)	217 (1.7)										
Connecticut  Delaware Dist. Columbia Florida Georgia Hawaii Idaho Indiana Iowa Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	13 (2.2)	212 (4.4)	80 (2.5)	211 (2.0)	8 (1.7)	195 (6.7)! *** (***)								
Delaware Dist. Columbia Florida Georgia Hawaii Idaho Indiana Iowa Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	16 (2.3)	229 (3.4)	82 (2.2)	225 (1.3)	2 (0.7)	\/								
Dist. Columbia Florida Georgia Hawaii Idaho Indiana Iowa Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	14 (2.6)	227 (4.0)	81 (2.5)	233 (1.4)	5 (1.3)	223 (5.1)!								
Florida Georgia Hawaii Idaho Indiana Iowa Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	11 (0.6)	229 (2.8)	80 (0.8)	220 (1.1)	8 (0.6)	215 (4.4)								
Florida Georgia Hawaii Idaho Indiana Iowa Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	35 (0.9)	193 (1.6)	63 (1.0)	192 (1.2)	2 (0.6)	*** (***)								
Hawaii Idaho Indiana Iowa Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	19 (2.4)	224 (2.9)	78 (2.6)	218 (1.8)	3 (0.9)	194 (8.5)!								
Idaho Indiana Iowa Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	24 (2.8)	219 (3.5)	74 (2.9)	218 (1.9)	1 (0.6)	*** (***)								
Indiana Iowa Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	17 (2.4)	221 (2.9)	81 (2.4)	215 (1.8)	2 (0.6)	*** (***)								
Iowa Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	8 (1.8)	230 (2.9)!	87 (2.2)	227 (1.2)	4 (1.3)	227 (6.2)!								
Iowa Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	12 (2.5)	226 (4.6)!	82 (2.8)	226 (1.5)	6 (1.6)	231 (3.8)!								
Kentucky Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	11 (2.2)	233 (3.0)!	85 (2.7)	235 (1.5)	4 (1.1)	230 (6.1)!								
Louisiana Maine Maryland Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	21 (3.3)	217 (2.4)	77 (3.4)	219 (1.5)	2 (1.1)	*** (***)								
Maine Maryland  Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota  Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	24 (3.0)	201 (3.9)	74 (3.0)	211 (1.9)	2 (0.8)	191(12.5)!								
Maryland  Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	13 (2.3)	242 (3.2)	84 (2.6)	235 (1.5)	3 (1.2)	*** (***)								
Massachusetts Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	18 (2.3)	226 (4.2)	78 (2.5)	221 (2.0)	4 (1.2)	224 (7.8)!								
Michigan Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	15 (2.3)	227 (3.7)	81 (2.2)	231 (1.7)	3 (1.2)	220 (5.5)!								
Minnesota Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas		3 - 1	76 (3.1)	226 (2.1)	6 (1.9)	221 (6.6)!								
Mississippi Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	18 (2.8)	224 (4.9)		233 (1.6)	7 (1.2)	224 (5.0)								
Missouri Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	6 (1.7)	244 (4.2)!	87 (1.9)		2 (0.8)	*** (***)								
Nebraska New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	24 (2.9)	204 (2.5)	74 (3.0)	206 (1.9)		*** (***)								
New Hampshire New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	23 (3.0)	226 (4.6)	75 (2.9)	228 (1.9)	2 (0.7)	226 (4.1)!								
New Jersey New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	15 (2.9)	238 (3.8)	77 (3.4)	229 (1.9)	7 (1.8)	, ,								
New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	9 (2.0)	236 (4.0)!	85 (2.4)	235 (1.5)	6 (1.6)	231 (3.8)!								
New York North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	18 (2.9)	231 (4.4)	81 (3.0)	232 (2.1)	1 (0.6)	, ,								
North Carolina North Dakota Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	13 (2.4)	216 (3.6)	83 (2.7)	218 (1.8)	4 (1.1)	208 (3.8)!								
North Dakota  Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	23 (2.4)	222 (3.6)	72 (2.5)	221 (1.9)	5 (1.1)	211 (8.7)!								
Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	18 (2.3)	214 (2.9)	78 (2.7)	217 (1.5)	4 (1.3)	215 (5.4)!								
Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	9 (2.4)	237 (3.2)!	82 (3.0)	234 (1.4)	9 (2.4)	235 (4.3)!								
Oklahoma Pennsylvania Rhode Island South Carolina Tennessee Texas	12 (2.0)	215 (3.8)	82 (2.5)	224 (1.5)	6 (1.9)	218 (9.7)!								
Rhode Island South Carolina Tennessee Texas	9 (2.2)	221 (4.0)!	84 (2.6)	225 (1.3)	7 (1.6)	226 (3.0)!								
Rhode Island South Carolina Tennessee Texas	13 (1.7)	232 (4.0)	81 (2.1)	228 (1.7)	6 (1.6)	230 (6.9)!								
South Carolina Tennessee Texas	8 (1.8)	216 (5.9)!	82 (2.3)	219 (2.0)	9 (1.8)	211 (3.8)!								
Tennessee Texas	38 (3.5)	219 (2.1)	61 (3.5)	218 (2.0)	0 (0.2)	*** (***)								
Texas	17 (2.2)	217 (3.4)	80 (2.4)	213 (1.4)	3 (0.9)	212 (7.5)!								
	31 (3.0)	219 (2.3)	68 (2.9)	223 (2.2)	1 (0.7)	*** (***)								
Utah	16 (2.2)	232 (2.7)	80 (2.6)	229 (1.1)	3 (1.1)	235 (6.1)!								
	16 (2.2)	224 (3.8)	77 (2.5)	224 (1.6)	7 (1.5)	220 (5.8)!								
	21 (2.4)	228 (3.1)	77 (2.9) 75 (2.9)	221 (1.4)	4 (1.3)	220 (4.8)!								
	14 (2.4)	234 (3.4)	81 (2.9)	234 (1.4)	5 (1.7)	232 (3.9)!								
Wyoming	12 (2.2)	230 (3.4)	83 (2.4)	230 (1.3)	5 (1.6)	227 (6.5)!								
TERRITORY Guam	24 (1.0)	194 (1.9)	66 (1.0)	192 (1.7)	10 (0.8)	181 (3.1)								

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



TABLE A.38 | Teachers' Reports on the Instructional Emphasis Placed on Measurement (continued)

1	Grade 8 - 1992											
Ì	Heavy E	mphasis	Moderate	Emphasis	Little or No	Emphasis						
PUBLIC SCHOOLS	Percentage of Students	Measurement Proficiency	Percentage of Students	Measurement Proficiency	Percentage of Students	Measurement Proficiency						
NATION	16 (2.0)	255 (3.0)	69 (2.1)	265 (4.0)	45 (4.6)	004 (0.4)						
Northeast	22 (5.5)	, ,	, , ,	265 (1.9)	15 (1.6)	281 (3.4)						
Southeast		263 (4.6)!	62 (4.8)	264 (5.1)	16 (3.3)	277 (9.8)!						
	17 (4.2)	244 (4.3)!	74 (4.9)	<b>2</b> 60 (2.5)	9 (2.6)	262 (5.4)!						
Central	14 (3.8)	261 (3.6)!	62 (5.2)	273 (3.9)	25 (4.5)	282 (5.1)						
West	13 (2.6)	254 (4.5)!	74 (3.1)	266 (3.6)	13 (3.0)	2 <b>9</b> 2 (6.9)!						
STATES				` ,								
Alabama	30 (3.8)	232 (5.5)	58 (3.5)	247 (2.3)	12 (2.1)	269 (7.1)						
Arizona	15 (2.4)	263 (4.1)	62 (2.9) >>	261 (2.7)	23 (2.5) <<							
Arkansas	15 (2.6)	245 (4.2)	66 (3.5)			271 (4.6)						
California		· · · · · · · · · · · · · · · · · · ·		250 (1.6)	19 (2.2)	264 (4.5)						
Colorado	14 (2.1)	248 (4.7)	70 (2.4) >>	257 (2.5)>	16 (1.8) <	282 (6.1)						
	10 (1.7)	277 (4.0)>	66 (2.8) >	269 (1.9)>	25 (2.6)≪	279 (3.8)						
Connecticut	16 (2.0)<	265 (4.4)	68 (2.6) <b>&gt;&gt;</b>	272 (2.1)>	17 (2.0)<	293 (6.6)						
Delaware	13 (0.6) <<	248 (3.1)	74 (0.7)>>		, ,							
Dist. Columbia	, ,			255 (1.5)	13 (0.7) <	289 (3.6)						
Florida	18 (0.9) <<	222 (4.7)	76 (0.9) <b>»</b>	222 (1.6)	6 (0.8)≪	261(11.0)						
	15 (2.3)	243 (5.4)	68 (2.9)>>	254 (1.9)	17 (2.3) <	270 (5.2)						
Georgia	28 (2.7)	243 (2.5)	62 (2.7) >	254 (2.8)	11 (1.9) <	271 (6.3)						
Hawaii	12 (0.7)	251 (2.7)	75 (0.9) >>	252 (1.5)	12 (0.6) <b>«</b>	276 (3.5)						
Idaho	10 (1.2)	271 (5.0)	71 (2.4)>>	276 (1.9)>>	19 (2.6) «	281 (2.5)						
Indiana	• •		• •	2.0 (1.0)	10 (2.0)	201 (2.5)						
	10 (2.1)	264 (4.0)	72 (3.1) >>	266 (2.1)	18 (2.1)≪	282 (6.0)						
lowa	11 (2.6)	285 (4.6)!	70 (3.5)>	284 (1.9)>>	19 (2.9)	301 (3.7)>						
Kentucky	20 (3.2)	259 (3.7)	65 (3.5)>	259 (1.7)»	15 (2.6) <	264 (4.9)						
Louisiana	12 (1.9)	242 (5.5)	71 (3.8)>	241 (2.3)	17 (3.3) <	249 (5.2)!						
Maine <sup>1</sup>	20 (3.7)	278 (3.6)	72 (3.6)	280 (2.3)		, ,						
Maryland	15 (2.3)	247 (6.2)	• • • • • • • • • • • • • • • • • • • •		8 (1.5)	300 (4.6)						
·	15 (2.5)	247 (0.2)	64 (2.5)>>	259 (2.2)>	21 (2.4) <<	286 (5.6)						
Massachusetts1	14 (2.0)	278 (4.6)	63 (3.1)	264 (2.1)	23 (2.6)	280 (4.0)						
Michigan	20 (3.0)	262 (5.0)	65 (3.0) >	264 (2.5)	15 (2.1) <<	276 (5.9)						
Minnesota	13 (2.5)	279 (5.4)!	65 (3.5) >>									
Mississippi <sup>1</sup>	30 (3.9)	, ,		283 (2.1)>>	22 (2.9) <<	292 (3.4)*						
Missouri <sup>1</sup>		234 (3.7)	61 (3.9)	234 (2.5)	9 (2.0)	261 (7.0)!						
Nebraska	11 (2.2)	267 (4.7)!	72 (2.3)	268 (1.7)	17 (1.9)	290 (4.4)						
ITODI ASKA	7 (2.0)	265 (4.6)!	73 (2.9) >>	277 (2.0)	19 (2.7)≪	287 (4.4)>						
New Hampshire	10 (1.5) <	271 (3.2)	67 (3.2)>>	278 (2.2)>	24 (2.8)≪	000 (0.0)>						
New Jersey	19 (3.2)	254 (4.3)	67 (3.5)>>		· · · · · · · · · · · · · · · · · · ·	288 (3.0)>						
New Mexico	13 (1.7)	, ,		267 (3.0)	14 (2.6) <	292 (5.9)						
New York		261 (3.5)>	69 (2.8) >>	256 (1.7)	18 (2.5) <<	266 (4.3)						
North Carolina	8 (1.6)	255(10.4)!	70 (2.9) >>	260 (3.0)	21 (3.2)≪	272 (6.7)						
	14 (2.1)	248 (4.9)	71 (2.7) >>	251 (1.9)>>	15 (1.9)≪	272 (4.3)>						
North Dakota	15 (3.0)	287 (4.1)!	77 (3.7) <b>»</b>	283 (2.0)	8 (2.4) <<	307 (7.3)!>						
Ohio	14 (2.6)	260 (7.0)	69 (26)	005 (0.0)	40 (0.5) =	, ,						
Oklahoma		, ,	68 (3.6)»	265 (3.2)	18 (2.5) <	285 (4.7)						
Pennsylvania	17 (3.1)	271 (6.1)	67 (3.5) >	262 (2.4)	16 (2.8)	279 (4.6)>						
•	11 (2.3)	257 (7.2)!	64 (3.0)>>	267 (2.0)	25 (2.7)≪	289 (4.0)						
Rhode Island	12 (0.8)	252 (3.7)	66 (0.9)>>	259 (1.6)	22 (0.8) <<	280 (2.7)>>						
South Carolina1	40 (3.4)	248 (2.2)	52 (3.1)	256 (2.4)	8 (1.3)	302 (5.0)						
Tennessee <sup>1</sup>	23 (3.2)	248 (3.4)	66 (3.3)	252 (2.4)	11 (1.6)	271 (6.7)						
Texas	• •	, ,	• •									
Utah <sup>1</sup>	23 (3.2)	250 (3.6)	63 (3.2)	260 (2.0)>	13 (2.0)	284 (7.7)>						
	9 (1.3)	267 (4.6)	65 (2.0)	272 (1.9)	26 (1.7)	283 (2.3)						
Virginia	6 (1.4)	261 (7.0)!	65 (2.8)>>	260 (2.0)>	29 (2.6) <	277 (3.2)						
West Virginia	12 (2.0)	255 (3.9)	72 (2.9)>>	255 (1.8)	16 (2.3) «	266 (3.5)						
Wisconsin	14 (3.3)	276 (9.3)!	74 (3.5)>>	279 (2.2)>	12 (2.0) «							
Wyoming	8 (1.4)	274 (3.7)	67 (2.3)>>			287 (4.8)						
ERRITORIES	~ ( 1.7)	217 (3.1)	01 (2.3)	274 (1.3)	25 (1.6)≪	289 (2.7)>>						
Guam	25 (4.0)	242 /0.0\	64 /4 4155	000 (0.0)	44 /> 44							
Virgin Islands	25 (1.0)	242 (2.9)	64 (1.1)>>	226 (2.0)	11 (0.7)≪	214 (3.8)≪						
V. 19 11 13 18 1143	9 (0.6)≪	210 (4.8)	71 (0.8) >>	209 (1.7)	19 (0.7)	216 (3.2)						

<sup>1</sup>Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

\*\*The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. (The value for 1992 was significantly lower than the value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.

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### TABLE A.39 | Teachers' Reports on the Instructional Emphasis Placed on Geometry

	Grade 4 - 1992											
	Heavy Er	mphasis	Moderate	Emphasis	Little or No	Emphasis						
PUBLIC SCHOOLS	Percentage of Students	Geometry Proficiency	Percentage of Students	Geometry Proficiency	Percentage of Students	Geometry Proficiency						
NATION	6 (1.1)	212 (5.0)	72 (2.9)	221 (1.2)	22 (2.8)	217 (1.9)						
Northeast	4 (2.4)	*** (***)	78 (3.3)	224 (3.3)	18 (2.3)	213 (3.8)						
Southeast	12 (3.2)	210 (7.8)!	73 (4.3)	212 (2.3)	15 (4.7)	208 (3.7)!						
Central	1 (0.7)	*** (***)	66 (8.5)	228 (1.7)	33 (8.5)	218 (2.9)!						
West	6 (2.1)	211 (5.9)!	71 (4.0)	222 (2.1)	23 (3.9)	224 (3.7)!						
STATES	0 (2.1)	211 (0.0).	7 7 (4.0)	(,	20 (0.0)	22 7 (0.1.)						
Alabama	10 (2.3)	205 (3.3)!	73 (3.5)	211 (1.7)	17 (3.1)	208 (3.1)						
Arizona	2 (0.6)	*** (***)	60 (3.4)	221 (1.4)	38 (3.5)	217 (1.9)						
Arkansas	· · ·	, ,	71 (3.1)	213 (1.4)	23 (3.1)	209 (3.1)						
California	6 (2.1)	205 (3.8)!	` '	, ,	\/	· · · · · · · · · · · · · · · · · · ·						
Colorado	8 (1.6)	209 (4.3)!	69 (3.1)	215 (1.9)	23 (3.2)	208 (3.6)						
	6 (1.6)	227 (4.6)!	78 (2.6)	228 (1.1)	16 (2.3)	221 (2.4)						
Connecticut	9 (1.9)	237 (3.6)!	76 (2.4)	231 (1.7)	15 (2.1)	225 (3.4)						
Delaware	8 (0.5)	232 (3.0)	67 (1.0)	221 (1.3)	25 (0.9)	211 (1.6)						
Dist. Columbia	30 (0.7)	200 (1.3)	63 (0.8)	197 (1.2)	7 (0.7)	191 (4.1)						
Florida	7 (1.6)	219 (3.5)!	73 (3.0)	217 (1.3)	19 (2.6)	211 (3.4)						
Georgia	12 (2.5)	215 (3.8)!	76 (3.1)	217 (1.6)	12 (2.3)	209 (2.6)						
Hawaii	12 (1.8)	227 (3.4)	76 (2.2)	218 (1.4)	11 (1.8)	207 (3.5)						
Idaho	4 (1.4)	226 (3.9)!	67 (3.2)	226 (1.2)	29 (3.0)	226 (2.4)						
Indiana	3 (1.0)	*** (***)	72 (2.6)	222 (1.4)	25 (2.3)	223 (2.0)						
lowa	3 (1.2)	237 (3.3)!	60 (3.8)	229 (1.5)	38 (3.6)	229 (2.0)						
Kentucky	9 (2.1)	216 (3.8)!	75 (3.2)	215 (1.4)	16 (2.6)	210 (2.6)						
Louisiana	10 (1.9)	207 (4.4)	77 (2.5)	208 (1.7)	13 (2.4)	196 (3.7)						
Maine			78 (3.0)	237 (1.1)	14 (2.7)	231 (2.1)						
Maryland	8 (1.9) 10 (1.8)	237 (3.5)! 227 (3.9)	80 (2.3)	221 (1.6)	9 (1.6)	209 (5.6)						
Massachusetts	` '	• •		` '								
	7 (2.1)	243 (3.9)!	67 (3.1)	230 (1.6)	26 (3.3)	224 (2.4)						
Michigan	10 (2.2)	224 (4.6)!	68 (3.7)	222 (2.1)	22 (3.5)	222 (3.3)						
Minnesota	4 (1.3)	237 (6.1)!	68 (3.5)	231 (1.4)	28 (3.6)	225 (2.3)						
Mississippi	12 (2.5)	200 (3.2)!	77 (3.1)	204 (1.2)	11 (2.0)	191 (4.4)						
Missouri	10 (2.6)	223 (6.8)!	72 (3.3)	224 (1.4)	18 (2.5)	226 (2.7)						
Nebraska	4 (1.7)	248 (5.3)!	64 (3.7)	229 (1.7)	32 (3.7)	226 (1.5)						
New Hampshire	4 (0.9)	234 (6.0)!	77 (2.8)	235 (1.2)	19 (2.8)	228 (2.6)						
New Jersey	11 (2.2)	226 (4.7)!	79 (2.9)	227 (1.5)	10 (2.0)	227 (4.2)						
New Mexico	6 (1.4)	220 (7.7)!	67 (3.7)	222 (1.5)	26 (3.4)	214 (2.3)						
New York	6 (1.4)	210 (3.6)!	72 (2.8)	220 (1.3)	22 (2.6)	212 (2.5)						
North Carolina	12 (2.1)	219 (3.4)	76 (2.7)	217 (1.6)	12 (2.2)	209 (2.3)						
North Dakota	4 (1.1)	235 (4.0)!	64 (4.0)	229 (1.2)	32 (4.1)	229 (2.0)						
Ohio	5 (1.5)	215 (6.7)!	70 (3.5)	223 (1.5)	25 (3.5)	216 (2.8)						
Oklahoma	4 (1.6)	216 (4.2)!	65 (3.6)	221 (1.6)	31 (3.6)	220 (1.6)						
Pennsylvania	4 (1.2)	229 (6.0)!	77 (2.7)	224 (1.4)	19 (2.5)	218 (2.7)						
Rhode Island	2 (0.8)	*** (***)	64 (3.7)	218 (1.8)	34 (3.7)	214 (3.0)						
South Carolina	22 (2.7)	213 (2.4)	74 (2.9)	216 (1.3)	5 (1.5)	207 (7.1)!						
Tennessee	14 (2.3)	214 (2.6)	74 (2.9) 70 (3.2)	212 (1.9)	16 (2.5)	208 (2.7)						
Texas	17 (2.9)	219 (2.1)	72 (3.1)	221 (1.8)	10 (2.0)	218 (5.1)!						
Utah	9 (1.8)	232 (3.7)!	78 (2.4)	227 (1.0)	12 (2.2)	222 (2.5)						
Virginia	8 (1.9)	232 (3.7)!	70 (2.4)	223 (1.6)	21 (2.2)	214 (2.1)						
West Virginia		, ,		223 (1.6) 217 (1.3)		1. 1						
Wisconsin	8 (2.3)	221 (4.0)!	70 (3.4)	· · · · · ·	22 (3.0)	214 (2.4)						
	4 (1.0)	231 (7.0)!	69 (3.7)	230 (1.3)	27 (3.7)	224 (2.2)						
Wyoming TERRITORY	3 (1.1)	230 (4.8)!	70 (3.3)	228 (1.5)	26 (3.0)	228 (2.0)						
Guam	12 (0.8)	200 (2.0)	61 (1.1)	203 (1.3)	28 (1.0)	201 (3.0)						

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.





TABLE A.39 | Teachers' Reports on the Instructional Emphasis Placed on Geometry (continued)

	Grade 8 - 1992										
PUBLIC SCHOOLS	Heavy Er	nphasis	Moderate	Emphasis	Little or No	Emphasis					
	Percentage of Students	Geometry Proficiency	Percentage of Students	Geometry Proficiency	Percentage of Students	Geometry Proficiency					
NATION	18 (2.6)	263 (2.3)	71 (2.7)	263 (1.4)	11 (1 4)	064 /4.4\					
Northeast	21 (4.7)	265 (4.3)!			11 (1.4)	264 (4.4)					
Southeast	3 1	, , ,	69 (4.7)	264 (3.7)	10 (4.2)	256(19.8)!					
	15 (4.9)	259 (4.8)!	77 (4.5)	256 (1.9)	9 (2.9)	257 (6.4)!					
Central	18 (2.9)	267 (6.0)	69 (3.6)	270 (2.6)	13 (2.6)	275 (6.3)!					
West	17 (6.5)	261 (3.5)!	70 (7.1)	264 (2.9)	12 (2.4)	264 (5.4)!					
STATES			, ,		_ ( , ,						
Alabama	30 (4.3)	242 (4.8)	60 (4.2)	247 (2.3)	9 (1.5) <<	247 (5.1)					
Arizona	14 (2.3)	265 (2.9)	65 (2.6) >		, , , , , , , , , , , , , , , , , , ,	• • •					
Arkansas					20 (2.1) «	259 (4.0)					
California	14 (2.7)	250 (3.5)	64 (3.3)	250 (1.6)	23 (3.0)	253 (2.9)					
	16 (2.6)	264 (3.8)	67 (3.1)>	259 (2.2)	16 (1.6)	260 (4.4)					
Colorado	14 (1.8)	273 (3.0)	71 (2.3)>>	266 (1.4)	15 (1.9)≪	276 (2.9)>					
Connecticut	18 (1.9)	274 (2.5)	63 (2.0) >	265 (1.3)	19 (1.7)	275 (3.8)					
Delaware	20 (0.8)	257 (3.2)	70 (1.0)>>	256 (1.2)	11 (0.7)≪	266 (4.9)					
Dist. Columbia	24 (1.1)	236 (2.4)	67 (1.1)>>	229 (1.7)	9 (0.9)«	248 (5.6)					
Florida	13 (2.0)	259 (3.5)	66 (3.5)>			, ,					
Georgia				254 (1.1)	21 (2.8)	256 (4.1)					
Hawaii	24 (2.3)	250 (2.8)	62 (2.3)>	253 (2.0)	13 (2.0)	260 (4.4)					
	16 (0.8)	269 (2.5)	73 (0.9)>>	256 (1.6)>	11 (0.5)≪	245 (3.4)					
Idaho	12 (1.7)	275 (1.9)	64 (2.6)>	271 (1.4)	24 (2.5) <	268 (1.9)					
Indiana	14 (2.5)	269 (2.7)	71 (3.2)>	265 (1.6)	14 (2.2)≪	268 (3.9)					
lowa	21 (3.8)	279 (2.5)	66 (3.9)	276 (1.2)>							
Kentucky		• •		1 1	13 (1.7)	283 (4.6)					
Louisiana	22 (3.1)	262 (2.6)	67 (2.9) >>	257 (1.1)	11 (2.3) <	244 (3.7)!					
Maine¹	15 (2.9)	249 (5.3)	71 (3.3)>	244 (1.9)	14 (2.2)<	245 (4.0)					
<b>I</b>	20 (3.7)	276 (2.2)	65 (3.5)	275 (1.5)	15 (2.5)	267 (3.9)					
Maryland	20 (3.0)	260 (3.4)	62 (3.1) >	259 (2.1)	18 (2.1)≪	266 (5.0)					
Massachusetts1	19 (2.8)	271 (3.4)	56 (3.0)	267 (2.0)	25 (3.0)	263 (2.8)					
Michigan	21 (3.1)	261 (4.4)	64 (3.3)>	261 (2.1)	15 (3.0) <						
Minnesota		• • • • • • • • • • • • • • • • • • • •	, ,			265 (5.2)!					
Mississippi <sup>1</sup>	10 (2.1)	291 (3.9)!>>	76 (3.0) <b>»</b>	274 (1.5)	14 (2.1) <	287. (4.2)					
1.1	25 (3.3)	241 (2.8)	65 (3.7)	238 (1.6)	10 (1.9)	241 (4.5)					
Missouri¹	32 (3.2)	267 (1.7)	59 (3.3)	265 (1.6)	9 (1.4)	281 (5.1)					
Nebraska	12 (3.0)	274 (2.8)!	73 (4.1)>	274 (1.5)	15 (2.6)	275 (3.1)					
New Hampshire	18 (2.0)≪	278 (2.0)	64 (2.9)>>	271 (1.1)	18 (2.3)	275 (3.1)					
New Jersey	32 (3.6)	258 (2.6)	59 (4.0) >	, ,	9 (2.1) <						
New Mexico	21 (2.6)			267 (2.5)		279 (4.6)!					
New York	3 1	262 (2.1)	64 (3.2)>>	255 (1.1)	15 (2.2) <<	256 (2.8)					
North Carolina	35 (3.2)	269 (3.2)	60 (3.3)	258 (2.9)	4 (1.4)	231 (7.2)!					
· · · · · · · · · · · · · · · · · · ·	14 (2.4)	252 (2.4)	69 (3.0) >	253 (1.6)>	17 (2.1)<	258 (3.0)					
North Dakota	16 (2.3)	277 (1.9)	76 (3.0) <b>»</b>	276 (1.7)	8 (1.8)≪	290 (3.2)!>					
Ohio	19 (2.7)	264 (2.6)	71 (2.9)>>	262 (1.7)	10 (1.6)≪	266 (4.6)					
Oklahoma	12 (2.1)	269 (3.6)	68 (3.6)	260 (1.6)	21 (3.0)	265 (3.2)					
Pennsylvania	18 (2.8)	263 (3.7)	66 (2.7)>>	, ,							
Rhode Island				263 (1.7)	16 (2.0) <<	270 (4.5)					
South Carolina <sup>1</sup>	16 (0.9)	260 (1.8)	67 (1.1)>>	257 (1.3)	18 (0.8) <<	268 (2.4) <b>»</b>					
	40 (3.6)	252 (1.8)	53 (3.4)	256 (2.1)	7 (1.3)	286 (4.0)					
Tennessee <sup>1</sup>	29 (3.5)	258 (2.6)	58 (3.6)	251 (2.0)	13 (2.1)	249 (7.3)					
Texas	30 (3.3)	261 (3.0)	64 (3.2)>	262 (1.8)	6 (1.0)	276 (6.6)					
Utah¹	8 (1.1)	276 (3.2)	64 (2.2)	268 (1.6)	29 (2.1)	270 (1.9)					
Virginia	12 (1.6)	266 (3.6)	63 (2.6) >>	260 (1.6)							
West Virginia					25 (2.4)	263 (2.7)					
Wisconsin	10 (1.8)	263 (2.7)	68 (2.6) >>	253 (1.5)	22 (2.3) <	255 (2.7)					
1	22 (3.1)	274 (3.3)	67 (3.6)	273 (2.0)	12 (1.8)<	271 (4.6)					
Wyoming ERRITORIES	15 (2.1)	269 (2.4)	69 (2.2) >>	270 (1.0)	16 (1.4)≪	282 (2.4)>					
Guam	20 (0.9)	244 (2.8)<	54 (4.2)	242 (2.4)	06 /4 4\	007 (0.0)					
Virgin Islands		244 (2.0)	54 (1.3)	243 (2.1)>	26 (1.1)	227 (2.2)					
g 13.a1143	2 (0.4) <<	*** (***)	67 (0.7)*>	223 (1.2)<	31 (0.9)≪	218 (2.3)					

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. 
The value for 1990 at about the 95 percent certainty level. 
These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.

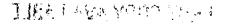




TABLE A.40 Teachers' Reports on the Instructional Emphasis Placed on Data Analysis, Statistics, and Probability

	Grade 4 - 1892										
PUBLIC SCHOOLS	Heavy E	mphasis	Moderate	Emphasis	Little or No	<b>Emphasis</b>					
	Percentage of Students	Data Analysis Proficiency	Percentage of Students	Data Analysis Proficiency	Percentage of Students	Data Analysis Proficiency					
NATION	7 (1.2)	222 (4.2)	41 (2.8)	221 (2.1)	52 (2.8)	215 (1.4)					
Northeast	6 (2.5)	*** (***)	46 (5.5)	227 (3.8)	48 (6.2)	214 (3.4)					
Southeast	7 (2.6)	224(11.2)!	44 (5.3)	212 (3.6)	49 (4.7)	205 (2.5)					
Central	1 (0.9)	*** (***)	28 (6.7)	227 (3.2)!	71 (6.5)	224 (2.3)					
West	14 (2.7)	220 (5.2)	46 (4.4)	221 (4.0)	40 (4.8)	214 (2.8)					
STATES	14 (2.1)	220 (0.2)	40 (4.4)	22. ()	,	<b>2</b> (2.5)					
Alabama	10 (1.7)	209 (4.0)	52 (3.5)	209 (2.5)	39 (3.7)	209 (2.5)					
Arizona	7 (1.4)	218 (4.6)	34 (3.0)	217 (2.0)	60 (3.0)	212 (1.5)					
Arkansas	5 (1.6)	205 (3.9)!	39 (3.2)	210 (2.4)	56 (3.3)	212 (1.5)					
California		210 (4.6)!	53 (3.9)	209 (2.3)	40 (3.9)	202 (2.4)					
Colorado	7 (1.7)		, ,	225 (2.0)	52 (3.6)	216 (1.9)					
	5 (1.3)	219 (3.9)!	43 (3.2)	``							
Connecticut	8 (1.7)	230 (4.5)!	41 (3.1)	229 (2.6)	52 (3.2)	224 (2.4)					
Delaware	5 (0.5)	235 (5.1)	33 (0.9)	227 (2.3)	62 (0.8)	215 (1.6)					
Dist. Columbia	19 (0.6)	193 (1.7)	46 (1.0)	189 (1.5)	35 (0.9)	186 (2.3)					
Florida	8 (1.8)	221 (3.6)!	37 (3.3)	215 (2.7)	55 (3.4)	214 (1.8)					
Georgia	6 (1.4)	220 (5.0)!	52 (4.2)	218 (2.3)	42 (3.7)	217 (1.7)					
Hawaii	6 (1.4)	214 (4.5)!	53 (3.1)	213 (1.9)	40 (3.2)	211 (2.2)					
Idaho	5 (1.6)	225 (3.7)!	37 (3.2)	220 (1.6)	59 (3.2)	219 (1.4)					
1	• •	, ,	, ,	` ,							
Indiana	3 (1.3)	202 (8.7)!	34 (3.3)	226 (2.1)	63 (3.4)	220 (1.4)					
lowa	4 (1.5)	231 (4.1)!	40 (3.3)	231 (1.5)	56 (3.7)	229 (1.5)					
Kentucky	11 (2.3)	222 (3.2)!	50 (3.5)	213 (1.8)	39 (3.6)	214 (2.7)					
Louisiana	14 (2.2)	206 (3.6)	45 (3.8)	206 (3.1)	42 (3.7)	202 (2.2)					
Maine	3 (1.0)	*** (***)	51 (4.1)	232 (1.5)	46 (4.3)	231 (2.0)					
Maryland	11 (1.6)	226 (4.5)	52 (3.3)	222 (2.1)	37 (3.1)	215 (3.1)					
Massachusetts	5 (2.0)	225 (4.4)!	46 (3.7)	232 (1.9)	49 (4.0)	223 (2.3)					
Michigan	, , ,	216 (6.3)!	46 (3.8)	216 (2.7)	46 (3.8)	221 (2.3)					
Minnesota	8 (1.8)	Y ! .		228 (2.8)	54 (3.2)	226 (1.5)					
Mississippi	4 (1.3)	226 (7.9)!	42 (3.0)	, ,		197 (2.1)					
. ''	8 (1.9)	195 (4.2)!	41 (3.4)	201 (2.1)	51 (3.5)						
Missouri	4 (1.4)	207 (8.1)! *** (***)	38 (3.2)	227 (2.6)	58 (3.2)	223 (1.7)					
Nebraska	3 (1.2)	*** (***)	41 (4.3)	228 (2.4)	57 (4.0)	223 (2.2)					
New Hampshire	6 (1.6)	237 (4.8)!	35 (3.1)	229 (2.1)	59 (3.3)	228 (2.0)					
New Jersey	8 (2.5)	222 (9.3)!	48 (3.8)	230 (2.2)	44 (4.3)	223 (2.4)					
New Mexico	6 (1.8)	214 (7.8)!	33 (3.5)	216 (2.0)	61 (3.2)	213 (1.8)					
New York	7 (1.9)	223 (6.8)!	57 (2.9)	222 (2.0)	36 (3.2)	218 (2.4)					
North Carolina	6 (1.2)	221 (6.0)	53 (2.8)	215 (1.6)	41 (2.8)	213 (2.0)					
North Dakota	4 (2.3)	227 (6.2)!	33 (3.1)	233 (2.9)	63 (3.7)	227 (1.2)					
Ohio	· · · · · · · · · · · · · · · · · · ·	` '	, ,	, ,	, ,	045 (4.0)					
Ohio	4 (1.3)	219 (5.9)!	43 (3.6)	223 (2.2)	53 (3.6)	215 (1.8)					
Oklahoma	5 (1.2)	220 (4.0)!	43 (3.2)	223 (1.5)	52 (3.5)	221 (2.2)					
Pennsylvania	4 (1.1)	226 (7.3)!	42 (3.9)	228 (2.3)	53 (4.1)	219 (1.8)					
Rhode Island	3 (1.0)	*** (***)	25 (2.8)	221 (3.0)	73 (2.9)	211 (2.0)					
South Carolina	7 (1.7)	220 (4.1)!	44 (3.7)	211 (2.4)	49 (3.5)	211 (2.0)					
Tennessee	5 (1.3)	202 (5.2)!	38 (3.0)	212 (2.6)	56 (2.8)	211 (1.8)					
Texas	16 (2.3)	218 (2.4)	59 (3.3)	219 (2.4)	25 (3.2)	219 (2.5)					
Utah	6 (1.3)	216 (3.3)!	39 (3.0)	223 (2.1)	55 (3.1)	222 (1.5)					
Virginia	5 (1.1)	219 (5.1)!	37 (2.7)	230 (2.9)	59 (2.9)	220 (1.8)					
West Virginia	4 (1.2)	213 (9.1)!	40 (3.5)	218 (1.7)	56 (3.7)	211 (1.7)					
Wisconsin	4 (1.1)	231 (4.5)!	40 (3.3)	232 (2.1)	54 (3.7)	227 (1.6)					
Wyoming				232 (2.1)	47 (3.4)	223 (1.4)					
TERRITORY	8 (1.8)	228 (3.1)!	45 (3.5)	223 (1.0)	41 (3.4)	223 (1.4)					
Guam	10 (0.9)	101 (2.4)	47 (4 N)	191 (17)	42 (0.9)	188 (1.5)					
- Juli	10 (0.8)	191 (2.4)	47 (1.0)	191 (1.7)	42 (U.S)	100 (1.5)					

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. In 1990, to determine the emphasis placed on Data Analysis, Statistics, and Probability, teacher responses were averaged across two topics: tables and graphs, and probability and statistics. In 1992, teachers were simply asked about the emphasis placed on Data Analysis, Statistics, and Probability. In both 1990 and 1992, at grade 4, the question specified the informal introduction of concepts. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



# Teachers' Reports on the Instructional Emphasis Placed on Data Analysis, Statistics, and Probability (continued)

	Grade 8 - 1992											
PUBLIC SCHOOLS	Heavy E	nphasis	Moderate	Emphasis	Little or No Emphasis							
	Percentage of Students	Data Analysis Proficiency	Percentage of Students	Data Analysis Proficiency	Percentage of Students	Data Analysis Proficiency						
NATION	11 (1.7)	273 (4.8)	59 (2.0) >>	268 (1.7)	30 (2.0) <<	268 (2.6)						
Northeast	17 (5.8)	273(11.1)!	57 (5.3)	271 (4.9)	27 (5.2)	• • •						
Southeast	7 (1.7)	275 (6.9)!			3 /	266 (7.4)!						
Central			64 (3.6) >	261 (2.1)	29 (2.8) <	260 (5.0)						
West	9 (2.6)	279(12.4)!	66 (3.5)>>	273 (3.5)	26 (3.9) <<	283 (4.1)>						
STATES	11 (3.2)	270 (4.9)!	53 (3.9)	269 (2.6)	36 (3.6)	266 (4.7)						
Alabama	9 (2.2)	247 (6.8)!	67 (3.2)>>	055 (0.0)	04 (0.0) 44	0.0 ()						
Arizona	11 (2.6)	272 (3.7)!>		255 (2.2)	24 (2.8) <<	242 (4.4)						
Arkansas			50 (3.7)>>	266 (2.0)	40 (3.5)≪	261 (3.4)						
California	7 (2.0)	257 (4.6)!	44 (4.0)>	257 (2.5)	49 (4.0) <	252 (2.4)						
1	10 (1.8)	255 (6.1)	64 (3.3) <b>»</b>	261 (3.0)	27 (3.1) <<	258 (3.9)						
Colorado	11 (1.8)	284 (4.5)>	57 (3.1) <b>&gt;&gt;</b>	271 (1.9)	32 (3.1) <<	272 (2.8)						
Connecticut	13 (2.4)	279 (5.8)	50 (2.6) >>	271 (2.3)	37 (3.0) <<	277 (2.9)						
Delaware	14 (0.5)	272 (3.3)	51 (0.9)>>	261 (1.7)	34 (0.8) <<	263 (2.6)						
Dist. Columbia	29 (1.1) >>	229 (4.4)>	55 (1.2)>	, ,	, ,	, ,						
Florida	10 (1.7)	273 (4.9)>		227 (1.4)>>	16 (1.1) «	248 (5.1)						
Georgia		· · · · · · · · · · · · · · · · · · ·	60 (2.5) >>	259 (1.9)	30 (2.7) <<	254 (3.6)						
Hawaii	12 (2.0)	262 (4.2)	55 (2.5) >	259 (2.4)	33 (2.5)	257 (2.7)						
1	8 (0.6)>>	272 (5.6)	45 (0.9)>>	254 (1.5)	47 (0.9) <b>«</b>	242 (2.0)						
Idaho	4 (0.9)	283 (6.8)	58 (2.9)>>	274 (1.7)	38 (2.8) «	273 (1.7)						
Indiana	5 (1.4)	281 (4.2)!	63 (3.3) <b>»</b>	274 (2.2)	32 (3.2) <<	271 (3.1)						
Iowa	8 (2.0)>	290 (4.8)!	58 (4.3)>	283 (2.2)	34 (4.4) <<	· · · · · · · · · · · · · · · · · · ·						
Kentucky	15 (2.1)	278 (4.6)	61 (3.1) >>	, ,	` '	286 (2.8)>						
Louisiana	14 (2.6)>		, ,	. , ,	24 (3.0) «	254 (3.9)						
Maine	, ,	246 (6.4)	48 (3.8)	249 (3.1)	38 (3.6) <<	247 (2.7)						
Maryland	15 (3.2) 19 (3.3) >	285 (3.5)! 267 (4.3)	61 (3.9)	282 (1.8)	24 (3.1)	279 (3.7)						
, I	• •	201 (4.3)	59 (3.5)>>	266 (2.5)	22 (2.7) <<	274 (4.9)						
Massachusetts	8 (1.6)	280 (5.8)!	41 (3.1)	275 (3.0)	51 (3.4)	272 (2.4)						
Michigan	16 (2.8) >	267 (4.8)	59 (3.1) >>	269 (2.5)	25 (3.2) <<	265 (4.0)						
Minnesota	7 (1.6)	305 (7.1)!	58 (3.3) <b>&gt;&gt;</b>	283 (1.9)	35 (3.4) <<	280 (2.3)						
Mississippi	7 (1.8)	250 (6.1)!	45 (3.6)	245 (2.8)	49 (4.0)	• •						
Missouri	10 (2.2)	272 (4.2)!	57 (3.2)			240 (2.5)						
Nebraska	7 (1.9)	282 (5.1)!	54 (4.3)»	272 (1.8) 278 (2.6)	33 (3.6) 39 (4.2) <b>≪</b>	272 (3.0) 279 (2.5)						
New Hampshire	, ,		` '		• •							
New Jersey	10 (2.1)	287 (3.6)!>	51 (3.1) >>	281 (1.7)	39 (3.4) «	280 (2.4)						
New Mexico	15 (3.0)	262 (6.4)!	62 (4.1)>>	272 (3.2)	23 (3.4) <<	273 (4.4)						
	12 (2.3)	263 (3.4)!	60 (3.0) <b>»</b>	260 (1.6)	27 (2.8) <<	253 (2.6)						
New York	14 (2.2)	286 (4.5)	70 (2.8) >>	269 (3.4)	16 (2.3) <<	248 (7.3)						
North Carolina	10 (1.9)	265 (3.5)	55 (3.2) <b>&gt;&gt;</b>	256 (1.9)	35 (3.2) <<	257 (3.0)>						
North Dakota	4 (1.9)	291 (3.5)! >	62 (3.8) >>	285 (1.6)	33 (3.2) «	287 (2.1)						
Ohio	10 (2.1)	278 (8.2)!	57 (3.7)>>	268 (2.7)	32 (3.5) «							
Oklahoma	4 (1.1)	278 (8.8)!	50 (3.4) >>	268 (2.4)	, , , , , , , , , , , , , , , , , , ,	274 (3.9)						
Pennsylvania	10 (2.3) >	280 (4.7)!		· · ·	47 (3.4) «	269 (2.2)						
Rhode Island			40 (2.8) >>	270 (2.3)	51 (3.1) «	273 (2.6)						
South Carolina	12.(0.6)>>	274 (5.0)	54 (1.2)>>	263 (1.9)	34 (1.1) «	268 (1.6) <b>»</b>						
	11 (1.8)	271 (6.1)	54 (3.2)	257 (2.1)	35 (3.2)	260 (2.7)						
Tennessee	6 (1.7)	264 (6.5)!	59 (4.0)	260 (1.7)	34 (3.7)	256 (3.7)						
Texas	21 (3.0)	269 (4.7)	61 (3.3)>>	263 (2.4)>	18 (2.2) <<	261 (4.1)						
Jtah	4 (1.0)	284 (4.3)!	51 (2.5)	274 (1.6)	45 (2.5)	277 (1.8)						
√irginia	6 (1.2)	273 (5.4)!	47 (2.7)>>	265 (2.2)	47 (2.8) «	270 (2.4)>>						
West Virginia	5 (1.5)	267 (6.7)!	50 (3.1)»	260 (2.1)								
Wisconsin	18 (2.8) >>	288 (4.1)	• •		46 (3.2) «	258 (2.6)						
Wyoming			57 (4.6) >	279 (2.1)	24 (4.7) <<	278 (4.8)!						
ERRITORIES	7 (1.4)	274 (5.3)!	56 (2.8)>>	276 (1.3)	37 (2.5) <<	274 (2.2)						
Guam	10 (0.7)>>	270 (28)~	50 (4 0) 33	000 (0.0)	20 /4 4\	007 (0.0)						
Virgin Islands	13 (0.8) >>	270 (3.8)>	52 (1.2) <b>»</b>	223 (2.8)	38 (1.1) <<	207 (2.8)						
	13 (0.0)	217 (5.3) <	47 (0.9) >>	214 (2.6)>>	40 (1.1) <b>&lt;&lt;</b>	210 (2.9) >						



### TABLE A.41 | Teachers' Reports on the Instructional Emphasis Placed on Algebra and Functions

	Grade 4 - 1992										
	Heavy E	mphasis	Moderate	Emphasis	Little or No	Emphasis					
PUBLIC SCHOOLS	Percentage of Students	Algebra and Functions Proficiency	Percentage of Students	Algebra and Functions Proficiency	Percentage of Students	Algebra and Functions Proficiency					
NATION Northeast Southeast Central West	4 (1.1) 3 (1.7) 0 (0.3) 0 (0.3) 11 (3.5)	218 (4.3)! *** (***) *** (***) *** (***) 215 (3.6)!	32 (3.4) 31 (4.6) 24 (2.9) 27(11.2) 44 (4.2)	216 (3.0) 220 (4.6)! 204 (5.1) 220 (6.2)! 218 (5.0)	65 (3.5) 66 (4.5) 75 (2.9) 72(11.2) 45 (5.3)	215 (1.5) 220 (2.7) 206 (2.5) 222 (2.9) 215 (2.9)					
STATES Alabama Arizona Arkansas California Colorado Connecticut	3 (1.7) 3 (0.9) 1 (0.5) 9 (1.8) 3 (1.1) 3 (1.2)	209(18.0)! 205 (7.4)! *** (***) 205 (4.2)! 223 (3.9)! 236 (8.1)!	36 (3.8) 32 (3.2) 14 (2.3) 38 (3.3) 34 (3.1) 34 (3.7)	205 (3.1) 219 (2.5) 211 (3.0) 213 (3.2) 221 (2.8) 227 (3.1)	61 (3.9) 65 (3.2) 85 (2.3) 53 (3.3) 62 (3.2) 63 (3.8)	203 (2.5) 211 (1.6) 206 (1.2) 206 (2.3) 214 (1.9) 226 (1.9)					
Delaware Dist. Columbia Florida Georgia Hawaii Idaho	2 (0.4) 12 (0.7) 3 (0.9) 3 (1.1) 3 (1.0) 2 (0.9)	199 (4.0) 221 (4.7)! 225 (5.6)! 216 (4.8)!	23 (0.7) 39 (0.8) 32 (2.8) 23 (2.5) 38 (2.8) 30 (3.1)	229 (3.1) 187 (2.0) 211 (2.4) 217 (3.5) 211 (2.2) 217 (2.1)	75 (0.8) 49 (0.8) 65 (2.7) 74 (2.3) 59 (2.9) 68 (3.3)	211 (1.6) 191 (1.9) 211 (2.4) 211 (2.9) 210 (2.2) 217 (1.7)					
Indiana Iowa Kentucky Louisiana Maine Maryland	1 (1.0) 1 (0.8) 1 (0.7) 6. (1.3) 4 (1.3) 3 (0.8)	*** (***) *** (***) *** (***) 208 (5.4)! 233(10.2)! 220 (7.3)!	20 (3.1) 26 (2.8) 39 (3.2) 46 (3.3) 27 (3.5) 27 (2.7)	219 (3.4) 228 (2.2) 212 (2.4) 205 (2.7) 229 (2.7) 218 (2.8)	79 (3.3) 73 (2.9) 60 (3.3) 48 (3.5) 69 (3.9) 70 (2.5)	217 (2.2) 225 (1.6) 212 (1.6) 196 (2.5) 227 (2.1) 216 (2.1)					
Massachusetts Michigan Minnesota Mississippi Missouri Nebraska	3 (1.1) 6 (1.9) 3 (1.2) 4 (1.7) 1 (0.5) 2 (1.0)	212(10.2)! 236 (5.7)! 195 (6.4)! *** (***)	30 (3.9) 46 (4.0) 26 (3.4) 32 (3.4) 30 (3.5) 29 (3.0)	226 (3.3) 215 (2.6) 226 (2.6) 197 (3.8) 222 (2.8) 225 (2.6)	68 (4.1) 48 (4.1) 71 (3.8) 64 (3.7) 70 (3.6) 69 (3.1)	221 (2.0) 218 (3.1) 224 (1.5) 193 (1.9) 220 (1.4) 218 (2.2)					
New Hampshire New Jersey New Mexico New York North Carolina North Dakota	2 (1.0) 5 (1.8) 2 (1.2) 5 (1.2) 2 (0.6) 1 (0.5)	223 (6.4)! *** (***) 213 (8.5)! *** (***)	23 (3.0) 39 (4.5) 29 (2.9) 41 (2.8) 29 (2.8) 20 (3.7)	229 (3.4) 228 (3.7) 213 (2.8) 220 (2.9) 213 (2.3) 226 (2.9)	75 (3.0) 57 (4.4) 69 (3.2) 54 (3.1) 68 (2.8) 79 (3.7)	226 (1.4) 222 (2.5) 210 (2.0) 211 (2.3) 210 (1.9) 225 (1.5)					
Ohio Oklahoma Pennsylvania Rhode Island South Carolina Tennessee	5 (1.7) 5 (1.8) 2 (0.9) 2 (0.9) 2 (0.8) 3 (1.0)	228 (7.8)! 212 (5.8)! *** (***) *** (***) 206 (8.4)!	31 (3.6) 27 (3.4) 27 (3.0) 22 (2.9) 22 (3.0) 22 (2.5)	215 (2.7) 220 (3.0) 230 (3.1) 218 (3.0) 204 (2.5) 211 (3.0)	64 (4.0) 68 (3.6) 72 (3.1) 77 (3.1) 75 (3.0) 75 (2.5)	216 (2.0) 217 (1.5) 218 (1.7) 210 (2.6) 208 (1.9) 208 (1.9)					
Texas Utah Virginia West Virginia Wisconsin Wyoming	8 (2.0) 6 (1.6) 4 (1.4) 2 (0.9) 3 (1.0) 4 (1.1)	219 (4.1)! 226 (4.5)! 224 (8.6)! *** (***) 227 (3.9)! 226 (3.3)!	48 (3.6) 35 (3.1) 21 (2.2) 29 (3.2) 27 (2.8) 30 (3.3)	221 (3.0) 222 (2.0) 221 (3.3) 212 (2.9) 226 (2.4) 221 (2.3)	44 (3.6) 59 (3.6) 75 (2.8) 69 (3.1) 70 (3.0) 66 (3.3)	213 (2.6) 220 (1.6) 215 (1.9) 208 (2.1) 225 (1.7) 222 (1.3)					
TERRITORY Guam	8 (0.8)	187 (5.0)	36 (1.2)	193 (2.2)	57 (1.0)	193 (1.5)					

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. At grade 4, the question specified the informal introduction of concepts. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



TABLE A.41 | Teachers' Reports on the Instructional Emphasis Placed on Algebra and Functions (continued)

	Grade 8 - 1992										
PUBLIC SCHOOLS	Heavy Emphasis		Moderate	Emphasis	Little or No	Emphasis					
	Percentage of Students	Algebra and Functions Proficiency	Percentage of Students	Algebra and Functions Proficiency	Percentage of Students	Algebra and Functions Proficiency					
NATION	46 (2.1)	282 (2.1)	41 (2.2)	259 (1.5)	13 (1.5)	241 (2.8)					
Northeast	38 (3.2)	293 (4.6)	40 (4.0)	257 (3.2)	22 (3.9)	241 (4.7)					
Southeast	49 (4.4)	273 (2.9)	42 (4.0)	255 (2.5)	9 (1.9)	237. (5.6)!					
Central	43 (3.6)	288 (3.7)	48 (5.1)	265 (3.5)	9 (2.9)	250 (8.2)!					
West	51 (4.4)	279 (3.7)	36 (3.6)	259 (2.2)	13 (2.8)	237 (4.7)!					
STATES		,	(,	200 (2.2)	15 (2.0)	231 (4.1)!					
Alabama	42 (2.9)	268 (2.6)	45 (3.5)	247 (3.4)	13 (2.1)	007 (0.7)					
Arizona	50 (3.1)	273 (2.2)	39 (3.2)	256 (2.5)		227 (3.7)					
Arkansas	35 (3.1)	276 (2.6)	44 (3.3)	• •	11 (1.7)	242 (3.5)					
California	42 (2.6)	277 (2.7)			21 (2.6)	236 (2.6)					
Colorado	53 (2.7)	, ,	42 (2.4)	251 (3.2)	16 (1.8)	238 (2.7)					
Connecticut	40 (2.5)	- 1 1	41 (2.7)	260 (1.8)	7 (1.2)	251 (3.8)					
ł	40 (2.3)	290 (2.3)	42 (2.4)>>	265 (2.1)	18 (2.0)	241 (3.4)					
Delaware	41 (1.1)	285 (1.9)	40 (1.1)>>	255 (1.1)	19 (1.0) <<	232 (2.2)					
Dist. Columbia	54 (1.2) <b>&gt;&gt;</b>	250 (2.0)	37 (1.1) <<	224 (2.4)	9 (0.6)	232 (2.2) 225 (4.5)					
Florida	47 (2.3)	279 (1.8)	34 (2.3)	248 (1.8)	19 (2.2) <	, ,					
Georgia	44 (2.7)	274 (2.1)	31 (2.4)	251 (2.9)	\ - · - /	238 (3.4)					
Hawaii	31 (0.8)	281 (2.1)	42 (0.9) >>	252 (1.4)>	25 (2.0)	237 (2.2)					
Idaho	54 (2.5)	284 (1.4)	39 (2.6)	1 1	26 (0.8) «	235 (1.6)**					
ladiaaa	` '	204 (1.4)	39 (2.0)	268 (1.4)>>	7 (1.1)≪	238 (4.0)					
Indiana	44 (2.7)	283 (2.1)	46 (2.9) >	258 (1.7)	10 (1.4) <<	240 (4.6)					
lowa	55 (3.4)	288 (1.8)	38 (3.3)	274 (1.9)	7 (1.4)	250 (5.0)!					
Kentucky	50 (3.0)	274 (2.4)	40 (3.0)	253 (1.7)	10 (1.9)	235 (4.6)					
Louisiana	72 (3.6)>	253 (2.3)	25 (3.4)	247 (3.6)	3 (1.0)						
Maine <sup>1</sup>	46 (4.2)	285 (2.2)	40 (3.6)	270 (1.9)	14 (1.9)	220 (9.0)!					
Maryland	51 (2.5)	281 (2.7)	32 (2.3)	254 (2.7)	17 (1.9) 17 (1.9)	251 (3.6)					
Massachusetts <sup>1</sup>	` ,	, ,	• •	·/	17 (1.9)	238 (4.3)					
Michigan	47 (2.7)	286 (2.3)	38 (3.1)	263 (2.2)	15 (1.6)	247 (3.5)					
	47 (3.6)	279 (2.8)	43 (3.7)	257 (2.6)	10 (1.8)	245 (3.3)					
Minnesota	54 (3.7)	291 (1.6)>	42 (3.9)	270 (1.8)	4 (1.4)	253 (7.0)!					
Mississippi'	44 (3.4)	260 (2.5)	38 (3.3)	235 (2.1)	18 (2.4)	230 (3.2)					
Missouri¹	43 (3.0)	285 (2.0)	42 (3.2)	263 (2.0)	15 (2.2)	250 (2.5)					
Nebraska	45 (3.5)	286 (2.3)	48 (3.6)	271 (2.0)	7 (1.5)	248 (5.5)!					
New Hampshire	42 (2.9)	000 (4.7)			, ,	, ,					
New Jersey	, ,	288 (1.7)	40 (2.5) >>	268 (1.5)	18 (3.1)	257 (2.9)					
New Mexico	47 (3.5)	284 (3.3)	39 (3.3)	267 (2.6)	14 (2.4)	247 (4.7)					
New York	49 (2.9)	267 (1.6)	44 (2.9) >	250 (2.0)	8 (1.2)≪	242 (5.1)					
North Carolina	48 (3.1)	281 (2.3)	42 (3.1)	253 (3.4)	9 (1.7)	232 (7.4)					
North Dakota	44 (2.7)	278 (1.9)	40 (2.5) >	249 (2.3)	16 (2.0)≪	231 (3.4)					
1	54 (4.2)	283 (1.6)	38 (4.0)	276 (2.4)	8 (1.5)	268 (3.8)					
Ohio	38 (3.4)	286 (2.6)>	45 (4.0) >	259 (2.5)	47 (0.4)						
Oklahoma	49 (2.9)	277 (2.1)	40 (3.0)		17 (3.4)	253 (5.6)!					
Pennsylvania	48 (2.5)	284 (2.2)		259 (1.7)	11 (2.0)	249 (4.8)					
Rhode Island	45 (1.0)	284 (2.2)	36 (2.3)	260 (2.1)	16 (2.1)	248 (4.2)					
South Carolina1			40 (0.9) >>	257 (2.4)	14 (0.8) <<	241 (3.5)					
rennessee¹	36 (2.5)	283 (3.1)	37 (2.4)	251 (2.1)	27 (2.5)	241 (2.9)					
	42 (3.0)	271 (2.2)	41 (2.9)	250 (2.2)	18 (2.8)	240 (3.9)					
rexas	57 (2.8)	275 (2.2)>>	36 (2.7)	256 (1.8)>	6 (1.4)	239 (5.1)!					
Jtah¹	59 (2.4)	283 (1.7)	30 (2.3)	262 (2.1)	11 (1.3)	243 (2.5)					
/irginia	52 (2.4)	284 (2.1)	32 (2.6)	256 (2.1)	17 (2.3)						
West Virginia	46 (3.0)	273 (1.8)	38 (3.1)	247 (1.8)		237 (2.4)					
Visconsin	48 (4.4)	282 (2.0)	42 (4.3)	269 (2.2)	16 (2.5)	235 (3.1)					
<b>N</b> yoming	47 (2.3)	283 (1.4)	43 (2.7)		11 (4.8)	264(18.7)!					
ERRITORIES	(=.0)	200 (1.7)	73 (2.1)	263 (1.8)	10 (2.0)	257 (4.2)!					
Suam	28 (1.2) <<	267 (2.6)>>	38 (1.4)>>	000 (0.7) -	05 (5.5)						
/irgin Islands	25 (0.8)«			233 (2.7)>	35 (0.9)	216 (1.9)					
	20 (0.0) **	230 (2.5)	63 (0.9)>>	214 (2.0)	12 (0.5)≪	230 (2.6)>>					

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

"The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. "The value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.



# Teachers' Reports on Placing Heavy Instructional Emphasis on Specific Mathematics Skills and Abilities

	Grade 4 - 1992								
	Learning Mathematics Facts and Concepts		Procedures Ne	Learning Skills and Procedures Needed to Solve Problems		Reasoning Ive Unique ems	Learning Communica Mathematics	te Ideas in	
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	
NATION	96 (0.7)	217 (1.1)	93 (1.1)	217 (1.2)	50 (3.3)	219 (1.7)	39 (2.6)	219 (2.2)	
Northeast	97 (1.9)	221 (3.0)	95 (2.2)	221 (3.0)	64 (2.9)	225 (3.3)	42 (5.2)	225 (4.0)	
Southeast	95 (1.4)	207 (2.0)	94 (1.5)	208 (2.2)	49 (6.9)	209 (2.9)	45 (5.2)	208 (4.7) 224 (3.4)	
Central	98 (1.2)	224 (2.1)	95 (2.4)	224 (2.2)	42 (7.5)	225 (2.9)	33 (4.8) 36 (5.6)	222 (4.3)	
West STATES	93 (1.3)	218 (2.1)	88 (2.6)	218 (2.1)	49 (6.0)	219 (4.0)	30 (3.0)	222 (4.0)	
Alabama	07 (0.0)	207 (1.6)	93 (1.5)	208 (1.6)	52 (3.4)	209 (1.9)	49 (3.5)	207 (2.1)	
Arizona	97 (0.9) 94 (1.6)	207 (1.6) 214 (1.1)	90 (1.8)	215 (1.1)	46 (2.7)	216 (1.4)	34 (2.6)	216 (1.7)	
Arkansas	99 (0.7)	209 (1.0)	91 (1.7)	209 (0.9)	31 (3.6)	210 (1.7)	29 (3.4)	209 (2.4)	
California	89 (1.9)	208 (1.7)	89 (2.0)	208 (1.7)	48 (4.1)	208 (2.3)	36 (3.2)	210 (2.6)	
Colorado	88 (1.9)	220 (1.2)	86 (1.8)	220 (1.2)	49 (3.4)	223 (1.4)	41 (2.9)	223 (1.7)	
Connecticut	89 (2.4)	227 (1.5)	93 (1.7)	227 (1.4)	57 (2.8)	231 (1.7)	42 (3.5)	229 (2.1)	
		•		218 (0.9)	42 (1.3)	223 (1.2)	41 (0.8)	222 (1.1)	
Delaware Dist. Columbia	95 (0.4)	217 (0.9)	93 (0.6) 90 (0.8)	191 (0.8)	60 (1.0)	193 (0.9)	61 (1.0)	193 (0.9)	
Florida	88 (0.9) 06 (4.4)	190 (0.9) 212 (1.3)	95 (0.8) 95 (1.1)	212 (1.3)	55 (3.4)	216 (1.4)	50 (3.4)	213 (1.7)	
Georgia	96 (1.4) 93 (1.5)	212 (1.3)	95 (1.1)	214 (1.3)	50 (3.8)	217 (1.9)	50 (3.3)	215 (1.9)	
Hawaii	89 (2.3)	213 (1.5)	88 (2.2)	214 (1.5)	44 (2.8)	218 (2.1)	36 (2.6)	215 (2.1)	
Idaho	91 (2.3)	220 (1.1)	88 (2.1)	220 (1.1)	47 (3.5)	222 (1.4)	29 (2.9)	223 (1.4)	
·					38 (3.6)	222 (1.9)	30 (3.8)	219 (2.5)	
Indiana	96 (1.2)	220 (1.1)	88 (2.3)	219 (1.2)	45 (4.1)	231 (1.5)	35 (3.4)	228 (1.8)	
lowa	94 (1.5)	229 (1.1)	91 (2.3)	229 (1.1) 214 (1.1)	53 (3.8)	215 (1.3)	50 (3.9)	213 (1.5)	
Kentucky Louislana	95 (1.4)	214 (1.1)	93 (1.6) 94 (1.2)	203 (1.6)	56 (2.9)	204 (1.8)	53 (3.4)	201 (2.2)	
Maine	96 (1.2)	203 (1.6) 230 (1.0)	86 (2.4)	230 (1.1)	49 (3.8)	233 (1.7)	30 (3.4)	233 (2.1)	
Maryland	84 (2.7) 89 (2.0)	217 (1.5)	89 (1.9)	217 (1.5)	65 (3.1)	220 (2.1)	49 (3.3)	216 (2.0)	
Massachusetts	, ,	` '	91 (2.1)	227 (1.3)	48 (3.8)	229 (1.6)	35 (3.3)	229 (2.4)	
	91 (2.9)	226 (1.4)	90 (1.9)	218 (1.9)	57 (3.6)	218 (2.3)	45 (3.8)	217 (3.0)	
Michigan Minnesota	91 (2.2)	219 (2.0)	88 (1.5)	227 (1.2)	46 (3.5)	230 (1.6)	29 (3.1)	229 (2.1)	
Mississippi	90 (1.9) 96 (1.5)	227 (1.2) 199 (1.3)	93 (1.4)	200 (1.3)	43 (3.0)	199 (1.9)	45 (3.1)	198 (1.8)	
Missouri	97 (0.8)	221 (1.4)	91 (2.1)	222 (1.5)	43 (3.5)	225 (2.0)	32 (3.2)	221 (2.5)	
Nebraska	95 (1.5)	224 (1.4)	89 (2.6)	224 (1.4)	38 (3.6)	227 (1.9)	36 (3.7)	227 (2.4)	
	: :			229 (1.2)	47 (3.6)	233 (1.5)	35 (3.3)	233 (1.9)	
New Hampshire	92 (1.8)	229 (1.2)	88 (1.7) 97 (0.8)	229 (1.2)	59 (3.8)	230 (2.1)	53 (4.3)	229 (2.2)	
New Jersey New Mexico	95 (1.8)	227 (1.4)	89 (2.4)	212 (1.3)	37 (3.6)	217 (2.1)	39 (3.3)	213 (2.0)	
New York	95 (2.0) 97 (1.0)	213 (1.3) 218 (1.4)	95 (2.0)	218 (1.3)	49 (3.1)	217 (2.0)	41 (3.4)	216 (2.1)	
North Carolina	93 (1.7)	212 (1.0)	89 (2.0)	212 (1.1)	54 (3.3)	213 (1.4)	43 (3.2)	211 (1.8)	
North Dakota	99 (0.7)	228 (0.9)	93 (1.9)	228 (0.9)	37 (3.8)	229 (1.2)	26 (3.4)	228 (1.6)	
	i : :	, ,			53 (3.2)	221 (1.6)	40 (3.8)	220 (2.0)	
Ohio	97 (1.2)	217 (1.3)	93 (2.1)	218 (1.3)	53 (3.2) 50 (3.6)	220 (1.5)	37 (3.5)	219 (1.4)	
Oklahoma	99 (0.7)	219 (1.0)	94 (1.5)	219 (1.1) 223 (1.5)	49 (2.6)	227 (2.0)	42 (2.9)	227 (2.0)	
Pennsylvania Rhode Island	96 (1.2)	223 (1.5)	93 (1.6) 93 (1.6)	214 (1.7)	40 (3.4)	217 (2.8)	27 (3.2)	212 (3.4)	
South Carolina	96 (0.9) 95 (1.0)	214 (1.7) 212 (1.2)	93 (1.8)	211 (1.2)	48 (3.5)	213 (1.6)	48 (3.3)	214 (1.5)	
Tennessee	97 (0.9)	212 (1.2)	93 (1.5)	210 (1.5)	42 (3.1)	210 (2.5)	41 (2.9)	208 (2.4)	
			93 (1.4)	217 (1.5)	61 (3.6)	219 (1.4)	48 (3.1)	219 (1.8)	
Texas	92 (1.4)	217 (1.5)		217 (1.3) 223 (0.9)	45 (3.5)	225 (1.3)	34 (2.9)	228 (1.6)	
Utah Virginia	96 (1.1)	223 (1.0)	90 (2.4) 93 (1.3)	219 (1.5)	50 (3.2)	222 (2.1)	38 (3.1)	217 (1.8)	
West Virginia	97 (0.9)	220 (1.4) 213 (1.2)	89 (2.5)	213 (1.3)	45 (4.0)	216 (1.9)	35 (3.3)	214 (2.0)	
Wisconsin	95 (1.2) 93 (1.7)	213 (1.2)	90 (2.1)	228 (1.2)	55 (3.1)	231 (1.4)	37 (3.2)	230 (1.8)	
Wyoming TERRITORY	95 (1.7)	225 (1.0)	91 (1.9)	225 (1.1)	51 (2.9)	226 (1.3)	34 (3.0)	225 (1.8)	
								197 (1.3)	

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.



# Teachers' Reports on Placing Heavy Instructional Emphasis on Specific Mathematics Skills and Abilities (continued)

	Grade 8 - 1992											
	Learning Math		Learning Skills and Procedures Reeded to Solve Problems		Developing Ability to So Prob		Learning Communica Mathematics	te Ideas in				
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency				
NATION	74 (2.0)	266 (1.3)	79 (2.0)	267 (1.2)	48 (2.2)	275 (1.7)	30 (0.4)	070 (4.0)				
Northeast	85 (3.1)	269 (3.4)	81 (5.6)	266 (3.1)	56 (4.5)	275 (1.7) 273 (3.9)	39 (2.4) 47 (4.6)	272 (1.8)				
Southeast	80 (3.7)	261 (1.5)	79 (4.0)	261 (1.7)	47 (3.9)	267 (2.9)	35 (3.6)	274 (5.2) 265 (3.2)				
Central West	61 (5.4)	271 (2.5)	73 (4.0)	274 (2.7)	41 (4.8)	284 (2.8)	32 (5.6)	280 (2.6)!				
STATES	71 (3.6)	266 (2.7)	83 (2.5)	268 (2.5)	49 (4.1)	276 (2.4)	44 (4.8)	271 (2.8)				
Alabama	70 (0 0)	050 (4.0)				, ,	` '					
Arizona	79 (3.0) >>	250 (1.8)	77 (3.7)	250 (1.9)	42 (3.5)	258 (3.8)	43 (4.2)	255 (3.3)				
Arkansas	72 (4.1)> 72 (3.3)>	262 (1.5)	83 (2.2)>>	264 (1.4)	51 (3.5)	271 (1.7)	43 (3.2)	268 (1.8)				
California	57 (3.4)	253 (1.6) 259 (2.3)	78 (3.0) >	256 (1.4)	31 (2.6)	266 (2.2)	30 (3.6)	262 (2.3)				
Colorado	70 (2.6) >>	270 (1.1)>	70 (2.4)>	259 (2.2)	49 (3.1)	269 (2.6)	40 (3.5)	263 (2.8)				
Connecticut	69 (2.8) >>	268 (1.4)	73 (2.8) > 71 (2.6) >	270 (1.1)	51 (2.7)	277 (1.3)	43 (3.2)	273 (2.0)				
Delaware	1 1 1.		: : : : : : : : : : : : : : : : : :	271 (1.6)	49 (3.3)	280 (2.1)	45 (3.1)	278 (2.2)				
Dist. Columbia	72 (1.0)*	263 (1.1)	75 (1.0)>>	261 (1.2)	50 (0.9)	269 (1.2)	40 (0.7) >	265 (1.5)≪				
Florida	76 (0.9) <b>&gt;&gt;</b>	234 (1.2)	73 (0.8) >>	235 (1.1)	71 (1.3)>>	235 (1.4)	66 (1.3)>	234 (1.3)				
Georgia	77 (2.4)*>	259 (1.4)	79 (3.2) >	259 (1.5)	52 (3.1)	269 (1.7)	52 (3.1)	265 (1.9)				
Hawaii	78 (2.9) <b>&gt;&gt;</b> 67 (0.9) <b>&gt;&gt;</b>	256 (1.5)	83 (2.8) >	256 (1.4)	54 (3.0)	264 (2.0)	54 (3.2)	261 (1.7)				
ldaho	67 (2.6)>	256 (1.0)	68 (0.9)	257 (0.9) >	35 (0.9) «	271 (1.5)>	36 (0.9)	269 (1.4)				
	, ,	273 (0.9)	74 (2.9)>	274 (0.8)	50 (2.8)>>	280 (1.4)	39 (3.1)	277 (1.4)				
Indiana	73 (3.1)	267 (1.3)	72 (3.2)	268 (1.4)	45 (3.0) >	279 (1.9)	34 (3.1)	277 (2.3)				
lowa	66 (4.4)>	283 (1.3)>	73 (3.5)	282 (1.2)	47 (4.5)	289 (1.6)	39 (3.8) >	286 (1.8)				
Kentucky Louisiana	76 (3.2)	262 (1.5)>	76 (2.9)	262 (1.3) >	53 (3.4)	271 (1.9)	45 (3.3)	270 (2.0)				
Maine <sup>1</sup>	78 (2.7) >	248 (1.9)	77 (3.1)	248 (1.9)	47 (4.0)	255 (2.9)	48 (3.8)	251 (2.6)				
Maryland	57 (4.3)	277 (1.5)	65 (3.3)	277 (1.3)	50 (4.0)	284 (1.8)	34 (3.2)	286 (2.2)				
	59 (3.5)	260 (2.3)	64 (3.5)	262 (2.0)	51 (2.8)	275 (2.4)	46 (3.4)	270 (2.5)				
Massachusetts <sup>1</sup>	75 (2.8)	273 (1.2)	78 (3.1)	273 (1.3)	48 (3.4)	281 (1.8)	44 (3.4)	279 (2.4)				
Michigan	63 (3.5)	266 (2.1)	69 (3.4)	266 (1.9)	52 (4.3)	269 (2.7)	44 (4.3)	266 (2.8)				
Minnesota	67 (3.7) <b>»</b>	279 (1.5)	74 (2.6)>	280 (1.3)	46 (3.4)>	290 (1.5)>	31 (3.5)	288 (2.2)				
Mississippi¹ Missouri¹	90 (2.3)	245 (1.2)	89 (2.5)	245 (1.2)	56 (3.2)	249 (1.9)	58 (3.2)	247 (1.7)				
Nebraska	64 (3.7)	269 (1.3)	70 (2.5)	269 (1.3)	42 (2.9)	279 (1.9)	34 (3.7)	276 (2.1)				
i	69 (3.8)>	275 (1.5)	77 (3.2)>>	276 (1.4)	41 (4.1)	284 (1.7)	23 (2.9)	281 (2.0)				
New Hampshire	59 (3.1)	275 (1.3)	64 (3.3)	277 (1.4)>	47 (3.4)	283 (1.6)	37 (3.5)	, ,				
New Jersey	69 (4.3)	271 (2.1)	76 (3.1)	270 (2.0)	63 (3.9) >	274 (2.4)	55 (4.2)	283 (1.4) 274 (2.4)				
New Mexico	75 (3.0)»	259 (0.9)	81 (2.4) >>	260 (1.0)>	46 (3.1)	267 (1.6)	44 (2.9)	265 (1.3)				
New York North Carolina	73 (3.8)>>	263 (2.5)	72 (3.3)	265 (2.7)	40 (3.1)	276 (2.9)	38 (3.4)	271 (3.3)				
North Dakota	71 (2.6) >	257 (1.4)>	72 (2.8)	258 (1.4)>	48 (3.3)	266 (1.8)	42 (3.1)	262 (2.0)				
	69 (4.2) >>	282 (1.3)	78 (3.7)>	282 (1.3)	48 (4.0)>	285 (1.3)	33 (3.9)	284 (1.8)				
Ohio	63 (3.9)	267 (2.1)	75 (3.9)	269 (2.1)	39 (3.7)	275 (2.5)	37 (4.2)					
Oklahoma	83 (2.9)>>	266 (1.3)	77 (3.0)>	266 (1.4)	39 (4.2)	276 (2.3)	42 (3.5)	275 (3.1)				
Pennsylvania	76 (2.9)>	269 (1.7)	80 (2.5)	270 (1.5)	52 (3.9)	276 (2.1)	43 (3.6)	270 (2.2) 275 (2.3)				
Rhode Island South Carolina <sup>1</sup>	62 (1.1)	263 (1.0)	71 (0.9) >>	267 (1.1)>>	53 (1.0)»	273 (1.0)	46 (1.1) >>	268 (1.1)				
Tennessee <sup>1</sup>	71 (2.8)	258 (1.6)	78 (3.3)	260 (1.5)	51 (3.3)	268 (1.9)	54 (3.3)	262 (1.8)				
1	75 (3.2)	256 (1.9)	81 (2.6)	258 (1.7)	45 (3.6)	265 (2.1)	43 (3.6)	261 (2.1)				
Texas	71 (3.0) >	261 (1.5)	80 (2.4)>	263 (1.4)>	61 (2.9)>>	270 (2.0)>	49 (3.2)					
Utah¹	75 (2.3)	272 (0.8)	84 (1.8)	274 (0.9)	49 (2.0)	279 (2.0)	36 (2.6)	268 (2.4)> 279 (1.5)				
Virginia	82 (2.0)>>	267 (1.4)	79 (2.2)	267 (1.5)	48 (2.1)	276 (1.9)	47 (2.8)	273 (2.5)				
West Virginia	78 (3.1) >>	258 (1.3)	80 (2.7) >	259 (1.2)	47 (2.9)	266 (1.6)	38 (3.5)	266 (1.9)				
Wisconsin Wyoming	64 (4.7)	277 (1.8)	71 (4.1)	278 (2.0)	52 (4.6) >	282 (2.0)	41 (4.7)>	282 (2.8)				
rerritories	66 (3.0) <b>»</b>	272 (1.0)	63 (3.1)	272 (1.1)	40 (2.7)	281 (1.4)	32 (3.1)	282 (1.5)				
Guam	60 (0.0)	007 (6.0) =	00 (4 5) };				//					
Virgin Islands	68 (0.9) <b>»</b> 77 (0.9) <b>»</b>	237 (1.2)>	60 (1.2)>>	243 (1.3)	37 (1.2)>>	252 (1.7)	43 (1.1) >>	245 (1.5)				
		221 (1.4)>	88 (0.6)>>	220 (1.2)	58 (1.2)>>	225 (1.2)	60 (1.0)>>	221 (1.3)				

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. (The value for 1992 was significantly lower than the value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated. Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



# Mathematics Teachers and their Classes



Teachers' Reports on Number of Years' Overall Teaching Experience at the Elementary or Secondary Level

	Grade 4 - 1992										
PUBLIC SCHOOLS	10 Years or Less Experience		More than 10 Years Years Ex		25 Years or More Experience						
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency					
NATION	35 (2.4)	213 (1.7)	46 (2.4)	220 (1.4)	19 (1.6)	221 (2.0)					
Northeast	25 (5.7)	217 (4.5)!	58 (5.1)	225 (3.8)	17 (2.9)	225 (4.2)					
Southeast	41 (4.7)	206 (3.7)	42 (3.6)	209 (2.7)	17 (3.2)	210 (5.3)					
Central	33 (6.3)	221 (2.5)	44 (6.7)	223 (2.3)	23 (2.8)	228 (4.1)					
West	38 (3.3)	212 (2.6)	44 (3.5)	221 (2.2)	18 (3.7)	219 (2.0)!					
STATES	\/	, ,									
Alabama	26 (2.5)	206 (2.6)	64 (3.1)	208 (1.8)	10 (2.1)	208 (4.1)!					
Arizona	42 (2.4)	213 (1.8)	46 (2.4)	216 (1.4)	11 (2.1)	212 (2.2)					
Arkansas	35 (3.3)	211 (2.2)	52 (3.5)	209 (1.1)	13 (2.1)	207 (2.3)					
California	42 (3.9)	203 (2.4)	40 (3.7)	209 (2.4)	19 (2.5)	211 (3.5)					
Colorado	34 (2.7)	219 (2.1)	51 (2.8)	219 (1.1)	15 (1.9)	223 (2.6)					
Connecticut	25 (2.7)	224 (2.9)	56 (3.6)	229 (1.4)	19 (2.6)	225 (3.0)					
Delaware	40 (1.0)	214 (1.0)	45 (1.0)	218 (1.1)	15 (0.6)	221 (1.8)					
Dist. Columbia	28 (0.8)	191 (1.3)	38 (0.8)	191 (1.2)	34 (0.7)	190 (1.1)					
Florida	41 (3.6)	213 (3.0)	47 (3.3)	214 (1.5)	12 (1.9)	209 (2.6)					
Georgia	42 (3.1)	213 (2.1)	50 (3.2)	214 (1.9)	8 (1.8)	214 (4.4)!					
Hawaii	39 (3.3)	213 (1.7)	39 (3.6)	215 (1.9)	22 (2.5)	210 (3.1)					
Idaho	43 (3.0)	220 (1.3)	49 (3.1)	221 (1.2)	8 (1.5)	219 (2.6)					
Indiana	28 (2.8)	218 (2.1)	53 (3.4)	220 (1.3)	19 (2.4)	218 (2.3)					
lowa	, ,	· · · · · · · · · · · · · · · · · · ·	45 (3.6)	229 (1.8)	21 (2.7)	231 (1.7)					
Kentucky	33 (3.3)	228 (1.8)	53 (2.7)	215 (1.5)	16 (2.5)	214 (2.7)					
	31 (3.1)	211 (1.5)	53 (2.7) 51 (3.3)	205 (2.0)	11 (2.0)	196 (4.1)					
Louisiana Maine	38 (3.3)	203 (2.2)	57 (3.4)	231 (1.3)	10 (1.6)	232 (2.0)					
Maryland	33 (3.2) 40 (3.3)	229 (1.7) 217 (2.5)	43 (3.0)	217 (1.6)	17 (2.8)	217 (4.1)					
	• ,		57 (3.7)	224 (1.5)	29 (3.7)	227 (2.6)					
Massachusetts	15 (2.6)	228 (3.8)	50 (3.3)	219 (2.1)	21 (2.2)	219 (3.0)					
Michigan	30 (3.0)	220 (2.6)	53 (3.1)	227 (1.4)	22 (2.8)	230 (2.0)					
Minnesota	25 (2.8)	225 (2.4)	, ,	200 (1.4)	11 (2.1)	199 (4.2)					
Mississippi	33 (3.3)	200 (2.0)	55 (3.3) 55 (3.1)	221 (1.5)	12 (2.1)	221 (3.1)					
Missouri Nebraska	33 (3.0) 30 (2.8)	221 (2.2) 220 (2.2)	55 (3.1) 57 (3.2)	226 (1.4)	13 (2.1)	228 (2.9)					
			, ,	: <u>:</u>	12 (2.5)	227 (2.7)!					
New Hampshire	35 (3.3)	228 (2.1)	53 (3.7)	230 (1.6)	24 (2.9)	231 (2.6)					
New Jersey	21 (2.7)	214 (3.9)	55 (3.3)	228 (2.1)	14 (2.5)	213 (3.9)					
New Mexico	41 (3.4)	208 (2.5)	45 (3.4)	215 (1.8)	17 (2.1)	225 (2.8)					
New York	35 (3.4)	206 (2.6)	48 (3.1)	222 (1.8)	15 (2.3)	211 (3.1)					
North Carolina North Dakota	34 (2.8) 25 (3.2)	212 (1.8)	51 (3.1) 54 (3.5)	213 (1.7) 228 (1.0)	21 (3.2)	228 (1.8)					
	, ,	228 (1.8)	, ,		• •						
Ohio	27 (2.9)	213 (2.1)	53 (3.1)	218 (1.6)	20 (3.1)	221 (2.5)					
Oklahoma	39 (3.3)	219 (1.7)	53 (3.2)	219 (1.1)	8 (1.7)	220 (3.7)! 226 (2.3)					
Pennsylvania	20 (2.9)	219 (3.7)	58 (3.4)	224 (1.8)	23 (3.1)	· ,					
Rhode Island	31 (3.1)	210 (2.4)	54 (3.5)	216 (2.1)	16 (2.4)	215 (3.5) 219 (3.1)!					
South Carolina	37 (2.8)	207 (2.0)	57 (2.9)	213 (1.4)	7 (1.6) 20 (2.3)	207 (3.0)					
Tennessee	28 (2.6)	205 (2.0)	52 (3.3)	213 (1.7)							
Texas	56 (2.9)	215 (1.6)	36 (2.9)	219 (2.0)	8 (1.6)	216 (4.7)!					
Utah	43 (3.1)	222 (1.4)	45 (3.3)	223 (1.6)	12 (2.2)	225 (2.4)					
Virginia	42 (2.8)	219 (2.0)	49 (2.5)	220 (1.8)	9 (2.0)	222 (3.7)!					
West Virginia	22 (3.0)	211 (2.0)	65 (3.3)	214 (1.4)	13 (2.4)	216 (2.2)					
Wisconsin	29 (2.9)	225 (1.9)	44 (3.2)	229 (1.6)	27 (2.9)	229 (2.0)					
Wyoming TERRITORY	26 (2.7)	222 (1.6)	57 (2.8)	226 (1.2)	17 (2.2)	224 (1.6)					
Guam	36 (1.2)	186 (1.7)	53 (1.3)	196 (0.9)	11 (0.6)	187 (2.3)					

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



TABLE A.43

# Teachers' Reports on Number of Years' Overall Teaching Experience at the Elementary or Secondary Level (continued)

MATION		Grade 8 - 1992									
NATION   Students   Proficiency   Proficie	DUDI 10	10 Years or Le	ss Experience	More than 10 Years Years Ex	But Less than 25 perience	25 Years or Mo	re Experience				
Northeast 20 (2.5) 280 (1.9) 48 (2.7) 288 (1.4) 17 (1.7) 22 55 0utheast 41 (3.4) 257 (2.6) 50 (4.0) 264 (2.0) 10 (3.2) 27 (4.4) 22 (2.6) 41 (3.4) 257 (2.6) 50 (4.0) 264 (2.0) 10 (3.2) 25 (4.7) 22 (2.6) 45 (4.1) 263 (3.3) 45 (2.8) 270 (2.5) 11 (2.0) 25 (4.7) 22 (2.6) 45 (4.1) 263 (3.3) 45 (2.8) 270 (2.5) 11 (2.0) 26 (4.7) 22 (2.6) 47 (4.2) 25 (4.7) 26 (2.6) 47 (4.2) 25 (4.7) 26 (2.6) 47 (4.2) 25 (4.7) 26 (2.6) 47 (4.2) 25 (4.7) 26 (2.6) 47 (4.2) 25 (4.7) 26 (2.6) 47 (4.2) 25 (4.7) 26 (2.6) 47 (4.2) 25 (4.7) 26 (2.6) 47 (4.2) 25 (4.7) 26 (2.6) 47 (4.2) 25 (2.6) 47 (4.2) 25 (2.6) 47 (4.2) 257 (1.9) 16 (2.8) 26 (2.6) 27 (2.3) 26 (2.6) 47 (4.2) 257 (2.0) 9 (2.2) 25 (2.6) 27 (2.3) 26 (2.6) 47 (3.2) 25 (2.6) 47 (3.2) 273 (1.5) 12 (2.2) 25 (2.6) 27 (2.3) 26 (2.6) 47 (3.2) 273 (1.5) 12 (2.2) 25 (2.6) 27 (2.3) 26 (2.6) 37 (3.2) 273 (1.5) 12 (2.2) 27 (2.3) 26 (2.6) 47 (3.2) 273 (1.5) 12 (2.2) 27 (2.3) 26 (2.6) 47 (3.2) 273 (1.5) 12 (2.2) 27 (2.3) 26 (2.6) 27 (2.3) 27 (2.6) 27 (2.6						Percentage of Students	Average Proficiency				
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West		28 (3.2)		• • •	3 1	, ,	259 (7.5)!				
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Arizona Arizon	Alabama	37 (3.4)	265 (4.7)	50 (4 O)	0.10.10.0						
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Dist. Columbia   24 (1.1)   225 (2.2)   52 (1.1)   235 (1.2)   24 (0.8)   23 (3.2)   24 (0.8)   23 (3.2)   24 (0.8)   23 (3.2)   24 (0.8)   23 (3.2)   24 (0.8)   23 (3.2)   24 (0.8)   23 (3.2)   24 (0.8)   23 (3.2)   24 (0.8)   23 (3.2)   24 (0.8)   23 (3.2)   24 (0.8)   23 (3.2)   24 (0.8)   24 (0.8)   24 (0.8)   25 (0.8)   24 (0.8)   25		45 (0.7)>>	261 (1.3)>	49 (0 0) (6		, ,					
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Georgia				, ,	· · · · · · · · · · · · · · · · · · ·	, , ,	233 (1.7)				
Hawaii (10)	Georgia				; ;	, <i>,</i>	260 (3.8)				
Idaho						12 (2.3)	249 (3.3)				
Indiana 32 (4.2) 265 (1.7) 53 (3.9) 271 (1.6) 15 (2.6) 26 (2.6) 1000 26 (3.7) 263 (2.1) 52 (4.4) 282 (1.4) 23 (3.8) 28 (2.1) 263 (2.1) 52 (4.4) 282 (1.4) 23 (3.8) 28 (2.1) 29 (2.6) 26 (2.1) 29 (2.6) 26 (2.1) 29 (2.6) 26 (2.1) 29 (2.6) 26 (2.1) 29 (2.6) 26 (2.1) 29 (2.6) 26 (2.1) 29 (2.6) 26 (2.1) 29 (2.6) 27 (2.1) 29 (2.6) 29 (2.1) 29 (2.6) 29 (2.1) 29 (2.6) 29 (2.1) 29 (2.6) 29 (2.1) 29 (2.6) 29 (2.1) 29 (2.6) 29 (2.1) 29 (2.6) 29 (2.1) 29 (2.6) 29 (2.1) 29 (2.6) 29 (2.1) 29 (2.6) 29 (2.1) 29 (2.6) 29 (2.1) 29					255 (1.7)	16 (0.5)	261 (2.1)				
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Dowa   Care	Indiana	32 (4.2)	265 (1.7)	53 (3.9)	074 (4.6)	45 (0.0)	, ,				
Kentucky Louisiana 38 (3.3) 260 (1.6) 45 (3.7) 263 (1.9) 11 (2.9) 26 (2.0) Maryland 26 (3.2) 278 (2.0) 57 (3.8) 279 (1.3) 17 (3.1) 277 (3.2) 265 (4.1) 57 (3.7) 264 (2.1) 15 (2.6) 266 (3.0) 244 (3.0) 269 (3.3) 52 (3.2) 262 (1.9) 20 (2.6) 276 (3.0) 269 (3.3) 33 (3.8) 282 (1.5) 34 (3.5) 286 (3.6) 244 (3.0) 58 (3.8) 246 (1.8) 14 (3.1) 244 (3.6) 279 (1.4) 42 (3.6) 271 (1.4) 46 (3.3) 271 (1.7) 12 (2.7) 265 (3.8) 279 (1.3) 279 (1	lowa				, , , ,	, ,	269 (2.6)				
Louisiana Maine¹ 26 (3.2) 278 (2.0) 57 (3.8) 279 (1.3) 17 (3.1) 274 (3.1) 274 (3.2) 265 (4.1)> 57 (3.8) 279 (1.3) 17 (3.1) 274 (3.1) 275 (3.2) 265 (4.1)> 265 (4.1) 276 (3.2) 278 (2.0) 278 (2.0) 278 (2.0) 279 (1.3) 17 (3.1) 279 (1.3) 17 (3.1) 279 (1.3) 17 (3.1) 279 (1.3) 17 (3.1) 279 (1.3) 18 (3.1) 279 (1.3) 18 (3.1) 279 (1.3) 18 (3.1) 279 (1.3) 18 (3.1) 279 (1.3) 18 (3.1) 279 (1.3) 18 (3.1) 279 (1.3) 18 (3.1) 279 (1.3) 18 (3.1) 279 (1.3) 18 (3.1) 270 (2.6) 271 (1.5) 28 (3.1) 29 (3.1)	Kentucky	. , ,				, , ,	284 (1.7) <b>&gt;&gt;</b>				
Maine' 26 (3.2) 278 (2.0) 57 (3.8) 279 (1.3) 17 (3.1) 274 (Maryland 27 (3.2) 265 (4.1)> 57 (3.7) 264 (2.1) 15 (2.6) 261 (Massachusetts' 11 (2.3) 262 (3.8) 68 (4.1) 271 (1.5) 21 (3.7) 280 (Minnesota 33 (4.4) 283 (1.7)» 33 (3.8) 282 (1.5) 34 (3.5) 283 (Mississippi' 28 (3.6) 244 (3.0) 58 (3.8) 246 (1.8) 14 (3.1) 244 (Missouri' 28 (3.6) 271 (1.4) 46 (3.3) 271 (1.7) 12 (2.7) 263 (Missouri' 3.9) 275 (1.9) 45 (4.5) 278 (1.8) 18 (3.5) 283 (Missouri' 3.9) 275 (1.9) 45 (4.5) 278 (1.8) 18 (3.5) 283 (Missouri' 3.9) 275 (1.9) 45 (4.5) 278 (1.8) 18 (3.5) 283 (Missouri' 3.9) 275 (1.9) 45 (4.5) 278 (1.8) 18 (3.5) 283 (Missouri' 3.9) 275 (1.9) 45 (4.5) 278 (1.8) 18 (3.5) 283 (Missouri' 3.9) 275 (1.9) 45 (4.5) 278 (1.8) 18 (3.5) 283 (Missouri' 3.9) 275 (1.9) 275 (	Louisiana	, ,	, ,				264 (4.0)!				
Maryland 27 (3.2) 265 (4.1) 57 (3.8) 279 (1.3) 17 (3.1) 27 (3.2) 265 (4.1) 57 (3.7) 264 (2.1) 15 (2.6) 26 (4.1) 27 (3.2) 265 (4.1) 57 (3.7) 264 (2.1) 15 (2.6) 26 (4.1) 27 (3.2) 265 (4.1) 27 (3.2) 265 (4.1) 27 (3.7) 264 (2.1) 15 (2.6) 26 (4.1) 27 (3.2) 265 (4.1) 27 (3.2) 265 (4.1) 27 (3.2) 265 (4.1) 27 (3.2) 265 (4.1) 27 (3.2) 265 (4.1) 27 (3.2) 265 (4.1) 27 (3.2) 265 (4.1) 27 (3.2) 265 (4.1) 27 (3.2) 265 (4.1) 27 (3.2) 265 (4.1) 27 (3.2) 265 (4.1) 27 (3.2) 265 (4.1) 27 (3.2) 265 (4.1) 27 (3.2) 27 (4.1) 27 (3.2) 27 (4.1) 27 (3.2) 27 (4.1) 27 (3.2) 27 (4.1) 27 (3.2) 27 (4.1) 27 (3.2) 27 (4.1) 27 (3.2) 27 (4.1) 27 (3.2) 27 (4.1)	Maine <sup>1</sup>	, , ,			, ,	16 (3.0)	248 (3.4)				
Massachusetts' Michigan  Massachusetts' Michigan  Mississippi' Mississ	_					17 (3.1)	276 (3.6)				
Michigan  Michigan  Michigan  Michigan  Minesota  Mississippi  28 (3.0)  269 (3.3)  269 (3.3)  252 (3.2)  262 (1.9)  20 (2.6)  270  Mississippi  Mississippi  28 (3.6)  244 (3.0)  33 (3.8)  282 (1.5)  34 (3.5)  283  Missouri  42 (3.6)  271 (1.4)  46 (3.3)  271 (1.7)  12 (2.7)  266  New Hampshire  New Hampshire  New Hampshire  New Hampshire  New Mexico  47 (4.0)  273 (1.4)  86 (3.7)  86 (3.9)  275 (1.9)  47 (4.0)  275 (1.3)  48 (3.9)  276 (2.4)  277 (2.8)  278 (1.8)  47 (2.9)  278 (1.8)  47 (2.9)  279 (1.2)  86 (1.9)  276  87 (2.4)  276  277 (2.4)  276  277 (2.7)  276  277 (2.7)  277 (2.7)  278  279  270  270  270  271  271  270  270  271  271		27 (3.2)	265 (4.1)>	57 (3.7)	264 (2.1)	15 (2.6)	268 (5.4)				
Michigan Michigan 28 (3.0) 269 (3.3) 52 (3.2) 262 (1.9) 20 (2.6) 277 (1.9) 33 (3.4) 283 (1.7) 33 (3.8) 282 (1.5) 34 (3.5) 285 (1.8) 277 (1.7) 12 (2.7) 265 (1.8) 278 (1.8) 279 (		11 (2.3)	262 (3.8)	68 (4.1)	271 (1.5)	24 (2.7)					
Minnesota Mississippi¹ 28 (3.6) 244 (3.0) 58 (3.8) 262 (1.5) 34 (3.5) 28³ Missouri¹ Nebraska New Hampshire New Hampshire New Hampshire New Hampshire New Mexico New Mexico New Mexico North Carolina North Carolina North Dakota Ohio Obio Obio Obio Obio Obio Obio Chambana Pennsylvania Rhode Island South Carolina¹ South	Michigan	28 (3.0)		· ,	`		280 (2.3)				
Mississippi <sup>1</sup> Missouri <sup>1</sup> (3.6)       244 (3.0)       58 (3.8)       246 (1.8)       14 (3.1)       244 (3.1)       244 (3.0)       58 (3.8)       246 (1.8)       14 (3.1)       244 (3.1)       244 (3.0)       58 (3.8)       246 (1.8)       14 (3.1)       244 (3.1)       244 (3.0)       58 (3.8)       246 (1.8)       14 (3.1)       244 (3.1)       244 (3.0)       58 (3.8)       246 (1.8)       14 (3.1)       244 (3.1)       244 (3.1)       244 (3.1)       246 (1.8)       14 (3.1)       244 (3.1)       244 (3.1)       244 (3.1)       246 (1.8)       14 (3.1)       244 (3.1)       246 (1.8)       14 (3.1)       244 (3.1)       244 (3.1)       246 (1.8)       14 (3.1)       244 (3.1)       244 (3.1)       246 (1.8)       14 (3.1)       244 (3.1)       246 (1.8)       14 (3.1)       244 (3.1)       246 (1.8)       14 (3.1)       244 (3.1)       244 (3.1)       244 (3.1)       244 (4.5)       26 (3.0)       279 (1.2)       8 (1.9)       278 (1.8)       278 (1.8)       278 (1.8)       279 (1.2)       8 (1.9)       278 (1.8)       279 (1.1)       278 (1.1)       278 (1.1)       279 (1.1)       279 (1.1)       279 (1.1)       279 (1.1)       279 (1.1)       279 (1.1)       279 (1.1)       279 (1.1)       279 (1.1)       279 (1.1)       279 (1.1)       279 (1.1)       279 (1.1)	Minnesota						276 (3.3) >				
Missouri' Nebraska Nebraska Nebraska New Hampshire New Hampshire New Hampshire New Jersey New Jersey New Jersey New Mexico New York North Carolina North Dakota Obklahoma Obklah	Mississippi <sup>1</sup>			` '	· · ·	· · ·	281 (2.0)				
Nebraska   37 (3.9)   275 (1.9)   45 (4.5)   278 (1.8)   18 (3.5)   28 (1.8)   19 (3.8)	Missouri¹			, ,		14 (3.1)	244 (3.6)!				
New Hampshire New Jersey New Mexico New York North Carolina North Dakota  Ohio Oblahana Oblahana Pennessee¹ Pennessee¹ Fennessee¹ Fennessee¹ Fexass Jtah¹ Jiginia Nest Virginia Nest Virginia North Gas (3.9)  Z73 (1.4) S30 (3.0) < 273 (1.4) S45 (4.5)						12 (2.7)	269 (3.4)!				
New Jersey New Mexico New York North Carolina North Dakota Oblio O		37 (3.9)	275 (1.9)	45 (4.5)	278 (1.8)	18 (3.5)>	281 (2.6)!				
New Mexico New Mexico New Mexico New York North Carolina North Dakota  Ohio Oklahoma Pennsylvania Rhode Island South Carolina¹ Fennessee¹  Fennessee¹  Fexas  47 (3.9)  266 (3.7)  266 (3.7)  266 (3.7)  266 (3.7)  266 (3.7)  266 (3.7)  266 (3.7)  267 (3.5)  268 (3.7)  268 (3.7)  260 (3.9)  271 (1.9)  30 (3.6)  271 (1.9)  30 (2.4)  272 (2.4)  273 (2.4)  274 (2.4)  275 (2.4)  275 (2.4)  276 (2.4)  277 (2.4)  278 (2.6)  278 (2.6)  279 (2.8)  270 (2.8)  270 (2.8)  270 (2.8)  270 (2.8)  270 (2.8)  271 (2.4)  271 (2.4)  272 (2.7)  273 (2.4)  274 (2.4)  275 (2.7)  276 (2.7)  277 (2.8)  278 (2.8)  279 (2.8)  270 (2.8)  270 (2.8)  270 (2.8)  271 (2.4)  271 (2.4)  272 (2.7)  273 (2.4)  274 (2.4)  275 (2.7)  276 (2.7)  277 (2.8)  278 (2.8)  279 (2.8)  270 (2.8)  270 (2.8)  270 (2.8)  271 (2.4)  271 (2.4)  272 (2.7)  273 (2.4)  274 (2.4)  275 (2.4)  276 (2.5)  277 (2.8)  278 (2.7)  279 (2.8)  270 (2.8)		30 (3.0) <	273 (1.4)>>	62 (3.0)	279 (1.2)	R (4 O)	070 (4.0)				
New Mexico New York New York North Carolina North Dakota  Dhio Dklahoma Pennsylvania Rhode Island South Carolina¹ Fennessee¹ Fennessee¹ Fexas  47 (3.9)  263 (1.8)  257 (1.3)  257 (1.3)  257 (1.3)  258 (3.4)  267 (2.4)  260 (1.6)  270 (2.8)  2	•	27 (3.5)	266 (3.7)			, ,	278 (4.0)!				
New York North Carolina North Carolina North Dakota  North Dakota  Dhio  Dklahoma  Pennsylvania Rhode Island South Carolina  Rhode Island South Carolina  Fennessee¹  Fennessee¹  Fexas  Jitah¹  Jirginia  Jirginia  West Virginia  West Virginia  Wyoming  Vyoming  Vyoming  Vyoming  Vyoming  Vyoming  Value (2.9)  254 (4.5)  254 (4.5)  56 (3.4)  267 (2.4)  267 (2.4)  267 (2.4)  267 (2.4)  260 (2.8)  276 (2.4)  260 (2.1)  261 (2.1)  262 (1.8)  267 (2.4)  269 (2.0)  31 (3.4)  268 (2.0)  39 (4.0) < 282 (1.6)  31 (3.4)  269 (2.0)  31 (3.4)  260 (2.1)  31 (3.4)  260 (2.1)  31 (3.4)  260 (2.1)  31 (3.4)  260 (2.1)  31 (3.4)  260 (2.1)  31 (3.4)  260 (2.1)  31 (3.4)  260 (2.1)  31 (3.4)  260 (2.1)  31 (3.4)  260 (2.1)  31 (3.4)  260 (2.1)  31 (3.4)  260 (2.1)  31 (3.4)  260 (2.7)  31 (3.4)  260 (2.7)  31 (3.4)  260 (2.7)  37 (3.9)  38 (3.4)  39 (3	New Mexico		, ,	` '	, , ,	, , ,	281 (3.8)				
North Carolina North Dakota  North Dakota  North Dakota  Ohio  Oklahoma  Oklahoma  Ohio  Oklahoma  Oklahoma  Ohio  Ohio  Oklahoma  Ohio  Ohi	New York			1 1			259 (3.0)!				
North Dakota 30 (3.6) 284 (2.0) 39 (4.0) 282 (1.6) 31 (3.4) 282 (2.0) 29 (4.1) 267 (2.5) 58 (4.8) 269 (2.0) 13 (2.5) 267 (2.5) 267 (2.8) 269 (3.5) 269 (1.5) 7 (1.9) 263 (3.6) 284 (2.0) 270 (2.8) 50 (3.8) 271 (2.4) 22 (2.7) 270 (3.8) 271 (2.4) 22 (2.7) 270 (3.8) 271 (3.4) 282 (3.2) 270 (2.8) 50 (3.8) 271 (2.4) 22 (2.7) 270 (3.8) 271 (3.4) 282 (3.2) 270 (3.8) 271 (3.4) 283 (3.2) 270 (3.8) 271 (3.4) 284 (3.2) 270 (3.8) 271 (3.4) 285 (3.2) 270 (3.8) 271 (3.4) 285 (3.2) 270 (3.8) 271 (3.4) 285 (3.2) 271 (3.4) 285 (3.2) 285 (3.2) 285 (3.2) 285 (3.2) 285 (3.2) 285 (3.2) 285 (3.2) 285 (3.2) 285 (3.2) 285 (3.2) 285 (3.2) 285 (3.2) 285 (3.2) 285 (3.2) 285 (3.2) 285 (3.2) 285 (3.2) 285 (3.2) 285 (3.2) 275 (3	North Carolina	. ,		` ·		3 7	276 (4.3)				
Dhio 29 (4.1) 267 (2.5) 58 (4.8) 269 (2.0) 13 (2.5) 267 (2.5) 267 (2.5) 267 (2.5) 267 (2.5) 267 (2.5) 267 (2.5) 267 (2.5) 267 (2.5) 267 (2.5) 267 (2.5) 267 (2.5) 267 (2.5) 267 (2.5) 267 (2.5) 267 (2.5) 267 (2.5) 267 (2.5) 271 (2.4) 22 (2.7) 270 (2.5) 271 (2.4) 22 (2.7) 270 (2.5) 271 (2.4) 22 (2.7) 270 (2.5) 271 (2.4) 22 (2.7) 270 (2.5) 271 (2.5	North Dakota						255 (3.3)!				
Oklahoma         25 (2.3)         26 (2.0)         52 (3.5)         269 (2.0)         13 (2.5)         267 (2.9)         267 (2.9)         268 (2.0)         13 (2.5)         267 (2.9)         267 (2.9)         268 (2.0)         13 (2.5)         267 (2.9)         268 (2.0)         277 (2.0)         277 (	Ohio	00 (0.0)	204 (2.0)	39 (4.0)<	282 (1.6)	31 (3.4)>	282 (1.4)				
DRIanoma	_ 1	29 (4.1)	267 (2.5)	58 (4.8)	269 (2.0)	13 (2.5)	267 (4.2)				
Pennsylvania Rhode Island Shouth Carolina' 30 (1.1)		41 (3.7)				i i	267 (4.2)				
Rhode Island South Carolina¹ Fennessee¹  Rose (2.6)  Rose (2.1.4)  Rose (2.6)							263 (5.9)!				
South Carolina' 7 (197) 258 (2.1) 53 (2.7) 262 (1.7) 8 (1.6) 258 (2.1) 53 (2.7) 262 (1.7) 8 (1.6) 258 (2.1) 28 (2.6) 255 (2.5) 59 (3.3) 260 (1.9) 13 (2.4) 254 (2.1) 263 (2.1) 2				: :		1 1 .	270 (2.8)				
Tennessee' 28 (2.6) 255 (2.5) 59 (3.3) 260 (1.9) 13 (2.4) 254 (2.5) 254 (2.5) 256 (2.5) 260 (1.9) 13 (2.4) 254 (2.5) 254 (2.5) 254 (2.5) 254 (2.5) 255 (2.5)	South Carolina1						271 (2.3) >				
Jexas     47 (3.9)     263 (1.8) >     42 (3.5)     266 (2.3)     12 (2.1)     263 (1.8) >       Jtah¹     51 (2.2)     272 (1.2)     32 (2.5)     276 (1.5)     17 (1.8)     276 (1.5)       Vest Virginia     42 (3.9)     256 (1.8)     52 (3.3)     271 (1.8)     9 (1.9)     270 (1.4)       Visconsin     35 (5.7)     277 (3.9)     40 (4.2)     281 (1.3)     25 (4.4)     276 (1.5)       Vyoming     40 (3.3)     274 (1.4)     47 (2.8)      275 (4.9)     275 (4.9)     275 (4.9)	Tennessee¹		255 (2.5)		: :		259 (3.2)				
Utah¹     51 (2.2)     272 (1.2)     32 (2.5)     276 (1.5)     17 (1.8)     276       Vest Virginia     42 (3.9)     256 (1.8)     52 (3.3)     271 (1.8)     9 (1.9)     270       Visconsin     35 (5.7)     277 (3.9)     40 (4.2)     281 (1.3)     25 (4.4)     276       Vyoming     40 (3.3)     274 (1.4)     47 (2.8)     275 (4.2)     275 (4.2)     275 (4.2)	-evac				200 (1.9)	13 (2.4)	254 (3.8)				
51 (2.2)     272 (1.2)     32 (2.5)     276 (1.5)     17 (1.8)     276       Vest Virginia     39 (3.4)     260 (1.6)     52 (3.3)     271 (1.8)     9 (1.9)     270       Vest Virginia     42 (3.9)     256 (1.8)     50 (3.8)     260 (1.4)     8 (2.1)     260       Visconsin     35 (5.7)     277 (3.9)!     40 (4.2)     281 (1.3)     25 (4.4)     276       Vyoming     40 (3.3)     274 (1.4)     47 (2.8)     275 (4.2)     275 (4.2)     276 (4.2)			263 (1.8)>	42 (3.5)	266 (2.3)	12 (2.1)	263 (3.1) >				
Vest Virginia     39 (3.4)     260 (1.6)     52 (3.3)     271 (1.8)     9 (1.9)     270       Vest Virginia     42 (3.9)     256 (1.8)     50 (3.8)     260 (1.4)     8 (2.1)     260       Visconsin     35 (5.7)     277 (3.9)     40 (4.2)     281 (1.3)     25 (4.4)     276       Vyoming     40 (3.3)     274 (1.4)     47 (2.8)     275 (4.9)     276 (4.9)     276 (4.9)							276 (1.8)				
Vest Virginia 42 (3.9) 256 (1.8) 50 (3.8) 260 (1.4) 8 (2.1) 260 (1.3) 277 (3.9) 40 (4.2) 281 (1.3) 25 (4.4) 276 (4.2) 281 (1.3) 25 (4.4) 276 (4.2) 281 (1.3) 25 (4.4) 276 (4.2) 281 (1.3) 25 (4.4) 276 (4.2) 281 (1.3) 25 (4.4) 276 (4.2) 281 (1.3) 25 (4.4) 276 (4.2) 281 (1.3) 25 (4.4) 276 (4.2) 281 (1.3) 25 (4.4) 276 (4.2) 281 (1.3) 25 (4.4) 276 (4.2) 281 (1.3) 25 (4.4) 276 (4.2) 281 (1.3) 25 (4.4) 276 (4.2) 281 (1.3) 25 (4.4) 276 (4.2) 281 (1.3) 25 (4.4) 276 (4.2) 281 (1.3) 25 (4.4) 281 (1.3) 281 (1.3) 25 (4.4) 281 (1.3) 2			260 (1.6)	52 (3.3)			270 (1.3)				
Visconsin 35 (5.7) 277 (3.9)! 40 (4.2) 281 (1.3) 25 (4.4) 276 (4.2) 281 (1.3) 25 (4.4) 276			256 (1.8)								
Vyoming 40 (3.3) 274 (1.4) 47 (2.8)		35 (5.7)					260 (4.7)!				
EDDITABLE 1 ' ' ' - ' - ' - ' - ' - ' - '							276 (2.5)				
ERRITORIES	ERRITORIES	` '	,	71 (2.0)	213 (1.2)	13 (2.2)	272 (3.5)				
Suam 37 (1.2)		37 (1.2) «	222 (1.7)	53 (1.0)>>	244 (4 6)	40 (0.5) (6	200 (0.0)				
firgin Islands 65 (0.9) (0.3) (0.3) (0.3)	irgin Islands					, ,	228 (3.3) 245 (2.5)				

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. "The value for 1992 was significantly lower than the value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences indicated.

Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not



#### Teachers' Reports on the Number of Years They Have Taught Mathematics

	Grade 8 - 1992									
	10 Years or Le Mather	ess Teaching natics	More than 10 Years Years Teaching	But Less than 25 Mathematics	25 Years or Mo	re Experience				
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency				
NATION	43 (2.1)	263 (1.6)	44 (2.4)	269 (1.6)	13 (1.8)	275 (3.3)				
Northeast	27 (3.6)	263 (4.3)	53 (5.1)	266 (3.7)	21 (6.1)	278 (6.1)!				
Southeast	53 (5.1)	258 (2.0)	39 (5.0)	263 (2.4)	8 (2.3)	264 (8.2)!				
Central	37 (3.3)	270 (3.9)	42 (5.7)	276 (4.6)	22 (5.0)	281 (4.8)!				
West	51 (3.9)	264 (2.9)	43 (3.6)	271 (2.7)	6 (1.4)	261 (4.3)!				
TATES	()	, ,								
Alabama	43 (3.6)	253 (1.7)	48 (4.1)	251 (2.9)	8 (2.3)	246 (4.6)!				
Arizona	52 (3.8)	262 (1.8)	39 (3.5)	269 (2.0)	9 (2.2)	260 (3.1)!				
Arkansas	41 (4.3)	252 (2.1)	51 (4.4)	257 (2.0)	7 (2.1)	260 (4.4)!				
California	55 (3.3)	255 (2.1)	35 (3.3)	268 (2.9)	11 (1.7)	266 (3.5)				
Colorado	48 (3.3)	269 (1.7)>	43 (3.0)	274 (1.6)	10 (2.0)	276 (3.3)!				
Connecticut	27 (2.9)	267 (2.9)	52 (3.1)	275 (1.9)	21 (2.9)	278 (4.7)				
1					6 (0.7)	273 (4.4)				
Delaware	59 (0.8)>>	261 (1.1)	35 (0.9) <b>«</b>	262 (1.7)	21 (0.7)	235 (1.9)				
Dist. Columbia	26 (1.1) <	235 (2.4)	53 (1.1)	234 (1.4)**	6 (1.6)	256 (5.1)!				
Florida	53 (3.3)	257 (1.8)	40 (3.3)	262 (2.0)	, ,					
Georgia	53 (3.5)	258 (1.9)	38 (3.6)	261 (2.0)	9 (1.8)	250 (3.9)! 265 (2.1)				
Hawaii	57 (0.9) <b>»</b>	254 (1.1)>>	29 (0.9) «	259 (1.7)	13 (0.5)	287 (2.4)!>				
ldaho	53 (3.0)	273 (1.2)>	39 (3.0)	273 (1.3)	8 (1.7)	.201 (2.4)!*				
Indiana	35 (4.2)	265 (1.8)	54 (4.1)	273 (1.6)	11 (2.1)	267 (3.1)				
lowa	32 (3.8)	281 (2.0)>	47 (4.2)	283 (1.4)	21 (3.9)	285 (1.8)!>				
Kentucky	49 (4.1)	260 (1.8)	43 (3.6)	264 (1.7)>	8 (2.5)	269 (4.6)!				
Louisiana	44 (3.4)	247 (2.7)	45 (3.4)	250 (2.2)	12 (2.6)	253 (3.1)!				
Maine <sup>1</sup>	37 (4.3)	276 (1.6)	49 (4.6)	280 (1.6)	14 (3.3)	276 (3.1)!				
Maryland	35 (3.5)	263 (3.1)>	51 (3.6)	265 (2.2)	14 (2.7)	270 (5.9)!				
	, ,	• •	` ,		18 (3.5)	282 (2.4)				
Massachusetts'	21 (2.8)	260 (2.5)	61 (3.7)	273 (1.7)	14 (2.0)	279 (4.6)				
Michigan	41 (3.5)	264 (2.8)	45 (3.7)	266 (2.6)	, ,	282 (2.1)				
Minnesota	35 (4.3)	283 (1.6)**	34 (3.9)	282 (1.6)	31 (3.1)	245 (4.9)!				
Mississippi '	36 (3.8)	245 (2.5)	54 (3.8)	246 (1.9)	10 (2.6)	271 (4.1)!				
Missouri'	46 (3.7)	269 (1.5)	44 (3.4)	273 (1.6)	9 (2.4)	281 (2.8)!				
Nebraska	42 (3.8)	275 (1.7)	41 (4.4)	278 (1.9)	18 (3.5)>	201 (2.0):				
New Hampshire	37 (3.3) <	274 (1.2)>	58 (3.5)	280 (1.3)	5 (1.8)	277 (5.7)!				
New Jersey	38 (4.1)	266 (3.4)	53 (4.1)	273 (2.0)	9 (2.0)	284 (3.2)!				
New Mexico	56 (3.6)	257 (1.1)>	42 (3.5)	263 (1.7)	2 (0.6) <<	*** (***)				
New York	30 (3.4)	251 (4.2)	52 (4.0)	269 (2.5)	18 (2.6)	281 (3.4)>				
North Carolina	48 (3.1)	257 (1.7)>	44 (3.1)	259 (1.9) >	8 (2.0)	257 (3.5)!				
North Dakota	36 (3.5)	283 (1.7)	39 (3.9) <	283 (1.6)	24 (3.3)>	281 (1.7)				
Ohio			47 (4.7)	269 (2.4)	10 (2.3)	266 (5.1)!				
Ohio	43 (4.2)	268 (2.1) >	47 (4.7)	269 (1.5)	6 (1.8)	262 (6.0)!				
Oklahoma	50 (4.1)	266 (1.9)	44 (4.0) 49 (3.7)	272 (2.2)	20 (2.8)	272 (3.1)				
Pennsylvania	31 (3.0)	268 (2.7)*	49 (3.7) 55 (1.1) <	267 (1.0)>	10 (0.5) «	271 (2.2)>				
Rhode Island South Carolina <sup>1</sup>	35 (1.1)**	260 (1.4) >	49 (3.0)	263 (1.8)	5 (1.2)	260 (4.4)				
	46 (3.2)	257 (1.8) 257 (2.0)		259 (2.3)	10 (1.9)	260 (3.4)				
Tennessee'	42 (3.4)	257 (2.0)	48 (3.7)							
Texas	50 (3.8)	262 (1.7)>	41 (3.3)	267 (2.3) >	10 (1.9)	263 (3.7)				
Utah¹	61 (2.5)	271 (1.1)	28 (2.6)	276 (1.7)	11 (1.3)	280 (2.2)				
Virginia	48 (3.4)	262 (1.5)	46 (3.1)	271 (2.0)	6 (1.4)	270 (5.1)!				
West Virginia	47 (4.0)	256 (1.7)	46 (3.9)	260 (1.5)	7 (2.0)	261 (4.3)!				
Wisconsin	40 (5.4)	276 (3.5)	41 (4.1)	280 (1.8)	18 (3.6)	279 (2.2)				
Wyoming	44 (3.1)	274 (1.3)	46 (3.1)	274 (1.5)	11 (1.5)	277 (2.2)				
TERRITORIES				040 (4.0)	40 (0.5)	228 (3.3)				
Guam	42 (1.3) «	227 (1.6)	48 (1.1)**	243 (1.6)	10 (0.5) <b>»</b> 1 (0.2) <b>«</b>	*** (***)				
Virgin Islands	65 (0.9) <<	217 (1.3)	34 (0.9)**	228 (1.7)	1 (0.2) **	( )				

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. "The value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Trial State Mathematics Assessment.



TABLE A.44 |

#### Teachers' Reports on Their Undergraduate Major

_				Grade	4 - 1992			
	Mather	natics	Mathematic	s Education	Educ	ation	Oth	ier
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	5 (1.0)	217 (5.0)	2 (0.6)	231 (6.2)!	00 (4.5)		L	
Northeast	5 (1.7)	*** (***)	3 (2.0)	231 (0.2)!	82 (1.5)	218 (1.0)	11 (1.3)	214 (2.4)
Southeast	5 (2.2)	Y/.		\ /	77 (4.6)	222 (2.4)	15 (4.6)	222 (5.9)!
Central	-	211 (3.6)!	1 (0.7)	( )	89 (2.8)	207 (2.0)	5 (1.7)	208 (7.2)!
West	1	223(10.4)!	1 (0.8)	*** (***)	90 (2.1)	224 (2.0)	3 (1.6)	*** (***)
STATES	4 (2.1)	215 (5.8)!	1 (1.0)	*** (***)	73 (2.4)	218 (2.0)	21 (2.1)	214 (2.8)
Alabama	2 (2.4)						, ,	,,
Arizona	6 (2.1)	201 (4.6)!	1 (0.5)	*** (***)	90 (2.4)	208 (1.7)	3 (1.1)	211 (5.2)!
Arkansas	6 (1.4)	211 (5.0)	1 (0.7)	*** (***)	81 (2.4)	214 (1.2)	11 (2.0)	212 (2.7)
California	4 (1.6)	203 (4.7)!	1 (0.7)	*** (***)	90 (2.4)	209 (0.9)	5 (1.7)	213 (4.7)!
	5 (1.7)	211 (4.9)!	1 (0.8)	*** (***)	51 (2.9)	209 (1.8)	43 (3.2)	204 (2.5)
Colorado	5 (1.2)	226 (5.6)!	2 (0.7)	*** (***)	81 (2.3)	220 (1.1)	12 (2.1)	217 (3.6)
Connecticut	3 (0.8)	230 (6.5)!	1 (0.7)	*** (***)	82 (2.4)	227 (1.3)	14 (2.1)	221 (3.3)
Delaware	4 (0.3)	225 (5.3)	2 (0.3)	*** /***)		• • •	•	` ' 1
Dist. Columbia	4 (0.4)	188 (2.8)	1 (0.0)	*** /***/	90 (0.6)	217 (0.8)	5 (0.3)	209 (3.5)
Florida	2 (0.7)	*** (***)	, , ,	*** (***)	87 (0.5)	190 (0.7)	8 (0.4)	197 (2.9)
Georgia	5 (1.4)	· · · · · · · · · · · · · · · · · · ·	1 (0.4)	*** (***)	, 90 (1.8)	213 (1.6)	7 (1.6)	211 (4.3)!
Hawaii	6 (1.4)		2 (0.6)	, , ,	86 (2.1)	214 (1.3)	7 (1.4)	215 (3.0)
Idaho	, , ,	213 (3.7)!	1 (0.6)		79 (2.4)	213 (1.6)	14 (2.2)	215 (2.7)
	6 (1.3)	222 (3.2)!	4 (1.2)	224 (3.9)!	84 (2.1)	220 (1.2)	6 (1.5)	216 (2.5)!
Indiana	3 (1.3)	217 (6.0)!	3 (1.0)	220 (2.8)!	93 (1.7)	219 (1.2)	4 (0.6)	*** (***)
lowa	4 (1.5)	230 (4.5)!	4 (1.5)	235 (6.5)	87 (2.4)		1 (0.6)	
Kentucky	2 (0.7)	*** (***)	1 (0.9)	*** (***)		228 (1.2)	5 (1.5)	235 (4.0)!
Louisiana	5 (1.9)	212 (6.0)!	2 (1.2)	*** /***	95 (1.4)	214 (1.1)	2 (0.8)	*** (***)
Maine	2 (0.7)	*** (***)	1 (0.7)	*** /***	89 (2.4)	203 (1.7)	4 (1.3)	189 (5.4)!
Maryland	4 (1.3)	216 (7.2)!	1 (0.7)	*** (***)	82 (2.7)	230 (1.1)	14 (2.6)	233 (2.4)
Massachusetts	, ,	, ,	, ,	( )	89 (1.9)	217 (1.3)	6 (1.3)	208 (6.0)!
Michigan	3 (1.1)	218 (6.9)!	2 (0.8)	*** (***) '	79 (2.7)	226 (1.4)	16 (2.2)	223 (3.3)
Minnesota	15 (3.2)	217 (5.1)!	2 (1.1)	*** (***)	70 (3.6)	222 (1.7)	13 (2.1)	213 (6.5)
	3 (1.2)	228 (3.4)!	1 (0.7)	*** (***)	94 (1.7)	227 (1.1)	2 (1.0)	*** (***)
Mississippi	5 (1.4)	192 (3.9)!	2 (1.1)	*** (***)	91 (1.9)	200 (1.3)	2 (0.8)	202 (6.8)!
Missouri	3 (1.0)	215 (7.9)!	2 (0.7)	*** (***)	90 (1.4)	221 (1.4)	5 (1.4)	228 (5.1)!
Nebraska	3 (0.8)	224 (5.9)!	0 (0.2)	*** (***)	93 (1.7)	224 (1.4)	4 (1.6)	232 (6.0)!
New Hampshire	5 (1.5)	230 (3.3)!	1 (0.6)	*** (***)	80 (2.3)	• •		
New Jersey	5 (1.4)	225 (8.4)!	0 (0.0)	*** /***		229 (1.3)	13 (1.8)	227 (2.3)
New Mexico	7 (2.1)	214 (3.9)!	1 (0.8)	*** /***	84 (2.5)	227 (1.6)	10 (2.2)	221 (6.2)!
New York	4 (1.2)	217 (6.8)!	1 (0.8)	*** /***	83 (3.0)	211 (1.5)	9 (1.8)	215 (5.2)!
North Carolina	4 (1.2)	218 (3.0)!	· · ·	*** (***)	72 (2.9)	218 (1.5)	22 (2.5)	213 (3.0)
North Dakota	6 (2.4)	, ,	1 (0.6)	\ /	90 (1.7)	212 (1.1)	5 (1.1)	206 (3.1)!
		230 (2.3)!	1 (0.3)	*** (***)	91 (2.6)	228 (0.8)	3 (1.2)	*** (***)
Ohio	4 (1.5)	223 (4.9)!	1 (0.5)	*** (***)	92 (2.1)	217 (1.3)	4 (1.1)	210 (0.0)
Okiahoma	9 (2.6)	217 (3.2)!	1 (0.5)	*** }***{	86 (2.8)	220 (1.1)	, ,	210 (9.0)!
Pennsylvania	5 (1.6)	227 (4.9)!	3 (1.2)	224 (6.5)!	85 (2.5)		- (,	217 (2.9)!
Rhode Island	5 (1.3)	201 (4.4)!	1 (0.5)	*** (***)		224 (1.4)	8 (1.6)	219 (4.7)!
South Carolina	2 (0.6)	*** (***)	1 (0.9)	*** /***	79 (2.5)	214 (1.7)	15 (2.2)	218 (3.7)
Tennessee	4 (0.7)	203 (6.4)!	2 (1.0)	*** }***}	90 (1.5)	212 (1.1)	6 (1.0)	210 (4.8)
Texas				` '	87 (1.9)	210 (1.4)	7 (1.6)	210 (3.4)!
Utah	10 (2.3)	220 (4.5)!	2 (0.7)	*** (***)	74 (3.1)	218 (1.4)	14 (2.5)	208 (4.4)
	7 (1.7)	229 (3.8)!	1 (0.4)	*** (***)	86 (2.1)	222 (1.0)	6 (1.3)	221 (3.1)!
Virginia	2 (0.8)	*** (***)	2 (1.3)	*** (***)	88 (2.1)	219 (1.5)	8 (1.6)	222 (4.6)!
West Virginia	5 (1.4)	213 (2.8)!	3 (1.4)	220 (6.3)!	86 (2.7)	213 (1.2)	6 (1.7)	213 (4.7)!
Wisconsin	2 (0.9)	*** (***)	1 (0.4)	*** (***)	95 (1.4)	228 (0.9)	2 (1.0)	
Wyoming	3 (0.9)	*** (***)	3 (1.2)	232 (4.2)!	89 (2.2)	224 (1.0)	5 (1.5)	225(16.7)! 224 (4.3)!
ERRITORY		•	, ,	, ,-		()	5 (1.5)	224 (4.3)!
Guam	8 (0.6)	191 (2.6)	0 (0.0)	*** (***)	84 (1.0)	192 (0.9)	8 (0.8)	183 (3.6)
					٠,,	\/	U (U.U)	.55 (5.5)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this



### TABLE A.45 | Teachers' Reports on Their Undergraduate Major (continued)

	Grade 8 - 1992										
	Mather	matics	Mathematics	Education	Educa	ation	Ott	ner			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	45 (2.9)	273 (1.7)	16 (2.1)	269 (2.5)	27 (2.8)	260 (2.3)	12 (1.2)	257 (2.7)			
Northeast	50 (7.0)	272 (5.2)	12 (2.1)	278 (4.6)!	29 (7.1)	259 (7.1)!	9 (1.7)	254 (6.6)			
Southeast	34 (5.4)	267 (3.0)	17 (3.7)	260 (3.6)!	38 (5.3)	259 (1.9)	11 (2.4)	247 (4.9)!			
Central	53 (5.8)	281 (2.5)	19 (3.9)	270 (6.3)!	18 (4.7)	262 (6.2)!	10 (3.0)	272 (4.6)!			
West	45 (5.4)	271 (2.5)	15 (4.9)	273 (3.3)!	25 (5.3)	261 (5.6)!	15 (2.8)	257 (4.2)			
STATES	` ′	, ,	, ,								
Alabama	51 (4.4)	254 (2.4)	22 (3.6)	255 (2.9)	20 (4.0)	239 (3.1)!	6 (1.8)	258 (7.9)!			
Arizona	20 (2.5)	267 (3.3)	9 (2.3)	264 (3.3)!	54 (3.4)	264 (1.8)	17 (2.8)	262 (2.8)			
Arkansas	49 (3.6)	257 (1.9)	25 (3.1)	260 (2.5)	17 (2.4)	247 (3.4)	10 (2.2)	254 (4.5)!			
California	30 (3.3)	267 (3.6)	7 (1.6)	268 (3.0)!	27 (3.3)	261 (3.1)	37 (3.0)	254 (2.9)			
Colorado	50 (2.8)	274 (1.5)	14 (2.0)	273 (2.6)	24 (2.9)	268 (2.2)	12 (2.1)	268 (3.0)			
Connecticut	43 (3.4)	279 (2.3)	14 (2.4)	277 (4.4)	26 (3.1)	264 (3.1)	18 (2.6)	270 (3.7)			
Delaware	29 (0.5)	265 (1.5)	25 (0.9)	265 (1.5)	23 (0.8)	252 (2.3)	22 (0.7)	265 (2.0)			
Dist. Columbia	63 (1.1)	236 (1.2)	17 (0.9)	228 (1.6)	12 (0.7)	232 (2.8)	8 (0.7)	239 (5.3)			
Florida	37 (2.8)	260 (2.4)	19 (3.1)	262 (3.2)	27 (3.4)	257 (3.0)	17 (2.3)	257 (2.8)			
Georgia	28 (2.9)	261 (2.8)	19 (2.8)	258 (2.8)	42 (3.7)	258 (2.2)	11 (1.7)	255 (2.9)			
Hawaii	47 (0.9)	263 (1.2)	22 (0.7)	264 (1.8)	23 (0.8)	243 (1.7)	8 (0.4)	243 (2.2)			
Idaho	37 (2.8)	277 (1.5)	16 (2.0)	276 (2.2)	36 (3.1)	270 (1.4)	10 (2.0)	277 (2.9)			
	1 ' '		` '		16 (2.1)	260 (2.4)	7 (1.9)	272 (5.7)!			
Indiana	51 (3.4)	272 (1.6)	27 (3.4)	269 (2.2)	1 1	279 (2.0)	4 (0.8)	284 (4.4)!			
lowa	54 (4.1)	284 (1.4)	19 (2.8)	285 (2.9)	23 (3.4)	255 (1.8)	6 (1.7)	255 (4.6)!			
Kentucky	36 (3.2)	269 (2.1)	17 (2.5)	267 (2.9)	42 (3.6)	247 (1.9)	4 (1.2)	247(10.1)!			
Louisiana	19 (2.5)	253 (3.6)	29 (3.0)	251 (3.1)	47 (3.7) 31 (3.7)	273 (2.0)	12 (2.4)	270 (3.3)!			
Maine Maryland	44 (4.0)	283 (1.4)	13 (2.4) 19 (3.2)	281 (3.4) 265 (3.7)	27 (3.6)	259 (2.6)	8 (2.0)	266 (6.5)!			
•	46 (3.6)	268 (2.2)		• •	1 _1	• •	, .				
Massachusetts	54 (3.1)	275 (1.7)	10 (1.7)	276 (4.8)	20 (2.5)	265 (3.7)	17 (2.7)	270 (3.9)			
Michigan	48 (3.2)	274 (2.5)	11 (2.6)	269 (5.9)!	33 (3.2)	256 (1.9)	8 (1.6)	267 (4.6)			
Minnesota	61 (3.2)	283 (1.3)	32 (2.8)	282 (1.9)	6 (1.9)	273 (4.1)!	2 (1.1)				
Mississippi	39 (3.9)	246 (2.4)	21 (3.5)	248 (2.6)	36 (3.4)	243 (2.2)	4 (1.5)	246(11.4)!			
Missouri	42 (3.7)	272 (2.1)	32 (2.6)	274 (1.2)	19 (3.1)	262 (2.6)	8 (1.9)	272 (3.6)! *** (***)			
Nebraska	55 (3.8)	275 (1.3)	33 (3.6)	280 (2.2)	11 (2.3)	276 (4.0)!	2 (1.1)	()			
New Hampshire	44 (4.1)	280 (1.1)	15 (2.3)	274 (1.9)	23 (3.4)	277 (2.0)	18 (3.0)	275 (3.6)			
New Jersey	35 (4.0)	279 (2.5)	13 (2.6)	281 (3.4)	41 (3.3)	263 (2.7)	10 (2.0)	264 (4.8)!			
New Mexico	49 (3.1)	262 (1.6)	10 (1.8)	265 (2.1)	33 (3.1)	254 (1.4)	7 (1.6)	259 (4.1)!			
New York	55 (3.3)	269 (2.4)	15 (2.9)	272 (4.2)	12 (2.5)	256 (5.8)	18 (2.9)	255 (5.3)			
North Carolina	39 (3.6)	263 (2.0)	25 (3.4)	259 (2.3)	26 (2.8)	251 (2.1)	10 (1.8)	250 (3.0)			
North Dakota	58 (4.3)	284 (1.4)	21 (3.8)	280 (2.4)	20 (2.9)	282 (1.8)	1 (0.7)	*** (***)			
Ohio	36 (4.0)	267 (3.1)	21 (4.4)	271 (5.0)!	32 (3.8)	269 (2.3)	11 (3.6)	265 (4.9)!			
Oklahoma	39 (4.0)	270 (1.8)	28 (3.6)	268 (2.2)	31 (4.1)	263 (2.3)	2 (0.8)	*** (***)			
Pennsylvania	57 (3.8)	276 (1.8)	29 (3.5)	271 (2.1)	10 (2.0)	255 (5.4)!	4 (1.3)	237 (6.7)!			
Rhode Island	66 (0.8)	267 (0.8)	10 (0.6)	263 (2.4)	17 (0.6)	259 (2.1)	7 (0.6)	263 (2.6)			
South Carolina	40 (3.2)	267 (2.1)	18 (2.6)	264 (2.5)	32 (2.6)	252 (1.9)	10 (2.2)	254 (4.7)!			
Tennessee	33 (3.9)	262 (2.9)	13 (2.7)	261 (3.4)!	43 (4.1)	255 (1.7)	10 (2.2)	257 (3.5)!			
Texas		268 (1.6)	13 (2.4)	263 (3.8)	16 (2.3)	258 (3.6)	11 (1.8)	252 (3.5)			
Utah	60 (3.0) 36 (2.4)	275 (1.5)	21 (2.1)	276 (1.7)	28 (2.3)	271 (1.4)	15 (1.9)	273 (2.7)			
Virginia	51 (3.0)	273 (1.7)	18 (2.4)	261 (2.4)	19 (2.5)	261 (3.1)	11 (1.7)	261 (3.7)			
West Virginia	45 (3.9)	261 (1.3)	37 (3.7)	258 (1.7)	16 (2.7)	253 (2.3)	2 (0.8)	*** (***)			
Wisconsin	36 (3.8)	282 (1.3)	27 (4.9)	283 (3.3)!	33 (3.7)	270 (2.3)	3 (1.2)	278 (5.3)!			
Wyoming	44 (2.5)	276 (1.6)	34 (2.6)	275 (1.3)	14 (1.7)	269 (2.3)	8 (1.2)	274 (2.6)			
TERRITORIES	++ (2.5)	2.0 (1.0)	<del></del>	2.5 (1.5)	,	()	· · · - /	· - · /			
Guam	43 (1.4)	242 (1.8)	20 (1.1)	222 (2.6)	24 (1.2)	237 (2.1)	13 (0.7)	226 (2.5)			
Virgin Islands	51 (0.6)	224 (1.4)	5 (0.4)	237 (4.1)	7 (0.7)	219 (3.7)	37 (0.8)	214 (1.7)			



#### TABLE A.46 |

Teachers' Reports on Their Graduate Major

				Grade	4 - 1992			_
	Mather	matics	Mathematic	s Education	Educ	ation	Oti	ner
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	2 (0.7)	215 (8.1)!	3 (0.9)	224 (8.3)!	82 (2.3)	219 (1.1)	10 /4 6\	040 (0.5)
Northeast	0 (0.0)	*** (***)	2 (1.9)	*** (***)	79 (5.4)		13 (1.6)	216 (2.5)
Southeast	4 (2.5)	*** (***)	3 (2.1)	*** }***	84 (4.6)		19 (5.1)	218 (4.1)!
Central	1 (1.2)	*** (***)	1 (1.0)	*** /***/	85 (4.0)	207 (2.2)	9 (2.7)	206 (5.3)!
West	2 (1.0)	*** (***)	5 (2.2)	*** /***	79 (4.7)	225 (2.0)	12 (3.1)	219 (6.2)!
STATES	\ '	` '	J (2.2)	( )	19 (4.1)	218 (2.6)	13 (2.4)	218 (3.1)
Alabama	3 (1.1)	*** (***)	1 (0.8)	*** (***)	92 (1.9)	000 (4.6)	0 (4 4)	
Arizona	2 (0.9)	*** }***	3 (0.8)	*** /***	79 (2.3)	208 (1.6)	3 (1.4)	211 (5.2)!
Arkansas	2 (1.7)	*** /***	1 (0.7)	*** }***		214 (1.2)	16 (2.2)	215 (2.7)
California	2 (0.8)	*** /***	3 (1.1)	207 (5.6)!	88 (2.3)	209 (1.2)	9 (1.9)	207 (2.8)!
Colorado	3 (1.0)	217 (4.6)!	2 (0.7)	*** (***)	81 (2.6)	206 (1.7)	14 (2.3)	208 (3.3)
Connecticut	2 (0.9)	*** (***)	2 (0.7)	*** /***	76 (2.7)	219 (1.4)	19 (2.5)	220 (2.5)
Delaware	` '	` '		` '	78 (2.8)	227 (1.5)	18 (2.7)	229 (2.5)
Dist. Columbia	2 (0.6)	*** (***)	3 (0.4)	*** (***)	84 (1.0)	219 (1.1)	10 (0.7)	218 (3.8)
Florida	9 (0.3)	198 (2.7)	8 (0.5)	184 (2.2)	62 (0.9)	188 (0.7)	21 (0.9)	197 (1.9)
_	3 (1.2)	*** (***)	2 (0.7)	*** (***)	80 (3.0)	212 (1.8)	16 (2.8)	206 (3.6)
Georgia	3 (1.2)	*** (***)	4 (1.6)	198 (8.9)!	88 (2.2)	216 (1.7)	5 (1.2)	208 (5.4)!
Hawaii	3 (1.1)	*** (***)	2 (0.9)	*** (***)	85 (2.1)	214 (1.7)	10 (1.9)	207 (2.5)
ldaho	4 (1.3)	221 (3.5)!	5 (1.5)	225 (3.7)!	81 (2.9)	220 (1.2)	9 (2.2)	221 (2.4)!
Indiana	1 (0.7)	*** (***)	1 (0.9)	*** /***\	05 (4.0)	, ,	, ,	` '
lowa	6 (1.8)	232 (2.6)!	8 (2.6)	237 (3.3)!	95 (1.2)	219 (1.1)	2 (1.1)	*** (***)
Kentucky	0 (0.3)	*** (***)	1 (1.0)	237 (3.3)! *** (***)	71 (3.9)	229 (1.6)	15 (2.8)	226 (2.7)!
Louisiana	4 (1.5)	204 (3.9)!	2 (1.7)	*** (***)	93 (1.6)	214 (1.2)	5 (1.2)	216 (3.2)!
Maine	4 (1.7)	*** (***)	1 (0.5)	*** (***)	85 (2.0)	204 (2.1)	8 (1.4)	200 (4.0)
Maryland	3 (1.2)	209 (7.2)!	3 (1.2)		77 (4.6)	231 (1.8)	18 (4.1)	228 (2.8)!
Massachusetts	` '		` '	217 (5.9)!	73 (3.2)	216 (1.6)	20 (2.9)	220 (3.2)
	4 (1.4)	222 (7.0)!	2 (1.0)	*** (***)	80 (2.9)	228 (1.5)	14 (2.6)	218 (4.1)!
Michigan	4 (1.5)	211(16.8)!	3 (1.4)	*** (***)	70 (3.7)	221 (2.0)	23 (3.4)	219 (4.1)
Minnesota	3 (1.2)	*** (***)	2 (0.9)	*** (***)	87 (2.3)	229 (1.0)	9 (2.0)	220 (4.9)!
Mississippi	3 (1.7)	*** (***)	1 (0.5)	*** (***)	94 (2.0)	200 (1.4)	2 (0.9)	*** (***)
Missouri	4 (1.6)	224 (4.2)!	3 (1.3)	*** (***)	77 (3.3)	221 (1.4)	15 (3.2)	218 (3.5)!
Nebraska	3 (1.3)	*** (***)	2 (0.9)	*** (***)	85 (2.5)	226 (1.5)	10 (2.3)	222 (3.7)!
New Hampshire	3 (1.6)	*** (***)	6 (1.8)	231 (2.8)!	79 (2.7)		, ,	` '
New Jersey	3 (1.5)	*** /***/	1 (0.5)	*** (***)	78 (3.7) 65 (4.3)	229 (1.8)	14 (3.1)	231 (3.2)!
New Mexico	3 (1.5)	*** /***	1 (0.9)	*** /***/	, ,	226 (2.3)	31 (3.9)	229 (3.6)
New York	2 (1.0)	*** (***)	2 (0.6)	*** (***)	86 (2.7) 82 (2.3)	212 (1.7)	10 (2.2)	206 (4.5)!
North Carolina	4 (1.7)	*** /***/	3 (1.5)	*** /***	_ : :	218 (1.3)	15 (1.9)	209 (3.7)
North Dakota	7 (2.5)	233 (3.6)!	1 (0.7)	*** /***	74 (4.2) 85 (3.2)	211 (1.9)	19 (4.0)	213 (3.3)!
Ohio	, ,	*** (***)		` '	05 (3.2)	228 (1.1)	7 (2.1)	228 (2.7)!
Oklahoma	2 (0.8)	*** (***)	3 (1.3)	218 (9.6)!	85 (2.4)	217 (1.4)	10 (2.0)	221 (4.9)
Pennsylvania	1 (0.8)	( )	1 (0.6)	*** (***)	87 (2.4)	220 (1.3)	11 (2.1)	215 (3.1)
Rhode Island	2 (0.6)	( )	1 (0.4)	*** (***)	89 (1.8)	225 (1.5)	8 (1.7)	217 (4.5)!
South Carolina	2 (1.0)	( )	3 (1.2)	*** (***)	79 (2.4)	213 (1.8)	16 (2.2)	219 (4.1)
Tennessee	3 (1.5)	200 (9.8)!	1 (0.7)	*** (***)	86 (2.2)	212 (1.3)	10 (1.9)	208 (3.4)!
	1 (0.7)	()	3 (1.5)	*** (***)	77 (3.2)	210 (1.6)	19 (2.8)	209 (2.7)
Texas	6 (2.0)	218 (5.9)!	1 (0.5)	*** (***)	73 (3.5)	217 (2.0)	20 (3.4)	214 (4.5)
Utah	7 (1.9)	224 (3.6)!	4 (1.1)	226 (6.3)!	81 (2.7)	224 (1.5)	8 (1.9)	222 (3.0)!
Virginia	2 (0.9)	*** (***)	3 (1.2)	*** (***)	75 (3.7)	220 (2.3)	20 (3.0)	220 (4.3)
West Virginia	1 (0.5)	*** (***)	1 (0.7)	*** (***)	78 (2.8)	213 (1.4)	20 (3.0)	215 (2.1)
Wisconsin	3 (1.7)	*** (***)	2 (0.9)	*** (***)	81 (3.1)	229 (1.3)	14 (2.6)	213 (2.1)
Wyoming	6 (1.6)	226 (3.2)!	4 (1.7)	224 (3.7)!	77 (3.2)	224 (1.3)	13 (2.8)	
TERRITORY			` '	(· )·	(3.2)	(1.0)	15 (2.0)	227 (2.0)!
Guam Ì	5 (0.6)	187 (4.0)	1 (0.1)	*** (***)	81 (1.4)	195 (1.1)	13 (1.2)	189 (3.2)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



### TABLE A.46 | Teachers' Reports on Their Graduate Major (continued)

				Grade	8 - 1992			
	Mather	natics	Mathematics	Education	Educa	ation	Oth	ier
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	21 (2.7)	272 (3.2)	19 (2.4)	273 (3.3)	46 (4.0)	267 (2.2)	13 (1.9)	260 (3.4)
Northeast	20 (5.3)	265 (5.6)!	24 (4.9)	277 (6.9)!	44 (9.1)	267 (7.0)!	13 (3.9)	256 (8.6)!
Southeast	21 (8.4)	261 (6.7)!	22 (6.2)	267 (6.5)!	50 (9.1)	261 (2.4)!	7 (5.2)	237 (3.6)!
Central	23 (4.2)	285 (4.5)	18 (5.5)	269 (7.3)!	43 (6.2)	274 (4.2)	16 (2.0)	266 (5.9)
West STATES	21 (4.3)	272 (6.1)!	16 (3.1)	279 (5.0)	48 (7.2)	265 (3.0)	16 (3.5)	267 (4.1)!
Alabama	31 (4.5)	254 (3.4)	26 (4.4)	261 (3.8)	38 (5.3)	248 (4.5)	5 (1.8)	247 (9.3)!
Arizona	18 (3.3)	264 (2.6)	13 (2.4)	268 (3.6)	44 (3.5)	263 (2.3)	26 (3.4)	263 (2.3)
Arkansas	1 ' '	260 (2.9)	28 (3.2)	263 (2.7)	32 (4.6)	250 (3.1)	12 (2.7)	253 (4.2)!
California	28 (4.3)		* :	270 (5.3)!	53 (4.0)	260 (2.2)	18 (2.5)	253 (3.1)
	18 (2.6)	270 (4.6)	11 (2.4)	, ,	39 (4.1)	270 (2.1)	17 (3.3)	273 (3.4)
Colorado Connecticut	22 (3.0)	272 (2.7) 275 (4.1)	22 (3.0) 20 (3.0)	272 (2.6) 279 (2.4)	43 (3.6)	270 (2.1)	13 (2.3)	275 (2.9)
	23 (3.2)			• •	• •	260 (2.1)	24 (1.1)	261 (2.2)
Delaware	13 (1.0)	268 (3.1)	28 (0.9)	268 (2.0)	35 (0.9)	3 :	22 (1.2)	235 (2.8)
Dist. Columbia	26 (1.1)	231 (2.2)	22 (1.0)	235 (2.3)	30 (1.3)	240 (1.8)	24 (3.6)	257 (3.4)
Florida	19 (2.9)	264 (3.9)	18 (3.1)	270 (3.9)	38 (3.8)	259 (3.0)	1 1	
Georgia	17 (3.2)	262 (3.9)	31 (3.7)	263 (2.9)	43 (3.6)	256 (2.2)	9 (1.9)	248 (4.3)!
Hawaii	20 (1.0)	261 (2.4)	31 (1.1)	264 (1.7)	35 (1.2)	249 (1.5)	14 (0.8)	246 (2.3)
Idaho	16 (2.6)	279 (3.1)	19 (3.2)	274 (2.4)	51 (3.9)	272 (1.8)	13 (2.7)	274 (1.9)!
Indiana	30 (4.0)	274 (2.4)	24 (4.2)	268 (2.3)	37 (3.9)	269 (2.4)	8 (2.3)	273 (5.1)!
lowa	28 (4.4)	284 (1.9)	23 (4.1)	283 (2.9)	39 (4.7)	281 (1.8)	10 (2.6)	286 (3.4)!
Kentucky	14 (3.0)	269 (5.2)!	16 (3.2)	270 (3.6)	63 (3.8)	258 (1.5)	7 (1.5)	261 (3.5)!
Louisiana	19 (3.6)	244 (4.5)	17 (3.3)	256 (4.7)	48 (4.5)	248 (2.7)	15 (3.3)	250 (4.5)!
Maine		279 (3.1)!	11 (3.0)	277 (3.2)!	45 (6.1)	279 (2.5)	15 (3.8)	273 (7.2)!
Maryland	29 (5.8) 23 (2.8)	279 (3.1)	16 (2.5)	262 (4.4)	46 (3.1)	264 (2.2)	15 (2.5)	262 (4.6)
Massachusetts	27 (4.1)	275 (3.0)	13 (2.7)	281 (3.7)!	43 (3.9)	272 (2.3)	16 (3.3)	261 (3.7)!
Michigan	1 ' '	262 (4.7)	22 (3.0)	269 (4.1)	40 (3.4)	267 (2.7)	17 (2.6)	267 (3.5)
Minnesota	21 (3.9)		31 (3.1)	287 (2.2)	22 (2.9)	281 (2.7)	13 (3.3)	276 (3.1)!
	33 (3.7)	281 (2.5)	29 (4.4)	248 (4.1)	48 (4.7)	246 (2.9)	6 (2.1)	241 (3.6)!
Mississippi	16 (3.0)	245 (4.1)		278 (1.9)	36 (4.1)	266 (2.2)	19 (2.8)	271 (2.8)
Missouri Nebraska	18 (3.9) 31 (4.4)	270 (2.9)! 278 (2.0)	27 (3.7) 28 (4.3)	276 (1.3)	29 (4.2)	279 (2.1)	11 (2.4)	278 (3.2)!
New Hampshire	35 (4.6)	279 (2.0)	27 (4.3)	276 (2.1)	28 (4.1)	279 (2.6)	10 (2.9)	278 (5.1)!
New Jersey	19 (4.0)	284 (4.6)!	20 (4.3)	272 (5.7)!	47 (5.2)	265 (3.4)	14 (2.9)	270 (5.2)!
New Mexico	22 (3.1)	264 (1.9)	16 (2.5)	259 (2.1)	45 (3.7)	255 (1.7)	17 (2.3)	259 (2.8)
New York	29 (3.4)	270 (2.7)	29 (3.7)	266 (3.7)	34 (3.9)	264 (3.7)	8 (1.6)	255 (7.9)
North Carolina	1 '	263 (3.8)!	33 (4.1)	263 (2.6)	45 (4.3)	252 (2.5)	7 (2.0)	247 (6.8)!
North Dakota	16 (3.3) 38 (3.7)	281 (1.8)	11 (3.1)	286 (4.2)!	39 (4.4)	280 (1.8)	12 (3.6)	287 (2.5)!
Ohio	13 (3.2)	277 (7.6)!	14 (3.3)	265 (5.8)!	60 (5.0)	268 (2.7)	13 (3.0)	267 (5.5)!
Oklahoma	18 (3.4)	271 (4.3)	22 (4.4)	268 (4.0)!	43 (4.5)	267 (2.5)	17 (3.3)	269 (3.6)!
Pennsylvania	37 (3.0)	274 (2.0)	26 (3.2)	275 (3.4)	25 (2.8)	266 (2.8)	12 (2.5)	269 (3.6)!
Rhode Island	35 (1.1)	270 (1.3)	16 (0.8)	269 (1.7)	36 (0.9)	261 (1.6)	13 (0.8)	260 (2.3)
South Carolina	1 ' '	268 (2.7)	24 (3.2)	261 (2.7)	42 (3.0)	256 (2.1)	8 (1.8)	259 (6.5)!
Tennessee	27 (3.7) 15 (3.2)	256 (5.4)!	12 (2.5)	262 (4.2)!	57 (4.3)	259 (1.8)	17 (3.5)	259 (6.0)!
Texas	23 (3.5)	266 (3.4)	23 (3.4)	271 (4.6)	37 (3.9)	256 (2.4)	17 (2.7)	260 (5.0)
Utah	25 (2.9)	275 (1.8)	26 (2.9)	278 (2.2)	31 (3.0)	271 (2.3)	18 (2.2)	275 (2.3)
Virginia		273 (3.3)	22 (3.1)	264 (3.1)	43 (3.8)	270 (2.5)	15 (2.6)	262 (5.8)
West Virginia	20 (3.2)	264 (2.3)!	19 (3.3)	261 (3.2)	43 (4.0)	259 (1.6)	21 (3.3)	251 (2.0)
Wisconsin	16 (3.2)	281 (4.6)!	20 (4.3)	280 (2.4)!	52 (4.8)	276 (1.6)	11 (2.1)	281 (3.9)
Wyoming	17 (3.6)	1. 1		271 (2.0)	32 (2.7)	278 (2.1)	15 (1.8)	271 (2.1)
TERRITORIES	31 (3.3)	276 (2.5)	22 (3.3)	211 (2.0)	O2 (2.1.)	()	( )	
Guam	16 (1.7)	242 (4.8)	26 (1.6)	241 (3.6)	51 (2.0)	239 (2.9)	6 (0.8)	*** (***)
Virgin Islands	19 (1.0)	220 (2.0)	6 (0.5)	*** (***)	45 (1.1)	219 (2.0)	30 (1.0)	228 (1.8)



TABLE A.47

Teachers' Reports on the Amount of Time Spent on In-Service Education in Mathematics or the Teaching of Mathematics During the Last Year

	Grade 4 - 1992									
ľ	16 Hours	or More	One to 1	5 Hours	No	ne				
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency				
NATION	21 (2.5)	216 (1.9)	62 (2.6)	240 (4.0)	47 (0.0)					
Northeast	14 (4.5)	220 (6.1)!		219 (1.2)	17 (2.0)	216 (2.0)				
Southeast			68 (5.9)	225 (3.0)	18 (3.9)	215 (4.1)!				
Central	25 (4.5)	208 (4.3)	61 (6.2)	207 (2.1)	15 (3.4)	210 (2.5)!				
West	18 (4.4)	221 (3.5)!	<b>62</b> (5.1)	225 (2.2)	20 (4.3)	223 (4.2)!				
	25 (5.9)	217 (3.1)!	59 (4.0)	218 (2.2)	16 (4.1)	213 (3.5)!				
STATES					` '					
Alabama	27 (3.1)	207 (2.4)	67 (3.3)	208 (1.9)	5 (1.9)	206 (5.1)!				
Arizona	18 (2.1)	217 (2.5)	56 (3.2)	214 (1.7)	26 (2.8)					
Arkansas	21 (2.5)	209 (2.4)	59 (3.4)	210 (1.3)		213 (2.0)				
California	26 (3.2)	206 (2.5)	· · ·		20 (2.5)	206 (2.5)				
Colorado	18 (2.1)		60 (3.5)	207 (1.9)	14 (1.9)	210 (2.7)				
Connecticut		222 (2.7)	59 (3.2)	220 (1.3)	22 (2.8)	218 (2.2)				
	17 (2.5)	228 (3.0)	74 (2.9)	227 (1.4)	10 (2.1)	227 (3.9)!				
Delaware	17 (0.9)	220 (1.7)	70 (1.1)	216 (1.0)	13 (0.7)	218 (2.4)				
Dist. Columbia	22 (0.6)	192 (1.5)	69 (0.8)	190 (0.9)	8 (0.6)	192 (3.3)				
Florida	30 (2.6)	215 (2.4)	59 (2.9)	213 (2.0)	11 (1.9)	211 (2.9)				
Georgia	15 (2.8)	214 (4.1)	53 (2.7)							
Hawaii	26 (2.5)	214 (2.2)		213 (1.4)	32 (3.1)	214 (1.7)				
Idaho	19 (2.3)		66 (2.6)	212 (1.7)	8 (1.3)	217 (3.8)				
	19 (2.3)	220 (1.7)	63 (3.3)	221 (1.3)	18 (2.5)	217 (1.5)				
Indiana	16 (2.7)	219 (2.9)	59 (3.2)	220 (1.5)	25 (3.3)	219 (2.2)				
lowa	17 (2.9)	230 (2.6)	59 (3.4)	229 (1.4)	24 (3.1)	228 (1.9)				
Kentucky	21 (3.1)	218 (2.6)	60 (3.7)	212 (1.5)	20 (3.1)					
Louisiana	19 (3.1)	209 (3.4)	66 (3.3)	203 (1.7)	• •	214 (2.2)				
Maine	28 (4.1)	233 (1.8)			15 (2.7)	195 (4.1)				
Maryland	25 (2.7)	220 (2.4)	53 (4.2) 61 (3.1)	230 (1.4)	20 (2.3)	229 (1.9)				
Massachusetts	• •		, ,	217 (1.7)	13 (2.4)	213 (5.4)				
	21 (2.8)	227 (2.6)	61 (3.9)	226 (1.6)	18 (2.8)	220 (3.0)				
Michigan	30 (2.9)	217 (2.6)	58 (3.8)	222 (2.2)	11 (2.7)	213 (4.7)!				
Minnesota	24 (3.1)	228 (1.9)	55 (3.5)	227 (1.4)	21 (3.1)	227 (2.8)				
Mississippi	35 (3.6)	197 (2.3)	53 (3.7)	202 (1.5)	12 (2.0)					
Missouri	16 (2.3)	224 (3.2)	59 (3.2)	221 (1.7)		196 (3.8)				
Nebraska	14 (2.6)	226 (2.8)	61 (3.6)	224 (1.7)	26 (3.0) 24 (3.2)	220 (2.4)				
New Hampshire	, ,		` '	, ,	, ,	225 (2.4)				
	29 (3.3)	232 (1.9)	57 (3.4)	229 (1.6)	14 (2.3)	225 (2.6)				
New Jersey	16 (2.5)	223 (4.3)	68 (3.4)	227 (1.6)	17 (3.2)	224 (3.9)!				
New Mexico	11 (1.9)	215 (2.9)	60 (3.2)	212 (2.0)	29 (3.4)	210 (2.0)				
New York	18 (2.8)	216 (3.8)	46 (3.1)	214 (2.1)	36 (3.8)	221 (2.2)				
North Carolina	20 (2.4)	213 (2.3)	62 (2.6)	212 (1.1)	19 (2.4)	212 (3.2)				
North Dakota	14 (2.4)	227 (1.4)	66 (3.3)	228 (1.1)	21 (3.2)	212 (3.2)				
Ohio	, ,			` '	, ,	, ,				
Oklahoma	18 (2.4)	214 (2.8)	64 (2.8)	219 (1.3)	17 (2.6)	216 (2.5)				
	20 (2.9)	219 (2.0)	65 (3.3)	219 (1.3)	15 (2.2)	219 (2.3)				
Pennsylvania	16 (2.4)	221 (2.5)	57 (3.7)	223 (1.9)	27 (3.3)	225 (2.4)				
Rhode Island	19 (2.4)	216 (3.6)	57 (3.0)	214 (1.8)	25 (2.9)	213 (3.4)				
South Carolina	23 (2.8)	215 (2.5)	67 (3.1)	211 (1.3)	10 (1.7)	204 (2.3)				
Tennessee	20 (2.2)	211 (3.5)	61 (3.4)	209 (1.4)	18 (2.6)	204 (2.3)				
Texas	• •		` '		, ,	, ,				
Jtah	28 (3.2)	218 (2.2)	60 (3.2)	218 (1.6)	12 (2.4)	211 (4.2)!				
	23 (3.2)	225 (2.4)	56 (3.4)	223 (1.1)	21 (2.3)	218 (2.1)				
/irginia	18 (2.8)	221 (3.2)	62 (2.9)	219 (1.8)	20 (2.3)	220 (2.2)				
West Virginia	22 (2.6)	216 (2.0)	63 (3.3)	212 (1.4)	15 (2.6)	215 (2.0)				
<i>N</i> isconsin	20 (3.1)	230 (2.6)	55 (3.2)	228 (1.5)	25 (2.9)					
Nyoming	20 (3.0)	225 (2.0)	55 (3.5)	224 (1.1)		225 (1.9)				
ERRITORY	(3.0)	220 (2.0)	SS (5.5)	224 (1.1)	25 (2.9)	226 (1.6)				
Guam	21 (1.3)	201 (2.2)	46 (1.2)	190 /4 0\	20 (4.5)	407 (4 7)				
	(1.5)	201 (2.2)	40 (1.2)	189 (1.2)	32 (1.5)	187 (1.7)				

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



### Teachers' Reports on the Amount of Time Spent on In-Service Education in Mathematics or the Teaching of Mathematics During the Last Year (continued)

	Grade 8 - 1992									
-	16 Hours or More		One to 1	5 Hours	Nor	ne				
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency				
NATION	47 (2.6)	268 (1.7)	45 (2.6)	266 (1.5)	8 (1.5)	267 (3.8)				
Northeast	38 (5.9)	271 (3.3)	51 (5.7)	263 (2.9)	11 (5.6)	270 (6.9)!				
Southeast	, ,	261 (2.6)	47 (3.7)	260 (2.0)	8 (2.3)	263 (4.6)!				
Central	45 (3.9)		41 (4.5)	279 (2.9)	4 (1.8)	*** (***)				
	55 (4.4)	273 (3.7)	, ,	· · · · · · · · · · · · · · · · · · ·	9 (2.0)	270 (4.5)!				
West	49 (6.1)	267 (3.2)	42 (5.8)	265 (3.4)	9 (2.0)	210 (4.0).				
STATES			>	0.40 (0.0)	0 (4.4)	232 (6.8)!				
Alabama .	50 (4.9)>>	255 (2.0)	47 (4.7)	249 (2.8)	3 (1.1) «	, ,				
Arizona	39 (3.9)**	264 (1.9)	48 (3.7)	266 (2.0)	13 (2.4) <<	261 (2.9)				
Arkansas	47 (4.0)	259 (2.0)	46 (4.0)	253 (1.8)	8 (2.2)	249 (4.6)!				
California	61 (3.4) >>	264 (2.3)	32 (3.4) <	256 (2.9)	8 (1.7)	258 (6.4)!				
Colorado	37 (3.4)	271 (1.7)	56 (3.1)	273 (1.6)	8 (1.6)	262 (4.0)!				
Connecticut	50 (3.6)	276 (2.5)	46 (3.6)	272 (1.9)	4 (1.0)	262 (7.6)!				
i	, ,	1 1	, ,		40 (0.7)	054 (0.4)				
Delaware	38 (0.9)<	260 (1.5)	49 (1.0) >	266 (1.3) >	13 (0.7)	254 (2.4)				
Dist. Columbia	48 (0.9) <<	233 (1.4)	49 (0.8) >>	234 (0.9)>>	3 (0.3) «	*** (***)				
Florida	50 (2.6)	263 (1.8)	40 (2.7)	257 (2.2)	10 (2.4)	251 (5.8)!				
Georgia	34 (2.7)	259 (2.7)	54 (3.0)	260 (1.6)	12 (2.5)	252 (2.9)!				
Hawaii	44 (0.8) >>	261 (1.4)>	47 (0.8)	259 (1.3) >>	10 (0.5) <<	229 (2.5) <<				
Idaho	40 (2.8)	277 (1.3)	47 (2.9)	272 (1.2)	13 (2.4)	273 (2.4) >>				
<i>'</i>	40 (2.0)	211 (1.5)	41 (2.0)	` ′	, ,					
Indiana	33 (4.1)>	273 (2.2)	60 (4.3)	268 (1.4)	7 (1.5) <b>«</b>	266 (4.5)!				
lowa	34 (4.3)	284 (1.4)	57 (4.3)	283 (1.2)>	9 (2.4)	277 (4.8)!				
Kentucky	33 (3.9)>	268 (2.5)	57 (4.3)	261 (1.3)	10 (2.6) <<	252 (3.3)!				
Louisiana	34 (3.8)	253 (3.2)	60 (4.0)	248 (2.1)	6 (1.7)	244 (5.9)!				
Maine <sup>1</sup>	46 (4.4)	279 (1.8)	43 (4.2)	277 (1.6)	11 (2.7)	278 (3.3)!				
Maryland	51 (3.9)	268 (2.3)	42 (3.9)	262 (2.4)	7 (1.9)	266 (4.7)!				
Wai yiaila	31 (3.9)	200 (2.3)	42 (0.0)		•					
Massachusetts <sup>1</sup>	28 (3.1)	277 (2.3)	56 (3.9)	271 (1.9)	16 (2.9)	266 (3.1)				
Michigan	40 (4.0)>	266 (3.1)	50 (4.0)	268 (2.1)	10 (2.0) <<	265 (5.1)!				
Minnesota	53 (3.6)>>	283 (1.1) >>	44 (3.4)	282 (1.7)>	3 (1.1) <	262 (8.2)!				
Mississippi 1	40 (4.2)	244 (2.3)	55 (4.3)	247 (1.9)	5 (1.4)	241 (6.9)!				
Missouri <sup>1</sup>	40 (3.7)	272 (1.9)	46 (4.1)	271 (1.6)	13 (2.7)	267 (2.9)!				
Nebraska	, ,	• • •	47 (4.2)	278 (1.5)	6 (1.9) <	280 (4.2)!				
Nebiaska	46 (4.1)	276 (1.8)	47 (4.2)	270 (1.5)	` '					
New Hampshire	56 (3.4) <<	279 (1.3)	40 (3.1) >	277 (1.4)>>	4 (1.6)	266 (3.5)!				
New Jersey	45 (4.7)>	274 (2.9)	52 (4.7)	269 (2.5)	3 (1.1) <<	*** (***)				
New Mexico	40 (3.1)>>	258 (1.6)	51 (3.1)	261 (1.0)	9 (1.5) «	256 (3.6)				
New York	27 (2.7)	255 (4.5)	58 (3.1)	268 (2.6)	15 (2.2)	273 (3.7) >>				
North Carolina		262 (2.0) >	53 (3.3)>	257 (1.7)*	7 (1.2)	243 (4.6)				
· L	40 (3.2)		' '	281 (1.3)	7 (1.5) «	277 (3.7)!				
North Dakota	34 (3.3)>	286 (1.7)	59 (3.6)	201 (1.3)	7 (1.5)	217 (0.1).				
Ohio	45 (5.3)>>	269 (2.5)	51 (5.4)	268 (2.4)	4 (1.4) <<	263 (4.8)!				
Oklahoma	30 (3.5)	267 (2.5)	67 (3.6)	268 (1.2)	3 (0.8) <<	254 (7.0)!				
Pennsylvania		273 (2.9)	51 (3.7)	270 (1.8)	14 (2.6)	267 (4.1)				
•	35 (3.4)	, ,	42 (0.9) <b>«</b>	265 (1.2)	5 (0.4) <<	259 (3.7)				
Rhode Island	53 (0.8) >>	266 (0.9)>>		• • •	6 (1.8)	254 (4.7)!				
South Carolina <sup>1</sup>	45 (3.5)	263 (2.0)	48 (3.4)	258 (1.7)	, ,	244 (2.7)!				
Tennessee'	49 (3.7)	261 (2.3)	43 (3.6)	257 (1.8)	8 (2.3)	ZT+ (Z.1)!				
Texas	56 (3.5)>	266 (2.1)	36 (3.4) <	263 (2.0) >	8 (1.9)	257 (4.1)!				
Utah¹		274 (1.4)	50 (3.3)	273 (1.2)	13 (1.7)	275 (2.5)				
1	37 (2.9)		51 (3.1)	266 (1.9)	9 (1.8)	256 (3.7)!				
Virginia	40 (3.1)	271 (2.0)			4 (1.3) <b>«</b>	244 (5.7)!				
West Virginia	35 (3.6) >	262 (1.8)	61 (3.8)	257 (1.3)		• •				
Wisconsin	44 (4.6)	280 (2.7)	52 (5.0)	278 (1.7)	4 (1.5) <	264 (4.6)!				
Wyoming	34 (2.6)	273 (1.7)	53 (2.9) >	276 (1.2)	13 (2.1) <	272 (2.3)				
TERRITORIES						':				
Guam	23 (0.8) <<	250 (1.9)>>	64 (1.1)>>	229 (1.2) <	13 (0.9) <<	235 (3.5)				
Virgin Islands	37 (0.9)>>	216 (1.9)	59 (0.8) <b>&gt;&gt;</b>	222 (1.1)	4 (0.5)≪	*** (***)				

¹Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

>The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. "The value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.



TABLE A.48 | Teachers' Reports on the Number of Students in Their Mathematics Classes

_	,		Grade 4	- 1992		
	1 to	20	21 to	25	26 or	More
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	17 (2.9)	218 (3.5)	39 (4.0)	216 (1.7)	43 (4.8)	210 (1.5)
Northeast	12 (4.4)	218(15.5)!	52 (8.1)	219 (3.4)	- 1 1	219 (1.5)
Southeast	18 (5.3)	206 (8.1)!	39 (4.1)	, ,	, , , , , , , , , , , , , , , , , , ,	222 (4.0)!
Central	18 (6.5)	231 (5.5)!	35(11.2)	\ - · - <i>,</i>	43 (7.8)	210 (1.8)
West	21 (5.9)	216 (5.1)	33 (6.0)	223 (4.0)!	47(13.0)	223 (2.4)!
STATES	21 (0.0)	210 (3.1):	33 (6.0)	215 (3.1)	46 (7.2)	222 (3.3)
Alabama	8 (1.8)	197 (3.8)!	36 (5.0)	000 (0.0)	50 (5.5)	
Arizona	8 (2.0)	V - · · · / ·	, , , ,	206 (3.0)	56 (5.0)	210 (2.2)
Arkansas	- (,	· · ·	27 (3.4)	211 (2.6)	66 (3.9)	215 (1.3)
California	26 (3.6)	207 (1.8)	46 (3.9)	211 (1.8)	28 (4.3)	210 (2.6)
Colorado	5 (1.2)	213 (6.9)!	9 (2.9)	208 (4.8)!	85 (3.0)	207 (1.9)
Connecticut	15 (2.5)	218 (2.6)	43 (3.4)	220 (2.0)	42 (3.8)	220 (1.7)
Connecticut	33 (3.7)	228 (2.5)	54 (4.2)	228 (2.0)	13 (3.2)	221 (5.1)!
Delaware	18 (0.9)	204 (1.7)	37 (1.3)	216 (1.1)	AE /A A\	<b>, ,</b> -
Dist. Columbia	38 (1.0)	193 (1.2)	45 (0.8)	, · · · ,	45 (1.4)	224 (1.3 <u>)</u>
Florida	10 (1.4)	, , , , , , , , , , , , , , , , , , ,	` <i>'</i>	190 (1.2)	17 (0.9)	185 (2.6)
Georgia	, · · · ,	,,	19 (2.8)	215 (3.2)	71 (3.3)	214 (1.3)
Hawaii	- \	203 (2.7)	44 (3.9)	216 (2.4)	39 (4.2)	219 (2.6)
Idaho	14 (2.0)	203 (3.4)	25 (3.0)	209 (2.2)	61 (3.5)	216 (1.9)
	7 (2.2)	217 (2.8)!	39 (3.9)	221 (1.5)	53 (3.7)	221 (1.4)
Indiana	17 (3.0)	217 (2.7)	50 (4.4)	220 (1.6)	33 (4.4)	004 (4.0)
lowa	29 (3.2)	227 (2.0)	47 (4.1)	231 (1.4)	, ,	221 (1.8)
Kentucky	18 (3.4)	209 (2.5)	: _ :		25 (4.2)	229 (2.3)
Louisiana	12 (2.3)	198 (4.8)		215 (1.9)	32 (4.1)	214 (1.8)
Maine	51 (4.6)	230 (1.4)	40 (4.3) 43 (4.5)	207 (2.4)	47 (4.6)	201 (2.8)
Maryland	16 (2.7)	224 (3.5)	30 (3.4)	232 (2.0)	6 (2.3)	227 (4.1)!
Massachusetts	` ,	, ,	, ,	219 (2.6)	55 (3.7)	216 (2.3)
1	24 (3.7)	223 (3.3)	46 (4.5)	227 (1.9)	30 (5.1)	228 (2.6)
Michigan	8 (1.7)	222 (3.8)	29 (4.0)	224 (3.0)	63 (4.3)	216 (2.2)
Minnesota	13 (2.3)	223 (3.3)	35 (4.3)	227 (2.4)	51 (4.4)	230 (1.5)
Mississippi	19 (2.6)	196 (3.0)	45 (3.8)	200 (1.9)	36 (3.4)	204 (2.6)
Missouri	19 (3.1)	217 (2.5)	46 (4.8)	224 (2.6)	35 (4.9)	222 (2.3)
Nebraska	36 (4.0)	223 (2.4)	42 (4.4)	223 (2.1)	22 (3.5)	233 (2.9)
New Hampshire	22 (3.0)	226 (1.8)	47 (3.9)		, ,	
New Jersey	31 (4.4)	231 (2.9)	, ,	229 (1.7)	31 (3.9)	232 (2.9)
New Mexico	13 (2.8)	207 (3.0)!	` _ !	225 (2.4)	23 (4.4)	223 (4.2)
New York	13 (2.4)	` ` · ·	44 (4.5)	210 (2.0)	44 (4.5)	215 (2.1)
North Carolina		216 (4.9)	43 (4.1)	224 (2.2)	44 (4.1)	215 (2.1)
North Dakota	,	205 (3.7)	40 (3.9)	212 (1.7)	44 (4.0)	216 (1.9)
	36 (4.2)	228 (1.5)	34 (4.3)	227 (1.6)	30 (3.8)	231 (1.4)
Ohio	10 (2.1)	219 (4.1)	48 (4.1)	219 (2.0)	42 (4.5)	217 (2.0)
Oklahoma	41 (3.7)	219 (1.5)	52 (4.0)	221 (1.5)	7 (2.5)	214 (3.6)!
Pennsylvania	16 (3.0)	224 (4.0)	39 (3.6)	226 (2.5)	46 (4.0)	
Rhode Island	19 (3.1)	217 (2.4)	47 (4.3)	218 (1.6)		222 (2.3)
South Carolina	21 (2.6)	206 (2.5)	40 (3.8)	, ,	34 (3.5)	208 (3.9)
Tennessee	19 (2.8)	207 (2.5)	39 (4.4)	213 (2.0) 209 (2.4)	39 (4.0) 43 (4.4)	213 (2.0)
Texas	<b>,</b> — <b>,</b>	<b>,</b> —,	` '	` '	<b>, ,</b>	212 (2.4)
Utah	53 (4.4)	214 (1.8)	46 (4.3)	221 (2.5)	1 (0.8)	*** (***)
Virginia	3 (1.1)	213 (6.1)!	20 (3.0)	219 (1.8)	78 (3.4)	225 (1.1)
	18 (3.3)	210 (3.2)	39 (3.6)	219 (2.2)	43 (3.7)	226 (2.5)
West Virginia	34 (3.4)	211 (1.9)	48 (3.6)	215 (1.9)	18 (3.1)	217 (2.7)
Wisconsin	26 (3.5)	228 (1.9)	36 (4.3)	228 (1.9)	38 (4.5)	230 (2.2)
Wyoming	28 (3.7)	225 (1.9)	50 (3.9)	224 (1.1)	22 (3.6)	226 (2.2)
TERRITORY Guam	00 (4.0)			• •	` ,	\/
Guain	22 (1.0)	192 (2.3)	57 (1.1)	195 (1.2)	21 (0.7)	184 (1.3)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.

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### TABLE A.48 | Teachers' Reports on the Number of Students in Their Mathematics Classes (continued)

	Grade 8 - 1992									
-	1 to	20	21 to	25	26 or	More				
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency				
NATION	22 (2.1)	262 (2.3)	29 (2.3)	273 (2.6)	49 (3.2)	267 (1.3)				
Northeast	18 (3.5)	253 (4.5)	35 (5.5)	277 (8.1)	47 (6.1)	265 (3.7)				
Southeast	23 (3.7)	257 (4.3)	22 (5.2)	261 (3.9)!	56 (7.5)	263 (1.7)				
Central	26 (4.9)	273 (3.8)!	36 (5.6)	276 (4.2)!	38 (6.9)	276 (2.9)				
West	· · ·	260 (4.4)	24 (2.8)	274 (3.1)	54 (4.8)	267 (2.5)				
STATES	21 (4.1)	200 (4.4)	24 (2.0)	214 (5.1)	G4 (4.0)	201 (2.0)				
Alabama	00 (0.8)	049 (9.4)	30 (3.3)	250 (4.1)	47 (3.9)	257 (2.0)				
Arizona	23 (2.8)	243 (3.1)	30 (3.2)	: :	59 (2.8)	268 (1.8)				
	13 (1.7)	257 (2.8)	27 (2.6)	258 (2.2)						
Arkansas	41 (3.3)	253 (1.8)	37 (2.3)	258 (2.1)	22 (2.5)	258 (2.2)				
California	8 (1.6)	261 (8.5)	12 (1.9)	267 (4.1)	80 (2.6)	261 (1.7)				
Colorado	19 (2.1)	270 (2.5)	28 (2.2)	268 (2.2)	52 (2.7)	274 (1.5)				
Connecticut	40 (2.6)	269 (1.7)	39 (2.2)	274 (2.6)	21 (2.4)	284 (2.7)				
Delaware	13 (0.8)	241 (3.2)	30 (0.9)	260 (1.4)	57 (1.3)	269 (1.0)				
Dist. Columbia	41 (1.4)	231 (2.1)	34 (1.3)	233 (1.9)	24 (1.1)	243 (1.8)				
Florida	19 (1.8)	249 (2.6)	22 (2.1)	257 (2.6)	59 (2.9)	264 (1.8)				
Georgia		244 (3.5)	24 (2.4)	259 (2.7)	55 (3.1)	263 (1.6)				
	21 (2.2)	, ,			47 (1.0)	271 (1.1)				
Hawaii	23 (0.8)	235 (2.3)	29 (1.0)	253 (1.6)	1 1	279 (1.3)				
Idaho	23 (2.2)	271 (2.0)	27 (1.9)	271 (1.7)	50 (2.3)					
Indiana	23 (2.7)	266 (2.5)	33 (2.6)	273 (2.0)	43 (2.7)	270 (1.9)				
lowa	33 (3.2)	281 (1.7)	38 (3.1)	284 (1.8)	29 (3.1)	284 (2.1)				
Kentucky	20 (2.5)	250 (3.3)	27 (2.5)	262 (2.4)	53 (2.8)	267 (1.7)				
Louisiana	18 (2.6)	254 (4.0)	28 (2.9)	250 (2.7)	<b>5</b> 4 (3.3)	249 (2.2)				
Maine	, , ,	277 (1.6)	34 (2.7)	279 (1.6)	13 (2.3)	282 (2.5)				
Maryland	54 (3.6) 15 (1.3)	255 (3.6)	23 (1.9)	265 (2.4)	63 (2.3)	268 (2.0)				
-	, ,	• •	, ,	• •	, ,					
Massachusetts	34 (2.9)	265 (2.2)	35 (2.6)	275 (2.3)	32 (2.8)	277 (2.7)				
Michigan	14 (1.5)	264 (4.1)	27 (2.8)	273 (3.4)	58 (3.3)	265 (2.0)				
Minnesota	15 (2.8)	271 (2.4)	23 (3.1)	278 (2.1)	61 (3.5)	286 (1.6)				
Mississippi	24 (2.7)	238 (3.1)	28 (2.4)	248 (3.2)	48 (3.0)	248 (1.9)				
Missouri	27 (2.6)	261 (2.0)	34 (2.7)	272 (2.0)	39 (3.0)	277 (2.2)				
Nebraska	43 (3.4)	277 (1.9)	39 (3.3)	276 (2.0)	18 (2.5)	280 (3.3)				
New Hampshire	40 (2.6)	275 (1.6)	37 (2.4)	276 (1.8)	23 (2.0)	285 (2.7)				
New Jersey	, , ,	, ,	31 (2.8)	273 (3.3)	25 (3.3)	271 (3.5)				
,	45 (4.0)	274 (2.5)		1 -1	49 (2.1)	261 (1.4)				
New Mexico	22 (2.1)	257 (2.2)	30 (1.9)	258 (1.6)						
New York	25 (2.9)	269 (3.2)	28 (2.5)	280 (2.8)	46 (3.3)	255 (3.3)				
North Carolina	29 (2.9)	251 (2.5)	34 (2.3)	256 (2.2)	37 (2.9)	264 (2.1)				
North Dakota	38 (4.1)	280 (2.6)	28 (3.1)	283 (1.5)	34 (3.1)	286 (1.5)				
Ohio	20 (2.7)	269 (4.0)	35 (2.8)	269 (2.5)	44 (3.3)	270 (3.2)				
Oklahoma	40 (3.0)	264 (1.8)	28 (2.4)	268 (2.0)	31 (3.4)	271 (2.4)				
Pennsylvania	18 (1.8)	257 (2.8)	32 (2.5)	275 (2.4)	49 (3.1)	274 (2.1)				
Rhode Island	28 (1.0)	259 (1.5)	49 (1.3)	266 (1.1)	24 (1.1)	271 (1.7)				
South Carolina	32 (2.3)	248 (2.0)	30 (2.0)	265 (2.1)	38 (2.0)	268 (1.9)				
Tennessee	15 (2.0)	236 (3.4)	20 (2.7)	258 (2.5)	65 (3.0)	263 (1.8)				
1	, ,	, ,	• •	, ,	. ,					
Texas	32 (2.3)	260 (2.3)	37 (2.4)	266 (1.8)	31 (2.7)	267 (3.2)				
Utah	9 (1.5)	255 (5.1)	14 (1.4)	271 (2.4)	77 (1.8)	276 (1.0)				
Virginia	24 (1.7)	258 (2.0)	34 (2.1)	267 (2.1)	42 (2.6)	273 (2.0)				
West Virginia	34 (2.7)	255 (1.8)	32 (2.5)	256 (2.1)	34 (3.1)	264 (1.8)				
Wisconsin	35 (4.9)	276 (3.7)	32 (3.6)	281 (2.1)	33 (3.5)	278 (2.2)				
Wyoming	37 (2.9)	268 (1.7)	34 (2.8)	277 (1.3)	29 (2.4)	280 (1.6)				
ERRITORIES	J. (=)	( )	- · \/	, ,	, ,	, ,				
Guam	10 (1.1)	221 (2.4)	39 (1.7)	231 (1.9)	52 (1.4)	240 (1.6)				
Virgin Islands	25 (1.0)	223 (1.8)	29 (1.2)	223 (1.7)	47 (0.8)	220 (1.4)				



TABLE A.49

### Teachers' Reports on Students Being Assigned to Mathematics Classes Based on Ability Grouping

	Grade 4 - 1992								
PUBLIC	Yes, Students Gre	ouped by Ability	No, Students Not G	Prouped by Ability					
SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency					
NATION	27 (3.0)	220 (2.5)	73 (3.0)	216 (1.2)					
Northeast	40 (7.1)	222 (4.6)	60 (7.1)						
Southeast	18 (3.4)	201 (5.3)		219 (3.1)					
Central	28 (7.3)		82 (3.4)	209 (2.1)					
West	24 (5.7)	228 (2.8)!	72 (7.3)	222 (2.3)					
STATES	24 (5.7)	224 (6.7)!	76 (5.7)	216 (2.1)					
Alabama	10 (0.0)								
Arizona	19 (3.6)	200 (2.9)	81 (3.6)	209 (1.7)					
	23 (3.9)	219 (3.0)	77 (3.9)	213 (1.3)					
Arkansas	20 (3.3)	211 (2.8)	80 (3.3)	209 (1.2)					
California	14 (2.4)	218 (5.6)	86 (2.4)	206 (1.7)					
Colorado	27 (4.0)	222 (2.5)	73 (4.0)						
Connecticut	25 (3.9)	233 (2.5)	75 (3.9)	219 (1.5)					
D-1	, ,	200 (2:0)	75 (3.9)	226 (1.6)					
Delaware	57 (0.9)	219 (1.1)	43 (0.9)	215 (1.4)					
Dist. Columbia	22 (0.8)	191 (1.8)	78 (0.8)	191 (1.0)					
Florida	17 (2.6)	215 (3.2)	83 (2.6)	212 (1.4)					
Georgia	32 (4.7)	211 (2.5)	68 (4.7)						
Hawaii	43 (4.9)	212 (2.1)	, ,	215 (2.2)					
Idaho	6 (1.6)		57 (4.9)	214 (2.0)					
	0 (1.0)	218 (3.2)!	94 (1.6)	220 (1.0)					
Indiana	22 (3.5)	224 (2.5)	78 (3.5)	218 (1.1)					
lowa	12 (2.4)	227 (3.7)!	88 (2.4)						
Kentucky	25 (4.3)	215 (2.9)		229 (1.1)					
Louisiana	22 (3.7)		75 (4.3)	213 (1.1)					
Maine		207 (3.5)	78 (3.7)	201 (1.7)					
Maryland	19 (3.6)	227 (3.2)	81 (3.6)	231 (1.1)					
	58 (4.1)	222 (1.7)	42 (4.1)	212 (2.5)					
Massachusetts	18 (3.8)	227 (3.0)!	82 (3.8)	226 (1.5)					
Michigan	10 (2.4)	219 (4.5)!	, ,						
Minnesota	38 (4.1)		90 (2.4)	219 (2.0)					
Mississippi	30 (4.1)	225 (1.9)	62 (4.1)	228 (1.5)					
Missouri		195 (2.3)	70 (4.1)	202 (1.7)					
Nebraska	16 (3.2)	222 (4.5)!	84 (3.2)	222 (1.3)					
INCDI aska	25 (3.2)	229 (2.2)	75 (3.2)	223 (1.7)					
New Hampshire	26 (4.4)	233 (2.3)	74 (4 4)	, ,					
New Jersey	39 (4.8)		74 (4.4)	228 (1.3)					
New Mexico		232 (2.2)	61 (4.8)	224 (2.2)					
New York	11 (3.1)	213 (4.3)!	89 (3.1)	212 (1.3)					
	36 (4.8)	212 (2.3)	64 (4.8)	220 (1.9)					
North Carolina	21 (3.8)	216 (3.1)	79 (3.8)	211 (1.2)					
North Dakota	6 (2.4)	224 (4.2)!	94 (2.4)	228 (0.8)					
Ohio	24 (4.4)		, ,						
Oklahoma	, , ,	224 (3.0)	76 (4.4)	215 (1.4)					
Pennsylvania	17 (2.7)	221 (2.7)	83 (2.7)	219 (1.2)					
Rhode Island	42 (4.3)	226 (2.2)	58 (4.3)	221 (1.8)					
	25 (4.4)	223 (3.0)	75 (4.4)	211 (1.9)					
South Carolina	33 (3.9)	211 (2.0)	67 (3.9)	212 (1.4)					
Tennessee	20 (3.2)	206 (2.4)	80 (3.2)	211 (1.7)					
Техаѕ	• •	` '		, ,					
Utah	28 (4.4)	219 (3.4)	72 (4.4)	216 (1.8)					
1	27 (3.8)	225 (2.6)	73 (3.8)	222 (1.1)					
Virginia	29 (3.7 <del>)</del>	222 (2.9)	71 (3.7)	219 (1.6)					
West Virginia	23 (3.2)	213 (2.3)	77 (3.2)	214 (1.4)					
<b>V</b> isconsin	28 (4.4)	231 (2.2)	72 (4.4)	227 (1.3)					
Wyoming ERRITORY	10 (2.8)	218 (3.3)!	90 (2.8)	227 (1.3) 225 (1.1)					
Guam	10 (0.0)	400 (0.0)							
	12 (0.9)	183 (3.0)	88 (0.9)	192 (1.0)					

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



### Teachers' Reports on Students Being Assigned to Mathematics Classes Based on Ability Grouping (continued)

	Grade 8 - 1992								
PUBLIC	Yes, Students Gro	ouped by Ability	No, Students Not G	Prouped by Ability					
SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency					
NATION	61 (2.6)	274 (1.6)	39 (2.6)	258 (1.4)					
Northeast	78 (5.5)	273 (3.8)	22 (5.5)	249 (4.8)!					
Southeast	50 (4.3)	268 (2.6)	50 (4.3)	255 (2.1)					
Central	60 (5.4)	282 (2.8)	40 (5.4)	263 (3.9)					
West	59 (5.0)	273 (3.1)	41 (5.0)	260 (1.7)					
STATES	39 (3.0)	273 (0.1)	4.1 (0.0)	200 ()					
	40 (2.7)	255 (2.2)	51 (3.7)	249 (2.5)					
Alabama	49 (3.7)		43 (3.7)>	256 (2.4)					
Arizona	57 (3.7) <	271 (1.8)>>	• • •	250 (1.5)					
Arkansas	57 (4.0)	260 (1.7)	43 (4.0)						
California	61 (3.5) <	269 (2.0) >	39 (3.5)>	249 (3.2)					
Colorado	57 (3.8)	278 (1.5)>	43 (3.8)	262 (2.1)					
Connecticut	75 (3.5) <	278 (1.2)>	25 (3.5)>	260 (3.3)					
Delaware	84 (0.5)	264 (1.2)	16 (0.5)	252 (1.6)>>					
Dist. Columbia	42 (1.0)≪	248 (1.7)>>	58 (1.0)>>	224 (1.3)					
Florida	69 (2.8) <	264 (1.9)	31 (2.8)>	250 (2.4)					
Georgia		260 (1.6)	26 (3.2)	253 (2.7)					
•	74 (3.2)			243 (1.7)>					
Hawaii	81 (0.6) <b>«</b>	261 (1.0) <b>&gt;&gt;</b>	19 (0.6) <b>&gt;&gt;</b>	243 (1.7) > 276 (1.8) >					
Idaho	67 (3.5)	274 (1.1)	33 (3.5)	270 (1.8)					
Indiana	63 (3.9)	276 (1.7)	37 (3.9)	260 (1.6)					
lowa	48 (4.7)	285 (1.4)>>	52 (4.7)	281 (1.6)					
Kentucky	61 (3.9)	266 (1.9)>	39 (3.9)	256 (1.5)					
Louisiana	43 (4.4)	257 (2.7)	57 (4.4)	244 (1.8)					
Maine <sup>1</sup>	50 (4.3)	283 (1.7)	50 (4.3)	274 (1.7)					
Maryland	84 (2.5) <b>«</b>	269 (1.6) >	16 (2.5) >>	249 (2.7)					
wiai yiailo	64 (2.5) **	209 (1.0)>	, ,	, ,					
Massachusetts <sup>1</sup>	81 (2.8)	276 (1.5)	19 (2.8)	257 (4.1)					
Michigan	58 (4.0)	274 (2.1)	42 (4.0)	257 (2.7)					
Minnesota	52 (4.1)	287 (1.6) >>	48 (4.1)	275 (1.3)					
Mississippi <sup>1</sup>	44 (3.5)	255 (2.1)	56 (3.5)	239 (1.6)					
Missouri 1	56 (4.0)	275 (1.4)	44 (4.0)	265 (1.7)					
Nebraska	51 (4.5)	279 (1.7)	49 (4.5)	276 (1.8)					
			, ,	070 (4.4)					
New Hampshire	57 (3.9) <b>≪</b>	281 (1.4)>>	43 (3.9)>>	273 (1.4) >					
New Jersey	72 (3.7)	278 (1.9)	28 (3.7)	255 (3.4)					
New Mexico	65 (3.5)	264 (1.2)	35 (3.5)	252 (1.7)					
New York	67 (3.7)	269 (2.4)	33 (3.7)	258 (3.7)>					
North Carolina	70 (3.4) <	261 (1.3) <b>»</b>	30 (3.4)>	250 (2.3) >					
North Dakota	25 (2.9)	288 (2.8)	75 (2.9)	281 (1.3)					
Ohio		277 (2.21	45 (4.2)>	258 (1.9)					
Oklahoma	55 (4.2) <	277 (2.3) >	45 (4.3)	263 (1.8)					
	55 (4.3)	271 (1.5)		260 (3.4)					
Pennsylvania	69 (3.5) <	275 (1.7)	31 (3.5)>						
Rhode Island	75 (0.7) <b>«</b>	269 (0.9)**	25 (0.7)*	252 (1.8)>>					
South Carolina1	80 (3.3)	262 (1.3)	20 (3.3)	254 (2.6)					
Tennessee'	56 (3.8)	261 (1.9)	44 (3.8)	255 (2.2)					
Texas	50 (3.3) <	272 (2.3)>>	50 (3.3)>	256 (1.7)					
Utah <sup>1</sup>	81 (2.4)	275 (0.9)	19 (2.4)	269 (2.0)					
Virginia		273 (0.5) >	34 (3.1)»	259 (1.7)					
West Virginia	66 (3.1) «		36 (3.4)	251 (1.7)					
• 1	64 (3.4)	263 (1.5)		274 (2.0)					
Wisconsin	44 (4.9)	285 (2.0)	56 (4.9)	, ,					
Wyoming	61 (2.9)	277 (1.2)>	39 (2.9)	271 (1.4)					
FERRITORIES	A. (5)	000 (4.0)	45 (0.7) >	217 (2.3)≪					
Guam	85 (0.7) <	238 (1.3)**	15 (0.7) >						
Virgin Islands	55 (0.8) <b>»</b>	227 (1.3)	45 (0.8) <b>«</b>	215 (1.2)					

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible. The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. The value for 1992 was significantly lower than the value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.

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TABLE A.50 | Teachers' Reports on the Ability Levels of Students in Their Mathematics Classes

				Grade	4 - 1992			
	Primarily H	igh Ability	Primarily Ave	erage Ability	Primarily L	ow Ability	Ability Wid	ely Mixed
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	8 (1.4)	240 (3.2)	39 (2.3)	220 (1.4)	13 (1.2)	195 (2.0)	40 (2.7)	017 (4.4)
Northeast	15 (5.1)	243 (4.5)!	38 (4.6)	223 (4.2)	14 (2.3)		, ,	217 (1.4)
Southeast	3 (1.1)	*** (***)	36 (5.0)	211 (2.6)	14 (2.3)		34 (4.2)	220 (2.9)
Central	9 (2.3)	234 (5.3)!	43 (4.6)	226 (3.0)	, ,	188 (3.4)	47 (5.3)	209 (2.5)
West	7 (2.3)	242(13.5)!	39 (3.9)	221 (3.1)	10 (2.8) 13 (2.1)	211 (5.6)!	38 (6.4)	222 (2.5)
STATES	. (2.0)	242(10.0):	33 (3.3)	221 (3.1)	13 (2.1)	194 (3.7)	40 (4.7)	218 (1.8)
Alabama	5 (1.5)	225 (5.8)!	41 (3.7)	212 (2.4)	17 (0.4)	400 (0.4)	07 (0.7)	
Arizona	9 (1.5)	237 (3.2)	33 (2.9)	, ,	17 (2.4)	190 (2.4)	37 (3.7)	208 (2.0)
Arkansas	8 (1.7)	224 (2.8)!	46 (3.4)	\ - · - /	13 (2.2)	200 (2.7)	45 (3.7)	212 (1.7)
California	6 (1.6)	239 (3.6)!	: :	210 (1.5)	12 (1.7)	194 (3.2)	34 (3.1)	210 (1.6)
Colorado	6 (1.2)	` '	35 (2.7)	209 (2.4)	13 (2.4)	193 (3.6)	45 (3.7)	205 (2.0)
Connecticut	10 (2.0)	239 (3.2) 249 (3.4)	33 (3.0)	222 (1.7)	12 (1.9)	205 (2.9)	49 (3.7)	220 (1.8)
	10 (2.0)	249 (3.4)	32 (2.9)	226 (1.6)	9 (1.4)	208 (4.2)	49 (3.9)	227 (1.9)
Delaware	17 (0.6)	244 (1.8)	41 (1.0)	219 (1.0)	21 (1.1)	196 (1.9)	22 (0.9)	216 (1.9)
Dist. Columbia	2 (0.1)	*** (***)	32 (1.0)	192 (1.3)	21 (0.7)	184 (1.5)	45 (1.1)	192 (1.5)
Florida	6 (1.3)	243 (4.0)!	43 (2.5)	214 (1.8)	11 (1.3)	196 (3.3)	40 (3.1)	210 (1.6)
Georgia	7 (1.5)	236 (3.2)!	40 (2.6)	219 (1.9)	20 (2.6)	191 (2.4)	34 (3.3)	216 (2.5)
Hawaii	11 (1.6)	235 (3.2)	36 (2.5)	217 (1.6)	20 (2.4)	195 (2.2)	32 (3.4)	212 (2.2)
Idaho	7 (1.5)	220 (3.3)!	41 (3.0)	220 (1.6)	7 (1.8)	212 (3.0)!	45 (3.4)	222 (1.2)
Indiana	10 (1.5)	238 (3.2)	44 (2.6)		, ,		• •	` '
lowa	6 (1.5)	240 (3.8)!	41 (3.6)	220 (1.5)	11 (2.4)	207 (3.0)!	38 (3.9)	218 (1.7)
Kentucky	8 (1.8)	, ,	43 (3.7)	228 (1.7)	7 (1.6)	214 (3.3)!	43 (4.1)	231 (1.4)
Louisiana	1 1	234 (5.3)!	33 (3.3)	215 (1.8)	19 (2.6)	200 (2.5)	40 (4.1)	214 (1.7)
Maine	7 (1.5) 4 (1.0)	230 (3.7)!	39 (2.9)	207 (2.2)	18 (2.3)	184 (3.3)	35 (3.3)	201 (2.5)
Maryland	20 (1.9)	247 (5.4)! 243 (2.4)	43 (3.9)	231 (1.4)	11 (1.8)	216 (3.7)	42 (4.4)	232 (1.6)
-		243 (2.4)	36 (2.3)	217 (1.8)	18 (2.2)	201 (2.9)	26 (2.9)	212 (2.4)
Massachusetts	8 (1.8)	249 (3.0)!	39 (3.3)	228 (1.7)	7 (1.7)	199 (3.6)!	45 (4.3)	225 (2.1)
Michigan	6 (1.8)	243 (5.2)!	37 (3.6)	225 (1.4)	8 (1.7)	195 (6.7)!	49 (̀3.9)́	215 (2.2)
Minnesota	12 (1.6)	, 238 (3.7)	41 (3.4)	227 (1.6)	10 (1.6)	216 (3.3)	37 (3.8)	227 (2.1)
Mississippi	3 (0.8)	234 (4.9)!	39 (3.4)	206 (2.4)	21 (2.8)	185 (2.1)	37 (3.2)	199 (2.0)
Missouri	7 (1.5)	242 (4.0)!	38 (3.1)	227 (1.3)	11 (2.0)	204 (4.8)!	44 (3.9)	218 (2.3)
Nebraska	10 (1.7)	247 (3.2)	36 (3.1)	227 (1.6)	15 (2.5)	211 (2.4)	39 (3.6)	223 (2.3)
New Hampshire	9 (2.2)	248 (3.8)!	39 (3.2)	228 (1.6)	0 (4.3)		• •	` '
New Jersey	14 (2.3)	249 (3.2)	39 (3.7)	226 (2.2)	8 (1.3)	217 (3.2)	45 (3.9)	228 (2.0)
New Mexico	4 (1.6)	226 (6.8)!	46 (4.4)	, , , , , , , , , , , , , , , , , , ,	14 (2.0)	210 (3.9)	34 (4.1)	226 (2.4)
New York	11 (1.9)	235 (3.7)	34 (3.3)	214 (1.8) 221 (2.1)	12 (2.5)	201 (3.4)!	39 (4.3)	212 (1.8)
North Carolina	8 (1.8)	236 (3.5)!	35 (3.0)	, ,	15 (2.1)	189 (3.1)	40 (4.2)	219 (2.2)
North Dakota	3 (1.5)	*** (***)	52 (4.0)	214 (1.6) 228 (1.0)	16 (2.0)	195 (2.4)	41 (3.1)	213 (1.6)
Ohio	, ,	• •	, ,	228 (1.0)	2 (1.0)	*** (***)	43 (4.4)	227 (1.5)
Ohio	9 (1.8)	239 (3.9)	39 (3.1)	218 (1.8)	9 (1.6)	201 (3.5)	43 (3.6)	215 (1.7)
Oklahoma	6 (1.3)	235 (3.6)!	48 (3.9)	222 (1.3)	11 (2.1)	207 (2.6)	35 (3.7)	218 (1.3)
Pennsylvania	15 (2.0)	245 (3.0)	38 (3.0)	223 (1.6)	14 (1.7)	206 (3.2)	33 (3.6)	220 (2.3)
Rhode Island	8 (1.8)	239 (4.4)!	41 (3.0)	215 (2.5)	13 (1.7)	201 (3.4)	38 (3.7)	211 (2.2)
South Carolina	7 (1.3)	237 (3.6)	35 (2.8)	216 (1.6)	17 (2.0)	190 (2.3)	41 (3.9)	212 (2.0)
Tennessee	5 (1.1)	229 (4.1)!	39 (3.6)	212 (2.0)	16 (2.2)	191 (2.9)	40 (3.7)	213 (1.8)
Texas	8 (1.7)	244 (4.2)!	34 (2.6)	223 (2.1)	18 (2.1)	100 (2.7)	40 (2.8)	
Utah	10 (1.7)	240 (3.3)	38 (3.2)	223 (1.3)		199 (2.7)	40 (3.8)	215 (2.0)
Virginia	14 (1.7)	242 (3.7)	43 (3.3)	221 (1.8)	12 (1.7) 11 (1.6)	209 (3.2)	40 (3.5)	223 (1.3)
West Virginia	8 (1.9)	227 (2.6)!	46 (3.0)	216 (1.5)	14 (2.5)	194 (1.9)	32 (3.3)	217 (2.1)
Wisconsin	11 (2.0)	245 (3.6)!	38 (3.5)	216 (1.5)		199 (2.8)	32 (2.9)	212 (2.0)
Wyoming	6 (1.5)	233 (3.6)!	42 (3.7)	227 (1.5) 225 (1.4)	13 (1.8)	217 (3.6)	39 (3.7)	228 (1.8)
TERRITORY	J (1.5)	200 (3.0):	72 (3.1)	223 (1.4)	7 (2.0)	210 (3.5)!	45 (3.2)	226 (1.2)
Guam	1 (0.3)	*** (***)	23 (1.1)	199 (1.6)	10 (4.2)	178 /4 0\	E7 /4 E\	400 (4.4)
		<u>·                                  </u>		199 (1.6) ————	19 (1.2)	178 (1.8)	57 (1.5)	193 (1.4)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



#### Teachers' Reports on the Ability Levels of Students in Their Mathematics Classes (continued)

				Grade	8 - 1992			
	Primarily H	igh Ability	Primarily Ave	erage Ability	Primarily L	ow Ability	Ability Wid	ely Mixed
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency						
NATION	23 (1.3)	300 (1.9)	38 (2.0)	264 (1.4)	18 (1.9)	244 (1.9)	20 (2.3)	259 (2.0)
Northeast	28 (1.3)	303 (4.8)	38 (2.7)	264 (4.2)	23 (2.8)	243 (3.5)	11 (4.0)	244 (6.7)!
Southeast	19 (2.5)	291 (1.8)	40 (2.8)	257 (2.2)	23 (4.6)	247 (4.5)!	18 (3.8)	256 (1.7)!
Central	26 (3.6)	302 (3.0)	37 (4.3)	270 (2.2)	13 (5.9)	248 (3.3)!	23 (5.3)	265 (3.2)!
West	21 (2.7)	300 (3.3)	38 (4.9)	264 (2.6)	16 (2.1)	238 (2.5)	25 (4.2)	262 (3.6)
STATES				()	00 (0.5)	007 (0 4)	07 (0.4)	050 (0.0)
Alabama	17 (2.1)	283 (2.7)	34 (3.3)	252 (2.6)	22 (2.5)	227 (2.4)	27 (3.4)	252 (3.0)
Arizona	21 (1.4)	293 (1.9)	43 (2.9)	262 (1.8)	15 (1.8)	246 (2.9)>	21 (2.6)	253 (2.3)
Arkansas	23 (1.8)	279 (2.4)	39 (2.8)	256 (1.5)	16 (1.7)	229 (2.2)	22 (3.1) 24 (3.2)	250 (2.3) 246 (3.7)
California	25 (1.5)	291 (2.2)	33 (3.0)	262 (3.0) >	18 (1.7)	236 (2.3)	30 (2.8)	264 (2.1)
Colorado	21 (1.6)	297 (1.8)	37 (2.4)	272 (1.8)	12 (1.4)	243 (2.8) 245 (2.7)	14 (2.1)	259 (3.9)
Connecticut	32 (1.9)	299 (2.4)	37 (2.0)	270 (1.8)	17 (1.5)	245 (2.1)		
Delaware	32 (1.3)	286 (1.7)<	32 (1.1)	260 (1.2)	26 (1.3)	237 (1.9)	9 (0.6) «	253 (2.0)**
Dist. Columbia	14 (0.8)	270 (2.7)	31 (1.1) «	237 (1.4)>	32 (1.2)**	218 (1.6)	23 (1.2) «	232 (2.1)
Florida	24 (1.7)	288 (1.7)	39 (2.3)	256 (2.1)	20 (2.0)	236 (2.6) >	17 (2.5)	254 (3.6)>
Georgia	24 (1.7)	286 (2.0)	36 (2.1)	258 (1.8)	25 (1.9)	234 (2.1)	15 (2.6)	252 (3.5)
Hawaii	19 (0.7) <<	298 (1.7)>	36 (0.9)	263 (1.2)**	28 (0.9)	233 (1.6)*	17 (0.5) >>	243 (1.6)>
ldaho	21 (1.8)	299 (2.1)	43 (2.7)	274 (1.1)	17 (2.0)	248 (2.5)	19 (2.9)	274 (2.0)
Indiana	24 (1.5)	300 (2.1)	38 (3.0)	266 (1.5)	15 (1.6)	244 (3.0)	23 (3.3)	260 (2.3)
lowa	22 (2.3)	304 (2.3)	34 (3.8)	281 (1.7)>	9 (1.3)	256 (3.1)	35 (4.6)	278 (1.7)
Kentucky	25 (1.7)	289 (2.0)	33 (2.6)	260 (1.7)	22 (2.4)	240 (2.1)>	19 (2.9)	257 (2.0)>
Louisiana	15 (1.8)	281 (3.1)	36 (3.3)	251 (2.1)	20 (2.5)	231 (3.3)	29 (3.3)	246 (2.5)
Maine¹	24 (2.0)	301 (1.9)	28 (3.1)	277 (1.9)	12 (1.9)	249 (2.3)	36 (4.0)	273 (1.7)
Maryland	34 (1.7)	296 (1.8)	36 (2.1)	258 (2.1)	19 (1.5)	233 (2.6)	12 (2.1)	255 (3.3)
Massachusetts1	29 (1.6)	296 (2.1)	37 (2.3)	271 (1.8)	19 (1.6)	248 (2.3)	15 (2.4)	262 (4.1)
Michigan	22 (2.0)	296 (2.0)	41 (2.8)	263 (2.0)	17 (2.5)	242 (2.5)	20 (3.3)	265 (3.2)
Minnesota	20 (2.0)	308 (2.1)	45 (3.4)	278 (1.6)	9 (1.9)	254 (4.1)!	25 (4.1)	275 (1.9)
Mississippi <sup>1</sup>	16 (1.5)	277 (2.4)	35 (2.3)	246 (2.4)	22 (2.2)	231 (2.3)	27 (2.9)	239 (2.2)
Missouri <sup>1</sup>	22 (1.8)	298 (2.0)	34 (2.4)	270 (1.5)	17 (1.9)	248 (2.2)	27 (3.7)	264 (1.7)
Nebraska	18 (2.1)	303 (2.1)	45 (3.8)	278 (1.8)	10 (1.7)	246 (4.4)	27 (3.9)	271 (2.5)
New Hampshire	27 (1.7)	301 (1.8)	30 (2.7)	272 (1.6)	10 (1.2)<	251 (2.6)	33 (3.7)>	272 (1.6)>
New Jersey	29 (1.8)	302 (2.0)	34 (2.3)	270 (1.9)	22 (2.2)	247 (2.9)	15 (2.8)	253 (5.2)
New Mexico	22 (1.3)	286 (1.5)	37 (2.7)	260 (1.1)>	16 (1.5)	239 (1.8)	25 (3.0)	249 (1.6)
New York	19 (1.6)	302 (2.5)>	45 (3.0)	268 (1.6)	18 (1.7)	224 (3.5)	18 (2.9)	261 (4.2)
North Carolina	24 (2.1)	288 (2.1)	34 (2.1)	260 (1.6)>>	23 (2.0)	230 (2.1)	19 (2.9)	248 (2.5)
North Dakota	14 (2.2)	302 (3.7)	48 (3.8)	282 (1.6)	5 (1.5)	261 (3.1)!>	33 (3.9)	279 (2.0)
Ohio	23 (2.6)	298 (1.5)	37 (3.5)	270 (2.2)>	13 (1.8)	240 (3.0)	27 (3.1)	256 (2.4)
Oklahoma	21 (1.7)	294 (1.7)>	44 (3.2)	268 (1.6)	19 (2.1)	241 (2.3)	17 (3.5)	263 (2.1)!
Pennsylvania	29 (2.2)	296 (1.8)	38 (2.4)	270 (1.7)	17 (1.5)	243 (2.7)	16 (2.6) >	257 (3.2)
Rhode Island	30 (1.1)	288 (1.5)	34 (1.1) «	261 (1.2)	19 (0.8) <	242 (1.5)>>	. 16 (0.8) >>	256 (2.0) >>
South Carolina <sup>1</sup>	26 (1.5)	294 (1.9)	37 (2.1)	258 (1.4)	24 (1.5)	233 (2.0)	13 (2.4)	252 (3.0)
Tennessee <sup>1</sup>	21 (2.3)	284 (2.5)	39 (3.2)	258 (1.5)	23 (2.4)	238 (2.6)	16 (2.5)	256 (3.7)
Texas	23 (1.6)	298 (2.2)>>	32 (2.5) <	264 (1.8)	17 (1.6)	238 (2.5)>	28 (2.6)	254 (2.0)
Utah <sup>1</sup>	26 (1.7)	294 (1.6)	35 (2.1)	275 (1.4)	27 (1.8)	253 (1.6)	12 (1.9)	272 (2.9)
Virginia	27 (1.9)	295 (2.0)	38 (2.5)	266 (1.8)	18 (1.6)	237 (2.0)	18 (2.4)	261 (2.6)
West Virginia	28 (1.9)	282 (1.6)	33 (2.6)	255 (1.5)	21 (2.2)	237 (2.2)	18 (2.4)	252 (1.8)
Wisconsin	19 (2.4)	303 (2.2)	42 (4.1)	279 (1.9)	9 (1.3)	244 (3.1)	30 (3.5)	270 (2.3)
Wyoming	23 (1.4)	295 (1.8)	39 (2.3)	274 (1.3)>	15 (1.2)	251 (1.7)	23 (2.6)	272 (1.7)
TERRITORIES	_= (,	/	, ,	, ,	` ,	•		
Guam	19 (1.0)	275 (2.0)	26 (1.3)≪	243 (1.7)	31 (1.1) «	213 (2.0)>	24 (1.1) >>	221 (2.0) «
Virgin Islands	19 (1.1) >>	244 (2.3)	39 (1.2)	222 (1.2)	23 (1.3)	208 (2.0)	20 (1.0) <<	211 (2.6)

¹Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

>The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. "The value for 1992 was significantly lower than the value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.

### BEST COPY AVAILABLE



# Classroom Instructional Approaches



TABLE A.51 Teachers' Reports on the Frequency with Which Students Do Mathematics Problems from Textbooks in Mathematics Class

	Grade 4 - 1992									
	Almost E	very Day	At Least On	ce a Week	Less than	Weekly				
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency				
NATION	75 (2.4)	216 (1.1)	21 (2.0)	219 (2.8)	4 (1.4)	227 (4.1)!				
Northeast	73 (5.6)	220 (2.7)	20 (4.1)	217 (6.9)!	7 (4.4)	*** (***)				
Southeast	84 (2.3)	208 (2.2)	15 (2.0)	205 (3.3)	1 (1.0)	*** }***{				
Central	78 (4.3)	224 (2.1)	18 (4.1)	226 (5.4)!	4 (1.9)	214 (9.8)!				
West	63 (6.1)	213 (2.4)	32 (4.8)	224 (4.7)!	6 (3.4)	214 (5.0): *** (***)				
STATES	03 (0.1)	213 (2.4)	32 (4.0)	224 (4.7)!	6 (3.4)	( )				
Alabama	91 (1.9)	208 (1.5)	8 (2.0)	205 (5.5)!	1 (0.5)	*** (***)				
Arizona	65 (3.3)	· · · · · ·	· · · · · · · · · · · · · · · · · · ·	- ' '	. ,	\ /				
Arkansas	92 (1.8)	Y /	30 (2.8)	216 (1.6)	5 (1.5)	211 (4.0)! *** (***)				
California	, ,	209 (0.9)	7 (1.8)	215 (5.1)!	1 (0.3)	· · · · · · · · · · · · · · · · · · ·				
Colorado	71 (3.1)	208 (1.9)	22 (3.0)	207 (3.2)	7 (1.8)	206 (5.2)!				
Connecticut	52 (3.4)	219 (1.4)	37 (2.9)	220 (2.0)	11 (2.3)	224 (3.8)!				
Connecticat	56 (3.6)	226 (2.0)	33 (3.3)	230 (1.9)	11 (2.2)	229 (3.7)				
Delaware	80 (0.8)	218 (1.0)	16 (1.0)	214 (1.9)	4 (0.4)	*** (***)				
Dist. Columbia	39 (0.6)	191 (1.3)	54 (1.0)	193 (1.0)	7 (0.8)	178 (3.2)				
Florida	81 (2.3)	213 (1.4)	16 (1.9)	207 (2.3)	3 (0.9)	215 (7.9)!				
Georgia	88 (2.4)	214 (1.4)	10 (1.9)	213 (4.9)	2 (1.7)	*** (***)				
Hawaii	84 (1.9)	214 (1.4)	14 (1.8)	210 (2.9)	2 (0.8)	*** }***				
Idaho	80 (3.2)	221 (1.0)	17 (2.8)	218 (2.4)	3 (1.6)	212 (3.6)!				
Indiana	` ,	, ,		` ,						
Indiana	72 (3.0)	218 (1.3)	24 (2.9)	221 (1.8)	3 (1.1)	227 (4.5)!				
lowa	68 (3.4)	228 (1.3)	26 (3.2)	231 (2.1)	6 (1.6)	233 (2.8)!				
Kentucky	76 (3.5)	214 (1.3)	22 (3.4)	210 (2.2)	2 (0.8)	213 (9.8)!				
Louisiana	91 (2.0)	203 (1.6)	9 (2.0)	197 (3.6)	0 (0.0)	*** (***)				
Maine	44 (4.1)	231 (1.3)	44 (4.0)	230 (1.5)	12 (2.7)	229 (3.8)				
Maryland	67 (3.3)	217 (2.1)	29 (3.2)	217 (2.4)	5 (1.5)	238 (5.1)!				
Massachusetts	58 (4.0)	225 (1.8)	33 (3.4)	227 (1.8)	9 (2.2)	234 (4.3)!				
Michigan	65 (3.9)	218 (2.1)	31 (3.5)	220 (3.1)	3 (1.1)	225 (6.1)!				
Minnesota	70 (3.3)	226 (1.5)	21 (3.0)	229 (2.5)	9 (2.2)	229 (2.9)!				
Mississippi	85 (2.7)	201 (1.4)	15 (2.8)	196 (2.3)	0 (0.5)	*** (***)				
Missouri	82 (2.7)	221 (1.6)	13 (2.3)	226 (2.7)	5 (1.8)	228(10.1)				
Nebraska	71 (3.8)	224 (1.5)	25 (3.7)	226 (2.9)	3 (1.3)	230 (9.1)!				
Now Homoshira	; ;	` '	, ,	, ,	• •	• •				
New Hampshire	55 (3.9)	229 (1.5)	36 (3.7)	227 (2.1)	9 (1.6)	237 (3.1)				
New Jersey	85 (2.7)	226 (1.5)	14 (2.7)	229 (4.3)	1 (0.4)	*** (***)				
New Mexico	83 (3.4)	212 (1.5)	13 (3.1)	213 (3.1)!	3 (1.6)	*** (***)				
New York	70 (3.3)	217 (1.5)	24 (2.7)	215 (2.7)	6 (1.8)	227 (5.4)!				
North Carolina	78 (2.8)	213 (1.2)	20 (2.5)	211 (2.9)	3 (1.1)	209 (4.3)!				
North Dakota	82 (3.0)	228 (0.9)	15 (2.7)	228 (2.7)	3 (1.1)	*** (***)				
Ohio	77 (3.4)	217 (1.5)	22 (3.3)	217 (3.0)	1 (0.7)	*** (***)				
Oklahoma	83 (2.9)	220 (1.1)	14 (2.5)	220 (2.9)	3 (1.6)	214 (4.8)!				
Pennsylvania	83 (2.5)	225 (1.5)	15 (2.4)	215 (3.7)	2 (0.8)	191 (6.1)!				
Rhode Island	65 (3.0)	213 (1.8)	32 (2.7)	217 (2.4)	4 (1.0)	204 (8.5)!				
South Carolina	87 (2.4)	212 (1.3)	12 (2.0)	207 (3.4)	2 (0.9)	204 (0.3)!				
Tennessee	85 (2.3)	209 (1.5)	13 (2.1)	214 (3.6)	2 (0.8)	*** (***)				
	, ,	` ,	, ,	, ,	• •					
Texas	69 (3.4)	216 (1.6)	26 (3.2)	217 (2.9)	5 (2.3)	228 (3.2)!				
Utah	80 (2.3)	224 (1.0)	17 (2.2)	223 (2.3)	3 (1.1)	208 (4.9)!				
Virginia	83 (3.0)	219 (1.4)	14 (2.4)	222 (3.8)	3 (1.1)	238(10.5)!				
West Virginia	89 (2.2)	214 (1.2)	11 (2.2)	212 (2.9)!	1 (0.5)	***`(***)				
Wisconsin	78 (2.9)	228 (1.3)	20 (2.9)	230 (2.7)	2 (0.9)	*** (***)				
Wyoming	56 (2.9)	226 (1.3)	35 (2.5)	223 (1.7)	9 (2.1)	225 (2.4)!				
TERRITORY										
Guam	70 (1.3)	192 (1.0)	23 (1.3)	187 (2.0)	8 (0.1)	196 (3.8)				

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



TABLE A.51 Teachers' Reports on the Frequency with Which Students Do Mathematics Problems from Textbooks in Mathematics Class (continued)

	Grade 8 - 1992								
PUBLIC SCHOOLS	Almost Ev	ery Day	At Least Or	nce a Week	Less than	Weekly			
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	82 (1.6)	271 (1.3)	15 (1.6)	256 (2.4)	3 (0.7)	248 (6.0)!			
Northeast	80 (2.7)	271 (4.2)	13 (2.2)	253 (4.5)	8 (2.7)	255 (8.6)!			
Southeast	92 (2.7)	263 (1.2)	8 (2.7)	243(11.7)!	1 (0.3)	*** (***)			
Central	, , ,	, ,	<b>Y</b> (	, , , , , , , , , , , , , , , , , , ,		*** /***			
	76 (4.3)	279 (2.5)	23 (4.4)	262 (5.0)!	1 (0.7)	( )			
West	79 (2.8)	271 (2.5)	16 (2.5)	257 (2.9)	5 (1.3)	240 (6.6)!			
STATES									
Alabama	87 (3.2)	254 (1.6)	12 (3.1)	239 (8.6)!	1 (0.9)	*** (***)			
Arizona	82 (2.8)>	266 (1.6)	14 (2.5) <	256 (3.2)!	4 (1.5)	258 (4.3)!·			
Arkansas	91 (2.0) >	257 (1.2)	7 (1.7) «	247 (4.9)!	2 (0.8)	*** (***)			
California	, ,			· · · · · · · · · · · · · · · · · · ·	, , ,	\ /			
Colorado	74 (3.1)	263 (2.1)	18 (2.4) «	258 (3.3)	8 (1.8) >	254 (5.0)!			
	70 (3.0)	276 (1.4)>	21 (2.6) <	263 (2.4)	9 (2.3)	256 (5.8)!			
Connecticut	74 (2.8) <b>»</b>	276 (2.0)	20 (2.6) <<	265 (2.6)	6 (1.5)	267 (6.4)!			
Delaware	60 (4.4)	000 (4.0)	05 (4.0) =	OFF (4.0)	7 (0.0) \$	050 (0.0)			
Delaware	68 (1.1)	266 (1.3)	25 (1.0) <	255 (1.8)	7 (0.6) >>	252 (2.6)			
Dist. Columbia	71 (1.0) <b>&gt;&gt;</b>	239 (1.2)	24 (1.0)≪	224 (1.9)<	5 (0.4)	227 (4.6)			
Florida	86 (2.0) >	262 (1.4)	12 (1.8) <<	246 (3.9)	2 (0.6)	*** (***)			
Georgia	87 (2.1) >>	260 (1.4)	12 (2.1) «	248 (2.7)	1 (0.4)	*** (***)			
Hawaii	79 (0.6) >>	261 (1.0)>	16 (0.6) «	250 (1.7)>>	5 (0.5)>>	231 (4.0)			
Idaho	` '	` '	` '	=== ( /	, ,	*** (***)			
Idano	93 (1.7) <b>»</b>	275 (0.8)	6 (1.5)≪	272 (3.8)!	2 (0.8)	()			
Indiana	87 (2.2)	272 (1.4)	12 (2.1)	257 (2.8)	2 (0.5)	*** (***)			
lowa	, , , , , , , , , , , , , , , , , , ,			, ,		. *** (***)			
	90 (2.2)**	283 (1.1)>	8 (1.9) «	283 (3.7)!	2 (1.1)	( )			
Kentucky	80 (2.7)	264 (1.2)>	17 (2.4)	256 (2.8)	3 (1.2)	239 (8.2)!			
Louisiana	87 (2.7)	251 (1.8)	11 (2.3)	243 (5.7)!	2 (1.2)	*** (***)			
Maine <sup>1</sup>	70 (3.8)	281 (1.3)	20 (3.4)	273 (2.2)	9 (2.0)	268 (6.9)!			
Maryland	72 (3.3)>	270 (1.9)	25 (3.2) <	257 (2.7)	3 (0.9)	251(12.6)!			
	` '	2.0 (,	20 (0.2)	20. (2)	` ,	• •			
Massachusetts <sup>1</sup>	82 (2.9)	274 (1.4)	14 (2.7)	263 (4.8)	4 (1.3)	261 (9.5)!			
Michigan	80 (2.6)	270 (1.7)	17 (2.5)	254 (4.2)	3 (0.9)	251(10.2)!			
Minnesota	95 (1.1) >>	282 (1.1)>	4 (1.4) <<	266 (5.9)!	1 (0.6)	*** (***)			
Mississippi <sup>1</sup>	` '	· · · · · ·	\ <i>\</i>	, ,	, ,	` ,			
Missouri <sup>1</sup>	88 (2.5)	246 (1.3)	10 (2.2)	234 (4.6)!	2 (1.1)	257(17.6)!			
	86 (2.5)	272 (1.2)	10 (1.9)	261 (3.2)	4 (1.3)	262 (4.7)!			
Nebraska	83 (2.9)	280 (1.3)	15 (2.7)	263 (2.3)	2 (0.9)	*** (***)			
New Hampshire	70 (0 7)33	070 (4.2)	20 (2.4)((	274 (1.3)	7 (1.8)	276 (4.5)!			
	73 (2.7)	279 (1.3)>	20 (2.1) «	( /	, ,	, ,			
New Jersey	80 (3.7)	274 (1.4)	19 (3.7)	261 (5.4)!	1 (0.5)	*** (***)			
New Mexico	82 (3.0) <b>&gt;&gt;</b>	261 (1.0)	12 (2.4)≪	251 (2.9)!	6 (1.7)	248 (4.4)!			
New York	66 (4.1)	270 (2.6)	22 (2.8) <	261 (4.5)	11 (2.8)	251 (7.3)!			
North Carolina	84 (2.3)>>	259 (1.3)>	13 (2.1) <<	249 (2.7)	3 (0.9)	236(10.2)!			
North Dakota	90 (1.8)>	283 (1.3)	5 (1.1) <	278 (4.6)!	5 (1.4)	277 (2.2)!			
!	00 (1.0)	200 (1.0)	3 (1.17)	210 (4.0).	5 (1.4)	, ,			
Ohio	79 (3.1)	272 (1.9)	19 (3.0)	260 (3.6)	1 (0.5)	*** (***)			
Oklahoma	93 (1.8)>	268 (1.2)	6 (1.7)«	265 (4.7)!	1 (0.4)	*** (***)			
Pennsylvania	86 (2.0)>	273 (1.6)	12 (1.9)<	258 (4.5)	2 (0.7)	*** (***)			
Rhode Island		· ,		, , ,	7 (0.4)>>	250 (2.7)			
	75 (1.1)>	268 (0.9)	17 (1.0) <<	256 (1.7)	V = · · /	259 (2.7)»			
South Carolina¹	85 (2.3)	262 (1.1)	13 (2.1)	249 (3.9)	2 (0.8)	( )			
Tennessee <sup>1</sup>	84 (3.1)	259 (1.5)	14 (2.7)	254 (3.2)	2 (1.0)	*** (***)			
Texas	80 (2.5)>>	267 (1.6) <b>&gt;&gt;</b>	18 (2.4)≪	252 (2.4)	2 (0.9)	*** (***)			
Utah¹				202 (2.4)					
	93 (1.3)	275 (0.8)	5 (1.2)	260 (2.9)!	2 (0.5)	\ /			
Virginia	81 (2.5)>	270 (1.2)	16 (2.3) <<	254 (3.6)	3 (0.7)	251 (7.2)!			
West Virginia	91 (1.7)	259 (1.1)	8 (1.5) <	252 (4.8)	1 (0.6)	*** (***)			
Wisconsin	84 (2.7)>	280 (1.6)	14 (2.5) <<	271 (4.8)	3 (1.2)	272 (8.3)!			
Wyoming	83 (2.4)»	277 (0.9)	9 (1.2) «	262 (2.8)	8 (1.9)	268 (1.9)!			
TERRITORIES	03 (2.4)	211 (0.3)	3 (1.2) **	202 (2.0)	0 (1.9)	200 (1.9)!			
	00 (0 =) >>		40 (0 =) 45	00 ( (0 0)	0 (0 5) }}	200 (4.4)			
Guam	80 (0.7) >>	238 (1.4)	12 (0.7)≪	224 (3.9)	8 (0.5) >>	220 (4.4)			
Virgin Islands	89 (0.8) >>	223 (1.2)	11 (0.8) <	207 (2.5)	0 (0.0)	*** (***)			

<sup>1</sup>Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. "The value for 1992 was significantly lower than the value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.



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TABLE A.52 Teachers' Reports on the Frequency with Which Students Do Mathematics Problems on Worksheets in Mathematics Class

	Grade 4 - 1992									
ľ	Almost Ev	ery Day	At Least On	ce a Week	Less than	n Weekly				
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency				
NATION	26 (2.3)	218 (2.0)	58 (2.4)	217 (1.6)	16 (2.0)	215 (2.1)				
Northeast	27 (4.8)	218 (5.4)	56 (4.0)	222 (3.6)						
Southeast		, ,	1 1		17 (3.4)	220 (4.9)!				
	27 (4.6)	208 (3.9)!	<b>54</b> (4.7)	209 (3.0)	19 (4.1)	203 (3.4)!				
Central	21 (4.8)	226 (3.1)!	59 (5.5)	223 (2.9)	19 (5.2)	221 (4.2)!				
West	29 (3.6)	221 (3.9)	60 (4.5)	215 (2.9)	10 (2.3)	219 (4.9)!				
STATES			•	` '	,,	( /-				
Alabama	24 (2.8)	203 (2.6)	56 (3.2)	208 (2.2)	20 (2.6)	209 (3.2)				
Arizona	25 (2.7)	215 (2.2)	58 (3.0)	214 (1.7)		1 1				
Arkansas					16 (2.5)	215 (2.7)				
California	20 (3.3)	208 (1.5)	57 (3.5)	208 (1.2)	22 (3.3)	213 (2.9)				
	23 (2.8)	205 (3.1)	47 (4.0)	208 (2.6)	30 (3.5)	209 (2.9)				
Colorado	23 (2.9)	216 (2.4)	55 (3.3)	220 (1.4)	22 (2.9)	225 (3.0)				
Connecticut	24 (2.5)	231 (2.2)	<b>55</b> (2.9)	227 (2.0)	21 (2.5)	224 (2.4)				
Detaware	37 (1.0)	219 (1,4)	51 (0.8)	216 (1.2)	12 (0.6)	217 (3.3)				
Dist. Columbia	24 (0.8)	190 (1.6)	? !	, , ,	` '					
Florida		1 1	59 (1.0)	193 (1.0)	17 (0.8)	185 (2.5)				
	23 (2.9)	214 (2.3)	50 (2.7)	212 (1.5)	27 (3.1)	211 (2.6)				
Georgia	27 (3.6)	217 (2.5)	50 (3.1)	213 (2.0)	23 (3.2)	213 (3.9)				
Hawaii	21 (2.4)	212 (3.0)	55 (2.9)	214 (1.7)	24 (2.6)	212 (2.4)				
Idaho	22 (3.2)	221 (2.4)	55 (3.8)	220 (1.3)	22 (3.3)	221 (1.5)				
Indiana	24 (3.3)	222 (2.2)	58 (3.1)	219 (1.2)	• •					
Iowa	26 (3.3)			1 1	18 (2.8)	217 (2.8)				
Kentucky		233 (1.7)	46 (3.1)	227 (1.6)	27 (3.5)	229 (2.3)				
	30 (4.0)	216 (1.9)	53 (3.8)	212 (1.7)	17 (3.1)	215 (2.6)				
Louisiana	29 (3.0)	206 (2.4)	59 (3.6)	201 (1.9)	12 (2.7)	203 (4.8)!				
Maine	28 (3.1)	229 (1.4)	52 (4.4)	231 (1.4)	20 (3.3)	231 (2.7)				
Maryland	28 (2.8)	223 (2.8)	47 (3.1)	215 (2.1)	25 (3.0)	218 (2.9)				
Massachusetts	37 (2.9)	229 (1.9)	53 (2.6)	226 (1.4)	10 (2.1)	225 (3.1)!				
Michigan	19 (2.9)	227 (4.3)	55 (3.8)	216 (1.9)		3 1				
Minnesota	, ,				26 (3.8)	219 (3.2)				
Mississippi	24 (3.5)	227 (2.8)	53 (4.0)	227 (1.3)	22 (3.6)	228 (3.1)				
	15 (2.6)	202 (2.9)	65 (3.4)	199 (1.5)	20 (3.1)	204 (3.4)				
Missouri	34 (4.0)	225 (2.2)	49 (3.3)	221 (2.0)	17 (2.6)	219 (2.5)				
Nebraska	20 (3.0)	224 (2.4)	52 (3.9)	225 (2.1)	28 (3.5)	226 (2.4)				
New Hampshire	29 (3.4)	231 (2.3)	51 (2.9)	228 (1.5)	20 (3.0)	228 (2.2)				
New Jersey	39 (3.8)	220 (2.4)	48 (3.6)	227 (2.0)	13 (2.1)	225 (5.0)				
New Mexico	18 (3.1)									
New York		216 (2.2)	53 (3.0)	213 (1.7)	29 (3.1)	208 (2.2)				
	43 (3.6)	217 (2.4)	38 (3.8)	219 (2.1)	19 (2.8)	213 (2.8)				
North Carolina	11 (2.0)	209 (2.8)	62 (2.9)	213 (1.2)	26 (2.5)	213 (2.0)				
North Dakota	33 (4.4)	226 (1.7)	50 (4.7)	228 (1.3)	17 (3.7)	231 (1.4)!				
Ohio	30 (3.7)	220 (2.3)	54 (3.6)	216 (1.9)	16 (2.5)	216 (2.4)				
Oklahoma	26 (3.7)	218 (2.1)	53 (3.8)	220 (1.3)	21 (2.8)	221 (2.4)				
Pennsylvania	52 (3.9)	225 (1.8)								
Rhode Island			39 (3.4)	221 (2.4)	9 (1.7)	220 (5.4)!				
South Carolina	37 (2.9)	217 (2.5)	49 (3.1)	213 (1.8)	14 (1.9)	210 (3.9)				
	18 (3.0)	208 (2.2)	56 (3.2)	212 (1.6)	26 (3.1)	213 (2.0)				
Tennessee	22 (2.9)	208 (2.5)	58 (3.2)	210 (1.8)	20 (2.9)	211 (2.2)				
Texas	30 (3.4)	219 (2.3)	55 (4.1)	217 (1.9)	15 (2.7)	214 (4.2)!				
Utah	28 (3.0)	225 (1.8)	53 (3.3)	222 (1.2)	20 (2.3)	223 (2.4)				
Virginia	22 (2.8)	219 (3.2)	53 (3.1)	219 (1.9)	25 (2.3) 25 (3.3)	220 (2.7)				
West Virginia		, ,				, ,				
Wisconsin	18 (2.4)	215 (1.8)	56 (3.2)	213 (1.7)	26 (2.5)	213 (2.3)				
I	35 (3.0)	228 (1.7)	49 (3.0)	228 (1.9)	15 (2.5)	230 (2.4)				
Wyoming FERRITORY	40 (3.5)	224 (1.4)	47 (3.2)	225 (1.3)	13 (2.2)	225 (2.3)				
Guam	24 (1.2)	194 (1.8)	45 (1.2)	192 (1.2)	31 (1.0)	189 (1.4)				

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



TABLE A.52 Teachers' Reports on the Frequency with Which Students Do Mathematics Problems on Worksheets in Mathematics Class (continued)

T	Grade 8 - 1992									
	Almost Ev	ery Day	At Least Or	nce a Week	Less than	Weekly				
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency				
NATION	12 (1.9)	259 (4.9)	54 (2.2)	266 (1.6)	35 (2.7)	273 (1.9)				
Northeast	13 (5.4)	271(13.1)!	50 (5.0)	264 (5.1)	38 (6.7)	272 (3.7)				
Southeast	15 (4.9)	256 (4.7)!	54 (5.2)	262 (1.7)	31 (7.3)	264 (3.2)!				
Central	8 (3.3)	266 (4.0)!	66 (5.5)	272 (3.6)	26 (4.5)	286 (3.5)				
West	10 (1.8)	250 (4.6)	47 (2.6)	265 (2.7)	42 (2.7)	1				
STATES	10 (1.0)	250 (4.0)	47 (2.0)	203 (2.1)	42 (2.7)	275 (2.8)				
Alabama	11 (3.1)	238(10.7)!	53 (4.2) <<	251 (1.9)	36 (3.8)>	258 (2.7)				
Arizona	6 (1.4)	249 (4.4)!	48 (3.1) <	264 (1.7)>	46 (3.1)	267 (2.0)				
Arkansas	10 (2.5)	245 (5.0)!	57 (4.0)	253 (1.6)	32 (4.1)	265 (2.1)				
California		256 (4.0)	39 (3.4) «	· · · · · · · · · · · · · · · · · · ·	, , ,	, ,				
Colorado	11 (2.0)	, ,	, ,	259 (2.8)	50 (3.7) >	264 (2.2)				
Connecticut	14 (1.9)>	259 (2.9)	52 (3.1)	270 (1.5)>	33 (3.3)	279 (1.8)				
Connecticut	16 (2.9) >	264 (5.0)	54 (3.1) <	276 (1.8)>	30 (3.0)	273 (3.1)				
Delaware	18 (0.8)>>	250 (1.7)	62 (1.1) <<	260 (1.3)	21 (1.0)>>	278 (2.1)				
Dist. Columbia	13 (0.8) >>	220 (2.5)	56 (1.2) <b>«</b>	230 (1.3)	31 (1.0)>>	247 (2.1)>>				
Florida	9 (1.6)	242 (2.9)	42 (3.1) <b>«</b>	254 (2.1)	49 (3.5)>>	267 (1.9)				
Georgia	7 (1.9)	243 (4.5)!	57 (4.0)	255 (1.9)	36 (3.8)	266 (1.9)				
Hawaii	11 (0.6)	238 (2.0)	53 (0.8) <	256 (1.1)>>	36 (0.8)	265 (1.3)				
Idaho	9 (1.8)	272 (3.7)!>	44 (3.5) <	271 (1.3)	47 (3.7)	278 (1.0)				
In all and	• •		, ,	, ,		` '				
Indiana	8 (2.1)	255 (4.0)!	54 (3.9)	265 (1.7)	38 (3.4)	279 (2.0)				
lowa	17 (4.2)	278 (3.0)!	51 (4.5)	283 (1.6)	32 (4.5)	286 (1.6)>				
Kentucky	12 (2.3)	255 (5.4)	54 (4.1) <	259 (1.2)>	35 (3.8)	270 (2.4)				
Louisiana	7 (2.0)	248 (4.0)!	67 (4.3)	247 (1.8)	26 (3.9)	257 (3.8)				
Maine <sup>1</sup>	12 (1.6)	270 (4.9)	51 (3.8)	277 (1.9)	37 (3.8)	282 (1.7)				
Maryland	13 (2.5)	259 (4.4)	59 (3.5)	262 (2.1)	28 (3.4)	276 (3.4)>				
Massachusetts <sup>1</sup>	15 (2.1)	261 (3.3)	55 (2.9)	272 (1.5)	30 (2.7)	279 (2.8)				
Michigan	10 (2.1)	264 (5.0)!	60 (3.7)	, ,						
Minnesota	, ,	``````	, ,	264 (2.3)	30 (3.4)	272 (2.8)				
Mississippi <sup>1</sup>	9 (2.6)	276 (3.9)!	47 (4.0) <	276 (2.0)	44 (4.0) >	288 (1.7)				
Missouri <sup>1</sup>	11 (2.7)	235 (5.7)!	57 (4.1)	244 (1.7)	32 (3.8)	251 (2.1)				
Nebraska	8 (2.0)	264 (3.9)!	51 (3.5)	268 (1.3)	41 (3.5)	276 (1.9)				
	14 (3.1)	275 (3.4)!	54 (4.2)<	273 (1.7)	33 (4.0)	286 (2.3)				
New Hampshire	22 (3.0) >>	276 (2.1)	51 (3.0) <<	276 (1.3)>>	27 (2.7)	282 (2.4)				
New Jersey	19 (3.1)>	270 (3.8)	48 (4.2)≪	268 (2.7)	33 (3.6)>	277 (3.2)				
New Mexico	14 (2.4)	258 (2.3)	39 (2.9)≪	256 (1.5)	47 (3.4)>	262 (1.6)				
New York	21 (3.7)>	260 (4.7)	49 (3.8) <	269 (3.3)	30 (3.7)	263 (3.5)				
North Carolina	9 (1.5)	251 (4.9)	57 (3.4) <<	254 (1.7)	34 (3.3)>	265 (1.9)				
North Dakota	15 (2.6)	283 (2.2)	45 (3.7) <	282 (2.0)	40 (3.6)	284 (1.2)				
Ohio	, ,			1	, ,					
Ohio	12 (2.2) >>	261 (3.6)	58 (4.9)	266 (1.9)	30 (4.7)	278 (4.4)				
Oklahoma	8 (2.5)	256 (3.9)!	42 (3.3) <	264 (2.1)	50 (3.2)	272 (1.4)				
Pennsylvania	10 (2.1)	253 (4.8)!	58 (2.9)	271 (1.6)	32 (2.9)	277 (2.9)				
Rhode Island	11 (0.6) >>	256 (2.2)	53 (0.9) <b>«</b>	265 (1.2)>	35 (0.8) <b>»</b>	269 (1.2)>>				
South Carolina <sup>1</sup>	12 (2.2)	245 (3.7)	54 (2.8)	259 (1.4)	34 (2.5)	269 (2.6)				
Tennessee'	13 (2.7)	248 (4.1)!	56 (4.0)	259 (1.8)	31 (3.9)	259 (2.4)				
Texas	10 (2.1)	255 (3.8)!	52 (3.9) <	259 (2.1)	38 (3.7)	275 (2.3)>>				
Utah <sup>1</sup>	6 (1.3)	262 (4.2)!	45 (2.5)	269 (1.3)	49 (2.5)	279 (1.2)				
Virginia	7 (1.3)	257 (5.0)	63 (2.8)	265 (1.5)	30 (2.8)	274 (2.8)				
West Virginia	5 (1.2)	, ,	50 (3.5) <	256 (1.4)						
Wisconsin		252 (4.3)!			45 (3.5)>	262 (1.7)				
Wyoming	6 (1.4)	269 (5.5)!	55 (4.4)	275 (2.0)	39 (4.5)	284 (1.8)				
TERRITORIES	10 (2.1)	272 (2.6)!	46 (3.1) <b>«</b>	271 (1.3)	44 (3.0)**	279 (1.4)>				
Guam	E /O.E\	004 (6.0)	47 /4 0\66	000 (4.6)	40 /4 01	000 /4 5\ =				
Virgin Islands	5 (0.5)	224 (6.0)	47 (1.3) <b>«</b>	232 (1.6)	48 (1.2)>>	239 (1.5) <				
VII gill Islanus	5 (0.4) >>	*** (***)	68 (0.8) **	219 (1.3)	27 (0.8)>>	227 (1.5)				

<sup>1</sup>Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

\*The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. (The value for 1992 was significantly lower than the value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.

\*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.



TABLE A.53 | Students' Reports on the Frequency with Which They Do Mathematics Problems from Textbooks in Mathematics Class

	Grade 4 - 1992								
ľ	Almost Ev	very Day	At Least Or	nce a Week	Less than	Weekly			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	65 (1.4)	219 (0.9)	17 (1.0)	220 (1.7)	18 (1.0)	208 (1.8)			
Northeast	65 (4.1)	224 (2.4)	17 (2.6)	227 (3.0)	18 (2.3)	214 (5.6)			
Southeast	71 (2.7)	, , ,	13 (1.4)						
Central	, ,	212 (1.8)	, ,	205 (2.6)	16 (2.0)	196 (3.9)			
West	<b>68</b> (2.2)	224 (2.2)	16 (1.9)	224 (1.8)	16 (1.6)	211 (4.0)			
STATES	58 (2.3)	218 (1.6)	22 (1.7)	221 (3.9)	20 (2.3)	210 (2.8)			
Alabama	70 (4.0)	040 (4.5)	40 (0.0)	000 (0.0)	44 (4.6)	400 (0.4)			
Arizona	79 (1.6)	210 (1.5)	10 (0.8)	200 (3.2)	11 (1.2)	189 (2.4)			
	61 (1.5)	217 (1.3)	19 (1.1)	215 (1.8)	21 (1.0)	204 (1.8)			
Arkansas	65 (1.7)	214 (1.0)	13 (1.0)	203 (1.9)	22 (1.2)	195 (1.9)			
California	57 (1.6)	212 (1.7)	19 (1.0)	201 (2.7)	24 (1.4)	202 (2.9)			
Colorado	55 (2.1)	223 (1.1)	21 (1.4)	221 (1.8)	24 (1.3)	212 (2.1)			
Connecticut	61 (1.9)	228 (1.4)	19 (1.3)	228 (1.7)	20 (1.3)	219 (2.1)			
Delaware	64 (1.1)	220 (1.2)	17 (0.9)	216 (2.1)	20 (1.0)	206 (1.4)			
Dist. Columbia	41 (0.9)	194 (1.1)	31 (1.0)	195 (1.5)	28 (0.8)	1 1			
Florida	, ,	, ,	` '	, ,	` '	185 (1.2)			
Georgia	70 (1.6)	216 (1.6)	13 (0.9)	205 (2.1)	17 (1.1)	201 (2.2)			
Hawaii	71 (1.2)	219 (1.3)	13 (0.8)	208 (2.2)	16 (1.1)	198 (2.0)			
	73 (1.4)	217 (1.4)	14 (1.1)	206 (2.6)	13 (0.8)	197 (2.3)			
Idaho	63 (1.9)	225 (0.9)	15 (1.3)	217 (1.8)	22 (1.1)	210 (2.0)			
Indiana	70 (1.4)	221 (1.0)	16 (1.2)	222 (2.0)	14 (0.8)	211 (2.4)			
Iowa	67 (1.9)	231 (1.1)	18 (1.3)	230 (1.7)	15 (1.1)	219 (2.1)			
Kentucky	68 (1.6)	217 (1.1)	14 (0.8)	208 (2.4)	18 (1.2)				
Louisiana	78 (1.4)	, ,			, , ,	204 (1.8)			
Maine	, , , , , , , , , , , , , , , , , , ,	207 (1.5)	12 (0.9)	197 (2.3)	10 (0.9)	187 (2.8)			
Maryland	45 (2.6)	233 (1.3)	27 (1.7)	232 (1.7)	27 (1.8)	226 (1.8)			
Mai yiaiiu	63 (1.9)	220 (1.6)	19 (1.5)	217 (2.5)	17 (1.2)	204 (2.2)			
Massachusetts	58 (2.2)	228 (1.5)	21 (1.3)	228 (1.8)	21 (1.6)	217 (2.5)			
Michigan	61 (2.1)	222 (1.8)	19 (1.3)	218 (2.9)	20 (1.6)	210 (2.4)			
Minnesota	67 (1.5)	232 (0.9)	16 (1.1)	223 (2.3)	17 (1.3)	216 (2.6)			
Mississippi	75 (1.3)	205 (1.1)	14 (0.9)	192 (2.2)	11 (0.8)	182 (2.2)			
Missouri	72 (2.1)	224 (1.5)	14 (1.1)	219 (1.7)	14 (1.7)	210 (3.9)			
Nebraska	68 (1.9)	228 (1.3)	16 (1.5)	225 (2.7)	16 (1.0)	209 (2.3)			
	` '		, ,	, ,	. ,				
New Hampshire	61 (2.2)	231 (1.3)	19 (1.5)	233 (2.1)	20 (1.3)	218 (2.2)			
New Jersey	80 (1.5)	229 (1.5)	12 (1.0)	221 (2.6)	9 (0.9)	206 (3.0)			
New Mexico	67 (1.8)	216 (1.7)	12 (1.0)	208 (3.6)	21 (1.4)	202 (2.0)			
New York	67 (2.1)	221 (1.4)	21 (1.4)	212 (2.4)	13 (1.2)	205 (3.1)			
North Carolina	74 (1.4)	215 (1.2)	13 (0.9)	205 (2.3)	14 (0.8)	198 (1.9)			
North Dakota	76 (1.9)	230 (0.8)	13 (1.3)	224 (2.1)	11 (1.1)	215 (2.0)			
Ohio		, ,	, ,		, ,				
Oklahoma	64 (1.8)	220 (1.2)	18 (1.4)	219 (2.5)	18 (1.0)	206 (2.3)			
	71 (1.8)	222 (1.1)	13 (1.1)	216 (2.2)	16 (1.3)	207 (1.8)			
Pennsylvania	71 (1.4)	227 (1.5)	17 (1.2)	219 (2.5)	12 (1.2)	209 (2.5)			
Rhode Island	57 (1.6)	219 (1.6)	18 (1.0)	212 (2.9)	26 (1.6)	205 (2.2)			
South Carolina	74 (1.5)	215 (1.2)	12 (1.0)	203 (2.6)	14 (1.0)	198 (1.9)			
Tennessee	68 (1.5)	214 (1.5)	15 (0.9)	203 (2.8)	16 (1.2)	198 (2.0)			
Texas	60 (2.4)	219 (1.3)	21 (1.2)	219 (2.6)	20 (2.1)	209 (2.6)			
Utah	60 (1.4)	228 (1.0)	14 (0.8)	220 (2.0)	26 (2.1)				
Virginia	71 (1.6)					212 (1.7)			
West Virginia		223 (1.3)	13 (0.9)	217 (2.9)	16 (1.2)	207 (3.1)			
Wisconsin	74 (1.2)	218 (1.1)	9 (0.8)	205 (3.0)	17 (1.0)	202 (1.8)			
	69 (1.7)	230 (1.1)	17 (1.1)	228 (2.0)	14 (1.1)	215 (3.1)			
Wyoming FERRITORY	60 (1.7)	227 (1.1)	19 (1.0)	226 (1.8)	21 (1.5)	216 (1.4)			
Guam	61 (1.3)	194 (0.9)	24 (1.1)	190 (1.4)	14 (0.7)	182 (2.5)			
Guam	61 (1.3)	194 (0.9)	24 (1.1)	190 (1.4)	14 (0.7)	182 (2.6)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.



### TABLE A.53 | Students' Reports on the Frequency with Which They Do Mathematics Problems from Textbooks in Mathematics Class (continued)

	Grade 8 - 1992									
ŀ	Almost Ev	very Day	At Least Or	nce a Week	Less than	Weekly				
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency				
NATION	84 (1.0)	270 (1.1)	11 (0.8)	251 (1.9)	5 (0.4)	245 (2.6)				
Northeast	81 (2.1)	272 (3.2)	12 (1.3)	254 (4.7)	7 (1.2)	243 (5.8)				
Southeast	89 (1.8)	260 (1.3)	8 (1.4)	242 (4.1)	3 (0.5)	*** (***)				
Central	84 (1.9)	276 (2.6)	11 (1.8)	259 (4.8)	5 (0.9)	256 (3.3)!				
West	82 (2.0)	271 (2.3)	12 (1.5)	247 (2.3)	6 (0.9)	244 (4.6)				
STATES	62 (2.0)	211 (2.3)	12 (1.3)	241 (2.3)	0 (0.5)	244 (4.0)				
Alabama	00 /4 6\>	060 /4 6\	8 (1.1) «	239 (4.5)	4 (0.9)	243 (9.3)!				
	88 (1.6)>	253 (1.6)	` '		6 (1.5)	252 (4.1)!				
Arizona	84 (1.9)	268 (1.3)	9 (1.0) «	247 (3.5)		• •				
Arkansas	87 (1.3)>	258 (1.2)	8 (0.9) «	244 (2.7)	4 (0.6)	231 (6.1)				
California	76 (1.9)>	264 (1.9)	14 (1.2) «	250 (2.9)	10 (1.5)	244 (3.5)				
Colorado	76 (2.5)	276 (1.0)>	14 (1.5)<	259 (2.1)	10 (2.0)	256 (5.3)				
Connecticut	78 (2.1)>>	276 (1.3 <sub>)</sub>	· 13 (1.2) <b>«</b>	266 (2.3)	9 (1.4)	260 (3.9)				
Delaware	75 (1.0)>>	267 (1.2 <sup>°</sup> )	16 (0.8)≪	249 (2.1)	10 (0.8)	251 (2.8)				
Dist. Columbia	59 (1.4)>>	239 (1.3)	28 (1.3)≪	228 (2.1)	12 (0.7)>	227 (3.0)				
Florida	87 (1.3) <b>&gt;</b> >	262 (1.4)	9 (1.1) «	237 (3.7)	3 (0.5)	239 (5.3)				
Georgia	91 (1.0)>>	261 (1.2)	7 (o.9) <b>«</b>	243 (3.1)	2 (0.3) <	*** (***)				
Hawaii	78 (0.9)»	262 (1.0)	14 (0.6) «	242 (2.4)>	8 (0.6)	234 (2.3)				
Idaho	93 (0.9)>>	275 (0.7)	3 (0.5)«	267 (4.8)	3 (0.7)	255 (8.6)!				
Indiana	90 (1.1)>>	271 (1.2)	6 (0.9)«	254 (2.9)	3 (0.6)	247 (4.4)				
lowa	90 (1.5)>>	284 (1.0)>	8 (1.1)«	271 (3.5)	3 (0.7)	271 (7.7)!				
Kentucky		264 (1.1)>	10 (1.1) <	250 (2.2)	5 (0.9)	243 (4.5)				
•	84 (1.6)		8 (1.1) «	1 1	4 (1.1)	233 (5.8)!				
Louisiana	88 (1.7)**	251 (1.7)	- ( ,	240 (2.4)	` '					
Maine <sup>1</sup> Maryland	80 (2.2)	281 (1.0)	11 (1.5) 18 (1.4)≪	267 (2.3) 250 (2.1)	8 (1.3) 6 (0.6)	266 (7.2) 247 (5.9)				
	76 (1.6)>>	269 (1.4)			, ,					
Massachusetts'	82 (1.7)	276 (1.0)	12 (1.2)	255 (2.2)	6 (1.1)	256 (4.7)				
Michigan	85 (1.7)>	270 (1.4)	9 (1.0)≪	248 (3.9)	6 (1.1)	251 (6.2)				
Minnesota	93 (1.2)*>	283 (1.0)>	5 (0.7)≪	265 (4.5)	3 (0.8)	267 (3.8)!				
Mississippi1	87 (1.5)	247 (1.2)	10 (1.1)	238 (4.0)	3 (0.7)	227 (4.6)!				
Missouri <sup>1</sup>	86 (1.9)	272 (1.2)	9 (1.1)	262 (2.5)	5 (1.1)	258 (5.1)!				
Nebraska	90 (1.4) <i>&gt;</i> >	279 (1.1)	7 (1.1) <b>«</b>	261 (3.9)	3 (0.6)	239 (6.3)! «				
New Hampshire	79 (2.2)> <sup>;</sup>	280 (1.1)	13 (1.3) «	273 (2.4)	8 (1.2)	267 (3.1)				
New Jersey	82 (2.0)	274 (1.5)	14 (1.6) <	264 (3.6)	5 (1.0)	252 (6.0)!				
New Mexico	83 (1.7)>	262 (0.9)	10 (0.9) **	243 (2.4)	7 (1.3)	245 (2.9)				
New York	71 (3.0)	269 (2.2)	16 (1.3) «	259 (3.4)	13 (2.3)	255 (4.9)				
North Carolina	88 (1.0) <b>»</b>	261 (1.2)>	8 (0.8) «	238 (3.0)	4 (0.6)	234 (5.5)				
North Dakota	90 (1.8)>>	284 (1.2)	4 (1.0) «	272 (3.5)!	6 (1.3)	274 (2.1)!				
Ohio	, ,	` ·	12 (1.2) «	254 (2.7)	5 (0.8)>	237 (3.2)				
Oklahoma	83 (1.6)>	271 (1.6)>	, , , , , , , , , , , , , , , , , , ,	251 (4.6)	3 (0.7)	237 (5.0)				
	92 (1.2)>	269 (1.1)	5 (0.7) «	,	` '					
Pennsylvania	85 (1.6) <b>»</b>	274 (1.4)	10 (1.1) «	255 (3.0)	5 (1.0)	250 (4.8)				
Rhode Island	82 (1.1)>>	269 (0.9) >	13 (1.0) «	251 (2.1)	5 (0.5)	243 (2.8)>				
South Carolina	87 (1.3)	262 (1.1)	9 (0.8)	245 (2.2)	4 (0.8)	243 (5.3)				
Tennessee¹	84 (1.9)	261 (1.6)	12 (1.4)	248 (2.3)	4 (0.8)	236 (4.1)				
Texas	80 (1.4)>>	268 (1.4)>	14 (1.1) «	247 (2.8)	5 (0.7)	248 (4.6)				
Utah <sup>1</sup>	91 (1.1)	276 (0.7)	5 (0.6)	253 (3.0)	4 (0.8)	253 (3.6)				
Virginia	87 (1.4) >>	269 (1.2)	9 (1.1) «	251 (3.2)	4 (0.6)	256 (6.0)				
West Virginia	92 (0.8)>>	260 (1.0)	6 (0.7) <	244 (3.0)	2 (0.4)	*** (***) ·				
Wisconsin	85 (1.7)	280 (1.3)	10 (1.0)≪	262 (3.6)	5 (1.1)	263 (5.3)!				
Wyoming	83 (1.7)	276 (1.0)	7 (0.8) «	269 (2.7)	10 (1.5)	267 (2.2)				
TERRITORIES			46.75.5144	004 (0.4)	0 (0.0)	044 (0.0)				
Guam	79 (1.0) <b>»</b>	239 (1.2)	13 (0.8) «	221 (2.4)	8 (0.6)	211 (3.0)				
Virgin Islands	81 (0.8)>>	223 (1.3)	15 (0.5) <b>«</b>	218 (2.1)	4 (0.5) <	*** (***)				

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible. The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. The value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



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Students' Reports on the Frequency with Which They Do Mathematics Problems on Worksheets in Mathematics Class TABLE A.54

	Grade 4 - 1992									
	Almost Ev	very Day	At Least O	nce a Week	Less than	Weekly				
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency				
NATION	45 (1.4)	218 (1.2)	37 (0.9)	219 (1.1)	18 (1.0)	215 (1.5)				
Northeast	47 (4.4)	225 (2.7)	34 (2.5)	222 (2.6)	19 (2.7)					
Southeast	40 (2.1)	, ,				219 (3.3)				
Central		205 (2.4)	39 (1.8)	212 (2.8)	22 (2.0)	209 (2.4)				
West	41 (3.2)	221 (2.8)	40 (1.9)	224 (2.0)	19 (2.1)	221 (3.3)				
	52 (1.7)	218 (2.1)	33 (1.0)	218 (2.0)	15 (1.4)	214 (3.1)				
STATES										
Alabama	34 (1.5)	201 (1.9)	44 (1.6)	211 (1.7)	22 (1.9)	210 (2.9)				
Arizona	47 (1.3)	213 (1.3)	35 (1.1)	217 (1.7)	18 (0.9)	210 (1.9)				
Arkansas	34 (1.8)	201 (1.2)	44 (1.7)	214 (1.2)	22 (1.8)	210 (2.1)				
California	47 (1.1)	204 (1.8)	32 (1.3)	211 (2.0)	21 (0.9)	208 (2.8)				
Colorado	47 (1.5)	220 (1.2)	37 (1.3)	222 (1.3)	16 (1.0)	216 (2.2)				
Connecticut	48 (1.8)	227 (1.6)	35 (1.4)	226 (1.5)	17 (1.1)					
1	, ,	LL: (1.0)	, ,	220 (1.5)	17 (1.1)	224 (2.4)				
Delaware	47 (1.0)	215 (1.2)	37 (1.0)	221 (1.2)	16 (0.9)	211 (2.6)				
Dist. Columbia	52 (1.0)	189 (0.7)	32 (1.0)	198 (1.2)	16 (0.9)	187 (1.8)				
Florida	37 (1.7)	208 (1.6)	39 (1.6)	217 (2.1)	24 (1.6)	213 (2.3)				
Georgia	40 (1.6)	211 (1.6)	41 (1.3)	219 (1.6)	19 (1.3)	212 (2.1)				
Hawaii	31 (1.6)	210 (2.0)	38 (1.1)	216 (1.7)	31 (1.6)					
ldaho	42 (2.1)				` '	214 (1.8)				
	42 (2.1)	219 (1.3)	38 (1.8)	222 (1.3)	20 (1.5)	220 (1.5)				
Indiana	42 (2.0)	219 (1.3)	39 (1.3)	221 (1.5)	19 (1.7)	218 (1.8)				
lowa	46 (2.5)	228 (1.1)	34 (1.7)	230 (1.5)	20 (1.8)	230 (2.2)				
Kentucky	42 (2.1)	213 (1.5)	42 (1.7)	216 (1.4)	15 (1.6)	211 (2.7)				
Louisiana	39 (1.7)	200 (1.9)	42 (1.3)	206 (1.6)		3 1				
Maine	49 (1.7)	229 (1.3)	• •		19 (1.5)	203 (2.4)				
Maryland	, ,		36 (1.5)	233 (1.3)	15 (1.4)	231 (2.0)				
	42 (1.9)	215 (1.8)	35 (1.5)	219 (1.8)	22 (1.3)	214 (2.0)				
Massachusetts	53 (1.7)	226 (1.5)	35 (1.4)	227 (1.7)	12 (1.2)	223 (2.3)				
Michigan	46 (1.8)	217 (2.0)	35 (1.3)	222 (2.0)	19 (1.5)	217 (2.8)				
Minnesota	46 (2.3)	225 (1.2)	36 (1.5)	230 (1.6)	19 (1.9)	229 (2.1)				
Mississippi	35 (1.6)	195 (1.7)	43 (1.4)	205 (1.5)						
Missouri	44 (2.7)	· · · · · · · · · · · · · · · · · · ·	, ,	, ,	22 (1.4)	200 (1.7)				
Nebraska		220 (1.8)	39 (2.0)	223 (1.6)	18 (2.0)	220 (2.3)				
I CDI doka	37 (2.3)	223 (1.8)	42 (1.8)	225 (1.7)	21 (1.7)	226 (1.9)				
New Hampshire	50 (2.2)	229 (1.5)	35 (1.6)	229 (1.3)	15 (1.4)	227 (2.5)				
New Jersey	40 (2.3)	224 (2.0)	39 (1.8)	228 (1.7)	21 (1.7)	226 (2.9)				
New Mexico	36 (2.4)	208 (1.7)	38 (1.7)	216 (2.0)	26 (2.1)	, ,				
New York	43 (1.8)	216 (1.8)	33 (1.5)	220 (1.8)		213 (2.3)				
North Carolina	32 (1.6)		, , ,	• •	24 (1.5)	215 (2.0)				
North Dakota		206 (1.6)	47 (1.2)	216 (1.6)	22 (1.1)	210 (1.5)				
THOIRT DUROLU	42 (2.7)	223 (1.4)	41 (2.4)	231 (1.2)	17 (1.7)	230 (1.5)				
Ohio	48 (2.1)	217 (1.7)	38 (1.4)	219 (1.4)	14 (1.4)	215 (2.3)				
Oklahoma	42 (2.2)	216 (1.3)	38 (1.6)	221 (1.4)	20 (1.9)	222 (1.9)				
Pennsylvania	52 (2.2)	223 (1.7)	34 (1.4)	224 (1.7)	15 (1.5)	7 7				
Rhode Island	52 (2.2) 52 (1.9)	213 (1.9)	33 (1.5)		` · ·	222 (2.9)				
South Carolina			<b>,</b> ,	216 (1.7)	15 (1.3)	213 (2.7)				
Tennessee	34 (1.7) 36 (4.8)	204 (1.4)	42 (1.5)	215 (1.4)	24 (1.4)	215 (2.1)				
. 505555	36 (1.8)	205 (1.5)	45 (1.5)	214 (1.6)	20 (1.6)	208 (2.3)				
Texas	52 (1.5)	218 (1.4)	34 (1.4)	220 (1.5)	14 (1.1)	208 (2.6)				
Utah	46 (1.6)	221 (1.3)	34 (1.2)	226 (1.3)	21 (1.4)	223 (1.7)				
Virginia	32 (1.8)	215 (2.0)	44 (1.4)	223 (1.6)						
West Virginia	34 (1.9)	211 (1.5)	44 (1.4)		24 (1.7)	222 (2.0)				
Wisconsin				216 (1.3)	22 (1.6)	215 (1.8)				
Wyoming	45 (2.3)	226 (1.7)	39 (2.0)	231 (1.3)	16 (1.8)	226 (2.0)				
TERRITORY	57 (1.9)	223 (1.1)	30 (1.5)	227 (1.4)	12 (1.1)	223 (1.7)				
Guam	42 (1.1)	192 (1.4)	32 (1.0)	194 (1.7)	25 (1.0)	187 (1.9)				
		<u> </u>		<u> </u>	· · · · · ·	· · · · · · · · · · · · · · · · · · ·				

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.



TABLE A.54 Students' Reports on the Frequency with Which They Do Mathematics Problems on Worksheets in Mathematics Class (continued)

	Grade 8 - 1992									
ŀ	Almost Ev	very Day	At Least Or	nce a Week	Less than	Weekly				
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency				
NATION	22 (1,4)	256 (2.5)	42 (1.2)	266 (1.4)	36 (1.7)	273 (1.3)				
Northeast	25 (4.3)	· 260 (7.1)	36 (2.3)	266 (4.3)	39 (3.7)	276 (3.0)				
Southeast	20 (2.4)	248 (2.9)	47 (2.3)	260 (2.1)	33 (2.4)	262 (1.8)				
Central	23 (2.7)	263 (4.1)	42 (3.1)	272 (2.6)	35 (3.9)	281 (3.4)				
West	21 (2.1)	252 (3.3)	42 (1.8)	267 (3.3)	37 (3.2)	275 (2.4)				
STATES	21 (2.1)	202 (0.0)	42 (1.0)	207 (0.0)	0. (0.2)	2.0 (2)				
Alabama	19 (2.1)>	243 (3.4)	46 (2.0)	250 (1.8)	35 (2.5)	258 (2.0)				
Arizona	20 (1.7)>	253 (2.6)	41 (1.8) <	262 (1.3)>	40 (2.4)	273 (1.6)>				
Arkansas	21 (1.9)>	245 (2.3)	43 (1.8)	255 (1.4)	36 (2.5)	262 (1.7)				
California	30 (1.8)>	251 (2.4)	34 (2.0) «	259 (2.4)	36 (2.3)	269 (2.3)				
Colorado	25 (2.0)>	261 (2.3)	42 (1.7)	272 (1.2) >>	33 (2.2)	280 (1.3)>				
Connecticut	28 (2.0)>	264 (1.9)	43 (1.8)	274 (1.7)	29 (1.8)	281 (2.0)				
Delaware	38 (1.0)>>	252 (1.2)	38 (1.1) «	263 (2.0)	24 (1.0)	278 (1.7)				
Dist. Columbia	38 (1.1)*	225 (1.2)	41 (1.2) «	238 (1.6)	20 (0.9)	244 (2.7)				
Florida	18 (1.6)	243 (2.4)	41 (1.6) <<	256 (1.6)	41 (2.4)	270 (1.9)				
Georgia	20 (1.8)	245 (2.0)	51 (1.8)	259 (1.5)	29 (2.0)	268 (1.8)				
Hawaii	27 (1.1)>>	243 (2.6) >	40 (1.1) <b>«</b>	256 (1.5) >>	33 (1.0)	268 (1.4)				
Idaho	13 (1.4)	267 (2.1)>	37 (1.6) <	272 (1.3)	50 (2.2)	278 (1.0)				
Indiana	16 (1.6)	256 (1.9)	45 (1.6)	267 (1.3)	40 (2.1)	277 (1.8)				
lowa	, ,	276 (2.0)	39 (2.4)	282 (1.5)	35 (3.0)	288 (1.5)>>				
Kentucky	25 (3.5)		'	1 1	30 (2.2)	269 (1.9)>				
Louisiana	25 (1.9)*	252 (1.9)	45 (1.8)	261 (1.4) >	29 (2.2)	255 (2.4)				
	22 (2.0)**	243 (2.5)	49 (1.6) <	249 (1.7)						
Maine' Maryland	24 (2.4) 28 (2.2)	272 (2.8) 252 (2.1)	41 (1.7) 44 (1.4)<	277 (1.5) 267 (1.7)	35 (2.5) 28 (2.1)	283 (1.3) 274 (2.3)				
Massachusetts <sup>1</sup>	` ,		39 (1.3)		35 (2.1)	279 (1.7)				
	25 (2.0)	. 263 (2.1)	7.7	272 (1.5)	36 (2.3)	274 (2.0)				
Michigan	22 (2.3)	255 (3.1)	42 (1.8)	266 (1.8)						
Minnesota	18 (2.0)	270 (2.0)	39 (1.8) <	280 (1.5) >	43 (2.4)	288 (1.5)>				
Mississippi <sup>1</sup>	25 (1.8)	237 (2.1)	51 (1.6)	247 (1.7)	25 (2.0)	251 (2.1)				
Missouri¹	22 (2.3)	263 (2.2)	41 (1.7)	268 (1.3)	37 (2.5)	277 (1.9)				
Nebraska	21 (2.5)>	270 (2.8)	41 (2.1) <b>«</b>	274 (1.7)	38 (2.6)	284 (1.9)				
New Hampshire	29 (2.0) >>	272 (1.6)	41 (1.4) <b>«</b>	277 (1.1)>	30 (2.0)	284 (2.0)				
New Jersey	31 (2.2) >>	266 (2.6)	38 (1.3) <<	271 (2.2)	31 (2.3)	277 (2.3)				
New Mexico	22 (2.1)>	253 (2.1)	40 (1.9)	256 (1.3)	38 (2.3)	265 (1.2)				
New York	31 (3.2) >>	260 (3.4)	36 (1.6) <b>&lt;&lt;</b>	268 (2.4)	33 (2.9)	269 (3.0)				
North Carolina	24 (1.6)>	248 (2.5)>	52 (1.3)	258 (1.3)>>	24 (1.6)	266 (2.0)>				
North Dakota	16 (2.0)	278 (2.3)	39 (2.2)	283 (1.5)	45 (2.4)	284 (1.3)				
Ohio	29 (2.1)>>	258 (2.1)	45 (2.4)	267 (1.6)>	26 (3.1)	278 (2.8)				
Oklahoma	13 (1.6)	256 (2.9)	43 (2.1)	266 (1.7)	44 (2.3)	272 (1.6)				
Pennsylvania	24 (2.0)>	260 (2.6)	42 (1.8)	271 (1.7)	34 (2.2)	278 (2.1)				
Rhode Island	29 (0.9)	257 (1.5)>>	41 (1.0) <	265 (1.2)>>	30 (1.0) «	273 (1.3)				
South Carolina <sup>1</sup>	25 (1.6)	250 (2.3)	49 (1.5)	261 (1.3)	26 (1.6)	268 (1.9)				
Tennessee <sup>1</sup>	25 (1.0) 25 (2.3)	252 (2.1)	47 (1.8)	259 (1.6)	28 (2.5)	262 (3.0)				
Texas	27 (2.0)>	254 (2.0)	47 (1.6)	263 (1.7)>	26 (2.1)	275 (2.3)>				
Utah¹	13 (1.3)	260 (2.3)	34 (1.4)	270 (1.1)	53 (1.7)	280 (1.0)				
Virginia	23 (1.6)>>	254 (2.0)	50 (1.4) <	267 (1.3)	27 (1.6)	279 (1.9)				
West Virginia	13 (1.1)	248 (2.2)	44 (1.7)	257 (1.2)	43 (2.1)	263 (1.5)				
Wisconsin	21 (2.2)	266 (2.8)	38 (2.3) <	277 (1.6)	41 (3.2)	284 (1.7)				
Wyoming			38 (2.3) < 38 (1.7) <	277 (1.3)	41 (3.2)	279 (1.3)				
TERRITORIES	21 (1.7)»	268 (1.5)	30 (1.1)	213 (1.3)	71 (1.7)	213 (1.3)				
Guam	22 (1.1)>>	223 (1.7)>>	41 (1.3) <<	233 (1.7)	37 (1.2)	243 (1.7)				
Virgin Islands	18 (0.9)>>	214 (2.2)>	51 (1.4) «	224 (1.5)>	31 (1.3)	224 (1.6)				

<sup>1</sup>Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. 
The value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.



TABLE A.55 Teachers' Reports on the Frequency with Which Students Work in Small Groups in Mathematics Class

	Grade 4 - 1992									
	At Least	Weekly	Less than O	nce a Week	Never or H	ardly Ever				
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency				
NATION	65 (2.9)	218 (1.4)	27 (2.3)	216 (1.8)	8 (1.4)	215 (3.0)				
Northeast	68 (4.0)	225 (3.3)	22 (3.1)	208 (3.0)	11 (3.1)	219 (5.8)!				
Southeast	67 (5.7)	207 (3.1)	26 (5.0)	209 (2.7)	7 (1.6)	208 (5.8)!				
Central	57 (8.1)	224 (2.2)	30 (5.9)	225 (3.5)!	13 (4.2)	219 (4.3)!				
West	69 (3.8)	219 (2.7)	28 (3.3)	216 (2.4)	3 (1.3)	*** (***)				
STATES	00 (0.0)	213 (2.1)	20 (3.3)	210 (2.4)	3 (1.3)	( )				
Alabama	60 (3.7)	206 (2.2)	29 (3.4)	211 (2.0)	11 (2.1)	004 (0.4)				
Arizona	62 (3.3)	, ,	, ,	, ,	` ,	204 (2.4)!				
Arkansas	38 (3.5)	216 (1.5)	27 (2.9)	213 (2.1)	11 (2.0)	209 (2.9)				
California	` '	207 (2.3)	40 (3.7)	209 (1.6)	21 (3.0)	212 (1.8)				
Colorado	72 (3.3)	208 (1.7)	23 (3.0)	207 (3.2)	4 (1.2)	194 (4.8)!				
Connecticut	73 (2.9)	221 (1.3)	22 (2.8)	216 (2.3)	5 (1.3)	216 (4.6)!				
Connecticut	66 (3.7)	230 (1.5)	25 (3.1)	227 (3.1)	8 (1.7)	209 (3.6)!				
Delaware	55 (1.1)	218 (1.0)	34 (1.1)	218 (1.2)	11 (1.1)	213 (2.8)				
Dist. Columbia	85 (0.6)	192 (0.8)	12 (0.4)	186 (2.0)	4 (0.4)					
Florida	70 (3.0)	212 (1.5)	23 (2.7)			186 (4.0)				
Georgia	68 (2.7)	, ,	, ,	216 (2.4)	7 (1.4)	207 (3.4)!				
Hawaii	, ,	215 (1.7)	21 (1.9)	212 (2.2)	11 (2.0)	212 (4.6)				
Idaho	54 (3.5)	215 (1.6)	35 (3.0)	213 (2.1)	11 (1.8)	203 (3.0)				
Idano	65 (2.8)	221 (1.3)	26 (3.0)	219 (2.1)	9 (1.7)	222 (2.4)				
Indiana	50 (4.0)	221 (1.5)	37 (3.6)	218 (1.7)	13 (2.0)	218 (2.5)				
lowa	60 (3.4)	231 (1.3)	34 (3.4)	226 (1.6)	5 (1.6)	225 (4.6)!				
Kentucky	74 (3.6)	215 (1.4)	21 (3.0)	208 (1.7)	5 (2.0)	· · · · · · · · · · · · · · · · · · ·				
Louisiana	63 (4.2)	203 (1.9)	25 (3.4)			207 (3.2)!				
Maine	71 (3.1)	231 (1.3)	26 (3.0)	203 (3.4)	12 (2.7)	200 (3.3)!				
Maryland	78 (2.7)	218 (1.7)	19 (2.9)	230 (1.8) 218 (4.0)	3 (1.2)	١ ,				
	, ,	210 (1.7)	13 (2.3)	210 (4.0)	3 (1.2)	209 (7.7)!				
Massachusetts	61 (3.8)	227 (1.7)	25 (2.7)	229 (2.0)	14 (2.7)	221 (3.4)!				
Michigan	64 (3.7)	221 (2.3)	30 (3.2)	217 (3.1)	6 (1.8)	216 (6.2)!				
Minnesota	61 (3.5)	227 (1.7)	33 (3.4)	228 (1.5)	6 (1.4)	225 (4.3)!				
Mississippi	57 (4.0)	198 (2.0)	32 (3.5)	204 (2.2)	11 (2.1)	200 (3.2)!				
Missouri	53 (3.8)	221 (2.1)	35 (3.5)	223 (2.2)	12 (2.1)	220 (2.7)				
Nebraska	63 (3.7)	226 (1.8)	34 (3.9)	224 (1.4)	4 (1.2)	214 (5.0)!				
New Hampshire	` '			, ,	· ,	, ,				
New Jersey	67 (3.2)	231 (1.3)	28 (3.2)	225 (1.9)	5 (1.3)	221 (3.4)!				
New Mexico	63 (4.2)	228 (2.0)	26 (3.6)	231 (2.3)	11 (2.3)	213 (3.7)!				
New York	60 (3.6)	212 (1.5)	29 (3.4)	216 (1.7)	11 (2.3)	204 (3.7)!				
	58 (2.8)	218 (1.8)	27 (2.2)	217 (2.7)	14 (2.1)	213 (3.3)				
North Carolina	63 (3.1)	213 (1.4)	31 (2.8)	212 (2.0)	6 (1.3)	207 (5.5)!				
North Dakota	45 (4.0)	226 (1.3)	41 (3.9)	230 (1.2)	14 (3.0)	227 (2.3)!				
Ohio	58 (3.4)	219 (1.7)	28 (3.0)	215 (2.0)	12 (2 8)	244 (2.4)				
Oklahoma	49 (3.9)	219 (1.7)	38 (3.4)	215 (2.0)	13 (2.8)	214 (3.4)!				
Pennsylvania	59 (3.5)	219 (1.3) 225 (1.9)			13 (2.2)	220 (2.3)				
Rhode Island		, ,	30 (3.2)	221 (2.1)	12 (2.3)	219 (5.1)				
South Carolina	55 (3.5) 66 (3.3)	214 (2.1)	30 (3.0)	218 (2.7)	15 (2.1)	207 (4.6)				
Tennessee	66 (3.3)	212 (1.3)	25 (2.9)	210 (2.1)	9 (1.9)	211 (4.3)!				
i i	56 (3.1)	208 (1.9)	34 (2.9)	212 (2.0)	10 (2.1)	212 (3.3)!				
Texas	70 (3.4)	218 (1.7)	24 (3.0)	218 (3.2)	6 (1.8)	212 (5.2)!				
Utah	65 (3.2)	224 (1.1)	28 (3.0)	223 (1.8)	7 (1.4)	215 (4.5)				
Virginia	65 (3.2)	219 (1.8)	26 (3.1)	223 (2.6)	9 (2.1)	213 (4.4)!				
West Virginia	57 (3.3)	214 (1.6)	30 (3.1)	213 (1.7)	13 (2.7)	210 (2.2)!				
Wisconsin	65 (3.6)	229 (1.3)	31 (3.6)	226 (1.9)	3 (1.2)	230 (3.5)!				
Wyoming	69 (3.3)	224 (1.3)	23 (2.7)	225 (1.6)	8 (2.2)	225 (3.1)!				
TERRITORY	00.07	224 (1.0)	20 (2.1)	220 (1.0)	0 (2.2)	223 (3.1)!				
Guam	64 (1.3)	192 (1.2)	21 (1.3)	188 (1.6)	15 (0.8)	192 (2.9)				
				100 (1.0)	15 (0.0)	132 (2.3)				

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



## Teachers' Reports on the Frequency with Which Students Work in Small Groups in Mathematics Class (continued)

	Grade 8 - 1992									
	At Least	Weekly	Less than O	nce a Week	Never or H	ardly Ever				
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency				
NATION	51 (2.6)	269 (1.6)	32 (2.6)	266 (2.2)	17 (2.2)	267 (2.9)				
Northeast	50 (4.7)	271 (4.7)	28 (4.7)	266 (5.1)	22 (3.7)	260 (5.7)				
Southeast	47 (5.4)	262 (2.4)	38 (5.6)	263 (3.5)	15 (3.1)	260 (4.3)!				
Central		273 (4.8)	32 (5.3)	274 (4.2)!	17 (4.3)	282 (5.2)!				
· ·	51 (5.3)		29 (4.2)	264 (3.7)	15 (5.1)	266 (4.3)!				
West	56 (4.7)	269 (2.4)	29 (4.2)	204 (0.1)	(5)					
STATES	(2)	050 (0.0)	06 (0.5)	255 (2.3)	19 (3.2)	249 (3.1)				
Alabama	45 (3.9)	250 (3.3)	36 (3.5)	266 (2.7)	13 (2.1)	261 (5.1)				
Arizona	56 (4.1)	264 (1.9)>	31 (3.9)	1 1	25 (3.4)	252 (2.8) <				
Arkansas	41 (3.7)	258 (2.2)	34 (3.4) <	256 (2.0)		268 (4.1)!				
California	62 (3.5)	260 (2.3)	26 (2.6)	262 (3.0)	12 (2.7)	· · · · · · · · · · · · · · · · · · ·				
Colorado	56 (3.1)<	273 (1.2)>	35 (2.9)	271 (2.4)	9 (1.8)	266 (3.3)!				
Connecticut	47 (3.3)	276 (2.3)	36 (3.0)	274 (2.2)	17 (2.6)	267 (4.4)				
Delaware	52 (0.7)>>	258 (1.5)	31 (0.8) <	269 (1.6)	17 (0.8) <	262 (2.1)				
Dist. Columbia	, ,	236 (1.0) >>	14 (0.6)	227 (2.7) «	5 (0.5) >>	236 (4.9)				
Florida	80 (0.7)	260 (2.2)	34 (2.8)	259 (2.3)	13 (1.6)	257 (3.7)				
	53 (2.9)			261 (2.2)	13 (1.8)>>	254 (3.4)				
Georgia	52 (3.1)	257 (2.0)	35 (3.0)	• •	19 (0.8) «	259 (1.7)				
Hawaii	46 (0.9) >>	258 (1.1) >>	36 (0.9)	256 (1.7)	١ /	268 (1.8 <u>)</u>				
Idaho	61 (3.2)	275 (1.0)	29 (3.2)	277 (1.8)>	10 (1.7)	200 (1.0)				
Indiana	38 (3.0)	272 (2.0)	43 (3.1)	271 (2.0)	19 (2.9)	261 (2.3)				
lowa	, ,	286 (1.5)>>	33 (4.4)	279 (2.0)	17 (4.0)	282 (3.0)!				
1	50 (4.6)	= ' '	38 (3.3)	261 (1.6)	9 (1.9)	262 (4.6)				
Kentucky	52 (3.5)	263 (1.9)	30 (3.9)	255 (2.5)	19 (3.1)	246 (2.2)				
Louisiana	51 (4.1)	249 (2.7)		282 (2.0)	8 (2.3)	274 (3.8)!				
Maine¹	69 (3.7)	278 (1.4)	23 (3.2)	, ,		258 (4.4)				
Maryland	57 (3.7)	266 (2.3)	31 (3.1)	269 (3.0)	12 (2.2)	230 (4.4)				
Massachusetts <sup>1</sup>	44 (3.8)	273 (2.2)	30 (3.2)	274 (2.8)	26 (3.4)	268 (2.4)				
Michigan	56 (3.7)>	265 (2.2)	33 (3.3)	268 (2.7)	11 (2.2)	270 (5.1)!				
Minnesota	51 (4.5)	283 (1.5)	37 (3.8) <	280 (1.9)>	12 (2.7)	280 (2.8)!				
Mississippi1	, ,	244 (2.9)	45 (3.3)	247 (1.6)	14 (2.8)	243 (3.0)				
1.7	40 (3.6)	• •	39 (3.7)	272 (1.7)	22 (3.3)	269 (2.4)				
Missouri¹	40 (3.7)	271 (1.7)	40 (4.6)	277 (1.9)	12 (2.9)	276 (3.6)!				
Nebraska	49 (4.6)	278 (1.9)	40 (4.0)	211 (1.5)						
New Hampshire	59 (3.4)	278 (1.3)>	33 (3.3)	278 (1.5)	8 (1.6)	274 (3.9)!				
New Jersey	52 (4.5)	272 (2.4)	37 (4.7)	270 (3.7)	10 (2.1)	273 (5.8)				
New Mexico	58 (3.3)	259 (1.0)	30 (2.6) <	259 (2.1)	12 (2.5)	262 (3.2)!				
New York	37 (4.1)	264 (2.9)	36 (3.4)	269 (3.7)	27 (3.7)	263 (5.0)				
North Carolina	50 (3.4)	258 (1.6)>>	36 (3.2)	257 (2.3)	14 (2.3)	256 (4.1)				
North Dakota	• •	284 (1.9)	34 (4.3)	285 (1.7)	27 (3.6)	278 (1.4)				
HUILII DAKULA	39 (4.0)	204 (1.3)			, ,	, ,				
Ohio	39 (4.1)	271 (2.4)	48 (3.9)	268 (2.4)	13 (2.7)	270 (3.5)				
Oklahoma	33 (3.6)	267 (2.2)	37 (2.9)	268 (1.9)	30 (3.4)>	267 (2.2)				
Pennsylvania	41 (3.7)	269 (3.0)	38 (3.3)	274 (2.1)	21 (2.6)	267 (3.0)				
Rhode Island	38 (1.0)>>	265 (1.0) >	37 (1.2) <	263 (1.2)	25 (0.9)≪	269 (2.1)>				
South Carolina <sup>1</sup>	47 (3.8)	261 (2.0)	39 (2.7)	260 (2.3)	14 (2.4)	261 (3.6)				
Tennessee <sup>1</sup>	38 (3.6)	257 (1.7)	39 (3.4)	260 (2.4)	22 (3.3)	256 (4.3)				
	• •		• •		• •	265 (3.5)				
Texas	55 (3.4) >	265 (2.1)>	33 (3.0) «	264 (2.6)	12 (2.1)					
Utah <sup>1</sup>	51 (2.9)	276 (1.2)	28 (2.3)	272 (1.8)	21 (1.9)	271 (2.0)				
Virginia	53 (3.1)	269 (1.6)	31 (2.4) <	267 (2.2)	16 (2.4)	262 (3.2)				
West Virginia	42 (3.7)	261 (1.5)	36 (3.5)	256 (2.0)	22 (3.0)	257 (2.1)				
Wisconsin	53 (5.0)	280 (2.3)	35 (4.8)	276 (2.6)	11 (2.0)	276 (2.5)				
Wyoming	58 (3.1) <	278 (1.1)>	29 (2.7)	270 (1.7)	12 (1.8)>	268 (2.8)				
TERRITORIES	(,	/	, ,							
Guam	38 (1.0)>	237 (2.4)	47 (0.9) >	238 (1.7)	15 (1.0) <<	220 (2.5) <				
Virgin Islands	29 (1.0) <<	215 (2.1)	37 (1.0)	222 (1.5)«	34 (0.8) >>	224 (1.8)				

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible. The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. The value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.



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TABLE A.56

### Teachers' Reports on the Frequency with Which Students Write Reports or Do Projects in Mathematics Class

	Grade 4 - 1992								
PUBLIC SCHOOLS	At Least	Weekly	Less than O	nce a Week	Never or H	ardiy Ever			
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	1 (0.4)	*** (***)	18 (2.1)	219 (3.4)	90 (0.0)	046 (4.4)			
Northeast	0 (0.2)	*** /***(	24 (4.9)		80 (2.2)	216 (1.1)			
Southeast	0 (0.3)	*** /***		228 (5.7)!	76 (5.0)	218 (2.1)			
Central	· · · · · · · · · · · · · · · · · · ·	( )	17 (3.8)	205 (3.3)!	83 (3.8)	208 (2.1)			
West	4 (1.3)	( )	10 (3.3)	223 (8.0)!	87 (4.0)	223 (1.9)			
	1 (0.6)	*** (***)	· 24 (4.9)	220 (7.2)!	75 (5.0)	217 (2.5)			
STATES				` '	(,	(,			
Alabama	3 (1.1)	*** (***)	21 (3.2)	207 (2.3)	76 (3.4)	207 (1.8)			
Arizona	4 (1.2)	209 (6.1)!	18 (2.1)	216 (3.0)		• • •			
Arkansas	0 (0.2)	*** (***)		1 1	79 (2.2)	214 (1.2)			
California			9 (1.4)	205 (3.5)	91 (1.4)	210 (1.1)			
Colorado	6 (1.4)	197 (6.0)!	27 (3.0)	209 (3.1)	67 (3.3)	208 (1.7)			
	3 (1.0)	215 (5.0)!	27 (2.5)	221 (1.8)	70 (2.4)	220 (1.3)			
Connecticut	3 (1.0)	231 (7.3)!	20 (2.0)	230 (2.4)	77 (2.2)	227 (1.6)			
Delaware	0 (0.1)	*** /***\	• •		, ,	` '			
Dist. Columbia	, , ,		19 (0.7)	227 (1.9)	80 (0.6)	215 (1.0)			
	9 (0.4)	188 (2.5)	37 (1.0)	192 (1.4)	54 (1.0)	190 (1.3)			
Florida	3 (0.8)	211 (6.7)!	26 (3.1)	210 (2.0)	71 (3.1)	213 (1.5)			
Georgia	1 (0.6)	*** (***)	20 (2.5)	215 (3.5)	78 (2.4)	213 (1.5)			
Hawaii	4 (1.0)	213 (4.6)!	20 (2.2)	219 (2.9)	76 (2.2)	, ,			
Idaho	2 (0.9)	*** (***)	14 (2.0)	, , ,	• •	212 (1.4)			
	2 (0.5)	( )	14 (2.0)	221 (2.5)	84 (1.9)	220 (1.1)			
Indiana	1 (0.7)	*** (***)	14 (2.7)	219 (3.0)	85 (2.8)	220 (1.1)			
lowa	1 (0.4)	*** /***	19 (2.9)	232 (2.0)					
Kentucky	5 (1.7)	215 (4.7)!			80 (3.0)	228 (1.2)			
Louisiana	· · ·	, ,	26 (3.2)	215 (2.1)	68 (3.4)	213 (1.4)			
Maine	4 (1.1)	197 (5.3)! *** (***)	18 (2.7)	202 (4.7)	78 (2.7)	203 (1.6)			
· ·	0 (0.4)	, , ,	22 (3.0)	230 (2.0)	78 (3.0)	231 (1.3)			
Maryland	6 (1.6)	216 (6.9)!	15 (2.4)	221 (3.4)	79 (3.0)	218 (1.6)			
Massachusetts	2 (0.7)	*** /***)	40 (0.4)	000 (0.0)	• •				
Michigan		*** /***	18 (3.1)	230 (3.0)	81 (3.2)	226 (1.5)			
Minnesota	2 (0.9)	(""")	24 (3.3)	217 (2.6)	74 (3.4)	219 (2.0)			
	4 (2.0)	227 (5.4)!	15 (2.5)	228 (2.6)	81 (2.2)	227 (1.3)			
Mississippi	2 (0.7)	*** (***)	20 (3.0)	198 (2.5)	78 (2.9)	201 (1.4)			
Missouri	2 (0.9)	*** (***)	19 (3.1)	222 (3.1)	79 (3.4)	222 (1.5)			
Nebraska	1 (0.7)	*** (***)	19 (2.4)	229 (2.3)	80 (2.6)				
New Hampshire		` ,	(2.1)	220 (2.0)	00 (2.0)	223 (1.4)			
New Hampshire	3 (1.0)	228 (5.3)!	21 (2.7)	233 (2.8)	76 (3.0)	228 (1.3)			
New Jersey	2 (1.2)	· *** (***)	26 (3.3)	230 (3.0)	72 (3.5)	226 (1.7)			
New Mexico	3 (1.0)	*** (***)	22 (3.3)	215 (2.1)	75 (3.4)	· · ·			
New York	3 (1.0)	*** }***	22 (2.5)	, ,		212 (1.4)			
North Carolina	3 (0.9)	207 (3.8)!		221 (2.2)	76 (2.7)	216 (1.5)			
North Dakota		207 (3.8)! *** (***)	18 (2.1)	212 (2.6)	79 (2.2)	212 (1.1)			
Mortin Dakota	2 (1.1)	()	15 (3.1)	227 (2.5)!	82 (3.3)	228 (0.9)			
Ohio	1 (0.7)	*** (***)	17 (2.8)	219 (2.7)	94 (0.0)	047 (4.5)			
Oklahoma	2 (0.6)	*** /***	, ,	, ,	81 (2.8)	217 (1.5)			
Pennsylvania	• •	( )	16 (2.7)	220 (2.4)	83 (2.8)	219 (1.1)			
Rhode Island	2 (0.9)	228(16.2)!	17 (2.4)	226 (2.9)	81 (2.5)	222 (1.7)			
	1 (0.7)	( )	17 (2.5)	219 (3.0)	82 (2.6)	213 (1.8)			
South Carolina	1 (0.5)	*** (***)	15 (2.3)	212 (3.2)	84 (2.2)	211 (1.3)			
Tennessee	3 (1.1)	195 (6.7)!	16 (2.4)	207 (3.8)	81 (2.4)	211 (1.4)			
Texas	2 (4.4)	, ,	` '	` '	, ,	•			
Utah	3 (1.1)	223 (7.7)!	19 (2.3)	215 (3.0)	77 (2.4)	217 (1.6)			
	3 (1.0)	236 (6.5)!	19 (2.5)	229 (2.3)	78 (2.7)	221 (1.1)			
Virginia	2 (0.7)	*** (***)	15 (2.0)	218 (4.4)	84 (2.1)	220 (1.4)			
West Virginia	1 (0.8)	*** (***)	17 (2.9)	215 (2.4)	82 (3.1)	213 (1.2)			
Wisconsin	3 (1.1)	233 (8.5)!	27 (3.4)	230 (1.9)					
Wyoming	3 (1.0)	230 (4.2)!		200 (1.5)	70 (3.5)	227 (1.3)			
ERRITORY	J (1.0)	230 (4.2)!	20 (2.7)	226 (1.6)	77 (3.0)	224 (1.1)			
Guam	0 (0.0)	*** (***)	00 (5.5)						
	2 (0.2)	*** (***)	28 (1.1)	192 (1.5)	70 (1.1)	191 (1.1)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



## Teachers' Reports on the Frequency with Which Students Write Reports or Do Projects in Mathematics Class (continued)

	Grade 8 - 1992								
PUBLIC SCHOOLS	At Least Weekly		Less than O	nce a Week	Never or H	ardly Ever			
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	1 (0.3)	*** (***)	21 (2.1)	266 (2.5)	79 (2.1)	268 (1.2)			
Northeast	1 (0.8)	. *** }***{	32 (4.7)	268 (4.8)	67 (4.9)	268 (3.5)			
Southeast	, ,	*** /***	20 (5.1)	271 (5.0)!	80 (5.1)	260 (1.3)			
	0 (0.0)	*** (***)	9 (3.3)	270 (5.9)!	90 (3.4)	275 (2.9)			
Central	1 (0.7)	*** (***)		260 (4.1)	77 (3.6)	270 (2.5)			
West	1 (0.4)	(***)	22 (3.5)	200 (4.1)	77 (3.0)	210 (2.0)			
STATES			22 (2.2)	050 (0.0)	76 (0.4)	252 (2.1)			
Alabama	1 (0.9)	*** (***)	22 (3.3) <b>«</b>	252 (3.3)	76 (3.4)>>	1			
Arizona	1 (0.3) <	*** (***)	20 (2.8) <b>«</b>	265 (2.7)>	80 (2.8)**	264 (1.8)			
Arkansas	1 (0.9)	*** (***)	16 (2.6) <b>«</b>	255 (2.8)	83 (2.9) >>	256 (1.4)			
California	3 (1.0)	255 (3.9)!	31 (3.0)≪	264 (3.4)	66 (3.0)»	260 (1.9)			
Colorado	3 (1.0)	*** (***)	28 (3.0) «	272 (2.0)	70 (3.3) <b>»</b>	271 (1.4)>			
Connecticut	2 (0.8)	*** (***)	25 (3.1) <i>«</i>	279 (3.0)	73 (3.1)**	271 (1.5)>			
Delaware	1 (0.3)	*** (***)	29 (1.0)«	257 (2.0)	70 (1.0)>>	264 (1.1)>			
Dist. Columbia	4 (0.4)	*** /***	45 (1.4)«	236 (1.7)	50 (1.4)>>	236 (1.5)>>			
Florida	1 (0.4)	*** /***/	17 (2.5) «	262 (4.2)	82 (2.5)>>	259 (1.6)			
Georgia		*** /***	21 (3.0) «	254 (3.1)	78 (3.1)»	259 (1.6)			
	1 (0.6)	*** /***	16 (0.7) «	263 (2.2) >>	83 (0.7) >>	256 (0.9)>			
Hawaii	2 (0.2) <	*** (***)	• • • • • • • • • • • • • • • • • • • •	278 (2.1)	85 (2.0)>>	274 (0.7)>			
idaho	0 (0.2) «	()	15 (2.0) <b>«</b>		• •				
Indiana	1 (0.5)	*** (***)	18 (2.5)≪	271 (3.1)	81 (2.5)>>	269 (1.5)			
lowa	1 (0.9)	*** (***)	16 (3.5) <<	281 (2.6)!	83 (3.6) <b>»</b>	283 (1.1) >			
Kentucky	3 (1.5)	262 (8.1)!	26 (3.3) «	262 (2.6)	70 (3.6) >>	262 (1.4)>			
Louisiana	1 (0.5)	*** (***)	20 (3.0) «	251 (3.8)	79 (3.1)>>	249 (1.7)			
Maine <sup>1</sup>	1 1	*** /***/	22 (3.4)	280 (2.5)	78 (3.5)	278 (1.2)			
Maryland	1 (0.7) 1 (0.6)	*** /***	23 (3.2) «	267 (4.4)	76 (3.3)>>	265 (1.8)			
	` '	*** (***)	- , ,	280 (2.2)	81 (3.0)	270 (1.3)			
Massachusetts <sup>1</sup>	0 (0.0)	\ ,	19 (3.0)	3 5		269 (1.8)			
Michigan	3 (1.5)	*** (***)	20 (3.7) «	260 (4.2)	77 (3.8)>>				
Minnesota	1 (0.6)	*** (***)	20 (3.3) «	278 (2.4)	79 (3.4)>>	282 (1.2)*			
Mississippi1	3 (1.1)	*** (***)	23 (3.0)	245 (3.1)	75 (3.2)	245 (1.5)			
Missouri¹	0 (0.1)	*** (***)	14 (2.2)	270 (2.8)	86 (2.2)	271 (1.1)			
Nebraska	1 (0.5)	*** (***)	20 (3.0) «	277 (2.3)	79 (3.1) <b>»</b>	278 (1.3)			
New Hampshire	3 (1.2)	281 (5.1)!>	37 (2.6) <<	279 (1.5)>	60 (2.6)>>	277 (1.4)			
New Jersey	0 (0.4)	*** (***)	19 (3.0) <<	275 (3.7)	81 (3.1)>>	270 (1.9)			
New Mexico	, ,	*** /***	22 (3.0) «	259 (2.3)	78 (2.9)»	259 (1.2)			
New York	0 (0.3) **	*** /***	19 (2.6) «	266 (4.2)	80 (2.9) >>	266 (2.4)			
	2 (1.2)	*** /***	24 (3.2) «	260 (2.5)>	76 (3.2)»	257 (1.6)>			
North Carolina North Dakota	0 (0.3)	*** (***)	19 (3.5) <	284 (3.9)!	81 (3.5)>>	283 (1.1)			
	0 (0.0)	( )		, ,	` '				
Ohio	0 (0.1)	*** (***)	12 (2.3) «	261 (5.1)	88 (2.3) >>	270 (1.7)			
Oklahoma	0 (0.3)	*** (***)	16 (2.7) <b>«</b>	274 (3.1)	84 (2.7)>>	266 (1.3)			
Pennsylvania	1 (0.6)	*** (***)	16 (2.8) <b>≪</b>	266 (3.7)	83 (2.8) >>	271 (1.5)			
Rhode Island	0 (0.1)	*** (***)	22 (0.8) <<	264 (1.7)	77 (0.8) >>	266 (0.9) >>			
South Carolina <sup>1</sup>	1 (0.6)	*** (*** <u>)</u>	26 (3.2)	264 (3.0)	72 (3.3)	259 (1.4)			
Tennessee <sup>1</sup>	1 (1.0)	*** (***)	21 (3.2)	259 (3.7)	78 (3.4)	258 (1.4)			
Texas	1 (0.6)	*** (***)	24 (3.3) <<	267 (3.8)>	74 (3.5)>>	263 (1.5)>			
Utah¹	1 (0.8)	*** }***{	16 (2.2)	273 (2.3)	82 (2.3)	274 (1.0)			
Virginia		*** /***	20 (2.3) <<	266 (3.1)	80 (2.4)>>	267 (1.3)>			
	0 (0.3)	*** (***)		261 (3.1)	86 (2.4)>>	258 (1.1)			
West Virginia	0 (0.0)	` '	14 (2.4) «		71 (4.7)>>	276 (1.3)			
Wisconsin	0 (0.2)	*** (***)	29 (4.7) <	284 (2.9)! >					
Wyoming TERRITORIES	0 (0.2) <<	*** (***)	13 (1.7) «	277 (3.2)	87 (1.6) <b>»</b>	274 (0.9)>			
Guam	2 (0.3)	*** (***)	31 (1.5)	245 (1.7)>	67 (1.5)	231 (1.3)			
Virgin Islands	0 (0.0)	*** (***)	19 (0.6) <<	220 (1.6)	81 (0.6)>>	221 (1.4)			

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. "The value for 1992 was significantly lower than the value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.



TABLE A.57

### Students' Reports on the Frequency with Which They Work in Small Groups in Mathematics Class

	Grade 4 - 1992								
PUBLIC SCHOOLS	At Least	Weekly	Less than O	nce a Week	Never or Hardly Ever				
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	37 (1,1)	213 (1.1)	19 (0.8)	228 (1.6)	44 (1.2)	047 (0.0)			
Northeast	40 (2.7)	217 (3.2)	19 (1.8)	, ,		217 (0.9)			
Southeast	35 (1.7)	202 (2.4)	3 5	235 (4.6)	42 (2.9)	223 (1.7)			
Central	34 (2.1)		16 (1.4)	216 (3.4)	49 (2.3)	211 (1.6)			
West	, ,	219 (2.7)	21 (1.9)	231 (2.7)	45 (2.5)	220 (2.5)			
STATES	40 (2.2)	213 (1.6)	18 (1.3)	228 (3.1)	42 (2.1)	217 (1.8)			
Alabama	05 (4.4)								
Arizona	35 (1.1)	202 (2.0)	16 (0.9)	218 (2.8)	50 (1.4)	207 (1.6)			
	40 (1.2)	209 (1.5)	17 (0.8)	224 (1.9)	43 (1.2)	215 (1.2)			
Arkansas	31 (1.1)	201 (1.3)	14 (0.8)	217 (2.3)	55 (1.2)	211 (1.0)			
California	41 (1.6)	202 (2.1)	19 (1.1)	216 (2.8)	41 (1.6)	209 (1.8)			
Colorado	41 (1.4)	216 (1.4)	21 (1.0)	229 (1.6)	38 (1.5)				
Connecticut	40 (1.5)	222 (1.4)	21 (1.0)	238 (1.8)	40 (1.5)	219 (1.3) 223 (1.8)			
Delaware	37 (1.7)	, ,		, ,		` '			
Dist. Columbia	, ,	214 (1.5)	17 (0.8)	227 (2.0)	46 (1.6)	215 (1.3)			
Florida	54 (0.9)	188 (0.9)	13 (0.7)	203 (2.4)	33 (0.9)	192 (1.1)			
	36 (1.2)	208 (1.9)	14 (0.9)	220 (2.7)	50 (1.5)	214 (1.5)			
Georgia	37 (1.5)	209 (2.0)	15 (0.7)	224 (2.5)	48 (1.8)	215 (1.2)			
Hawaii	42 (1.3)	207 (1.9)	15 (0.9)	225 (2.4)	43 (1.4)	214 (1.5)			
Idaho	39 (1.7)	216 (1.3)	22 (1.2)	228 (1.5)	40 (1.4)	220 (1.1)			
Indiana	34 (1.2)	214 (1.6)	18 (0.9)	• •					
Iowa	35 (1.5)			231 (1.4)	48 (1.3)	219 (1.2)			
Kentucky	, , ,	228 (1.6)	26 (1.1)	238 (1.4)	39 (1.6)	225 (1.3)			
Louisiana	41 (1.8)	212 (1.5)	19 (0.9)	225 (1.9)	40 (1.9)	211 (1.0)			
Maine	41 (1.5)	199 (1.7)	15 (0.8)	216 (2.3)	44 (1.4)	204 (1.7)			
	38 (1.9)	229 (1.4)	32 (1.4)	237 (1.3)	30 (1.9)	228 (1.4)			
Maryland	42 (1.5)	212 (1.8)	23 (1.1)	228 (1.8)	36 (1.6)	215 (1.7)			
Massachusetts	39 (1.6)	221 (1.7)	19 (1.3)	234 (1.8)	43 (2.0)	006 (4.6)			
Michigan	40 (1.5)	214 (2.1)	21 (1.2)	228 (2.4)	, ,	226 (1.6)			
Minnesota	35 (1.6)	224 (1.4)	25 (1.3)		39 (1.5)	218 (1.8)			
Mississippi	41 (1.5)	194 (1.5)		235 (1.4)	40 (1.7)	227 (1.3)			
Missouri	32 (1.3)	7 7	12 (0.8)	212 (1.8)	47 (1.5)	203 (1.3)			
Nebraska	31 (2.0)	215 (1.7) 220 (1.9)	20 (1.3)	232 (1.8)	48 (1.7)	221 (1.3)			
Now Hampahira	, ,	, ,	26 (1.3)	231 (2.2)	43 (1.9)	224 (1.3)			
New Hampshire	41 (1.5)	227 (1.9)	21 (1.0)	236 (1.5)	39 (1.9)	227 (1.5)			
New Jersey	41 (2.2)	223 (2.5)	17 (1.1)	231 (1.7)	42 (2.1)	228 (1.7)			
New Mexico	36 (1.3)	207 (2.1)	14 (0.7)	221 (2.6)	51 (1.3)	213 (1.4)			
New York	38 (1.5)	210 (1.4)	15 (1.0)	224 (2.6)	47 (1.6)				
North Carolina	36 (1.2)	205 (1.5)	19 (0.8)	224 (1.9)	<b>1</b>	221 (1.5)			
North Dakota	30 (1.7)	223 (1.3)	24 (1.4)	234 (1.1)	45 (1.2) 47 (2.0)	211 (1.3)			
Ohio	, ,	• •	• ,	, ,	, ,	227 (1.2)			
	38 (1.4)	217 (1.9)	19 (1.2)	226 (1.8)	43 (1.9)	215 (1.3)			
Oklahoma	31 (1.6)	211 (1.4)	17 (1.0)	228 (1.8)	52 (1.7)	221 (1.2)			
Pennsylvania	38 (1.8)	220 (2.2)	20 (1.1)	232 (1.7)	43 (1.8)	222 (1.6)			
Rhode Island	40 (1.4)	210 (2.2)	17 (0.9)	226 (2.3)	43 (1.3)	214 (1.6)			
South Carolina	40 (1.6)	205 (1.6)	14 (0.8)	221 (1.8)	47 (1.7)	214 (1.3)			
Tennessee	39 (1.6)	206 (1.7)	14 (0.9)	215 (2.2)	47 (1.7) 47 (1.6)	214 (1.3)			
Texas	40 (1.9)		, ,	` '	• •	` '			
Utah		212 (1.6)	18 (1.0)	228 (2.0)	42 (2.0)	217 (1.4)			
Virginia	38 (1.2)	220 (1.3)	19 (0.9)	229 (1.6)	43 (1.3)	223 (1.3)			
West Virginia	33 (1.3)	215 (1.7)	19 (1.1)	228 (2.6)	48 (1.4)	220 (1.3)			
	34 (1.5)	211 (1.5)	18 (1.1)	220 (2.0)	48 (1.8)	214 (1.2)			
Wisconsin	38 (1.5)	223 (1.8)	25 (1.0)	237 (1.3)	38 (1.8)	226 (1.2)			
Wyoming	40 (1.5)	223 (1.3)	21 (1.0)	230 (1.3)	39 (1.5)	223 (1.1)			
ERRITORY				, ,	( /	()			
Guam	49 (1.4)	189 (1.2)	12 (0.8)	191 (3.4)	40 (1.2)	194 (1.2)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.



### Students' Reports on the Frequency with Which They Work in Small Groups in Mathematics Class (continued)

I	Grade 8 - 1992								
PUBLIC SCHOOLS	At Least	Weekly	Less than O	nce a Week	Never or H	ardly Ever			
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION		265 (1.5)	26 (1.0)	270 (1.4)	38 (1.8)	266 (1.3)			
Northeast	34 (3.4)	268 (5.1)	27 (2.3)	270 (3.6)	39 (3.1)	267 (3.2)			
Southeast	36 (2.3)	257 (2.2)	25 (1.5)	262 (2.1)	39 (2.3)	256 (2.3)			
Central	, ,	271 (3.1)	28 (2.3)	276 (3.1)	37 (3.9)	272 (2.2)			
West	35 (2.0)	263 (2.4)	24 (2.0)	271 (2.8)	38 (4.1)	268 (2.5)			
STATES	38 (2.6)	203 (2.4)	24 (2.0)	211 (2.0)	55 ()	200 (===)			
Alabama	20 (0.0) 33	249 (2.8)	23 (1.3)	256 (2.4)	46 (2.4) <<	251 (1.6)			
	32 (2.2)>>	,	26 (1.3)	267 (1.5)	37 (1.6)	263 (1.8)			
Arizona	37 (1.6)	264 (1.7)>	= - 1 7	260 (1.7)	45 (2.3) <	253 (1.7)			
Arkansas	32 (2.1) >>	256 (1.8)>	23 (1.3)	, ,	34 (2.3)	260 (2.1)			
California	43 (2.2)>	257 (2.5)	23 (1.2)	266 (2.2)	, ,	• •			
Colorado	41 (2.0)	271 (1.6)	28 (1.2)	275 (1.5)	31 (1.7)	270 (1.8)			
Connecticut	32 (1.8)	271 (1.9)	28 (1.1)	280 (1.5)	40 (2.1)	271 (2.0)			
Delaware	39 (1.0)>>	257 (1.7)	27 (0.8)	269 (1.5)	34 (0.9) <<	263 (1.4)>			
Dist. Columbia	53 (1.1)>	234 (1.1)>>	17 (0.8)	242 (2.5)	30 (0.9) <	230 (2.0)			
Florida	, ,	255 (2.1)	23 (1.5)	266 (1.8)	42 (1.8) «	258 (2.1)			
_	35 (1.9) >	, ,	25 (1.3) <b>«</b>	267 (1.7)	40 (2.1)	257 (1.7)			
Georgia	35 (2.3) >	255 (1.8)	= 1 1	\	37 (1.1) <b>«</b>	259 (1.4)			
Hawaii	40 (1.2) >>	252 (1.4) >>	23 (1.1)	262 (1.3)	31 (1.6) «	270 (1.2)			
Idaho	44 (2.1)**	276 (1.0)>	25 (1.4)<	277 (1.3)	31 (1.0)**	270 (1.2)			
Indiana	29 (1.6)>>	271 (1.9)	29 (1.6)	274 (2.0)	42 (1.9)<	266 (1.7)			
lowa	32 (2.4)	286 (1.4)>	33 (2.2)	285 (1.3)	35 (2.9)	278 (1.8)			
Kentucky	38 (2.6)>>	260 (1.8)>	31 (1.4)	264 (1.6)	32 (2.3) <<	260 (1.6)			
Louisiana	, ,	1 1	23 (1.3)	257 (2.3)	42 (2.5) <<	247 (1.8)			
Maine <sup>1</sup>	35 (2.1) >>	247 (2.3)	31 (1.7)	281 (1.6)	28 (2.0)	274 (1.6)			
	40 (2.2)	279 (1.3)	, ,	271 (2.2)	34 (2.0) <	262 (1.6)			
Maryland	37 (2.1)	261 (1.9)	28 (1.3)	211 (2.2)	, ,				
Massachusetts <sup>1</sup>	31 (1.7)	270 (2.1)	. 24 (1.5)	276 (2.0)	45 (1.9)	271 (1.5)			
Michigan	40 (2.5)>>	265 (2.1)	23 (1.5)	269 (2.1)	37 (2.3)≪	267 (1.7)>			
Minnesota	40 (2.8)>>	281 (1.2)	27 (1.4)	282 (1.3)	34 (2.7) <	283 (1.7)>>			
Mississippi <sup>1</sup>	27 (1.6)	239 (2.2)	24 (1.4)	254 (2.0)	49 (2.1)	245 (1.6)			
Missouri <sup>1</sup>	31 (1.9)	267 (2.5)	29 (1.4)	276 (1.2)	40 (2.0)	269 (1.5)			
Nebraska	, ,	276 (1.6)	29 (1.6) «	280 (1.6)	34 (2.7)	275 (1.5)			
I CDI aska	37 (2.7)>	270 (1.0)	` '						
New Hampshire	39 (1.7) >	277 (1.5)	33 (1.2)	280 (1.5)	28 (1.8)	276 (1.5)			
New Jersey	36 (2.4)>>	268 (2.3)	29 (1.8)	279 (1.9)	35 (2.3) <b>«</b>	268 (2.7)			
New Mexico	37 (1.6)>>	257 (1.3)	22 (1.1)	262 (1.6)	41 (1.6) <b>«</b>	259 (1.2)>			
New York	29 (1.5)>>	257 (3.3)	23 (1.5)	277 (2.7)	48 (1.7)≪	265 (2.3)			
North Carolina	38 (2.0)>>	257 (1.7)>>	28 (1.6)	262 (1.6)	34 (2.3) «	256 (2.0) >			
North Dakota	32 (2.1) >>	283 (1.5)	26 (2.0)	285 (1.7)	42 (2.4)<	281 (1.4)			
	, ,	, ,		·	• • •				
Ohio	31 (2.3) >>	267 (2.2)	32 (2.1)	271 (1.5)	37 (2.3) <	265 (2.3)			
Oklahoma	27 (1.4) >	268 (2.1)	23 (1.4)	272 (1.6)	51 (2.0)	265 (1.5)			
Pennsylvania	32 (1.9) >>	269 (2.4)	27 (1.3)	275 (1.9)	41 (2.1) «	270 (1.6)			
Rhode Island	33 (1.1)>>	262 (1.5)	25 (1.0)>>	268 (1.5)	42 (1.0) <b>«</b>	267 (1.3)*			
South Carolina <sup>1</sup>	37 (1.8)	258 (1.6)	25 (1.3)	265 (1.8)	38 (2.1)	259 (1.6)			
Tennessee <sup>1</sup>	31 (1.7)	254 (1.8)	24 (1.6)	264 (1.9)	45 (2.2)	258 (2.1)			
Toyon	, ,	` ''	• •	260 /4 0\	34 (2.2) <<	263 (1.7)>			
Texas	38 (2.4) >>	261 (2.1)	27 (1.5)	269 (1.9)		274 (1.1)			
Utah¹	36 (1.6)	271 (1.2)	18 (0.9)	277 (1.5)	46 (1.8)				
Virginia	35 (1.6)	265 (1.8)	28 (1.4)	. 274 (1.9)	37 (1.9)	264 (1.8)			
West Virginia	31 (2.0) >>	258 (1.8)	23 (1.4)	264 (1.5)>	46 (2.3) <	256 (1.3)			
Wisconsin	38 (2.4)>>	277 (2.0)	31 (1.5)	281 (1.8)	31 (2.1) <	275 (2.0)			
Wyoming	47 (2.1)	277 (1.0)	25 (1.3) **	274 (1.5)	28 (1.8)	270 (1.8)			
TERRITORIES	• •	, ,							
Guam	30 (0.9)>>	229 (1.9)	18 (1.0)	242 (2.4)	52 (1.2)≪	235 (1.5)			
Virgin Islands	39 (1.1)>	220 (1.3)>	15 (0.8)	230 (1.9)	45 (1.1) <	221 (1.5)			

¹Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

>The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. "The value for 1992 was significantly lower than the value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.



1372 JANA 1900 TOA

#### Students' Reports on the Frequency with Which They Write Reports or Do Projects in **Mathematics Class**

	Grade 8 - 1992								
PUBLIC SCHOOLS	At Least Weekly		Less than Once a Week		Never or Hardly Ever				
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	6 (0.4)	240 (3.0)	18 (0.8)	265 (1.8)	77 (0.9)	060 (4.0)			
Northeast	4 (0.6)	*** (***)	19 (1.3)	260 (3.1)	, ,	269 (1.0)			
Southeast	7 (0.6)	230 (5.0)			78 (1.7)	272 (3.1)			
Central	5 (1.1)	, ,	18 (1.9)	261 (2.5)	76 (1.9)	260 (1.4)			
West		258 (5.9)!	16 (1.5)	273 (3.6)	79 (1.7)	274 (2.3)			
STATES	6 (0.6)	241 (4.1)	19 (1.7)	265 (4.3)	75 (1.9)	270 (2.0)			
Alabama					` '				
	5 (0.7) <	229 (4.2)	19 (1.5)	249 (2.7)	76 (2.0)	254 (1.7)			
Arizona	5 (0.5)≪	239 (3.8)	18 (1.2)	265 (2.0)	77 (1.4)	266 (1.3)			
Arkansas	5 (0.4)	234 (3.4)	16 (1.1)	254 (2.1)	79 (1.2)				
California	9 (0.8)	242 (4.0)	26 (1.8)	256 (2.8)		257 (1.3)			
Colorado	6 (0.6) <<	258 (3.9)			64 (2.1)	265 (1.7)>			
Connecticut	3 (0.4) <	244 (6.2)	21 (1.2)	272 (1.8)	73 (1.4)>	273 (1.2)>			
	3 (0.4) <	244 (0.2)	21 (1.4)	272 (2.1)	76 (1.4)	275 (1.1)>			
Delaware	4 (0.4)	234 (5.3)	20 (0.9)	257 (2.0)	76 (0.9)	265 (1.0)			
Dist. Columbia	10 (0.8)≪	221 (3.0)	. 24 (0.9)	236 (1.9)	· ·	205 (1.0)			
Florida	4 (0.5)«	230 (4.4)	15 (1.0) <		67 (1.0)>>	235 (1.2)			
Georgia	5 (0.6) «	245 (3.8)	1 1	255 (2.7)	81 (1.3)*	262 (1.4)			
Hawaii	9 (0.6) *	240 (3.0)	18 (1.0)	255 (2.2) <	77 (1.2)>>	260 (1.3)			
Idaho		231 (3.4)	20 (0.9)	254 (2.1)	71 (1.0)>>	261 (0.9)>>			
144.10	5 (0.4)≪	261 (3.5)	16 (1.0)<	274 (1.8)	80 (1.1)>>	275 (0.8)			
Indiana	3 (0.4)≪	247 (3.4)	15 (1.1)	000 (0.4)	04 (4.0)				
lowa	4 (0.5)«	, ,		268 (2.4)	81 (1.2)	271 (1.1)			
Kentucky	, , ,	269 (3.3)	15 (1.1)	284 (1.8)	80 (1.3)≫	283 (1.1) >>			
Louisiana	7 (0.8)	246 (3.4)	23 (1.3)	260 (1.5)	70 (1.7)	264 (1.2)>			
Maine <sup>1</sup>	4 (0.5) «	223 (4.3)	17 (1.6)	250 (2.5)	78 (1.7)	250 (1.8)			
	4 (0.7)	262 (4.5)	17 (1.3)	279 (1.7)	79 (1.4)	279 (1.1)			
Maryland	4 (0.5) <	227 (4.0)	18 (1.2)	261 (2.4)	78 (1.3)>	267 (1.4)			
Massachusetts1	3 (0.3)	247 (5.0)	45 (4.4)	' '					
Michigan	5 (0.5) <		15 (1.4)	272 (1.8)	82 (1.5)	273 (1.1)			
Minnesota	, ,	242 (3.3)	18 (1.4)	264 (2.4)	77 (1.6)	269 (1.5)			
Mississippi <sup>1</sup>	5 (0.6) <	264 (3.3)	16 (0.9)	280 (1.9)	79 (1.2) >	283 (1.1) >>			
Missouri <sup>1</sup>	5 (0.5)	228 (5.1)	17 (1.6)	249 (3.0)	78 (1.9)	246 (1.1)			
i i	5 (0.6)	251 (3.4)	17 (1.1)	267 (2.1)	77 (1.3)	273 (1.2)			
Nebraska	5 (0.5)≪	259 (3.6)	18 (1.2)	276 (1.9)	77 (1.3)>>	278 (1.3)			
New Hampshire	3 (0.4)≪	255 (4.5)	05 (4.7)		, ,				
New Jersey	3 (0.5) «		25 (1.7) <	277 (1.6)	73 (1.8)≫	279 (1.0) >			
New Mexico	, ,	245 (4.6)	17 (1.5)	265 (2.4) <	79 (1.8)>	274 (1.9)			
New York	6 (0.5) <	245 (3.4)	17 (1.2)	259 (1.8)	77 (1.3)	260 (1.0)			
i i	4 (0.7) <	233 (8.6)	20 (1.8)	260 (2.9)	76 (1.9)	269 (2.0) >			
North Carolina	5 (0.6)≪	232 (3.5)	21 (1.4)	258 (2.0)	73 (1.5 <b>)</b>	259 (1.3)>>			
North Dakota	3 (0.4)≪	271 (3.6)	13 (0.9)≪	281 (1.5)	84 (1.1)>>	283 (1.2)			
Ohio	5 (0.7)	000 (0.7)	45 (4.0)	• •	` '	205 (1.2)			
Okiahoma		238 (3.7) <	15 (1.0)	261 (2.2)	81 (1.3)	271 (1.6)>			
Pennsylvania	3 (0.4) <	248 (5.5)	13 (1.0)	263 (2.0)	84 (1.2)	269 (1.2)>			
Rhode Island	4 (0.4) <	242 (4.6)	15 (1.1)	268 (2.9)	81 (1.3)	273 (1.4)			
South Carolina <sup>1</sup>	3 (0.3) «	*** (***)	18 (0.9)>>	265 (2.0)	79 (1.0)	266 (0.9)>>			
Tennessee¹	5 (0.4)	241 (4.2) ·	20 (1.3)	258 (1.9)	75 (1.5)	262 (1.1)			
1011103366	4 (0.4)	239 (4.0)	18 (1.3)	260 (2.2)	78 (1.3)	259 (1.4)			
Texas	5 (0.5)≪	239 (3.2)	24 (2.0)		` '				
Jtah <sup>1</sup>	5 (0.4)			266 (2.8)	71 (2.0)	265 (1.4)>			
/irginia	3 (0.4) 4 (0.5)≪	255 (3.2)	17 (0.8)	272 (1.6)	78 (0.9)	276 (0.9)			
West Virginia		245 (5.0)	20 (1.5)	267 (2.8)	77 (1.8)	268 (1.2)			
Wisconsin	3 (0.3) «	235 (4.2)	10 (0.8) <	260 (2.1)	87 (1.0)>>	259 (1.0)			
li li	6 (0.5)	258 (4.1)	20 (2.5)	278 (2.2)	75 (2.7)	279 (1.5)			
Wyoming	6 (0.5)	258 (3.1)	15 (0.8)≪	274 (1.8)	79 (1.0)>>	276 (0.9) >			
ERRITORIES			• •	( /	(,	210 (0.3)			
Suam	9 (0.7)<	209 (3.9)	15 (0.9)	238 (2.7)	76 (1.0)	237 (1.1)>>			
/irgin Islands	12 (0.8) <	211 (2.0)	17 (1.0)>>	225 (2.2)	70 (1.0)	223 (1.3)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. 'The value for 1992 was significantly lower than the value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



Teachers' Reports on the Frequency with Which Students Do Work with Objects Like Rulers, Counting Blocks, or Geometric Shapes in Mathematics Class

	Grade 4 - 1992								
PUBLIC SCHOOLS	At Least	Weekly	Less than O	nce a Week	Never or H	ardly Ever			
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	46 (3.0)	218 (1.9)	44 (2.9)	216 (1.7)	10 (1.8)	219 (2.6)			
Northeast	43 (7.0)	220 (5.3)	46 (6.2)	220 (3.7)	11 (5.2)	220 (5.4)!			
Southeast	: :	210 (4.1)	46 (5.2)	204 (2.5)	6 (2.1)	210 (5.2)!			
	48 (4.9)		48 (7.0)	224 (3.1)	16 (4.4)	224 (4.7)!			
Central	36 (6.7)	223 (2.5)		215 (2.6)	7 (2.9)	217 (4.6)!			
West	55 (5.4)	219 (2.9)	38 (5.1)	213 (2.0)	7 (2.3)	<b>2</b> 77 ( ).			
STATES			50 (4.5)	006 (4.7)	8 (2.3)	202 (3.4)!			
Alabama	40 (4.3)	211 (2.7)	52 (4.5)	206 (1.7)		208 (2.8)			
Arizona	38 (3.2)	214 (1.9)	48 (3.1)	216 (1.4)	13 (2.0)	1. 1			
Arkansas	21 (2.8)	. 211 (3.1)	59 (3.4)	209 (1.1)	20 (2.8)	207 (2.1)			
California	57 (4.0)	209 (2.2)	36 (3.7)	205 (2.6)	6 (1.8)	205 (6.6)!			
Colorado	56 (3.2)	223 (1.5)	41 (3.4)	216 (1.8)	3 (1.2)	214 (7.1)!			
Connecticut	62 (3.5)	230 (1.6)	33 (3.4)	226 (2.5)	5 (1.1)	207 (4.6)!			
				046 (4.4)	15 (0.7)	217 (2.6)			
Delaware	28 (0.9)	219 (1.5)	57 (0.9)	216 (1.1)	, ,	180 (4.6)			
Dist. Columbia	68 (1.0)	192 (0.8)	27 (1.0)	190 (1.4)	5 (0.2)				
Florida	51 (3.3)	215 (1.6)	43 (3.3)	210 (1.8)	6 (1.3)	209 (8.0)!			
Georgia	50 (3.6)	213 (2.1)	45 (3.5)	214 (2.1)	6 (1.4)	213 (7.1)!			
Hawaii	40 (3.8)	213 (2.0)	48 (3.3)	214 (1.9)	11 (2.2)	210 (3.7)			
Idaho	39 (3.8)	223 (1.8)	53 (3.8)	220 (1.3)	8 (1.7)	210 (2.5)!			
	, ,		, ,	004 (4.0)	44 (0.0)	216 (2.9)			
Indiana	27 (3.4)	217 (2.6)	62 (3.4)	221 (1.2)	11 (2.0)				
lowa	41 (3.9)	229 (1.9)	53 (3.6)	229 (1.2)	6 (1.5)	230 (3.5)!			
Kentucky	51 (3.8)	214 (1.7)	44 (3.7)	213 (1.1)	5 (1.4)	206 (4.1)!			
Louisiana	44 (3.7)	204 (2.4)	44 (3.5)	202 (2.3)	12 (2.0)	200 (4.0)			
Maine	53 (4.2)	231 (1.3)	43 (3.9)	231 (1.6)	4 (1.6)	225 (6.4)!			
Maryland	62 (3.3)	219 (1.5)	37 (3.3)	218 (2.5)	2 (0.7)	*** (***)			
1	, ,		, ,	` '	9 (2.3)	224 (4.0)!			
Massachusetts	48 (4.0)	227 (2.0)	42 (3.9)	227 (1.9)		210 (5.6)!			
Michigan	51 (3.8)	218 (2.5)	43 (3.6)	222 (2.4)	6 (1.7)	, , ,			
Minnesota	42 (3.8)	228 (1.9)	50 (3.8)	227 (1.6)	8 (1.5)	221 (3.2)			
Mississippi	38 (4.1)	200 (1.9)	49 (3.9)	202 (1.9)	13 (2.6)	195 (3.8)!			
Missouri	33 (3.6)	222 (3.0)	57 (3.9)	222 (1.4)	10 (2.4)	219 (3.1)!			
Nebraska	45 (3.9)	227 (2.1)	45 (3.9)	223 (1.8)	10 (2.4)	225 (2.4)!			
New Hampshire	· . ·		42 (3.2)	229 (1.8)	5 (2.0)	224 (2.9)!			
New Hampshire	53 (3.1)	230 (1.5)	• •	227 (2.3)	6 (1.6)	214 (3.5)!			
New Jersey	42 (3.8)	229 (2.5)	51 (3.9)	1 1	11 (2.4)	205 (3.4)!			
New Mexico	38 (3.7)	212 (1.7)	50 (3.6)	214 (1.7)		213 (3.6)!			
New York	46 (3.5)	217 (2.1)	46 (3.1)	218 (1.9)	8 (1.7)	1. 1			
North Carolina	43 (2.9)	214 (1.6)	48 (2.9)	210 (1.8)	10 (1.6)	214 (3.1)			
North Dakota	19 (3.0)	230 (2.2)	68 (3.1)	227 (1.1)	13 (2.7)	228 (2.9)!			
Ohio	20 (2.0)	217 (2.3)	52 (3.7)	219 (1.4)	10 (2.1)	211 (3.5)!			
	38 (3.9)	• •	59 (3.5)	220 (1.4)	17 (2.1)	217 (1.6)			
Oklahoma	23 (3.1)	221 (2.0)			14 (2.3)	220 (4.5)			
Pennsylvania	33 (3.5)	223 (2.3)	53 (3.7)	224 (1.9)	17 (2.5)	203 (3.2)			
Rhode Island	35 (3.2)	216 (2.9)	48 (3.7)	216 (2.2)		1 1			
South Carolina	49 (3.1)	214 (1.6)	47 (3.2)	210 (1.5)	4 (1.0)	199 (3.8)!			
Tennessee	28 (2.1)	209 (3.0)	54 (2.6)	209 (1.5)	17 (2.5)	212 (2.2)			
Texas	55 (3.9)	217 (2.0)	40 (3.7)	219 (2.2)	4 (1.2)	209 (7.0)!			
Utah	41 (3.2)	226 (1.4)	49 (3.5)	221 (1.5)	11 (2.2)	219 (2.6)!			
Virginia			51 (2.8)	217 (1.7)	8 (1.3)	218 (3.1)			
	42 (3.3)	223 (2.3)	53 (3.8)	213 (1.5)	15 (2.7)	209 (2.1)			
West Virginia	32 (3.1)	216 (2.1)		229 (1.2)	5 (1.9)	225 (2.9)!			
Wisconsin	45 (3.7)	227 (1.8)	50 (4.0)		_ : :	225 (2.8)!			
Wyoming TERRITORY	42 (3.6)	226 (1.5)	53 (3.6)	223 (1.2)	5 (1.1)				
Guam	40 (1.4)	192 (1.5)	53 (1.6)	192 (1.0)	7 (0.8)	182 (5.3)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



Teachers' Reports on the Frequency with Which Students Do Work with Measuring Instruments or Geometric Solids

	Grade 8 - 1992								
PUBLIC SCHOOLS	At Least	Weekly	Less than O	nce a Week	Never or H	lardly Ever			
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	7 (1,1)	270 (3.7)	50 (3.3)	265 (1.5)	40 (0.0)				
Northeast	8 (3.0)	266 (6.0)!	48 (8.3)		42 (3.3)	271 (2.1)			
Southeast	8 (1.9)		, , ,	267 (4.6)	44 (7.8)	270 (5.9)			
Central	4 (1.9)	265 (5.2)!	54 (6.1)	259 (2.3)	38 (5.4)	265 (3.5)			
West	4 (1.9)	( )	50 (5.9)	272 (2.2)	46 (6.1)	279 (6.2)			
STATES	8 (2.0)	276 (7.9)!	49 (6.2)	263 (2.0)	43 (7.0)	271 (3.0)			
				• •	(	21 1 (0.0)			
Alabama	5 (1.7)	243 (7.5)!	65 (4.0)	249 (2.3)	30 (3.5)	060 (0.7)			
Arizona	8 (2.3)	261 (2.6)!	41 (3.8)	263 (1.7)		260 (2.7)			
Arkansas	6 (2.0)	250 (7.1)!	39 (3.6)		51 (3.8)	266 (2.3)			
California	13 (2.3)	260 (5.4)		254 (2.1)	56 (3.6)	257 (1.9)			
Colorado	9 (1.9)		50 (2.7)	257 (2.3)	37 (2.7)	267 (2.5)			
Connecticut		272 (3.5)!	52 (3.3)	271 (1.4)	39 (3.3)	272 (1.9)			
Commodicat	6 (1.3)	279 (3.8)!	56 (3.6)	270 (2.1)	38 (3.5)	277 (2.1)			
Delaware	8 (0.7)	<b>254</b> (3.1)	48 (1.0)	` '	• •	, ,			
Dist. Columbia	13 (0.7)	, ,		262 (1.2)	44 (0.9)	264 (1.3)			
Florida	, ,	251 (2.7)	53 (1.0)	228 (1.2)	34 (1.1)	238 (2.0)			
Georgia	5 (1.4)	264 (4.5)!	41 (2.8)	259 (1.7)	54 (3.0)	260 (2.4)			
	8 (1.6)	258 (4.0)!	50 (3.1)	255 (1.9)	43 (3.3)	262 (1.9)			
Hawaii	11 (0.7)	256 (2.5)	44 (1.0)	257 (1.2)	45 (0.9)				
Idaho	12 (1.6)	274 (2.2)	38 (2.6)	275 (1.3)	, ,	258 (1.5)			
Indiana	5 (1.0)		` '	270 (1.5)	49 (2.6)	274 (1.4)			
Iowa	5 (1.3)	268 (5.4)!	56 (3.2)	267 (1.4)	40 (3.0)	274 (2.5)			
	8 (2.4)	281 (3.6)!	53 (4.1)	279 (1.6)	40 (4.3)				
Kentucky	6 (1.6)	264 (5.7)!	51 (3.3)	262 (1.7)		288 (1.7)			
Louisiana	3 (1.1)	246 (8.7)!	32 (3.5)		43 (3.4)	263 (2.1)			
Maine	13 (2.3)	278 (2.5)	, ,	250 (2.7)	64 (3.5)	250 (1.9)			
Maryland	6 (1.4)	, ,	50 (4.3)	277 (1.4)	37 (4.0)	281 (2.1)			
	0 (1.4)	257 (7.1)!	48 (3.7)	262 (2.4)	46 (3.8)	271 (2.4)			
Massachusetts	7 (1.9)	274 (3.5)!	39 (3.0)	271 (2.2)	54 (3.1)	070 (4.0)			
Michigan	16 (2.8)	257 (5.5)	53 (3.4)			273 (1.8)			
Minnesota	9 (1.7)	279 (5.6)!		268 (2.3)	31 (3.6)	270 (3.6)			
Mississippi	10 (2.2)	, ,	48 (4.2)	281 (1.7)	43 (4.3)	283 (2.1)			
Missouri		244 (4.6)!	37 (3.4)	245 (2.1)	<b>54</b> (3.7)	246 (1.8)			
Nebraska	8 (2.0)	267 (3.4)!	52 (3.7)	268 (1.5)	40 (3.4)	′ 276 (1.9)			
110brusku	7 (2.4)	277 (6.5)!	<b>54</b> (3.7)	276 (1.6)	39 (3.7)	280 (1.7)			
New Hampshire	9 (2.1)	278 (3.6)!	47 (3.3)	070 (4.0)	. ,	• •			
New Jersey	10 (2.0)	252 (6.3)!		276 (1.3)	44 (2.9)	279 (1.8)			
New Mexico	5 (1.2)		52 (4.1)	272 (2.2)	38 (4.0)	275 (3.0)			
New York		257 (4.0)!	46 (3.8)	259 (1.1)	49 (3.7)	260 (1.6)			
North Carolina	7 (2.2)	253 (8.5)!	45 (3.7)	266 (3.0)	48 (3.8)	266 (3.3)			
	5 (1.4)	255 (5.7)!	50 (3.2)	255 (1.9)	45 (3.3)	260 (1.9)			
North Dakota	10 (1.9)	281 (2.4)	59 (4.4)	283 (1.6)	32 (4.1)				
Ohio	5 (1.8)	005 /5 01	, ,		02 (4.1)	284 (1.9)			
Oklahoma	` '	265 (5.6)!	53 (4.0)	267 (2.6)	41 (3.7)	273 (2.7)			
Pennsylvania	7 (2.2)	265 (4.2)!	44 (3.5)	267 (1.8)	49 (3.5)	268 (1.9)			
	6 (1.7)	267 (3.6)!	44 (3.5)	263 (1.9)	50 (3.8)	277 (2.4)			
Rhode Island	9 (0.7)	262 (2.9)	38 (1.3)	263 (1.3)	53 (1.4)				
South Carolina	8 (1.3)	251 (5.4)	64 (3.3)			267 (0.9)			
Tennessee	9 (2.1)	259 (3.6)!	49 (3.4)	256 (1.4)	28 (3.2)	273 (3.4)			
Toyon	, ,	` '	49 (3.4)	255 (1.8)	41 (3.3)	261 (2.5)			
Texas	8 (1.5)	254 (4.4)	54 (3.2)	262 (2.0)	38 (3.2)	271 (2.1)			
Utah	4 (0.8)	271 (4.9)	34 (3.1)	273 (1.5)	61 (3.2)				
√irginia	3 (0.9)	268 (8.6)!	36 (2.9)	264 (2.2)		274 (1.1)			
West Virginia	3 (0.9)	259 (6.1)!	49 (3.6)		60 (2.8)	270 (1.4)			
<i>N</i> isconsin	10 (2.9)			256 (1.4)	48 (3.6)	262 (1.7)			
Wyoming		277 (2.7)!	63 (4.6)	278 (2.4)	28 (3.5)	278 (2.3)			
ERRITORIES	8 (1.5)	263 (3.5)	52 (2.4)	273 (1.1)	40 (2.4)	280 (1.5)			
Guam	4 (5.0)			•	, <i>,</i>	( /			
I	1 (0.3)	*** (***)	47 (1.4)	234 (1.6)	52 (1.3)	236 (1.3)			
/irgin Islands	0 (0.0)	*** (***)	36 (0.8)	214 (1.2)	64 (0.8)	225 (1.5)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this



# Students' Reports on the Frequency with Which They Do Work with Objects Like Rulers, Counting Blocks, or Geometric Shapes in Mathematics Class

<del></del>	Grade 4 - 1992								
PUBLIC SCHOOLS	At Least	Weekly	Less than O	nce a Week	Never or Ha	ardly Ever			
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	35 (1.3)	215 (1.4)	24 (0.9)	226 (1.1)	41 (1.3)	214 (1.1)			
Northeast	36 (2.7)	222 (3.7)	26 (2.3)	229 (2.6)	38 (2.0)	220 (2.5)			
Southeast	40 (2.9)	209 (2.7)	19 (1.2)	218 (2.4)	41 (3.7)	205 (2.1)			
	· · ·	219 (3.0)	26 (2.1)	229 (2.2)	47 (2.0)	220 (2.9)			
Central	26 (2.0)			226 (2.1)	38 (2.5)	214 (1.8)			
West	38 (2.6)	215 (2.5)	24 (1.8)	220 (2.1)	30 (2.3)	214 (1.0)			
STATES			/>	040 (0.0)	54 (O O)	000 (4.7)			
Alabama	28 (1.7)	200 (1.9)	21 (1.2)	216 (2.3)	51 (2.2)	208 (1.7)			
Arizona	29 (1.4)	208 (1.6)	23 (0.9)	221 (1.7)	48 (1.5)	214 (1.4)			
Arkansas	30 (1.8)	205 (1.9)	19 (0.9)	218 (1.7)	51 (1.8)	208 (1.1)			
California	40 (1.6)	203 (2.3)	23 (1.3)	214 (2.3)	37 (1.9)	209 (1.6)			
Colorado		216 (1.5)	28 (1.0)	227 (1.4)	35 (1.7)	218 (1.4)			
	37 (1.5)	1 1		235 (1.4)	33 (1.4)	222 (1.6)			
Connecticut	40 (1.9)	223 (1.5)	27 (1.3)	255 (1.4)	55 (1.17)	1 1			
Delaware	29 (1.3)	210 (1.3)	21 (0.9)	229 (1.7)	50 (1.5)	215 (1.4)			
Dist. Columbia	, ,	192 (0.9)	18 (0.9)	202 (1.8)	30 (1.0)	186 (1.6)			
	52 (1.1)	' '	21 (1.1)	221 (2.2)	43 (2.4)	210 (1.6)			
Florida	36 (2.4)	211 (2.2)	• • •		42 (2.0)	214 (1.4)			
Georgia	35 (1.8)	208 (1.9)	24 (1.0)	224 (2.2)		, ,			
Hawaii	46 (1.8)	211 (1.8)	21 (0.9)	220 (2.0)	33 (1.5)	212 (1.6)			
Idaho	33 (2.0)	218 (1.5)	27 (1.1)	227 (1.3)	40 (1.8)	218 (1.2)			
		010 (1.5)	04 (0.0)	226 (1.2)	44 (1.8)	219 (1.5)			
Indiana	31 (1.8)	216 (1.5)	24 (0.9)	,	, ,	227 (1.3)			
lowa	30 (1.6)	226 (1.7)	31 (1.3)	236 (1.2)	39 (1.9)	• •			
Kentucky	39 (1.7)	211 (1.6)	25 (1.1)	220 (1.6)	37 (1.8)	213 (1.3)			
Louisiana	36 (1.4)	199 (1.8)	19 (1.0)	211 (2.1)	45 (1.5)	204 (1.6)			
Maine	35 (2.1)	228 (1.4)	35 (1.4)	237 (1.4)	29 (1.7)	228 (1.7)			
	, ,	213 (1.9)	26 (1.1)	228 (1.7)	39 (1.8)	212 (1.7)			
Maryland	35 (1.8)	213 (1.9)	20 (1.1)	• •	, ,	, ,			
Massachusetts	42 (1.7)	224 (1.7)	24 (1.3)	233 (1.6)	34 (2.0)	223 (1.7)			
Michigan	36 (1.6)	215 (2.4)	26 (1.1)	227 (1.8)	38 (1.6)	217 (2.1)			
Minnesota		225 (1.6)	28 (1.1)	233 (1.2)	39 (2.0)	226 (1.3)			
	33 (2.0)	· · · · · · · · · · · · · · · · · · ·	16 (1.0)	210 (2.2)	46 (1.8)	200 (1.2)			
Mississippi	38 (1.8)	197 (1.7)		• •	44 (2.0)	220 (1.5)			
Missouri	30 (1.3)	217 (1.8)	26 (1.3)	228 (1.5)	1 . 1	1 1			
Nebraska	32 (2.1)	224 (2.0)	28 (1.5)	230 (1.8)	40 (1.9)	221 (1.4)			
Now Hampshire	00 (0.0)	000 (4.6)	24 (1.0)	233 (1.7)	40 (2.0)	226 (1.3)			
New Hampshire	36 (2.0)	229 (1.6)	• ,	232 (1.9)	37 (2.2)	224 (2.1)			
New Jersey	36 (1.9)	224 (2.2)	27 (1.3)	1		212 (1.2)			
New Mexico	30 (1.9)	208 (2.5)	19 (0.9)	220 (2.5)	51 (2.2)	·			
New York	38 (1.9)	213 (1.8)	24 (1.1)	226 (2.0)	38 (1.7)	216 (1.6)			
North Carolina	36 (1.5)	209 (1.7)	23 (0.9)	222 (1.5)	41 (1.7)	208 (1.4)			
North Dakota	24 (1.6)	223 (1.8)	28 (1.0)	233 (1.3)	48 (1.6)	227 (1.0)			
	24 (1.0)	220 (110)	• •		10 (0.1)	045 (4.4)			
Ohio	30 (1.5)	215 (1.7)	24 (1.2)	226 (1.8)	46 (2.1)	215 (1.4)			
Oklahoma	26 (1.5)	215 (1.6)	23 (1.2)	226 (1.6)	51 (2.0)	218 (1.2)			
Pennsylvania	34 (1.9)	220 (1.7)	29 (1.3)	230 (1.6)	36 (1.8)	222 (1.8)			
Rhode Island	32 (1.7)	212 (2.7)	21 (1.0)	222 (1.8)	47 (1.8)	212 (1.9)			
South Carolina	· · · · · · · · · · · · · · · · · · ·	207 (1.4)	21 (1.1)	222 (1.4)	40 (1.5)	209 (1.3)			
	39 (1.6)			219 (2.1)	51 (1.8)	209 (1.4)			
Tennessee	29 (1.3)	204 (2.1)	20 (1.0)	219 (2.1)	, ,				
Texas	40 (1.8)	213 (1.7)	24 (1.2)	226 (1.8)	36 (2.0)	216 (1.8)			
Utah	33 (1.5)	219 (1.5)	28 (1.0)	230 (1.4)	39 (1.8)	221 (1.2)			
			25 (1.3)	. 230 (1.9)	44 (1.9)	217 (1.4)			
Virginia	32 (2.0)	216 (2.0)			40 (1.7)	211 (1.2)			
West Virginia	34 (1.6)	212 (1.5)	25 (1.1)	221 (1.6)		225 (1.3)			
Wisconsin	32 (1.8)	225 (1.8)	30 (1.0)	235 (1.2)	37 (1.6)				
Wyoming	29 (1.6)	223 (1.5)	26 (1.2)	229 (1.2)	45 (1.6)	222 (1.2)			
TERRITORY	( /	, ,							
Guam	40 (1.3)	187 (1.3)	17 (0.9)	199 (1.8)	43 (1.3)	192 (1.3)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.



TABLE A.62

### Students' Reports on the Frequency with Which They Do Work with Measuring Instruments or Geometric Solids

PUBLIC SCHOOLS	Grade 8 - 1992								
	At Least	Weekly	Less than O	nce a Week	Never or H	ardly Ever			
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	20 (1.2)	263 (1.7)	27 (1.1)	272 (1.4)	52 (1.6)	005 (4.4)			
Northeast	21 (2.7)	263 (4.3)	27 (1.8)			265 (1.1)			
Southeast	19 (1.6)	, ,		270 (4.9)	52 (3.2)	269 (2.8)			
Central		255 (2.5)	24 (3.1)	266 (1.9)	57 (3.7)	256 (2.1)			
West	19 (2.9)	271 (2.7)	29 (2.0)	278 (3.1)	52 (3.6)	271 (1.9)			
	21 (2.6)	264 (3.2)	30 (1.3)	272 (2.1)	49 (2.6)	265 (2.5)			
STATES			, ,	(,	(2.0)	200 (2.0)			
Alabama	18 (1.5)	243 (3.4)	24 (1.2)	254 (2.4)	EQ (4 Q)	àsa (4.0)			
Arizona	18 (1.2)	263 (2.5)	22 (1.0)		59 (1.9)	253 (1.6)			
Arkansas	17 (1.4)			266 (1.7)	60 (1.5)	265 (1.5)			
California		250 (2.4)	26 (1.1)	259 (2.2)	57 (1.7)	255 (1.3)			
Colorado	25 (1.4)	255 (2.8)	28 (1.1)	267 (2.3)	48 (1.9)	260 (1.9)			
1	20 (1.3)	273 (2.0)	28 (1.1)	276 (1.4)	52 (1.5)	269 (1.3)			
Connecticut	19 (1.2)	271 (2.4)	27 (0.9)	277 (1.9)	_ 1 /				
Delaware	. ,	, ,	(0.0)	, ,	54 (1.5)	272 (1.5)			
	18 (0.8)	258 (1.9)	26 (0.9)	262 (1.7)	56 (1.2)	264 (1.3)			
Dist. Columbia	21 (1.2)	230 (2.0)	21 (1.3)	242 (2.7)	58 (1.3)				
Florida	19 (1.2)	251 (2.3)	21 (1.2)		, , ,	233 (1.3)			
Georgia	19 (1.2)	249 (1.8)		262 (2.2)	60 (1.8)	261 (1.8)			
Hawaii	26 (0.9)		25 (1.1)	261 (1.8)	56 (1.6)	261 (1.4)			
Idaho		255 (1.6)	23 (0.8)	259 (1.6)	51 (1.0)	257 (1.1)			
Idano	23 (1.4)	275 (1.6)	25 (1.0)	277 (1.1)	53 (1.7)	273 (1.0)			
Indiana	19 (1.4)	000 (0.0)	•			270 (1.0)			
lowa		268 (2.3)	29 (1.2)	271 (1.5)	52 (1.6)	269 (1.5)			
	23 (1.9)	281 (1.6)	31 (1.2)	286 (1.3)	46 (2.1)	281 (1.3)			
Kentucky	19 (1.7)	258 (2.1)	27 (1.1)	263 (1.6)	55 (1.8)				
Louisiana	13 (1.2)	241 (2.8)	21 (1.2)	255 (2.4)		261 (1.3)			
Maine	21 (1.6)	276 (1.8)	29 (1.3)		66 (1.8)	249 (1.8)			
Maryland	16 (1.0)			280 (1.5)	50 (1.8)	278 (1.4)			
	10 (1.0)	258 (2.6)	27 (1.1)	270 (1.8)	57 (1.5)	264 (1.7)			
Massachusetts	16 (1.6)	270 (2.9)	22 (1.0)	275 (1.9)	60 (0.0)				
Michigan	24 (1.9)	263 (2.5)			62 (2.3)	272 (1.5)			
Minnesota	25 (1.6)		30 (1.2)	271 (1.8)	47 (2.4)	266 (1.9)			
Mississippi		280 (1.9)	32 (1.4)	283 (1.4)	43 (2.1)	282 (1.5)			
Missouri	18 (1.6)	238 (2.2)	19 (1.1)	249 (1.7)	62 (1.8)	247 (1.5)			
	23 (1.6)	269 (1.6)	31 (1.1)	273 (1.6)	46 (1.9)	270 (1.6)			
Nebraska	21 (1.9)	276 (1.9)	34 (1.4)	281 (1.6)	45 (2.2)				
New Hampshire			. (,	201 (1.0)	45 (2.2)	275 (1.3)			
	16 (1.3)	278 (1.7)	28 (1.3)	280 (1.3)	55 (1.6)	276 (1.2)			
New Jersey	26 (1.7)	265 (2.8)	28 (1.4)	279 (1.8)	46 (2.1)				
New Mexico	16 (0.8)	254 (2.2)	26 (1.0)	264 (1.2)	58 (1.3)	270 (2.2)			
New York	22 (1.7)	260 (3.4)	28 (1.3)			258 (1.1)			
North Carolina	16 (1.1)	250 (2.5)	- 1	270 (2.4)	51 (1.9)	266 (2.5)			
North Dakota	22 (1.6)		28 (1.1)	263 (1.5)	56 (1.2)	258 (1.4)			
1	22 (1.0)	285 (1.9)	31 (1.6)	283 (1.3)	47 (1.9)	282 (1.5)			
Ohio	19 (1.3)	266 (2.3)	28 (1.1)	274 (0.0)	50 (6.7)				
Oklahoma	15 (1.2)	, ,		271 (2.0)	53 (1.7)	266 (1.8)			
Pennsylvania		262 (2.6)	23 (1.5)	272 (1.8)	62 (1.8)	267 (1.2)			
Rhode Island	16 (1.3)	265 (2.5)	24 (1.1)	273 (2.0)	60 (1.6)	271 (1.6)			
I	18 (1.0)	262 (1.8)	23 (0.8)	270 (1.5)	59 (1.2)	264 (1.0)			
South Carolina	25 (1.4)	251 (1.6)	28 (1.0)	260 (1.5)					
Tennessee	20 (1.8)	255 (2.0)	26 (1.4)	200 (1.3)	48 (1.8)	265 (1.4)			
Tayaa		200 (2.0)	20 (1.4)	265 (1.7)	54 (1.9)	256 (1.8)			
Texas	19 (1.4)	259 (2.3)	30 (1.2)	267 (2.0)	50 (1.6)				
Jtah	16 (1.0)	271 (1.7)	22 (0.9)			264 (1.5)			
/irginia [	15 (1.1)	263 (2.8)		275 (1.4)	62 (1.4)	274 (0.9)			
West Virginia			23 (1.0)	273 (1.6)	63 (1.5)	266 (1.3)			
Wisconsin	16 (1.4)	254 (1.9)	24 (1.1)	261 (1.5)	60 (1.7)	258 (1.2)			
1	25 (1.5)	278 (2.9)	33 (1.0)	280 (1.6)	42 (1.5)	276 (1.7)			
Wyoming	21 (1.5)	273 (1.9)	31 (0.9)	275 (1.4)	48 (1.4)	275 (1.1)			
ERRITORIES		. ,	(/	( 1.47)	TO (1.4)	213 (1.1)			
∋uam	22 (1.0)	224 (2.8)	19 (1.1)	244 (2.4)	50 (6.0)	000 (1.5)			
/irgin Islands	17 (0.9)			244 (2.4)	59 (1.0)	236 (1.3)			
	11 (0.5)	215 (2.0)	14 (1.0)	227 (2.2)	68 (0.8)	223 (1.2)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.



### Teachers' Reports on "How Well Supplied Are You by Your School System with the Instructional Materials and Other Resources You Need to Teach Your Class?"

<del></del>	Grade 4 - 1992								
	I get some or none		I get most of the r	resources I need.	I get all the res	sources I need.			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	37 (3.5)	213 (2.0)	52 (3.0)	220 (1.3)	11 (1.7)	221 (2.8)			
Northeast	44 (6.1)	215 (4.3)	45 (5.4)	228 (3.3)	11 (3.3)	233 (3.9)!			
Southeast	41 (5.3)	206 (2.8)	46 (5.0)	210 (2.8)	13 (2.8)	206 (3.0)!			
Central	35(10.6)	221 (4.2)!	54 (7.8)	225 (2.2)	11 (4.6)	226 (6.4)!			
West	32 (4.7)	211 (3.3)	58 (4.8)	219 (2.2)	10 (2.3)	225 (4.5)!			
STATES	` '					/			
Alabama	53 (3.3)	206 (2.0)	39 (3.2)	210 (2.4)	8 (1.9)	208 (4.7)!			
Arizona	48 (3.6)	212 (1.5)	43 (3.2)	216 (1.8)	10 (1.7)	218 (3.8)			
Arkansas	43 (4.4)	207 (2.0)	48 (4.4)	211 (1.3)	9 (1.5)	210 (2.7)			
California	46 (3.3)	202 (2.2)	49 (3.3)	211 (2.6)	5 (1.2)	210 (5.5)!			
Colorado	34 (3.2)	217 (1.8)	55 (2.9)	220 (1.6)	11 (2.1)	225 (4.3)			
Connecticut	31 (3.1)	219 (2.3)	59 (3.2)	231 (1.5)	10 (1.8)	227 (3.6)			
Delaware	. ,	216 (1.1)	42 (0.9)	218 (1.2)	7 (0.4)	220 (3.2)			
Dist. Columbia	51 (0.8)	187 (0.8)	21 (0.7)	203 (2.0)	2 (0.1)	*** (***)			
Florida	77 (0.7)	209 (2.7)	54 (2.9)	215 (1.7)	12 (1.9)	213 (3.1)			
	34 (3.0)	209 (2.7)	54 (3.8)	215 (1.9)	10 (1.7)	214 (3.7)			
Georgia	36 (3.8)	1 - 1	43 (3.1)	213 (1.8)	5 (1.1)	209 (4.5)!			
Hawaii Idaho	53 (3.3)	213 (1.7)	57 (2.6)	221 (1.2)	7 (1.7)	222 (2.2)!			
lualio	36 (2.9)	219 (1.6)	, ,	, ,	` '				
Indiana	36 (3.9)	219 (1.8)	53 (3.5)	218 (1.4)	11 (2.4)	223 (2.6)!			
lowa	23 (3.3)	225 (2.1)	62 (3.7)	230 (1.3)	15 (2.9)	232 (2.5)!			
Kentucky	36 (3.6)	210 (1.6)	56 (3.9)	216 (1.5)	9 (2.1)	211 (3.2)!			
Louisiana	53 (3.5)	199 (2.1)	41 (3.3)	208 (2.0)	6 (1.6)	208 (6.7)!			
Maine	41 (3.9)	228 (1.4)	52 (3.9)	233 (1.6)	7 (1.8)	231 (3.7)!			
Maryland	47 (3.3)	211 (2.4)	46 (3.0)	220 (2.2)	7 (1.5)	228 (3.2)!			
Massachusetts	47 (3.7)	220 (1.8)	47 (3.5)	231 (1.7)	6 (1.8)	219 (7.6)!			
Michigan	48 (3.7)	217 (2.5)	45 (3.6)	222 (2.5)	7 (1.9)	224 (5.7)!			
Minnesota	31 (3.1)	225 (2.1)	58 (3.2)	227 (1.2)	10 (2.2)	234 (3.0)!			
Mississippi	52 (3.9)	198 (1.9)	42 (3.7)	202 (2.0)	6 (2.0)	205 (3.3)!			
Missouri	33 (4.1)	217 (2.5)	56 (3.9)	222 (1.3)	11 (2.2)	228 (4.0)			
Nebraska	17 (2.5)	223 (2.6)	67 (3.2)	224 (1.6)	15 (2.5)	226 (2.3)			
New Hampshire	47 (3.8)	226 (1.8)	48 (3.5)	232 (1.5)	4 (1.3)	229 (5.8)!			
New Jersey	38 (3.4)	219 (3.0)	47 (3.7)	231 (1.5)	15 (3.0)	230 (3.9)!			
New Mexico	48 (3.5)	210 (2.3)	47 (3.5)	213 (1.7)	5 (1.3)	216 (3.8)!			
New York	40 (2.9)	210 (2.6)	49 (3.4)	222 (1.9)	11 (2.3)	219 (3.1)!			
North Carolina	52 (3.3)	211 (1.3)	44 (3.1)	213 (1.8)	4 (1.2)	218 (3.9)!			
North Dakota	42 (4.2)	226 (1.5)	50 (4.1)	229 (1.1)	8 (2.4)	228 (2.3)!			
Ohio	50 (4.2)	213 (1.8)	46 (4.1)	221 (1.5)	5 (1.7)	226 (5.7)!			
Oklahoma	39 (3.9)	219 (1.6)	54 (3.9)	220 (1.3)	7 (1.7)	217 (3.4)!			
Pennsylvania	33 (3.6)	215 (2.5)	56 (3.5)	227 (1.7)	10 (2.1)	233 (4.1)			
Rhode Island	57 (3.5)	212 (2.3)	41 (3.4)	217 (1.9)	2 (1.0)	*** (***)			
South Carolina	37 (3.3)	208 (2.2)	54 (3.3)	213 (1.5)	9 (1.7)	214 (4.8)			
Tennessee	50 (4.0)	207 (1.9)	43 (3.7)	212 (1.8)	7 (2.0)	213 (5.1)!			
Texas	32 (3.0)	214 (2.2)	54 (3.3)	218 (2.0)	14 (2.1)	220 (2.1)			
Utah	53 (3.6)	221 (1.5)	41 (3.5)	225 (1.4)	6 (1.4)	220 (3.8)!			
Virginia	35 (3.6)	213 (1.9)	54 (3.6)	222 (1.8)	11 (1.8)	225 (3.3)			
West Virginia		212 (1.4)	51 (3.0)	215 (1.7)	11 (1.8)	213 (3.1)			
_	1 ' '			229 (1.4)	10 (2.0)	228 (2.9)!			
Wyoming	18 (2.5)	227 (1.9)	66 (3.1)	224 (1.2)	16 (2.3)	226 (1.6)			
Guam	63 (1.0)	189 (1.0)	32 (1.0)	195 (1.8)	4 (0.8)	204 (4.2)			
Wisconsin Wyoming TERRITORY	38 (2.7) 30 (3.2) 18 (2.5) 63 (1.0)	226 (2.2) 227 (1.9)	60 (2.8)	229 (1.4) 224 (1.2)	10 (2.0) 16 (2.3)	228 226			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



# Teachers' Reports on "How Well Supplied Are You by Your School System with the Instructional Materials and Other Resources You Need to Teach Your Class?" (continued)

•	Grade 8 - 1992								
PUBLIC SCHOOLS	I get some or none nee	of the resources I	I get most of the i	esources I need.	I get all the resources I need.				
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	33 (1.9)	261 (1.5)	53 (2.5)	269 (1.1)	13 (2.3)	272 (3.4)			
Northeast	37 (4.6)	250 (3.3)	51 (5.1)	277 (3.4)		? ?			
Southeast	35 (3.6)	260 (1.9)	<b>5</b> 0 (5.5)	260 (1.6)	12 (4.6)	274 (5.9)!			
Central	26 (3.9)	272 (4.6)	60 (5.7)	274 (2.2)	15 (7.0)	265 (6.0)!			
West	35 (3.4)	263 (2.7)	52 (4.1)		13 (3.3)	282 (6.1)!			
STATES	(,	200 (2.17)	32 (4.1)	268 (2.4)	12 (2.7)	270 (5.1)!			
Alabama	37 (4.1)	246 (2.6)	54 (4.5)	055 (0.0)	45 (5.5)				
Arizona	41 (3.6)>	265 (1.8)		255 (2.2)	10 (2.0)	254 (5.9)!			
Arkansas	28 (3.3) <		43 (3.7)	264 (1.6)	15 (3.1)	265 (4.2)!			
California		254 (2.5)	56 (3.9) >	256 (1.8)	16 (3.3)	256 (4.0)!			
Colorado	32 (2.8)	256 (2.5)	56 (3.0)	264 (2.2)	12 (2.0)	262 (4.4)			
Connecticut	36 (3.3)>	269 (1.8)	51 (3.0)	274 (1.5)>	13 (2.1)	271 (4.4)			
	30 (3.7)	264 (3.2)	50 (3.9)	274 (2.3)	20 (3.3)	283 (2.3)>			
Delaware	46 (0.8)>>	264 (1.3)>	47 (0.8)≪	260 (1.5)	7 (0.5)	261 (3.0)			
Dist. Columbia	59 (1.0)	233 (1.3)	35 (1.0)	237 (1.4)	6 (0.4)>>	230 (4.6)			
Florida	37 (3.2)	254 (3.0)	50 (3.3)	262 (1.7)	13 (2.3)				
Georgia	32 (3.4)	254 (2.4)	53 (3.5)	262 (1.6)	15 (2.4)	263 (3.9)			
Hawaii	47 (O.9)	256 (1.3)»	47 (0.9) <<	258 (1.2)	, , ,	259 (3.6)			
Idaho	42 (3.3)	273 (1.1)	49 (3.5)	275 (1.4)	7 (0.4) <i>&gt;</i> 9 (2.3)	256 (2.9)			
Indiana	` '	, ,	, ,		9 (2.3)	277 (3.4)!			
lowa	31 (4.2)	265 (2.0)	55 (4.2)	272 (1.7)	13 (2.6)	268 (3.5)			
1	22 (2.9)	280 (1.8)	60 (4.5)	283 (1.2)>	18 (3.5)	286 (2.7)>			
Kentucky	35 (4.4)	259 (1.7)	51 (3.7)	265 (1.8)>	14 (3.0)	260 (3.4)!			
Louisiana	49 (4.6)	246 (2.4)	43 (4.4)	252 (2.6)	8 (2.4)	253 (5.5)!			
Maine <sup>1</sup>	28 (4.1)	273 (1.7)	57 (4.5)	280 (1.4)	15 (3.0)	279 (3.1)			
Maryland	34 (3.6)>	256 (3.1)	54 (4.0)	270 (2.1)	11 (2.6)	270 (5.7)!			
Massachusetts <sup>1</sup>	42 (2.6)	265 (2.2)	50 (2.0)	• • •	, ,	, ,			
Michigan	31 (3.9)	263 (3.1)	50 (3.2)	279 (1.5)	9 (2.0)	271 (3.1)!			
Minnesota	29 (3.3)		56 (3.8)	268 (2.2)	13 (2.4)	271 (5.1)			
Mississippi1	57 (4.0)	279 (2.0)	58 (4.1)	284 (1.2)>>	13 (2.9)	280 (3.1)!			
Missouri <sup>1</sup>		244 (1.5)	34 (3.5)	248 (2.3)	9 (2.3)	244 (4.6)!			
Nebraska	26 (3.8) 23 (3.1)	268 (2.0)	60 (3.7)	271 (1.3)	14 (2.6)	274 (3.0)			
	23 (3.1)	273 (1.9)	61 (3.7)	279 (1.5)	16 (2.6)	275 (2.9)			
New Hampshire	36 (3.7)>	275 (1.4)>	53 (3.5)	279 (1.3)>	11 (2.4)	279 (3.3)!			
New Jersey	31 (3.6)	261 (3.8)	46 (4.1)	273 (2.4)	23 (4.1)				
New Mexico	41 (3.6)	254 (1.5)	51 (3.9)	263 (1.3) >>	9 (1.6)	280 (3.7)			
New York	31 (3.7)	256 (3.3)	48 (3.9)	266 (3.1)		258 (2.3)			
North Carolina	46 (3.4)	255 (1.7)>>	43 (3.0)	260 (3.1)	20 (3.3)	280 (3.2)>			
North Dakota	25 (3.2)	285 (2.1)	50 (4.6)	282 (1.4)	11 (2.5) 25 (3.4)	257 (2.3)!			
Ohio		• •			• •	281 (2.2)			
Oklahoma	51 (4.9) >	266 (2.0)	42 (4.0)	272 (2.4)	7 (1.9)	260 (8.0)!			
Pennsylvania	37 (3.9)	266 (2.0)	46 (3.9)	270 (2.1)	17 (2.6)	264 (3.3)			
Rhode Island	29 (3.4)	263 (3.2)	51 (3.5)	274 (2.0) >	20 (2.8)	272 (2.8)			
-	42 (0.9) >>	253 (1.5)	51 (0.7)	273 (1.1) <b>»</b>	6 (0.6) <b>«</b>	269 (2.6)			
South Carolina¹	32 (3.3)	259 (2.3)	52 (3.5)	261 (1.7)	16 (2.3)	259 (3.4)			
Tennessee¹	42 (3.8)	259 (2.1.)	46 (3.4)	258 (1.9)	12 (2.2)	255 (4.3)			
Texas	29 (2.8)	258 (2.7)	49 (3.2)	265 (2.4)					
Jtah¹	38 (2.8)	274 (1.3)	53 (2.5)		22 (2.7)	268 (2.5)>			
/irginia	33 (3.5)	263 (2.4)>	51 (3.4)	274 (1.3)	10 (1.5)	271 (2.5)			
West Virginia	38 (4.3)	259 (1.6)		270 (1.4)	16 (2.6)	266 (3.4)			
Visconsin	19 (2.9)		53 (4.4)	258 (1.2)	9 (2.2)	257 (2.6)!			
Wyoming	20 (1.7)	275 (3.1)	69 (3.7)	280 (1.9)	12 (2.5)	272 (3.8)			
ERRITORIES	20 (1.7)	272 (1.6)	66 (3.0)»	276 (1.0)	14 (2.4)≪	271 (3.4)			
Suam	69 (1.1)	222 /4 21 5	07 /4 4155	000 (5.5)					
Virgin Islands		233 (1.3)>	27 (1.1)**	233 (2.6)	3 (0.4)≪	*** (***)			
	82 (0.5)>>	216 (1.1)	18 (0.5)≪	241 (2.4)>>	0 (0.0)	*** (***)			

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. (The value for 1990 at about the 95 percent certainty level.) These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent.



## Teachers' Reports on How Often They Use Multiple-Choice Mathematics Tests to Assess Student Progress in Mathematics

<del></del>	Grade 4 - 1992								
	Once or Twice a Week		Once or Tw	ice a Month	Yearly or	r Never			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	6 (1.0)	204 (3.6)	44 (3.1)	218 (1.6)	50 (2.9)	217 (1.5)			
Northeast	8 (2.4)	205 (6.9)!	45 (7.3)	222 (4.1)!	47 (6.3)	221 (4.0)			
Southeast	11 (2.6)	199 (3.7)!	49 (5.4)	206 (1.9)	40 (4.8)	212 (4.1)			
Central	2 (1.5)	*** (***)	43 (7.6)	225 (2.6)	54 (7.4)	222 (2.3)			
West	3 (1.2)	196 (4.5)!	36 (4.2)	224 (3.3)	60 (4.5)	215 (2.4)			
STATES	3 (1.2)	130 (4.5):	30 (4.2)	224 (0.0)	00 ()	270 (277)			
Alabama	47 (0.7)	206 (2.3)	63 (3.2)	209 (1.7)	20 (2.8)	203 (3.7)			
Arizona	17 (2.7)	, ,	42 (2.9)	216 (1.5)	53 (3.2)	214 (1.5)			
	5 (1.2)	207 (4.4)!		· · · · · · · · · · · · · · · · · · ·	27 (3.7)	211 (2.9)			
Arkansas	8 (1.8)	200 (4.0)!	65 (3.8)	210 (1.1)	52 (3.9)	209 (2.1)			
California	5 (1.5)	196 (6.9)!	43 (3.7)	207 (2.6)		, ,			
Colorado	2 (0.8)	*** (***)	37 (3.2)	220 (1.7)	61 (3.4)	221 (1.6)			
Connecticut	2 (0.7)	*** (***)	43 (3.8)	229 (2.0)	55 (4.0)	227 (1.9)			
Delaware	5 (0.5)	221 (4.4)	39 (1.3)	217 (1.5)	56 (1.0)	217 (1.3)			
Dist. Columbia	29 (0.8)	187 (1.7)	45 (1.0)	192 (1.1)	26 (0.9)	194 (1.7)			
Florida	10 (1.9)	205 (4.2)	54 (3.7)	213 (1.3)	36 (3.8)	213 (2.3)			
Georgia	10 (1.8)	202 (4.4)	57 (3.5)	214 (1.9)	33 (3.4)	217 (2.3)			
Hawaii	5 (1.1)	211 (3.6)!	55 (3.2)	214 (2.0)	40 (3.0)	212 (2.0)			
Idaho	2 (0.8)	*** (***)	47 (3.8)	222 (1.1)	51 (3.9)	219 (1.3)			
Indiana	5 (1.1)	221 (2.2)!	45 (4.1)	218 (1.6)	50 (4.1)	220 (1.5)			
	- 1 /		54 (3.9)	230 (1.2)	43 (3.8)	228 (1.6)			
lowa	3 (1.3)	222 (6.1)!		215 (1.3)	34 (3.8)	212 (2.0)			
Kentucky	10 (1.9)	214 (3.6)	56 (3.3)	• •	28 (3.7)	201 (2.9)			
Louisiana	16 (3.1)	196 (4.8)	56 (3.9)	205 (2.0)	59 (3.9)	231 (1.4)			
Maine	2 (0.9)	*** (***)	39 (4.0)	231 (1.8)	44 (3.9)	219 (1.8)			
Maryland	8 (1.7)	198 (4.9)!	49 (3.5)	220 (2.4)	44 (3.5)	` .			
Massachusetts	4 (1.4)	206 (7.4)!	37 (3.9)	226 (1.6)	58 (3.7)	228 (1.7)			
Michigan	4 (1.6)	199 (9.5)!	42 (4.5)	218 (2,7)	54 (4.6)	221 (2.2)			
Minnesota	3 (1.6)	227 (5.6)!	56 (3.7)	228 (1.3)	41 (3.9)	225 (1.9)			
Mississippi	18 (3.3)	191 (3.4)	52 (3.9)	202 (1.7)	30 (3.6)	200 (2.3)			
Missouri	5 (1.2)	206 (8.1)!	62 (3.3)	222 (1.7)	33 (3.3)	224 (1.5)			
Nebraska	1 (0.6)	*** (***)	42 (3.4)	224 (2.0)	57 (3.4)	225 (1.8)			
New Hampshire	1 (0.5)	*** (***)	38 (3.8)	229 (1.7)	61 (3.8)	230 (1.5)			
New Jersey	10 (2.0)	218 (4.8)!	57 (3.8)	226 (2.0)	33 (3.9)	231 (2.5)			
New Mexico	5 (1.4)	207 (4.7)!	44 (4.5)	211 (1.9)	51 (4.4)	213 (1.9)			
New York	14 (2.3)	203 (3.7)	53 (3.8)	218 (1.8)	33 (3.4)	222 (2.0)			
North Carolina	9 (1.7)	212 (3.8)	51 (3.6)	212 (1.4)	40 (3.5)	212 (1.8)			
North Dakota	2 (1.3)	*** (***)	44 (4.2)	226 (1.4)	54 (4.2)	229 (1.1)			
	•	` '	52 (4.1)	218 (1.7)	43 (4.4)	216 (1.9)			
Ohio Oklahoma	5 (1.3)	221 (5.4)!	• • •	220 (1.1)	32 (3.4)	218 (2.1)			
Oklahoma	5 (1.1)	216 (2.8)!	63 (3.4)	, ,					
Pennsylvania	4 (1.3)	214 (5.6)!	51 (3.7)	226 (1.8)	44 (3.8)	221 (2.6)			
Rhode Island	2 (0.8)	*** (***)	42 (3.9)	211 (2.5)	57 (3.8)	216 (2.0)			
South Carolina	7 (1.3)	212 (3.5)	53 (3.2)	211 (1.7)	39 (3.3)	212 (1.7)			
Tennessee	13 (1.8)	197 (2.5)	53 (3.3)	210 (1.6)	34 (3.4)	214 (2.2)			
Texas	11 (2.0)	210 (4.0)	60 (3.3)	219 (1.8)	29 (3.2)	218 (2.3)			
Utah	5 (1.4)	220 (4.4)!	57 (3.5)	222 (1.1)	38 (3.5)	225 (1.5)			
Virginia	6 (1.4)	206 (3.4)!	52 (3.0)	222 (1.9)	42 (3.0)	218 (1.9)			
West Virginia	5 (1.5)	213 (4.4)!	56 (3.8)	214 (1.4)	39 (3.6)	213 (1.8)			
Wisconsin	1 (0.5)	*** (***)	60 (3.1)	226 (1.5)	39 (3.1)	231 (1.6)			
Wyoming	2 (0.9)	*** (***)	45 (3.6)	225 (1.5)	53 (3.7)	225 (1.1)			
TERRITORY	- \/	, ,	, ,	•		(			
Guam	1 23 (1.2)	189 (1.9)	35 (1.3)	192 (1.4)	42 (1.3)	193 (1.5)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



TABLE A.64

Teachers' Reports on How Often They Use Multiple-Choice Mathematics Tests to Assess Student Progress in Mathematics (continued)

	Grade 8 - 1992								
PUBLIC SCHOOLS	Once or Twice a Week		Once or Tw	ce a Month	Yearly o	r Never			
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	4 (1.1)	263 (9.2)!	30 (2.7)	262 (2.1)	66 (3.0)	074 (4.0)			
Northeast	3 (1.9)	*** (***)	24 (5.8)	266 (8.4)!		271 (1.3)			
Southeast	3 (2.1)	*** /***	44 (4.1)	, , , , , , , , , , , , , , , , , , ,	73 (6.5)	269 (2.7)			
Central	4 (2.8)	*** /***		259 (2.3)	53 (5.4)	265 (2.2)			
West	5 (1.7)	249 (6.3)!	24 (5.1)	270 (4.6)!	72 (6.2)	275 (2 <i>.</i> 5)			
STATES	3 (1.17)	249 (0.3)!	26 (5.9)	259 (2.9)!	69 (5.7)	272 (3.1)			
Alabama	5 (1.7)	0.40 (7.0)							
Arizona	, ,	242 (7.2)!	44 (4.4)	250 (2.8)	51 (4.4)	254 (2.0)			
Arkansas	3 (1.2)	257 (5.0)!	19 (2.9)	261 (2.6)	78 (3.2)	266 (1.6)			
1	6 (1.8)	249 (7.4)!	33 (3.5)	. 256 (2.7)	61 (3.4)	256 (1.4)			
California	2 (0.7)	*** (***)	29 (2.7)	256 (2.4)	69 (2.7)	264 (2.1)			
Colorado	3 (1.0)	253 (9.1)!	24 (3.2)	271 (2.0)	73 (3.1)	272 (1.3)			
Connecticut	2 (0.7)	*** (***)	25 (3.0)	264 (3.5)	73 (2.9)				
Delaware	2 (2 2)	*** (***)	• •	204 (0.0)	73 (2.9)	276 (1.1)			
Dist. Columbia	3 (0.2)	*** (***)	25 (1.0)	258 (1.3)	72 (1.0)	264 (1.2)			
	22 (0.8)	224 (1.8)	36 (1.2)	229 (1.8)	42 (0.9)	246 (1.6)			
Florida	9 (1.9)	246 (4.3)!	39 (3.5)	255 (1.8 <b>)</b>	52 (3.9)	265 (2.2)			
Georgia	6 (1.3)	246 (5.0)!	43 (3.0)	256 (2.1)	52 (3.1)				
Hawaii	2 (0.2)	*** (***)	19 (0.9)	250 (2.1)		261 (1.7)			
daho	4 (1.3)	268 (3.7)!	20 (2.5)	` _/	79 (0.9)	260 (1.0)			
	• •	` '	20 (2.3)	270 (1.6)	76 (2.8)	277 (0.9)			
ndiana	3 (1.1)	*** (***)	21 (3.3)	269 (2.4)	77 (3.5)	270 (1.5)			
owa	1 (1.1)	*** (***)	24 (3.3)	279 (2.4)	75 (3.4)	, ,			
Centucky	2 (0.4)	*** /***{	41 (4.2)	262 (1.7)		284 (1.1)			
ouisiana	8 (2.4)	231 (4.5)!	46 (4.3)		58 (4.4)	263 (2.0)			
Maine	1 (1.1)	*** /***)	, , ,	251 (2.4)	46 (4.1)	252 (2.4)			
Maryland	3 (1.1)	( )	29 (3.3)	279 (2.6)	70 (3.3)	278 (1.2)			
-	3 (1.1)	242 (9.6)!	35 (3.5)	258 (3.0)	62 (3.6)	271 (1.8)			
Massachusetts	3 (1.2)	*** (***)	17 (2.9)	271 (3.7)	90 (2.0)	070 (4.0)			
Michigan	4 (1.9)	241(11.4)!	23 (3.2)	256 (4.1)	80 (3.0)	272 (1.3)			
Minnesota	2 (1.0)	*** (***)			73 (3.1)	271 (1.8)			
Mississippi	8 (2.3)	. , , ,	20 (3.3)	279 (3.2)	78 (3.4)	282 (1.1)			
Missouri	*	240 (5.4)!	39 (3.7)	244 (2.4)	53 (4.0)	247 (1.9)			
Nebraska	1 (0.2)	( )	23 (3.3)	265 (2.2)	76 (3.4)	273 (1.2)			
100/ doka	0 (0.2)	*** (***)	23 (4.0)	279 (2.5)	77 (3.9)	277 (1.3)			
New Hampshire	4 (2.3)	285 (4.4)!	24 (3.0)	075 (4.7)	70 (0 1)	` '			
New Jersey	7 (2.0)		, ,	275 (1.7)	72 (3.4)	278 (1.3)			
New Mexico	* · · · · ·	262(11.1)!	37 (4.3)	263 (3.1)	56 (4.7)	278 (1.9)			
New York	1 (0.9)		19 (2.6)	254 (2.4)	79 (2.9)	261 (1.0)			
North Carolina	7 (2.2)	238 (9.8)!	29 (3.5)	258 (4.7)	64 (3.9)	272 (2.1)			
North Dakota	2 (0.8)	258 (7.5)!	45 (3.4)	2 <b>56</b> (1.8)	53 (3.6)	259 (1.6)			
TOTTI Dakota	4 (2.0)	273 (3.6)!	18 (2.5)	283 (3.1)	78 (2.8)	283 (1.1)			
Ohio	2 (1.0)	*** (***)	00 (0.0)			200 (1.17			
Oklahoma		( )	23 (3.3)	260 (2.9)	75 (3.3)	272 (2.0)			
ennsylvania	5 (1.8)	250 (4.7)!	20 (3.1)	263 (2.8)	75 (3.3)	270 (1.4)			
	1 (0.9)	*** (***)	19 (3.0)	267 (2.5)	80 (3.2)	272 (1.9)			
Rhode Island	2 (0.2)	*** (***)	17 (0.6)	257 (1.2)	81 (0.7)	267 (1.0)			
outh Carolina	6 (1.8)	239 (4.5)!	38 (3.4)	259 (1.8)	56 (3.4)	264 (1.9)			
ennessee	5 (1.7)	252 (6.6)!	47 (4.0)	256 (1.9)	48 (4.3)	260 (1.9)			
exas	A /4 E\		` <i>'</i>	` '	, ,	200 (1.9)			
Itah	4 (1.5)	253 (7.0)!	45 (3.6)	257 (1.6)	51 (3.6)	272 (2.2)			
/irginia	4 (1.5)	269 (2.5)!	29 (2.9)	267 (1.5)	67 (3.0)	277 (1.1)			
	3 (1.0)	263(11.5)!	33 (2.7)	262 (1.9)	64 (2.9)	271 (1.5)			
Vest Virginia	3 (1.1)	249 (7.2)!	26 (3.4)	255 (1.9)	71 (3.5)	260 (1.3)			
Visconsin	1 (0.6)	*** (***)	27 (5.2)	276 (4.0)!	71 (5.3)				
Vyoming	1 (0.2)	*** (***)	18 (2.6)	270 (4.0):		279 (1.7)			
ERRITORIES	, :=,	` '	(2.0)	211 (2.4)	81 (2.6)	276 (0.9)			
Suam	0 (0.0)	*** (***)	50 /4 4\	040 /4 0)	10 10 5				
rgin Islands		\ /	52 (1.1)	243 (1.6)	48 (1.1)	227 (1.3)			
	6 (0.7)	203 (5.9)	41 (1.0)	218 (1.2)	52 (1.0)	226 (1.4)			

When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent.



TABLE A.65

### Teachers' Reports on How Often They Use Problem Sets to Assess Student Progress in Mathematics

	Grade 4 - 1992								
-	Once or Twice a Week		Once or Tw	ice a Month	Yearly o	r Never			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	53 (3.2)	217 (1.3)	38 (2.6)	219 (1.6)	9 (1.6)	210 (3.0)			
Northeast	44 (6.0)	221 (4.0)	47 (6.1)	223 (2.8)	9 (3.7)	208 (8.5)!			
	, ,		, ,		9 (3.6)	213 (4.4)!			
Southeast	61 (8.1)	205 (2.1)	30 (5.1)	210 (4.6)		213 (4.4): +++ (+++)			
Central	52 (6.4)	228 (1.8)	43 (6.2)	219 (2.8)	5 (2.6)	\ ,			
West	53 (3.3)	217 (2.0)	36 (2.9)	222 (4.1)	11 (2.9)	205 (5.6)!			
STATES									
Alabama	55 (3.5)	206 (2.1)	35 (3.6)	207 (2.2)	10 (2.6)	214 (3.6)!			
Arizona	55 (2.7)	214 (1.3)	34 (2.4)	214 (1.9)	10 (2.1)	216 (3.5)!			
Arkansas	54 (3.8)	208 (1.1)	37 (3.7)	210 (2.3)	9 (2.0)	212 (3.1)!			
California	1 1	, ,	46 (3.0)	209 (2.3)	15 (2.5)	207 (3.7)			
	39 (3.2)	205 (2.2)			1 1				
Colorado	49 (3.2)	219 (1.5)	37 (2.8)	222 (1.7)	14 (1.6)	220 (2.4)			
Connecticut	41 (3.9)	229 (1.8)	49 (3.6)	227 (1.5)	10 (2.2)	225 (6.7)!			
Delaware	52 (1.7)	219 (1.0)	35 (1.7)	217 (1.2)	14 (0.8)	215 (2.6)			
Dist. Columbia	57 (1.2)	192 (1.3)	34 (1.1)	191 (1.4)	9 (0.5)	182 (2.6)			
Florida	56 (3.0)	213 (1.4)	34 (2.8)	213 (2.3)	11 (1.9)	208 (3.1)			
		· · · · · · · · · · · · · · · · · · ·			, ,	218 (4.8)			
Georgia	52 (2.6)	217 (1.5)	39 (2.8)	210 (2.3)	9 (1.4)	1 1			
Hawaii	35 (2.9)	214 (1.6)	53 (2.8)	213 (1.8)	12 (2.0)	208 (4.1)			
Idaho	56 (3.2)	220 (1.3)	37 (3.2)	221 (1.4)	7 (1.6)	219 (2.8)!			
Indiana	58 (3.4)	220 (1.5)	30 (3.0)	219 (1.8)	12 (2.6)	217 (3.4)!			
lowa	47 (3.5)	230 (1.5)	43 (3.3)	229 (1.4)	10 (2.1)	222 (3.1)!			
Kentucky		· · · · · · · · · · · · · · · · · · ·	40 (3.1)	214 (1.7)	11 (2.7)	214 (3.4)!			
	49 (3.5)	213 (1.6)			12 (2.7)	202 (4.2)!			
Louisiana	61 (3.6)	203 (2.1)	27 (3.0)	204 (2.7)	= ' '	1 1			
Maine	40 (4.2)	229 (1.3)	48 (4.4)	231 (1.7)	12 (2.1)	233 (4.0)			
Maryland	47 (3.2)	219 (1.8)	42 (3.2)	219 (2.1)	11 (2.1)	211 (6.2)!			
Massachusetts	46 (3.5)	223 (1.8)	41 (3.0)	229 (1.9)	13 (3.1)	231 (2.5)!			
Michigan	49 (3.6)	218 (2.5)	42 (3.9)	220 (2.6)	9 (2.0)	220 (4.1)!			
Minnesota	47 (3.7)	228 (1.6)	37 (3.3)	227 (1.8)	15 (2.7)	226 (3.0)			
Mississippi	, , ,	, ,	23 (3.3)	198 (3.4)	10 (2.2)	200 (4.3)!			
	67 (3.8)	200 (1.6)	` ,	1		, ,			
Missouri	53 (3.0)	222 (1.9)	38 (3.1)	220 (2.3)	9 (2.0)	220 (3.0)!			
Nebraska	43 (4.0)	223 (1.5)	47 (4.0)	227 (1.9)	11 (2.5)	225 (3.7)!			
New Hampshire	42 (3.4)	228 (1.7)	46 (3.3)	230 (1.8)	12 (2.4)	231 (3.5)			
New Jersey	45 (4.2)	224 (2.4)	43 (4.1)	230 (2.2)	12 (2.6)	225 (4.0)!			
New Mexico	47 (4.0)	212 (1.7)	36 (3.6)	212 (1.8)	17 (2.5)	211 (3.1)			
New York	, ,	• • •	43 (3.6)	219 (2.1)	10 (1.9)	213 (4.5)			
	46 (3.3)	216 (2.0)	1 7	, ,	, , ,	• •			
North Carolina	56 (3.0)	211 (1.5)	35 (3.2)	214 (2.0)	9 (1.7)	210 (3.3)			
North Dakota	48 (4.1)	227 (1.4)	41 (3.7)	229 (1.5)	12 (3.3)	226 (1.6)!			
Ohio	63 (3.9)	218 (1.4)	30 (3.7)	218 (2.3)	7 (1.4)	211 (4.7)!			
Okiahoma I	58 (3.9)	219 (1.5)	32 (3.9)	221 (1.5)	10 (2.6)	220 (2.6)!			
Pennsylvania	50 (3.8)	224 (1.8)	39 (3.9)	225 (2.3)	10 (1.7)	219 (3.6)			
Rhode Island	· · · · · · · · · · · · · · · · · · ·		41 (2.4)	214 (2.2)	13 (2.5)	208 (4.1)!			
South Carolina	46 (3.1)	216 (2.1)			14 (2.3)	213 (3.8)			
Tennessee	56 (3.3)	211 (1.4)	31 (2.9)	211 (1.8)	1 - 1	209 (3.5)			
	58 (2.1)	208 (1.7)	31 (2.4)	213 (2.1)	11 (1.5)				
Texas	59 (3.4)	218 (1.9)	31 (3.0)	215 (2.5)	10 (1.9)	220 (3.9)			
Utah	60 (3.2)	223 (1.2)	32 (3.0)	225 (1.7)	9 (2.1)	219 (2.8)!			
Virginia	52 (2.9)	220 (1.9)	37 (3.0)	218 (2.1)	11 (2.3)	220 (2.8)!			
West Virginia	47 (3.2)	214 (1.6)	43 (3.0)	212 (1.7)	9 (2.3)	214 (2.9)!			
Wisconsin	45 (3.3)	228 (1.6)	45 (3.4)	227 (1.7)	10 (2.3)	231 (4.3)!			
Wyoming TERRITORY	51 (3.9)	224 (1.3)	43 (3.4)	225 (1.2)	8 (1.8)	224 (2.9)!			
Guam	59 (1.1)	191 (1.3)	29 (1.1)	192 (1.7)	12 (0.5)	193 (3.1)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



TABLE A.65 Teachers' Reports on How Often They Use Problem Sets to Assess Student Progress in Mathematics (continued)

PUBLIC SCHOOLS	Grade 8 - 1992								
	Once or Twice a Week		Once or Tw	ice a Month	Yearly or Never				
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	59 (2.5)	271 (1.6)	31 (2.5)	263 (1.7)	10 (1.9)	262 (3.2)			
Northeast	56 (4.8)	277 (4.0)	31 (4.9)	, ,		1 1			
Southeast	58 (4.6)	263 (2.2)	· · · · · · · · · · · · · · · · · · ·	256 (3.5)	13 (3.9)	251 (4.4)!			
Central	58 (4.1)	, ,	27 (4.6)	259 (2.6)	15 (5.3)	261 (3.5)!			
West	- 1 !	278 (3.6)	36 (6.0)	270 (3.3)!	6 (3.4)	277 (2.9)!			
STATES	<sub>.</sub> 61 (5.3)	269 (3.0)	31 (4.5)	264 (3.3)	8 (2.3)	267(10.2)!			
Alabama	<b>60</b> (0.0)	()							
Arizona	63 (3.8)	252 (2.2)	31 (3.5)	254 (2.7)	6 (2.6)	237 (3.8)!			
	59 (3.8)	266 (1.5)	34 (3.4)	262 (2.6)	7 (1.7)	258 (4.7)!			
Arkansas	55 (4.1)	258 (1.7)	32 (3.7)	256 (2.3)	12 (2.6)	249 (3.5)!			
California	46 (3.9)	260 (2.6)	43 (4.0)	264 (2.3)	11 (1.9)	258 (4.2)			
Colorado	53 (3.5)	271 (1.3)	39 (3.3)	270 (2.2)		, ,			
Connecticut	44 (3.4)	274 (2.4)	48 (3.4)	275 (2.2) 275 (1.8)	9 (2.1)	275 (3.8)!			
Deleviore		, ,	40 (3.4)	2/3 (1.0)	8 (1.9)	257 (7.3)!			
Delaware	57 (0.9)	262 (1.1)	35 (0.9)	262 (2.0)	9 (0.6)	261 (2.9)			
Dist. Columbia	56 (1.0)	237 (1.2)	33 (1.1)	232 (1.7)	11 (0.7)	232 (4.0)			
Florida	56 (3.6)	258 (1.8)	34 (3.4) ·	262 (2.3)	11 (1.9)				
Georgia	60 (3.4)	260 (1.6)	29 (3.0)	257 (2.6)	11 (2.0)				
Hawaii	48 (1.0)	263 (1.4)	41 (0.9)	· · · · · · · · · · · · · · · · · · ·	, ,	250 (3.3)			
Idaho	68 (2.8)	276 (1.0)	26 (2.9)	253 (1.4)	11 (0.6)	249 (2.0)			
la di - a -	00 (2.0)	270 (1.0)	26 (2.9)	272 (1.6)	6 (1.3)	271 (3.6)!			
Indiana	69 (3.1)	269 (1.7)	25 (2.7)	272 (2.5)	6 (2.1)	266 (6.1)!			
lowa	67 (4.5)	284 (1.3)	28 (4.2)	281 (2.0)	5 (1.7)	278 (3.5)!			
Kentucky	58 (4.0)	264 (1.5)	35 (3.9)	261 (1.9)	7 (1.8)	260 (6.0)!			
Louisiana	59 (3.9)	250 (2.4)	30 (3.5)	251 (3.2)		. , ,			
Maine	50 (5.0)	279 (1.6)	41 (4.7)	· · · · · ·	11 (2.8)	245 (4.3)!			
Maryland	48 (3.7)	265 (2.5)	38 (3.3)	279 (2.0)	10 (2.2)	274 (3.4)!			
Managabusanta	, ,		30 (3.3)	267 (2.5)	13 (2.6)	265 (5.0)			
Massachusetts	61 (3.2)	272 (1.4)	29 (2.6)	277 (2.8)	11 (2.0)	258 (3.8)			
Michigan	64 (3.4)	268 (2.2)	30 (3.1)	265 (2.4)	6 (1.2)	259 (6.0)			
Minnesota	64 (4.2)	282 (1.4)	28 (3.8)	279 (2.2)	7 (1.8)	283 (5.2)!			
Mississippi	69 (3.6)	248 (1.7)	20 (3.1)	239 (3.2)	11 (2.2)	• •			
Missouri	56 (4.5)	270 (1.3)	32 (3.8)		, ,	240 (5.2)			
Nebraska	62 (4.6)	278 (1.6)	31 (4.1)	272 (1.7) 275 (2.1)	12 (2.4)	269 (2.8)			
New Hompshire	, ,		31 (4.1)	213 (2.1)	7 (2.3)	277 (3.9)!			
New Hampshire	58 (3.5)	277 (1.3)	32 (3.3)	280 (1.5)	11 (2.7)	277 (3.4)!			
New Jersey	47 (4.5)	274 (2.3)	44 (4.3)	271 (2.9)	9 (2.1)	256 (6.3)!			
New Mexico	59 (3.7)	261 (1.1)	31 (3.0)	256 (1.8)	10 (2.2)	263 (4.0)!			
New York	49 (3.9)	271 (2.0)	42 (3.4)	262 (4.0)	9 (1.8)	254 (7.5)!			
North Carolina	57 (3.5)	257 (1.9)	32 (3.4)	259 (2.0)	11 (2.4)	, ,			
North Dakota	64 (4.1)	284 (1.1)	30 (3.5)	282 (1.9)	• •	255 (3.0)!			
Ohio	, ,	, ,	, ,	202 (1.9)	6 (1.7)	279 (5.9)!			
	60 (4.1)	271 (2.4)	28 (4.0)	270 (2.5)	11 (2.8)	261 (6.2)!			
Oklahoma	64 (3.8)	267 (1.6)	29 (3.2)	269 (1.8)	8 (2.2)	259 (4.6)!			
Pennsylvania	67 (3.5)	273 (1.5)	25 (3.1)	268 (4.2)	8 (2.3)	256 (5.9)!			
Rhode Island	<b>52</b> (1.1)	268 (1.2)	33 (1.0)	261 (1.4)	15 (0.8)	265 (2.4)			
South Carolina	56 (3.3)	263 (1.6)	31 (2.9)	257 (3.0)	, ,	• •			
Tennessee	58 (4.1)	260 (2.0)	32 (3.8)		13 (2.2)	261 (3.1)			
Texas	` '	, ,		256 (2.4)	9 (2.1)	251 (3.4)!			
Jtah	63 (3.0)	264 (1.7)	30 (2.9)	265 (2.7)	7 (1.7)	268 (4.5)!			
Virginia	71 (2.5)	274 (0.9)	22 (2.2)	274 (2.3)	7 (1.4)	267 (3.2)!			
	63 (2.5)	268 (1.6)	28 (2.4)	265 (2.2)	9 (1.6)	267 (4.3)			
West Virginia	58 (3.8)	258 (1.4)	30 (3.2)	261 (1.7)	12 (2.4)	256 (3.3)!			
Wisconsin	55 (4.2)	278 (1.8)	34 (3.9)	278 (3.0)	11 (2.6)	277 (3.8)!			
Wyoming	61 (3.6)	275 (1.1)	33 (3.5)	275 (2.0)	6 (1.8)	268 (4.1)!			
ERRITORIES	• •	` '	\/	()	0 (1.0)	200 (7.1)			
Guam	52 (1.5)	242 (1.5)	26 (1.0)	234 (1.9)	23 (1.4)	223 (2.3)			
/irgin Islands	61 (0.9)	220 (1.7)	34 (1.0)	225 (1.4)	6 (0.5)	208 (3.0)			



### Teachers' Reports on How Often They Use Short (Phrase/Sentence) or Long (Several Sentences/Paragraph) Written Responses to Assess Student Progress in Mathematics

	Grade 4 - 1992								
-	At Least Monthly		Once or Tw	vice a Year	Never or H	ardly Ever			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	46 (3.0)	217 (1.8)	16 (1.6)	216 (2.5)	38 (2.3)	217 (1.5)			
Northeast	45 (4.0)	220 (4.5)	19 (2.5)	227 (3.4)	36 (3.7)	217 (3.8)			
Southeast	51 (7.5)	208 (4.2)	18 (4.1)	205 (3.6)!	31 (4.8)	209 (2.3)			
· · · · · · · · · · · · · · · · · · ·	, ,	, ,		217 (7.6)!	53 (5.2)	225 (2.5)			
Central	36 (6.6)	223 (3.1)	11 (3.3)	1 1		213 (3.3)			
West	52 (4.2)	220 (2.8)	17 (2.5)	217 (5.0)	31 (3.7)	213 (3.3)			
STATES				0.0 (0.1)	00 (0.0)	007 (0.0)			
Alabama	48 (3.6)	205 (2.1)	21 (2.8)	212 (3.1)	32 (3.3)	207 (2.2)			
Arizona	40 (3.1)	215 (1.7)	23 (2.5)	215 (2.4)	37 (2.9)	212 (1.8)			
Arkansas	38 (3.3)	207 (1.4)	17 (2.4)	208 (1.8)	45 (3.0)	211 (1.7)			
California	50 (3.5)	208 (2.5)	15 (2.5)	210 (3.3)	35 (3.2)	206 (2.2)			
Colorado	43 (3.1)	222 (1.6)	22 (3.0)	216 (2.6)	35 (3.2)	220 (2.1)			
Connecticut	45 (2.9)	227 (2.3)	17 (2.3)	231 (2.8)	38 (3.0)	226 (1.9)			
Delaware	, ,	219 (1.2)	18 (0.5)	220 (1.6)	50 (1.1)	216 (1.5)			
i i	32 (1.1)	, ,	` '		18 (0.7)	192 (2.2)			
Dist. Columbia	68 (1.0)	191 (1.0)	15 (0.7)	188 (1.8)	` ,	212 (1.9)			
Florida	44 (3.4)	212 (2.0)	18 (2.3)	214 (2.8)	38 (3.1)	3 1			
Georgia	42 (3.4)	211 (1.9)	13 (2.0)	219 (3.2)	44 (3.4)	214 (1.9)			
Hawaii	44 (3.5)	216 (1.8)	17 (2.5)	215 (2.7)	39 (3.1)	209 (2.0)			
Idaho	39 (3.3)	221 (1.3)	20 (3.1)	220 (1.7)	41 (3.0)	219 (1.4)			
Indiana	30 (3.9)	220 (2.6)	17 (2.6)	221 (2.6)	53 (4.0)	219 (1.4)			
lowa	36 (3.6)	231 (1.8)	20 (2.9)	231 (1.6)	44 (3.8)	227 (1.4)			
Kentucky	. , ,	1 1	21 (3.0)	214 (2.2)	22 (3.0)	211 (2.4)			
	57 (3.8)	214 (1.6)	= - 1 7	' '	31 (3.8)	207 (2.4)			
Louisiana	53 (3.9)	200 (2.3)	15 (2.7)	204 (3.2)		1 1			
Maine	49 (3.6)	231 (1.4)	24 (2.8)	230 (1.8)	27 (2.5)	231 (2.2)			
Maryland	64 (3.2)	219 (2.1)	16 (2.7)	218 (3.4)	20 (2.4)	215 (2.5)			
Massachusetts	37 (3.8)	226 (2.7)	22 (3.1)	228 (2.0)	41 (3.8)	226 (1.9)			
Michigan	35 (3.5)	213 (3.0)	20 (2.8)	224 (2.5)	45 (3.3)	222 (2.4)			
Minnesota	37 (3.4)	229 (2.0)	19 (2.8)	227 (2.0)	44 (3.0)	226 (1.8)			
Mississippi	47 (3.8)	198 (1.9)	13 (2.4)	200 (2.9)	40 (3.4)	202 (2.3)			
Missouri	41 (4.2)	220 (2.2)	18 (2.5)	222 (2.7)	41 (4.0)	224 (1.7)			
Nebraska	32 (3.2)	229 (2.1)	20 (2.8)	225 (2.7)	47 (3.8)	222 (1.8)			
New Hampshire		231 (1.7)	17 (2.2)	230 (2.4)	45 (3.6)	228 (1.5)			
New Jersey	38 (3.4)	• •	15 (3.0)	226 (3.8)!	34 (3.6)	229 (2.3)			
	50 (4.0)	226 (2.0)	\ /	,		, ,			
New Mexico	50 (3.8)	213 (2.0)	16 (2.9)	205 (2.5)	33 (3.7)	214 (1.9)			
New York	48 (3.5)	215 (2.0)	16 (2.2)	224 (2.5)	36 (3.5)	217 (2.1)			
North Carolina	44 (2.9)	213 (2.0)	17 (2.2)	209 (2.1)	39 (2.8)	213 (1.7)			
North Dakota	31 (3.3)	226 (1.3)	21 (3.1)	230 (1.8)	47 (3.2)	228 (1.3)			
Ohio	36 (3.3)	218 (2.0)	20 (2.8)	218 (2.4)	44 (3.7)	216 (2.0)			
Oklahoma	35 (3.3)	221 (1.5)	19 (2.8)	217 (2.1)	45 (3.6)	220 (1.3)			
Pennsylvania	44 (3.4)	223 (2.0)	20 (2.9)	221 (3.1)	36 (3.2)	224 (2.4)			
Rhode Island	30 (2.9)	214 (2.9)	17 (2.3)	215 (2.9)	52 (3.3)	214 (1.9)			
South Carolina		, ,	15 (2.0)	210 (2.5)	41 (2.9)	212 (1.9)			
Tennessee	45 (3.0) 40 (3.0)	212 (1.7) 207 (2.1)	18 (2.4)	213 (1.9)	42 (3.0)	211 (1.9)			
			` ,		, ,				
Texas	58 (3.6)	218 (1.7)	15 (2.4)	218 (3.1)	26 (3.3)	216 (2.5)			
Utah	38 (2.7)	225 (1.4)	17 (2.1)	225 (2.2)	44 (3.1)	220 (1.5)			
Virginia	41 (3.2)	216 (1.9)	21 (2.8)	224 (3.1)	38 (2.9)	220 (2.1)			
West Virginia	32 (3.6)	213 (1.5)	20 (3.0)	211 (3.1)	47 (4.0)	215 (1.5)			
Wisconsin	45 (3.7)	230 (1.8)	16 (2.2)	225 (2.0)	39 (4.0)	227 (1.5)			
Wyoming TERRITORY	36 (3.0)	225 (1.7)	20 (2.7)	222 (1.6)	44 (3.6)	225 (1.2)			
Guam	52 (1.3)	192 (1.2)	8 (0.7)	197 (3.0)	40 (1.2)	191 (1.5)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



# Teachers' Reports on How Often They Use Short (Phrase/Sentence) or Long (Several Sentences/Paragraph) Written Responses to Assess Student Progress in Mathematics (continued)

	Grade 8 - 1992								
PUBLIC SCHOOLS	At Least Monthly		Once or Tw	ice a Year	Never or H	ardly Ever			
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	43 (2.9)	269 (1.7)	23 (2.2)	267 (2.1)	34 (2.8)	267 (2.1)			
Northeast	52 (7.2)	273 (3.8)	16 (3.8)	, ,		, ,			
Southeast	, ,	, ,	· · ·	256 (5.9)!	32 (7.1)	266 (6.1)!			
Central	51 (4.3)	265 (3.2)	22 (3.5)	257 (4.8)	27 (4.5)	259 (3.3)			
	34 (4.4)	273 (3.8)	26 (5.0)	278 (4.2)!	40 (5.5)	274 (3.4)			
West	38 (6.0)	266 (2.4)	26 (5.0)	270 (2.7)	36 (5.6)	267 (4.5)			
STATES			(,		33 (3.3)	201 (4.0)			
Alabama	42 (4.3)	256 (2.2)	23 (4.0)	247 (5.1)	35 (3.7)	050 (0.0)			
Arizona	46 (3.6)	264 (1.5)	, ,			250 (2.8)			
Arkansas		, ,	25 (3.7)	264 (2.6)	29 (3.5)	264 (3.7)			
California	27 (2.7)	259 (2.2)	27 (2.8)	256 (2.6)	46 (3.0)	254 (1.9)			
	45 (3.7)	262 (2.7)	21 (2.5)	260 (3.3)	34 (3.6)	261 (3.0)			
Colorado	50 (3.6)	273 (1.7)	16 (2.1)	270 (2.6)	34 (3.3)	270 (2.0)			
Connecticut	46 (4.0)	278 (2.4)	21 (2.8)	271 (3.1)					
Data	` '	` '	21 (2.0)	211 (3.1)	<b>3</b> 3 (3.9)	268 (2.7)			
Delaware	42 (1.0)	262 (1.4)	16 (0.5)	265 (2.5)	42 (1.0)	261 (1.6)			
Dist. Columbia	63 (1.0)	231 (1.2)	20 (0.9)	246 (2.8)	17 (0.9)				
Florida	42 (3.9)	261 (2.2)			` ,	232 (2.4)			
Georgia	, ,		22 (2.5)	257 (2.2)	36 (3.9)	259 (3.1)			
Hawaii	44 (3.5)	. 258 (1.9)	17 (3.1)	259 (3.9)	40 (3.9)	258 (2.1)			
ľ	37 (0.9)	262 (1.4)	27 (0.8)	260 (1.6)	36 (1.1)	250 (1.3)			
Idaho	31 (3.2)	275 (2.1)	27 (3.0)	277 (2.1)	42 (3.0)	273 (1.3)			
Indiana	()		• •		.2 (0.0)	270 (1.0)			
	25 (3.6)	272 (2.6)	26 (3.6)	269 (2.3)	49 (4.5)	269 (1.8)			
lowa	39 (4.0)	283 (1.5)	20 (3.0)	282 (2.3)	41 (4.3)	283 (1.7)			
Kentucky	52 (3.9)	264 (1.7)	20 (2.7)	265 (2.6)	28 (3.8)				
Louisiana	45 (4.0)	252 (2.6)	20 (3.0)			257 (2.4)			
Maine		, ,		254 (2.5)	35 (3.5)	246 (2.4)			
Maryland	, 34 (4.2)	284 (1.9)	34 (4.3)	275 (2.3)	32 (3.9)	276 (2.3)			
IVIAI YIAIIU	59 (3.8)	266 (2.2)	20 (2.9)	270 (2.9)	21 (2.9)	259 (3.9)			
Massachusetts	36 (3.6)	276 (2.3)	40 (0:0)	070 (0.5)	10 (0.5)				
Michigan	` '		18 (2:3)	270 (3.5)	46 (3.5)	270 (1.8)			
	45 (3.9)	265 (2.7)	22 (2.9)	270 (3.0)	33 (3.4)	267 (2.7)			
Minnesota	41 (4.0)	285 (1.8)	23 (2.8)	278 (2.3)	36 (3.6)	280 (1.7)			
Mississippi	46 (4.0)	246 (2.5)	24 (3.0)	241 (2.6)	30 (3.1)	248 (2.0)			
Missouri	33 (3.9)	270 (2.1)	24 (3.2)	270 (2.1)	42 (4.0)				
Nebraska	39 (4.8)	278 (1.9)	, ,		, , ,	273 (1.5)			
	00 (4.0)	270 (1.5)	25 (3.1)	278 (2.0)	35 (4.1)	276 (2.1)			
New Hampshire	37 (4.1)	280 (1.7)	35 (3.6)	279 (1.5)	28 (3.7)	274 (2.6)			
New Jersey	59 (4.0)	272 (2.4)	25 (3.7)		, , ,				
New Mexico	35 (3.3)	, , ,		274 (4.0)	17 (2.4)	264 (3.9)			
New York		261 (1.3)	25 (2.6)	257 (1.8)	40 (2.8)	259 (1.5)			
	46 (3.9)	263 (3.3)	24 (3.1)	270 (4.1)	30 (3.5)	267 (3.7)			
North Carolina	44 (4.1)	260 (2.1)	21 (3.0)	256 (2.2)	36 (4.3)	255 (2.3)			
North Dakota	28 (3.7)	283 (1.9)	25 (3.5)	281 (2.3)	47 (4.6)	284 (1.3)			
Ohio	, ,		, ,	(2.0)	, ,	204 (1.3)			
	34 (4.0)	268 (2.3)	19 (3.1)	266 (3.7)	47 (4.7)	272 (2.3)			
Oklahoma	29 (2.9)	269 (2.5)	24 (3.5)	268 (2.7)	47 (3.6)	266 (1.8)			
Pennsylvania	40 (3.2)	274 (2.8)	23 (2.5)	270 (2.8)					
Rhode Island	37 (0.9)	266 (1.3)	· ·		37 (3.0)	267 (1.8)			
South Carolina			26 (1.0)	265 (1.4)	38 (1.1)	264 (1.4)			
Tennessee	47 (3.7)	261 (1.9)	25 (3.3)	260 (2.1)	28 (2.6)	259 (2.5)			
1011102266	39 (3.9)	259 (1.8)	23 (3.7)	257 (3.1)	39 (3.2)	257 (2.6)			
Texas	54 (3.7)	065 (0.0)	04 (0.8)	004 (0.0)	, ,	, ,			
Utah		265 (2.0)	21 (2.8)	261 (3.3)	26 (3.1)	267 (2.3)			
	35 (2.4)	276 (1.4)	23 (2.3)	273 (1.9)	42 (2.6)	272 (1.6)			
Virginia	38 (3.2)	271 (2.4)	22 (2.6)	269 (2.3)	39 (3.2)	263 (2.5)			
West Virginia	31 (2.8)	260 (1.9)	25 (3.1)	261 (2.1)	44 (4.2)	256 (1.7)			
Wisconsin	47 (4.8)	280 (2.8)	26 (5.0)			3 1			
Wyoming	32 (2.5)			280 (3.0)!	27 (3.7)	274 (2.1)			
ERRITORIES	32 (2.3)	276 (1.6)	25 (2.6)	277 (2.2)	44 (2.9)	272 (1.1)			
	44.4.4								
Guam	43 (1.2)	243 (1.7)	21 (1.1)	235 (2.0)	36 (0.8)	225 (1.5)			
Virgin Islands	26 (1.0)	220 (2.4)	29 (1.3)	221 (1.9)	46 (1.3)	221 (1.3)			



#### Teachers' Reports on How Often They Use Projects, Portfolios or Presentations to Assess Student Progress in Mathematics

	Grade 4 - 1992								
}	At Least Monthly		Once or Tw	rice a Year	Never or H	ardly Ever			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	21 (2.0)	218 (2.4)	27 (1.9)	220 (2.4)	52 (2.5)	215 (1.3)			
Northeast	22 (3.4)	226 (5.9)!	27 (3.8)	226 (4.9)	50 (4.6)	215 (3.2)			
Southeast	23 (4.0)	207 (4.4)	30 (3.2)	212 (4.1)	47 (4.5)	205 (2.0)			
Central	23 (4.8)	225 (4.5)!	18 (4.6)	224 (4.7)!	59 (5.5)	223 (1.9)			
West	, ,	214 (2.3)	33 (4.3)	222 (4.9)	50 (5.5)	216 (3.1)			
STATES	17 (2.6)	214 (2.5)	55 (4.5)	222 (4.0)	<b>45</b> (8.5)	210 (01.)			
Alabama	04 (0.0)	205 (2.6)	26 (2.5)	208 (3.0)	50 (3.6)	208 (2.0)			
	24 (3.0)	205 (2.6)		214 (2.0)	52 (3.6)	215 (1.6)			
Arizona	23 (3.0)	213 (2.4)	25 (2.6)	, ,	61 (3.5)				
Arkansas	14 (2.3)	206 (3.7)	25 (2.9)	211 (1.9)	, ,	209 (1.4)			
California	31 (3.6)	206 (3.1)	27 (3.1)	211 (2.7)	41 (3.7)	206 (2.2)			
Colorado	33 (2.9)	221 (2.4)	26 (2.5)	220 (1.8)	41 (2.6)	219 (1.6)			
Connecticut	29 (2.5)	229 (1.9)	20 (2.8)	231 (2.8)	51 (3.1)	226 (1.9)			
Delaware	19 (0.9)	223 (1.8)	21 (1.0)	219 (1.4)	60 (0.8)	215 (1.2)			
Dist. Columbia	57 (1.2)	191 (1.0)	17 (0.7)	196 (2.3)	26 (1.0)	186 (1.8)			
Florida	25 (2.9)	211 (2.4)	28 (2.8)	215 (2.2)	46 (3.3)	212 (1.8)			
Georgia	26 (2.8)	212 (2.9)	26 (2.5)	211 (1.9)	47 (3.0)	216 (1.8)			
Hawaii	20 (2.8) 22 (2.3)	217 (2.2)	22 (2.6)	213 (2.9)	55 (2.9)	212 (1.5)			
Idaho		11	28 (2.9)	219 (1.8)	57 (3.1)	221 (1.3)			
	15 (2.5)	220 (2.0)	, ,		, .				
Indiana	17 (3.2)	218 (2.8)	25 (3.1)	222 (2.1)	58 (3.6)	218 (1.3)			
lowa	24 (3.5)	230 (2.1)	25 (3.1)	231 (1.6)	52 (3.9)	228 (1.6)			
Kentucky	39 (3.5)	214 (1.6)	25 (3.2)	214 (2.5)	36 (3.9)	212 (1.5)			
Louisiana	25 (3.2)	201 (3.3)	27 (2.6)	199 (2.9)	48 (3.5)	206 (1.8)			
Maine	24 (2.8)	232 (2.2)	24 (3.4)	229 (1.8)	52 (3.5)	231 (1.6)			
Maryland	29 (3.3)	218 (2.5)	20 (2.3)	217 (3.3)	<b>51 (3.3)</b>	218 (1.9)			
Massachusetts	23 (3.2)	228 (3.3)	23 (3.5)	229 (2.1)	54 (3.8)	225 (1.7)			
Michigan			21 (2.4)	221 (2.6)	55 (3.3)	222 (2.2)			
	24 (3.4)	210 (4.2)		1	58 (3.1)	227 (1.8)			
Minnesota	21 (2.5)	225 (2.3)	21 (3.0)	228 (2.5)		::			
Mississippi	23 (3.0)	195 (2.6)	23 (3.0)	204 (2.1)	54 (3.6)	200 (1.7)			
Missouri	18 (3.2)	219 (3.3)	27 (3.5)	223 (2.6)	55 (4.8)	222 (1.9)			
Nebraska	16 (2.8)	233 (2.8)	30 (3.3)	228 (2.2)	55 (4.2)	221 (1.7)			
New Hampshire	22 (3.0)	231 (2.8)	27 (2.8)	230 (2.0)	51 (3.6)	228 (1.3)			
New Jersey	24 (3.6)	229 (4.2)	22 (3.4)	230 (2.2)	54 (4.2)	225 (2.0)			
New Mexico	26 (3.0)	215 (2.3)	29 (3.0)	211 (2.2)	44 (3.1)	211 (1.7)			
New York	23 (3.1)	215 (3.3)	27 (3.2)	219 (2.4)	51 (3.1)	217 (1.8)			
North Carolina	27 (2.7)	213 (2.1)	27 (2.7)	212 (2.1)	47 (2.8)	212 (1.5)			
North Dakota	16 (3.2)	228 (2.5)!	20 (2.7)	227 (1.8)	64 (3.6)	228 (0.9)			
Ohio	, ,	, ,	22 (2.6)	219 (2.8)	58 (3.5)	216 (1.6)			
Oklahoma	20 (2.9)	219 (2.5)	· ·	220 (2.2)	57 (3.3)	219 (1.3)			
	14 (2.2)	221 (2.8)	· ·		58 (3.2)	223 (1.9)			
Pennsylvania	15 (2.3)	224 (3.2)	27 (2.9)	223 (2.3)		1 =1			
Rhode Island	12 (1.8)	212 (3.7)	21 (2.3)	220 (3.4)	67 (3.0)	212 (1.7)			
South Carolina Tennessee	21 (2.9)	209 (2.2)	29 (2.5) 25 (2.7)	211 (1.7) 211 (2.4)	50 (3.1) 56 (3.3)	213 (1.6) 211 (1.5)			
	19 (2.4)	205 (3.5)	• •		• •				
Texas	28 (3.4)	219 (1.8)	28 (2.5)	219 (2.9)	44 (3.2)	215 (2.2)			
Utah	20 (2.4)	229 (2.4)	20 (2.1)	223 (2.0)	60 (2.8)	222 (1.1)			
Virginia	19 (2.2)	220 (2.9)	24 (2.0)	224 (2.9)	57 (2.7)	217`(1.8)			
West Virginia	18 (2.9)	214 (2.6)	25 (3.2)	216 (2.4)	57 (3.7)	212 (1.5)			
Wisconsin	21 (2.7)	232 (2.1)	27 (3.5)	229 (1.9)	51 (3.7)	226 (1.7)			
Wyoming TERRITORY	22 (2.4)	224 (2.1)	28 (3.1)	225 (1.5)	51 (3.1)	224 (1.1)			
Guam	37 (1.0)	192 (1.5)	18 (0.9)	192 (2.4)	45 (1.2)	191 (1.5)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



## Teachers' Reports on How Often They Use Projects, Portfolios or Presentations to Assess Student Progress in Mathematics (continued)

	Grade 8 - 1992							
PUBLIC SCHOOLS	At Least Monthly		Once or Tw	rice a Year	Never or H	ardly Ever		
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency		
NATION	21 (2.2)	267 (2.5)	32 (2.6)	267 (1.6)	47 (2.8)	268 (1.8)		
Northeast	26 (5.1)	264 (5.0)!	40 (8.2)	271 (3.6)!	35 (6.4)	266 (6.9)!		
Southeast	19 (5.1)	269 (3.7)!	34 (5.8)	256 (2.4)	46 (6.2)	, ,		
Central	18 (4.9)	278 (6.8)!	24 (4.5)	276 (3.0)!	, ,	263 (2.0)		
West	22 (2.8)	262 (4.1)	30 (2.5)		58 (6.0)	273 (3.7)		
STATES	22 (2.0)	202 (4.1)	30 (2.3)	269 (1.5)	48 (3.8)	269 (3.4)		
Alabama	06 (2.7)	050 (0.0)	00 (4.4)	0=0 (+0)				
Arizona	26 (3.7)	252 (2.9)	32 (4.1)	253 (4.3)	42 (3.7)	250 (2.5)		
Arkansas	18 (2.7)	266 (2.7)	30 (2.8)	263 (2.5)	52 (3.2)	264 (2.0)		
	10 (2.1)	259 (2.7)!	27 (2.9)	257 (2.1)	63 (3.6)	254 (1.7)		
California	26 (2.5)	257 (3.3)	29 (3.5)	264 (3.2)	45 (3.7)	262 (2.3)		
Colorado	27 (3.4)	269 (2.6)	30 (2.9)	274 (2.3)	43 (3.6)	271 (2.0)		
Connecticut	19 (1.8)	274 (2.3)	41 (3.6)	275 (3.0)	40 (3.6)	271 (2.1)		
Delaware	04 (0.7)	• •	` ,			, ,		
Dist. Columbia	24 (0.7)	261 (2.0)	32 (1.0)	263 (1.8)	44 (1.0)	263 (1.2)		
	49 (1.4)	237 (1.3)	29 (1.3)	237 (2.2)	22 (1.0)	228 (2.1)		
Florida	18 (2.1)	260 (2.7)	35 (3.1)	261 (2.3)	48 (3.5)	258 (2.2)		
Georgia	18 (2.7)	258 (3.4)	32 (3.4)	261 (2.0)	50 (3.9)	256 (2.3)		
Hawaii	21 (0.7)	261 (1.6)	29 (1.0)	263 (1.6)	49 (1.0)	252 (1.2)		
Idaho	16 (1.8)	274 (1.8)	28 (3.1)	277 (1.8)	56 (3.1)	274 (1.3)		
Indiana	46 (0.0)	, ,	, ,	, ,	` •	• •		
	16 (2.6)	272 (2.3)	33 (3.6)	269 (2.4)	51 (4.1)	270 (1.7)		
lowa	17 (3.9)	285 (2.8)!	27 (3.6)	284 (1.5)	56 (4.9)	282 (1.4)		
Kentucky	29 (3.9)	264 (2.1)	36 (3.6)	265 (2.2)	35 (4.0)	259 (1.8)		
Louisiana	20 (3.5)	250 (4.5)	25 (2.9)	252 (3.0)	55 (4.1)	249 (1.8)		
Maine	18 (2.9)	281 (2.3)	42 (4.3)	280 (2.1)	40 (4.0)	275 (1.5)		
Maryland	26 (3.7)	265 (3.9)	35 (3.4)	265 (2.6)	39 (3.9)	266 (2.5)		
Massachusetts	17 (2.5)	977 (9.0)	` ,		•			
Michigan		277 (3.2)	29 (3.5)	272 (2.7)	55 (4.3)	271 (1.8)		
	24 (3.2)	257 (4.3)	26 (3.1)	260 (3.5)	50 (3.3)	274 (2.0)		
Minnesota	17 (2.3)	278 (2.2)	31 (3.8)	282 (2.0)	52 (4.2)	282 (1.8)		
Mississippi	16 (2.8)	247 (4.8)	35 (4.2)	246 (2.7)	49 (4.0)	244 (1.9)		
Missouri	13 (2.4)	269 (2.6)	32 (3.7)	274 (1.6)	55 (4.1)	270 (1.3)		
Nebraska	13 (2.8)	271 (2.7)!	34 (3.7)	280 (1.8)	<b>53</b> (3.3)	277 (1.7)		
New Hampshire	36 (3.6)	276 (1.7)	36 (3.4)	280 (4.8)	, ,	• •		
New Jersey		, ,		280 (1.8)	27 (3.3)	277 (1.6)		
New Mexico	15 (2.7)	274 (4.3)	33 (3.5)	272 (2.9)	52 (3.3)	270 (2.8)		
New York	20 (3.1)	258 (2.1)	33 (3.4)	257 (1.8)	47 (3.6)	262 (1.3)		
	13 (2.5)	259 (7.6)	33 (3.9)	265 (2.7)	54 (4.4)	267 (3.1)		
North Carolina	16 (2.5)	260 (3.8)	39 (2.9)	257 (1.8)	45 (3.6)	257 (2.0)		
North Dakota	17 (2.4)	287 (2.3)	23 (3.6)	285 (1.9)	60 (3.9)	281 (1.6)		
Ohio	14 (2.9)	267 (4.3)	31 (4.4)	265 (3.0)	55 (4.0)	070 (0.0)		
Oklahoma	15 (2.9)	272 (2.7)!	` '	, ,	55 (4.9) 50 (3.4)	272 (2.3)		
Pennsylvania		, ,	26 (3.5)	268 (2.6)	59 (3.4)	266 (1.6)		
Rhode Island	14 (2.6)	267 (4.0)	25 (3.0)	266 (2.8)	61 (3.8)	273 (1.8)		
South Carolina	19 (0.7)	267 (1.9)	31 (1.1)	264 (1.2)	51 (1.1)	265 (1.2)		
	23 (3.1)	261 (2.6)	34 (3.4)	260 (2.6)	43 (3.8)	261 (1.8)		
Tennessee	21 (3.1)	261 (2.9)	32 (3.5)	260 (1.6)	47 (4.1)	255 (1.9)		
Texas	26 (3.3)	264 (3.3)	32 (2.9)	268 (2.8)	43 (3.4)	262 (1.8)		
Utah	12 (1.9)	276 (3.0)	31 (2.8)	276 (1.6)		` '		
Virginia	21 (2.7)	271 (3.1)			57 (3.2)	272 (1.1)		
West Virginia	12 (2.0)		34 (3.4)	267 (1.6)	45 (3.6)	267 (1.8)		
Wisconsin		257 (2.7)	28 (3.4)	258 (2.5)	61 (3.6)	259 (1.3)		
Wyoming	22 (5.1)	278 (4.4)!	29 (3.7)	278 (1.8)	49 (5.1)	278 (2.6)		
ERRITORIES	16 (1.9)	275 (1.5)	36 (2.6)	275 (1.5)	48 (2.8)	274 (1.3)		
	00.44.45	A				•		
Guam	26 (1.1)	241 (2.1)	42 (0.9)	241 (1.8)	32 (0.8)	223 (2.2)		
Virgin Islands	25 (1.2)	218 (1.8)	21 (1.1)	218 (2.1)	54 (1.1)	223 (1.5)		



#### TABLE A.68 | Students' Reports on How Often They Take Mathematics Tests

_	Grade 4 - 1992								
	Almost Every Day		At Least On	ce a Week	Less than	Weekly			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	9 (0.8)	197 (2.3)	30 (1.4)	212 (1.1)	61 (1.7)	223 (1.1)			
Northeast	7 (1.1)	198 (6.4)!	25 (1.7)	213 (3.6)	68 (1.8)	229 (2.4)			
Southeast	12 (2.1)	185 (2.7)	38 (2.1)	206 (1.6)	50 (3.3)	217 (2.6)			
Central	6 (1.5)	205 (4.4)!	23 (3.4)	214 (2.4)	71 (4.0)	226 (2.5)			
West	10 (1.1)	205 (4.4)	31 (3.0)	215 (2.1)	58 (3.6)	220 (2.1)			
TATES	10 (1.1)	200 (4.4)	31 (3.0)	213 (2.1)	50 (5.0)	220 (2.1)			
Alabama	12 (1.2)	190 (2.4)	45 (1.5)	206 (1.7)	43 (2.0)	214 (2.1)			
Arizona	11 (0.9)	200 (2.4)	31 (1.3)	212 (1.4)	58 (1.6)	218 (1.4)			
Arkansas	10 (0.8)	191 (2.1)	36 (1.5)	206 (1.3)	54 (1.6)	214 (1.3)			
California	, ,	, , ,		204 (2.0)	57 (1.7)				
Colorado	12 (0.8)	188 (2.9)	31 (1.3)	Y /	, , ,	213 (1.9)			
	12 (1.0)	208 (2.1)	29 (1.0)	219 (1.7)	59 (1.4)	223 (1.1)			
Connecticut	7 (0.7)	208 (3.8)	24 (1.4)	221 (2.2)	69 (1.8)	229 (1.2)			
Delaware	10 (0.9)	197 (2.2)	30 (1.1)	210 (1.7)	60 (1.1)	223 (1.2)			
Dist. Columbia	17 (0.7)	178 ( <b>1</b> .9)	33 (0.9)	191 (1.3)	49 (1.0)	197 (0.9)			
Florida	9 (0.8)	189 (2.8)	34 (1.7)	208 (1.6)	57 (2.0)	219 (1.6)			
Georgia	8 (0.5)	190 (3.2)	33 (1.7)	208 (1.8)	59 (1.9)	221 (1.5)			
Hawaii	12 (1.0)	194 (2.4)	28 (1.2)	209 (1.6)	60 (1.5)	219 (1.5)			
Idaho	8 (0.8)	208 (2.7)	25 (1.2)	217 (1.4)	67 (1.7)	223 (1.0)			
	• •		, ,	` '	, ,				
Indiana	8 (0.8)	203 (2.3)	24 (1.1)	212 (1.6)	68 (1.3)	224 (1.1)			
lowa	7 (0.6)	213 (2.7)	19 (1.2)	223 (2.0)	74 (1.4)	232 (1.1)			
Kentucky	7 (0.8)	196 (2.7)	28 (1.4)	209 (1.4)	65 (1.6)	218 (1.1)			
Louisiana	19 (1.4)	189 (2.5)	58 (1.7)	205 (1.3)	23 (1.9)	210 (2.3)			
Maine	6 (0.9)	226 (3.8)	20 (1.4)	227 (1.7)	74 (1.7)	233 (1.2)			
Maryland	7 (0.6)	191 (3.2)	29 (1.7)	210 (2.1)	65 (1.9)	222 (1.4)			
Massachusetts	8 (1.0)	213 (4.4)	27 (1.6)	222 (1.8)	65 (2.0)	229 (1.4)			
Michigan	10 (0.9)	200 (2.9)	24 (1.5)	212 (2.3)	66 (1.7)	224 (1.8)			
Minnesota			` '		74 (1.5)	231 (1.0)			
Mississippi	6 (0.5)	209 (2.9)	20 (1.4)	220 (1.8)	35 (1.7)				
, ,	14 (1.0)	184 (2.1)	50 (1.6)	202 (1.3)		204 (1.6)			
Missouri	7 (0.8)	202 (2.6)	23 (1.5)	215 (2.2)	70 (1.7)	225 (1.3)			
Nebraska	5 (1.0)	206 (3.9)	19 (1.4)	215 (2.0)	75 (1.7)	228 (1.3)			
New Hampshire	4 (0.7)	214 (2.6)	23 (1.2)	225 (1.6)	73 (1.5)	231 (1.3)			
New Jersey	7 (0.6)	201 (3.2)	30 (1.7)	219 (1.9)	62 (1.9)	233 (1.5)			
New Mexico	14 (1.4)	202 (2.8)	28 (1.5)	210 (1.7)	58 (1.7)	216 (1.8)			
New York	8 (0.7)	198 (3.2)	32 (2.0)	214 (1.6)	60 (2.3)	222 (1.6)			
North Carolina	10 (0.6)	190 (2.2)	35 (1.4)	209 (1.8)	54 (1.5)	217 (1.4)			
North Dakota	4 (0.7)	211 (3.8)	17 (1.6)	219 (1.7)	79 (1.9)	230 (0.8)			
Ohio	, ,		` '			, ,			
	9 (0.8)	201 (3.0)	30 (1.6)	213 (1.8)	61 (1.9)	222 (1.3)			
Oklahoma	9 (0.7)	204 (2.2)	28 (1.2)	218 (1.5)	63 (1.4)	222 (1.1)			
Pennsylvania	6 (0.6)	197 (3.2)	32 (1.5)	217 (1.6)	62 (1.8)	229 (1.5)			
Rhode Island	7 (0.8)	197 (3.9)	27 (1.6)	207 (2.1)	65 (2.0)	219 (1.5)			
South Carolina	12 (0.9)	196 (1.5)	43 (1.4)	209 (1.4)	45 (1.8)	218 (1.4)			
Tennessee	10 (0.7)	195 (2.8)	38 (1.6)	208 (1.7)	52 (1.8)	214 (1.4)			
Гехаѕ	11 (0.9)	205 (2.2)	37 (2.0)	215 (1.7)	52 (2.2)	221 (1.5)			
Jtah	7 (0.7)	210 (2.5)	23 (1.5)	222 (1.6)	69 (1.7)	225 (1.1)			
Virginia	, , ,		30 (1.5)	213 (1.8)	61 (1.7)	227 (1.4)			
West Virginia	9 (0.8)	198 (2.6)							
Wisconsin	7 (0.7)	198 (2.5)	26 (1.3)	207 (1.6)	66 (1.4)	218 (1.1)			
Wyoming	6 (0.5)	210 (3.1)	19 (1.3)	221 (2.0)	75 (1.4)	231 (1.0)			
ERRITORY	12 (1.2)	215 (2.3)	21 (1.2)	221 (1.4)	67 (1.9)	227 (1.0)			
Guam	18 (1.0)	180 (2.0)	32 (1.0)	193 (1.6)	50 (1.2)	194 (1.2)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



TABLE A.68 | Students' Reports on How Often They Take Mathematics Tests (continued)

	Grade 8 - 1992								
<b> </b>	Almost E	ery Day	At Least Or	nce a Week	Less than	Weekly			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	7 (0.4)	246 (2.3)	55 (1.4)	264 (1.1)	38 (1.4)	274 (1.4)			
Northeast	5 (1.1)	252 (7.9)	55 (3.9)	265 (3.6)	40 (4.5)	274 (3.2)			
Southeast	9 (0.8)	238 (3.4)	63 (2.6)	258 (1.8)	27 (2.7)				
Central	6 (0.5)					264 (2.8)			
West		252 (5.4)	44 (2.5)	268 (2.4)	51 (2.5)	279 (2.3)			
STATES	6 (0.7)	248 (4.3)	59 (2.1)	266 (2.2)	35 (2.1)	272 (3.3)			
Alabama	40 (0.0)	225 (2.2)		4					
	10 (0.8) >>	235 (3.0)	74 (1.4) <<	252 (1.6)	16 (1.3)	260 (2.9)			
Arizona	5 (0.5) >	248 (4.4)	57 (2.4)≪	264 (1.4)	39 (2.6)>>	268 (1.8)			
Arkansas	9 (0.9) >>	237 (3.1)	65 (1.7)≪	256 (1.4)	26 (1.6)	260 (1.8)			
California	5 (0.6)>	240 (4.8)	49 (1.9)≪	255 (1.8)	46 (1.8)>>	268 (2.1)			
Colorado	5 (0.5)>	256 (4.7)	48 (2.1)≪	270 (1.5)	47 (2.2)>>	275 (1.5)>			
Connecticut	6 (0.5) <b>»</b>	255 (3.5)	49 (2.2) «	269 (2.0)	45 (2.4)>>	280 (1.4)			
Delaware	8 (0.8)>>	246 (3.4)	56 (1.5)«	262 (1.1)	36 (1.2)>>	266 (1.8)			
Dist. Columbia	17 (1.1)»	225 (2.1)	54 (1.1)«						
Florida	9 (0.8)*	• • •	• • • • • • • • • • • • • • • • • • • •	236 (1.1)	28 (1.2) >>	237 (2.6)			
Georgia		244 (3.9)	65 (1.6) <	259 (1.6)	26 (1.5) >	265 (2.0)			
<b>-</b>	9 (0.9)>	244 (2.9)	62 (1.3) <b>«</b>	258 (1.2)	29 (1.7)>	265 (1.9)			
Hawaii	8 (0.6)	239 (3.5)	52 (1.1) <b>≪</b>	257 (1.2)>>	40 (1.0)>>	261 (1.2)			
Idaho	4 (0.4) >>	257 (3.5)	51 (1.7) <b>«</b>	273 (0.9)	45 (1.7) <b>»</b>	277 (1.1)			
Indiana	5 (0.6)>	250 (4.9)	51 (2.3) <<	266 (1.4)	44 (2.3)>	276 (1.5)			
lowa	3 (0.5)	265 (4.8)	44 (2.4)	282 (1.5)>	53 (2.6)	284 (1.1)>			
Kentucky	4 (0.4)>	242 (4.1)	50 (1.5) «	259 (1.4)	46 (1.6)>>	267 (1.4)			
Louisiana	13 (1.5)>>	232 (2.6)	79 (1.4) <	251 (1.7)	• •				
Maine <sup>1</sup>	4 (0.5)	269 (4.1)			8 (1.0)	259 (3.6)			
Maryland	7 (0.7)>>	234 (3.6)	47 (1.8) 55 (1.4)≪	276 (1.5) 262 (1.4)	49 (1.9) 38 (1.5) <b>»</b>	280 (1.0) 274 (1.6)			
	` ,	• •	` '	, ,	` '	274 (1.0)			
Massachusetts¹	5 (0.7)	266 (4.2)	63 (1.7)	271 (1.2)	32 (1.8)	276 (1.5)			
Michigan	5 (0.7)	248 (4.3)	55 (1.9)	263 (1.4)	41 (2.1)	274 (1.9)			
Minnesota	3 (0.4) >	261 (5.3)	47 (1.9)<	280 (1.1)>	50 (2.0)	285 (1.4)>>			
Mississippi 1	11 (1.0)	231 (2.3)	76 (1.5)	247 (1.3)	13 (1.5)	248 (2.6)			
Missouri <sup>1</sup>	5 (0.5)	252 (3.8)	44 (2.1)	267 (1.5)	51 (2.1)	276 (1.4)			
Nebraska	4 (0.4)>	249 (4.5)	43 (2.1) «	275 (1.6)	54 (2.1)»	281 (1.3)			
New Hampshire	3 (0.4)>	264 (4.7)	57 (1.8) <	276 (1.2)	` '	•			
New Jersey	6 (0.8)>	, ,		, ,	39 (2.0) >	281 (1.4)>			
New Mexico	, , , , , , , , , , , , , , , , , , ,	247 (4.4)	56 (2.0) <b>«</b>	269 (1.8)	38 (2.1)*	279 (1.7)			
New York	7 (0.7)*	248 (3.3)	59 (1.7) <b>«</b>	257 (1.2)	35 (1.8)>	264 (1.3)			
	6 (0.8) >	245 (5.2)	59 (1.6) <<	265 (2.1)	35 (1.8)>>	271 (2.6)			
North Carolina North Dakota	10 (0.9) >	242 (2.4)	62 (1.7)«	257 (1.4)>>	28 (1.8)	265 (1.6) <b>»</b>			
NOTHI DAKOLA	4 (0.5)	278 (3.4)	57 (2.2)	282 (1.2)	39 (2.3)	284 (1.8)			
Ohio	6 (0.9)>	253 (4.2)	57 (2.1) <<	266 (1.8)	37 (2.1)>	272 (1.8)			
Oklahoma	4 (0.5) >	247 (4.5)	54 (2.2) <	267 (1.6)>	42 (2.3)	• • •			
Pennsylvania	4 (0.4)>>	251 (4.2)		, ,		270 (1.4)			
Rhode Island	6 (0.6)>>		56 (1.8) <	269 (1.6)	40 (1.9)	276 (1.8)			
South Carolina¹	, ,	249 (4.1)	63 (1.4) <b>«</b>	263 (1.1)>	31 (1.4)*	273 (1.4)			
Tennessee¹	11 (0.7)	244 (1.9)	68 (1.1) 67 (4.6)	260 (1.2)	21 (1.1)	270 (2.0)			
l l	9 (0.9)	245 (2.2)	67 (1.6)	258 (1.6)	25 (1.8)	264 (1.8)			
Texas	7 (0.7)>>	243 (2.9)	63 (1.7) <b>«</b>	260 (1.5)	30 (1.7)>	275 (2.1)>			
Utah¹	4 (0.5)	262 (4.4)	. 42 (1.5)	270 (1.2)	54 (1.5)	278 (0.9)			
Virginia	7 (0.5) >>	249 (2.8) >	64 (1.4)«	267 (1.3)	29 (1.4)>	273 (2.1)			
West Virginia	7 (0.9) >	248 (3.9)	52 (2.0) <<	257 (1.2)	41 (2.1)>	262 (1.3)			
Wisconsin	4 (0.5) >	256 (4.3)	45 (2.1)	277 (1.8)	51 (2.2)	280 (1.6)			
Wyoming	4 (0.5) >>	263 (3.2)	50 (1.6) <	277 (1.0)					
TERRITORIES	÷ (0.0)··	200 (0.2)	30 (1.0)	213 (1.1)	46 (1.7)	277 (1.0)>			
Guam	9 (0.8) >>	216 (3.3)	55 (1.1) <b>«</b>	228 /4 6/33	26 /4 4135	005 /4 0\			
Virgin Islands	17 (0.9)*			238 (1.6)>>	36 (1.1)>>	235 (1.9)			
	17 (0.9)**	211 (1.8) >.	70 (1.3) <b>«</b>	222 (1.4)	13 (0.8)	234 (3.2)			

¹Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. "The value for 1992 was significantly lower than the value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.



TABLE A.69

### Teachers' Reports on How Often They Ask Students to Write a Few Sentences About How to Solve a Mathematics Problem

	Grade 4 - 1992								
	At Least Weekly		Less than O	nce a Week	Never or H	ardly Ever			
PUBLIC SCHOOLS	Percentage of students	Average Proficiency	Percentage of students	Average Proficiency	Percentage of students	Average Proficiency			
NATION	19 (2.1)	218 (2.6)	37 (2.2)	217 (2.0)	43 (2.4)	216 (1.5)			
Northeast	21 (5.6)	226 (5.5)!	41 (6.2)	220 (4.1)	38 (7.0)	218 (3.5)!			
Southeast	19 (3.0)	, ,	46 (5.1)	209 (3.7)	35 (3.7)	206 (2.1)			
		206 (4.2)							
Central	13 (3.4)	224 (4.6)!	25 (3.5)	223 (3.3)	62 (5.4)	224 (2.4)			
West	25 (5.3)	218 (4.8)!	38 (2.8)	223 (3.2)	37 (4.0)	212 (2.3)			
STATES									
Alabama	29 (3.1)	205 (3.3)	41 (4.0)	211 (2.3)	31 (3.4)	205 (2.4)			
Arizona	22 (2.6)	214 (2.6)	35 (2.5)	217 (1.8)	44 (3.4)	212 (1.6)			
Arkansas	11 (2.2)	210 (2.3)	32 (3.2)	207 (1.6)	56 (3.7)	210 (1.6)			
California			, ,	, , ,					
	28 (3.1)	212 (3.2)	38 (3.1)	205 (2.2)	33 (3.8)	206 (2.4)			
Colorado	25 (2.6)	226 (2.3)	39 (3.1)	217 (1.5)	36 (2.7)	219 (2.0)			
Connecticut	29 (2.8)	228 (1.7)	38 (2.8)	229 (2.6)	33 (3.0)	226 (2.1)			
Delaware	17 (0.8)	220 (1.8)	30 (0.9)	219 (1.3)	53 (1.0)	216 (1.2)			
Dist. Columbia	42 (1.0)	191 (1.2)	31 (0.8)	188 (1.4)	27 (0.7)	190 (1.8)			
Florida	26 (2.5)	215 (1.9)	34 (2.5)	211 (2.1)	40 (2.9)	212 (2.0)			
Georgia									
	26 (2.8)	210 (2.8)	37 (3.3)	217 (1.9)	36 (2.4)	214 (2.1)			
Hawaii	22 (2.7)	217 (2.6)	40 (3.2)	215 (1.8)	38 (3.0)	209 (2.1)			
Idaho	16 (2.7)	226 (2.1)	34 (3.8)	220 (1.5)	50 (3.6)	219 (1.3)			
Indiana	9 (2.0)	217 (4.5)!	33 (3.4)	220 (1.5)	57 (3.7)	219 (1.4)			
lowa	17 (2.4)	231 (3.2)	39 (3.6)	230 (1.6)	44 (3.8)	228 (1.2)			
Kentucky	34 (3.0)	213 (2.0)	39 (3.2)	217 (1.6)	27 (3.4)	208 (2.1)			
Louisiana						, ,			
	29 (2.8)	201 (3.0)	44 (3.4)	203 (2.3)	28 (3.4)	203 (2.3)			
Maine	30 (3.9)	235 (2.2)	36 (3.9)	229 (1.7)	34 (3.0)	228 (2.0)			
Maryland	49 (3.3)	218 (2.4)	36 (2.9)	220 (1.9)	15 (2.2)	214 (3.0)			
Massachusetts	26 (3.2)	224 (3.1)	33 (2.8)	231 (1.7)	40 (3.6)	225 (1.9)			
Michigan	24 (3.3)	218 (3.6)	36 (3.4)	218 (3.0)	40 (3.3)	221 (2.2)			
Minnesota	21 (3.1)	228 (2.5)	36 (3.3)	226 (1.9)	43 (3.3)	228 (1.5)			
Mississippi	22 (3.2)	197 (1.9)	33 (3.1)	201 (2.3)	45 (3.6)	202 (2.1)			
Missouri									
	19 (2.6)	219 (3.2)	41 (3.7)	222 (2.2)	40 (3.7)	223 (1.5)			
Nebraska	22 (3.4)	233 (2.7)	35 (3.3)	226 (2.0)	43 (4.2)	220 (1.7)			
New Hampshire	19 (2.4)	229 (3.0)	39 (3.3)	232 (1.4)	42 (3.4)	227 (1.5)			
New Jersey	30 (3.5)	225 (2.3)	45 (4.0)	228 (2.3)	26 (3.1)	226 (2.9)			
New Mexico	21 (2.8)	213 (2.3)	42 (3.9)	213 (2.0)	37 (3.5)	211 (2.1)			
New York	26 (2.9)	215 (2.7)	39 (2.8)	218 (2.1)	34 (3.0)	218 (2.1)			
North Carolina				, ,					
	20 (2.6)	211 (2.3)	36 (2.7)	214 (1.7)	44 (2.6)	212 (1.4)			
North Dakota	15 (3.1)	227 (2.3)!	21 (2.9)	229 (2.4)	64 (3.8)	228 (1.1)			
Ohio	18 (2.8)	222 (3.0)	36 (3.2)	219 (2.2)	46 (3.7)	214 (1.7)			
Oklahoma	14 (2.0)	221 (2.4)	35 (3.1)	219 (1.7)	51 (3.2)	220 (1.3)			
Pennsylvania	20 (2.5)	228 (2.9)	38 (2.9)	222 (2.2)	42 (3.3)	221 (2.1)			
Rhode Island	16 (2.9)	215 (3.5)	30 (2.7)	218 (2.3)	54 (3.5)	212 (2.1)			
South Carolina	, , ,	, ,		, ,		210 (1.8)			
Tennessee	21 (2.4) 17 (2.4)	214 (2.1) 206 (2.9)	36 (2.7) 37 (2.8)	212 (1.9) 212 (1.9)	43 (2.8) 46 (3.3)	209 (1.7)			
	• •	` ,	` '	• •	, ,				
Texas	31 (3.3)	217 (2.7)	42 (3.5)	219 (2.0)	28 (3.1)	216 (2.5)			
Utah	21 (2.7)	227 (1.9)	34 (2.8)	222 (1.6)	45 (3.5)	222 (1.5)			
Virginia	21 (2.6)	219 (3.3)	37 (3.0)	220 (2.2)	42 (3.0)	219 (2.1)			
West Virginia	18 (3.3)	218 (2.9)	24 (2.6)	213 (2.4)	58 (4.4)	212 (1.3)			
Visconsin	29 (3.0)	229 (2.3)	37 (3.3)	227 (2.0)	34 (3.7)	229 (1.5)			
Wyoming	23 (2.8)	228 (2.0)	38 (3.3)	225 (1.6)	39 (3.5)	222 (1.2)			
ERRITORY									

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



TABLE A.69

## Teachers' Reports on How Often They Ask Students to Write a Few Sentences About How to Solve a Mathematics Problem (continued)

	Grade 8 - 1992							
	At Least Weekly		Less than O	nce a Week	Never or H	ardly Ever		
PUBLIC SCHOOLS	Percentage of students	Average Proficiency	Percentage of students	Average Proficiency	Percentage of students	Average Proficiency		
NATION	22 (2.3)	273 (2.6)	38 (2.7)	265 (1.7)	41 (2.6)	267 (1.9)		
Northeast	30 (6.8)	272 (5.9)!	40 (5.5)	260 (3.3)	30 (6.7)	273 (6.4)!		
Southeast	20 (4.5)	269 (4.6)!	41 (5.6)	260 (3.3)	39 (3.9)	`		
Central	11 (2.9)	275(11.9)!	42 (5.6)	· · · · · · · · · · · · · · · · · · ·		260 (2.0)		
West	25 (4.2)	276 (2.7)	, ,	278 (1.8)	47 (6.2)	272 (4.4)		
STATES	25 (4.2)	210 (2.1)	31 (4.9)	263 (3.9)	44 (4.3)	266 (3.1)		
Alabama	18 (3.5)	055 (0.0)	25 /4 5	050 (0.0)	47 (4.0)	050 (0.0)		
Arizona		255 (3.8)!	35 (4.5)	252 (3.9)	47 (4.3)	250 (2.3)		
Arkansas	28 (3.6)	269 (2.3)	40 (3.8)	263 (1.8)	. 32 (3.8)	262 (3.2)		
California	12 (2.1)	254 (3.7)	20 (2.9)	258 (3.1)	68 (3.4)	255 (1.7)		
	27 (3.4)	259 (3.4)	38 (2.5)	263 (2.5)	35 (3.2)	260 (2.7)		
Colorado	27 (3.0)	272 (2.2)	35 (2.5)	274 (1.7)	37 (3.1)	268 (2.2)		
Connecticut	24 (3.2)	280 (4.1)	33 (3.2)	274 (3.0)	42 (4.0)	269 (2.1)		
Delaware	22 (0.8)	267 (2.4)	29 (0.9)	259 (2.0)	50 (0.9)	262 (4.2)		
Dist. Columbia	42 (1.0)	235 (1.4)	. 1 1		, , ,	262 (1.3)		
Florida	22 (3.0)	, , ,	37 (1.1)	237 (1.9)	21 (0.9)	230 (2.0)		
Georgia	` '	265 (3.3)	30 (2.7)	259 (2.2)	48 (3.7)	258 (2.4)		
Hawaii	22 (3.4)	258 (3.4)	40 (3.2)	258 (1.9)	38 (3.0)	260 (2.5)		
Idaho	18 (0.7)	267 (1.9)	40 (1.0)	260 (1.4)	42 (1.1)	250 (1.2)		
Idario	20 (1.6)	281 (1.5)	31 (2.8)	274 (1.8)	49 (2.8)	273 (1.0)		
Indiana	15 (2.5)	276 (3.6)	26 (3.4)	271 (3.0)	58 (3.6)	267 (4.7)		
Iowa	18 (3.1)	285 (2.3)	, ,		` '	267 (1.7)		
Kentucky			39 (4.5)	284 (1.8)	44 (4.8)	281 (1.6)		
Louisiana	24 (3.0)	267 (2.7)	45 (3.4)	263 (1.5)	32 (3.4)	258 (2.2)		
Maine	25 (3.2)	249 (3.6)	31 (3.1)	251 (3.1)	44 (3.6)	250 (2.0)		
	20 (3.7)	280 (2.9)	37 (4.3)	280 (1.7)	44 (3.8)	276 (1.8)		
Maryland	28 (3.4)	269 (3.3)	47 (3.8)	266 (2.1)	25 (3.3)	262 (3.1)		
Massachusetts	17 (2.7)	276 (3.5)	33 (3.3)	273 (2.7)	51 (4.2)	270 (1.7)		
Michigan	30 (3.4)	264 (4.0)	34 (3.2)	268 (2.5)	36 (3.3)	· · · · · · · · · · · · · · · · · · ·		
Minnesota	27 (2.7)	286 (1.8)	26 (3.0)	281 (3.0)	* * *	268 (2.7)		
Mississippi	25 (3.3)	245 (3.6)	, ,	, ,	47 (3.5)	279 (1.6)		
Missouri	16 (2.2)		41 (3.8)	243 (2.1)	35 (4.1)	249 (1.6)		
Nebraska	, ,	275 (2.7)	27 (3.4)	268 (2.3)	57 (3.8)	271 (1.5)		
1100/doka	16 (3.6)	276 (3.1)!	47 (4.0)	278 (1.7)	37 (4.3)	277 (2.1)		
New Hampshire	22 (3.3)	282 (2.1)	45 (3.7)	276 (1.4)	32 (3.8)	276 (2.0)		
New Jersey	31 (4.3)	276 (2.6)	41 (4.5)	268 (3.4)	28 (3.5)	272 (3.3)		
New Mexico	15 (2.2)	264 (2.3)	30 (2.7)	260 (1.4)	56 (3.3)	258 (1.6)		
New York	24 (3.1)	261 (3.8)	25 (2.9)	260 (4.6)	51 (3.7)	: _ : _ : _ : _ : _ : _ : _ : _ : _		
North Carolina	19 (2.5)	265 (3.1)	38 (3.1)	256 (2.0)		, ,		
North Dakota	15 (2.8)	282 (3.4)!	27 (3.1)	, ,	43 (3.3)	255 (1.8)		
	13 (2.0)	202 (3.4)!	27 (3.1)	282 (1.8)	58 (3.9)	283 (1.3)		
Ohio	19 (3.6)	273 (4.0)!	28 (3.5)	269 (3.4)	53 (4.8)	269 (2.2)		
Oklahoma	13 (2.8)	266 (4.8)!	28 (2.9)	267 (2.2)	59 (3.4)	268 (1.8)		
Pennsylvania	18 (2.6)	272 (3.2)	35 (3.0)	272 (2.0)	46 (3.3)	269 (2.6)		
Rhode Island	27 (1.0)	268 (1.7)	39 (0.8)	266 (1.2)	35 (1.0)	262 (1.6)		
South Carolina	22 (2.8)	264 (2.2)	36 (3.2)	264 (2.6)	42 (3.2)	, ,		
Tennessee	21 (3.7)	261 (3.4)	30 (3.2)			, ,		
Taura	, ,			259 (2.1)	49 (4.1)	256 (2.2)		
Texas	25 (3.4)	266 (3.1)	39 (3.4)	264 (2.1)	35 (3.3)	264 (2.0)		
Utah	25 (2.0)	278 (1.7)	27 (2.5)	273 (1.6)	48 (2.6)	272 (1.2)		
Virginia	19 (2.9)	270 (3.5)	30 (2.7)	267 (2.6)	50 (3.4)	267 (1.7)		
West Virginia	14 (2.2)	265 (3.3)	27 (2.7)	261 (2.0)	59 (2.9)	256 (1.3)		
Wisconsin	25 (4.6)	285 (3.3)!	32 (4.2)	277 (2.8)	43 (5.2)	275 (2.4)		
Wyoming	13 (1.9)	284 (2.7)	28 (2.3)	274 (1.9)	59 (2.6)	273 (2.4)		
TERRITORIES	·- (·· <del>-</del> )		(L.O)	±1 → (1.0)	GG (2.0)	213 (1.1)		
Guam	14 (0.9)	270 (3.3)	38 (1.1)	234 (1.7)	48 (4.0)	226 (4.5)		
Virgin Islands	2 (0.3)	*** (***)			48 (1.0) 60 (4.4)	226 (1.5)		
			29 (1.2)	230 (2.0)	69 (1.1)	213 (1.3)		

<sup>\*\*\*</sup>Sample size insufficient to permit reliable estimate. There were fewer than 62 students.



TABLE A.70

### Teachers' Reports on the Frequency with Which Students Make Up Mathematics Problems for Other Students to Solve

	Grade 4 - 1992								
ľ	At Least	Weekly	Less than O	nce a Week	Never or H	ardly Ever			
PUBLIC SCHOOLS	Percentage of students	Average Proficiency	Percentage of students	Average Proficiency	Percentage of students	Average Proficiency			
NATION	22 (2.3)	216 (1.9)	47 (2.4)	219 (1.7)	31 (2.5)	214 (1.9)			
Northeast	30 (5.0)	223 (4.1)	48 (6.0)	223 (4.1)	22 (3.2)	211 (5.5)			
Southeast	20 (3.6)	204 (3.0)	48 (4.1)	210 (3.3)	33 (2.9)	206 (2.1)			
Central	18 (4.4)	221 (4.1)!	41 (5.2)	227 (2.7)	41 (7.1)	1 1			
West		• •	3		1 _ 1	222 (2.9)			
STATES	25 (5.4)	215 (2.7)!	51 (5.0)	221 (3.2)	25 (4.6)	214 (4.1)!			
Alabama	30 (3.4)	209 (3.3)	43 (3.4)	209 (1.8)	27 (3.1)	203 (2.8)			
Arizona	21 (2.4)	216 (2.3)	45 (2.3)	216 (1.6)	34 (2.9)	210 (1.9)			
Arkansas	13 (2.1)	207 (3.0)	32 (3.4)	210 (1.0)	55 (3.3)				
California		, ,				209 (1.5)			
Colorado	24 (3.2)	209 (3.3)	51 (3.3)	209 (2.1)	25 (2.6)	202 (2.1)			
	24 (2.7)	225 (2.6)	44 (3.1)	219 (1.7)	31 (2.9)	218 (1.9)			
Connecticut	29 (2.9)	229 (2.6)	46 (3.0)	230 (1.7)	25 (3.0)	221 (3.0)			
Delaware	24 (0.9)	220 (1.8)	43 (1.6)	220 (0.9)	34 (1.5)	212 (1.7)			
Dist. Columbia	39 (1.0)	192 (1.2)	38 (1.1)	190 (1.5)	23 (0.8)	190 (1.5)			
Florida	27 (3.0)	212 (2.2)	38 (2.2)	215 (1.9)	34 (3.0)	209 (2.1)			
Georgia	31 (2.8)	213 (1.9)	42 (2.9)	218 (2.0)	27 (2.4)	207 (2.3)			
Hawaii	20 (2.3)	215 (2.3)	41 (2.6)	214 (2.1)	39 (3.0)	211 (2.1)			
Idaho	10 (1.9)	222 (2.1)	45 (2.8)	220 (1.4)	45 (2.8)	220 (1.4)			
•	, ,		` ,	` '	• •				
Indiana	16 (2.6)	219 (2.8)	39 (3.4)	220 (1.6)	45 (3.9)	219 (1.5)			
lowa	21 (2.7)	225 (2.0)	48 (3.2)	231 (1.3)	31 (3.0)	228 (2.0)			
Kentucky	28 (2.8)	215 (2.1)	45 (3.1)	214 (1.6)	27 (3.5)	211 (2.2)			
Louisiana	30 (3.1)	202 (2.9)	37 (3.0)	206 (2.3)	33 (3.4)	200 (2.3)			
Maine	21 (2.8)	230 (1.8)	45 (4.0)	232 (1.7)	34 (3.9)	229 (1.9)			
Maryland	37 (3.2)	217 (2.5)	48 (3.4)	218 (1.9)	15 (2.1)	219 (3.6)			
Massachusetts	, ,	, ,	` '	, ,	` '				
	23 (2.7)	227 (2.6)	43 (3.6)	227 (2.0)	34 (3.7)	225 (2.0)			
Michigan	22 (3.5)	214 (4.7)	40 (3.6)	220 (3.0)	38 (3.5)	220 (1.8)			
Minnesota	24 (3.8)	226 (2.8)	46 (3.8)	228 (1.5)	30 (2.9)	227 (1.9)			
Mississippi	28 (3.1)	198 (1.9)	35 (3.1)	203 (2.1)	38 (3.3)	199 (2.2)			
Missouri	23 (2.6)	221 (3.1)	41 (3.2)	224 (1.9)	37 (3.4)	222 (1.9)			
Nebraska	20 (3.1)	228 (3.2)	49 (4.0)	225 (2.2)	31 (3.8)	223 (1.7)			
New Hampshire	23 (2.8)	229 (2.7)	51 (3.6)	233 (1.4)	26 (3.0)	222 (1.6)			
New Jersey	30 (3.5)	232 (2.5)	39 (3.5)	225 (2.2)	30 (4.1)	224 (2.8)			
New Mexico	, ,	, ,	, ,	, ,	,	, ,			
New York	22 (3.2)	212 (2.5)	45 (3.3)	214 (1.8)	34 (3.4)	210 (2.1)			
	27 (2.3)	219 (2.2)	46 (3.1)	218 (2.1)	27 (2.6)	214 (2.4)			
North Carolina	27 (2.8)	209 (2.2)	39 (2.9)	216 (1.6)	33 (2.9)	211 (1.6)			
North Dakota	9 (2.7)	224 (2.7)!	36 (4.3)	227 (1.5)	<b>5</b> 5 (4.7)	229 (1.3)			
Ohio	23 (2.8)	218 (2.5)	46 (2.9)	219 (2.2)	31 (2.5)	214 (2.3)			
Oklahoma	17 (2.5)	222 (2.4)	37 (2.8)	218 (1.4)	46 (3.5)	220 (1.4)			
Pennsylvania	25 (3.0)	227 (3.2)	38 (3.2)	222 (1.9)	37 (3.5)	221 (2.6)			
Rhode Island	17 (2.4)	217 (4.5)	40 (3.4)	218 (2.0)	44 (4.0)	209 (2.7)			
South Carolina	28 (3.1)	= · · · /	, ,		32 (2.7)	,			
Tennessee	26 (3.1) 19 (2.6)	212 (2.2) 207 (2.9)	40 (2.9) 37 (3.2)	214 (1.6) 210 (1.6)	32 (2.7) 44 (3.5)	207 (2.4) 211 (1.6)			
			• •						
Texas	36 (3.2)	220 (2.2)	40 (3.2)	218 (2.1)	24 (3.5)	212 (2.6)			
Utah	21 (2.7)	228 (1.9)	42 (2.6)	224 (1.6)	37 (3.1)	220 (1.5)			
Virginia	27 (2.8)	220 (3.1)	44 (3.1)	221 (1.8)	29 (2.7)	216 (2.2)			
West Virginia	20 (3.0)	217 (2.3)	34 (3.1)	216 (2.0)	46 (3.5)	210 (1.4)			
Wisconsin	24 (2.8)	228 (2.3)	49 (3.1)	228 (1.4)	27 (3.2)	228 (2.0)			
Wyoming FERRITORY	18 (2.3)	226 (1.9)	46 (3.2)	225 (1.4)	36 (3.4)	223 (1.4)			
Guam	35 (1.0)	193 (1.3)	32 (1.1)	193 (1.7)	33 (1.2)	188 (2.0)			
		100 (1.0)	<u> </u>			100 (2.0)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



## TABLE A.70 Teachers' Reports on the Frequency with Which Students Make Up Mathematics Problems for Other Students to Solve (continued)

	Grade 8 - 1992								
PUBLIC SCHOOLS	At Least	Weekly	Less than Once a Week		Never or H	ardiy Ever			
	Percentage of students	Average Proficiency	Percentage of students	Average Proficiency	Percentage of students	Average Proficiency			
NATION	7 (1.3)	269 (4.0)	33 (2.5)	269 (2.3)	59 (2.6)	267 (1.4)			
Northeast	4 (2.1)	253(10.0)!	41 (6.3)	, , ,		, ,			
Southeast	9 (2.8)			273 (5.7)	55 (6.4)	265 (4.1)			
Central		265 (7.2)!	34 (2.8)	259 (3.2)	57 (3.3)	263 (1.8)			
	8 (3.6)	274 (5.5)!	32 (6.1)	278 (3.5)!	60 (6.3)	274 (3.8)			
West	7 (1.7)	274 (9.0)!	30 (4.5)	266 (4.2)	63 (4.5)	267 (2.3)			
STATES					• •	• •			
Alabama	15 (2.8)	244 (7.3)	22 (3.6)	250 (3.0)	63 (4.0)	254 (1.9)			
Arizona	8 (1.4)	261 (4.6)	24 (2.9)	263 (2.0)	68 (3.1)	265 (1.7)			
Arkansas	9 (1.8)	251 (6.1)!	21 (3.4)	254 (2.6)		, ,			
California	8 (2.0)				71 (3.7)	257 (1.5)			
Colorado		248 (3.7)!	29 (3.2)	259 (3.5)	63 (3.7)	264 (1.9)			
Connecticut	10 (2.1)	265 (4.3)!	34 (3.2)	272 (2.1)	56 (3.4)	272 (1.5)			
Connecticut	14 (2.0)	266 (2.9)	34 (3.4)	276 (3.4)	52 (3.7)	274 (2.2)			
Delaware	13 (0.7)	262 (2.9)	32 (0.8)	262 (1.4)	55 (0.8)	262 (1.3)			
Dist. Columbia	23 (0.9)	227 (2.2)	36 (1.1)	242 (1.7)	41 (1.1)	234 (1.7)			
Florida	10 (2.0)	265 (5.5)	26 (3.0)	257 (2.4)	64 (3.2)	, ,			
Georgia	14 (2.3)	259 (3.0)			, , ,	260 (1.8)			
Hawaii		, ,	36 (3.2)	257 (2.1)	49 (3.3)	259 (1.9)			
Idaho	10 (0.4)	255 (2.9)	25 (0.8)	258 (1.7)	65 (0.9)	258 (1.1)			
	7 (1.7)	269 (3.0)!	21 (2.2)	270 (1.9)	72 (2.9)	277 (0.9)			
Indiana	7 (1.6)	265 (3.3)!	22 (2.9)	272 (3.0)	71 (3.2)	269 (1.5)			
Iowa	5 (1.9)	287 (4.0)!	27 (4.1)	283 (2.1)	68 (4.2)	282 (1.2)			
Kentucky	10 (2.8)	252 (3.3)!	28 (3.7)	265 (2.1)	· ·	• •			
Louisiana	14 (3.0)	246 (4.7)!	` ,		62 (4.2)	263 (1.6)			
Maine	10 (3.0)	• •	25 (3.4)	250 (2.8)	61 (3.7)	250 (2.2)			
Maryland	12 (2.1)	275 (5.2)! 247 (3.6)	35 (3.7)	278 (1.7)	55 (4.3)	279 (1.5)			
- 1	, ,	247 (3.6)	33 (3.2)	267 (3.3)	<b>55</b> (3.4)	269 (1.8)			
Massachusetts	6 (1.5)	269 (7.5)!	29 (3.0)	274 (1.9)	65 (3.3)	271 (1.6)			
Michigan	15 (2.8)	261 (5.2)	31 (3.6)	265 (3.6)	53 (3.9)	270 (2.5)			
Minnesota	8 (1.8)	287 (4.3)!	23 (2.7)	281 (2.3)	70 (3.3)	281 (1.4)			
Mississippi	17 (3.2)	242 (5.4)	36 (3.6)	247 (2.4)					
Missouri	6 (1.6)	268 (3.4)!			47 (3.9)	245 (1.4)			
Nebraska	6 (1.9)	278 (3.6)!	24 (2.9) 35 (4.1)	267 (2.6) 275 (2.1)	70 (3.1)	273 (1.2)			
New Hampshire	• •	` '			58 (3.9)	279 (1.6)			
	13 (2.5)	272 (2.5)	41 (2.7)	279 (1.6)	46 (3.2)	278 (1.5)			
New Jersey	15 (2.9)	261 (6.1)	41 (3.9)	274 (2.7)	44 (3.9)	272 (2.7)			
New Mexico	14 (2.5)	254 (2.0)	24 (2.7)	256 (2.0)	61 (3.2)	262 (1.3)			
New York	12 (2.6)	257 (5.1)!	28 (4.0)	268 (3.6)	59 (3.8)	266 (3.1)			
North Carolina	10 (1.9)	254 (4.4)	36 (3.0)	259 (2.0)	54 (3.1)	11			
North Dakota	7 (2.5)	279 (5.4)!	26 (3.2)	284 (1.7)	67 (3.9)	257 (1.5) 283 (1.3)			
Ohio	6 (1.2)	, ,		` '	` '	• •			
Oklahoma	• •	256 (3.2)	22 (3.2)	270 (3.7)	72 (3.3)	270 (1.7)			
	4 (1.3)	258 (5.9)!	21 (2.8)	269 (2.6)	74 (3.0)	268 (1.4)			
Pennsylvania	7 (1.6)	251 (5.6)!	25 (3.1)	265 (3.1)	68 (3.5)	275 (1.6)			
Rhode Island	17 (0.6)	269 (2.0)	25 (0.8)	262 (1.8)	58 (0.9)	265 (1.0)			
South Carolina	11 (2.1)	256 (3.7)	38 (2.8)	259 (2.4)	51 (3.2)	262 (1.8)			
Tennessee	12 (2.5)	256 (3.4)!	28 (2.9)	257 (2.3)	60 (3.3)	258 (2.1)			
Texas	11 (1.8)	253 (3.8)	32 (2.5)	267 (2.2)	57 (3.2)	• •			
Utah	8 (1.9)	280 (3.0)!				266 (2.1)			
Virginia			23 (2.2)	271 (1.6)	69 (2.4)	274 (1.0)			
West Virginia	10 (1.7)	263 (4.3)	31 (3.0)	264 (2.3)	58 (3.3)	270 (1.6)			
	8 (2.5)	253 (2.6)!	22 (3.0)	260 (2.1)	69 (3.5)	259 (1.4)			
Wisconsin	11 (3.1)	276 (5.1)!	43 (5.7)	280 (2.8)	46 (4.9)	277 (1.3)			
Wyoming	4 (1.2)	278 (4.8)!	<b>30</b> (3.0)	276 (1.7)	67 (3.1)	274 (1.0)			
TERRITORIES					` '	,,			
Guam Virgin Islands	14 (1.1)	258 (2.6)	26 (0.8)	222 (1.8)	59 (1.2)	233 (1.6)			
virgin islands	27 (0.9)	216 (1.8)	30 (1.2)	225 (1.9)	43 (1.3)	221 (1.7)			



### Students' Reports on How Often They Write a Few Sentences About How to Solve a Mathematics Problem

	Grade 8 - 1992								
	At Least	Weekly	Less than O	nce a Week	Never or H	ardly Ever			
PUBLIC SCHOOLS	Percentage of students	Average Proficiency	Percentage of students	Average Proficiency	Percentage of students	Average Proficiency			
NATION	21 (0.8)	257 (1.5)	18 (0.7)	269 (1.6)	61 (1.2)	269 (1.2)			
Northeast	21 (2.5)	254 (3.1)	17 (1.1)	270 (2.5)	62 (2.5)	273 (3.5)			
Southeast	19 (1.2)	247 (3.2)	18 (1.8)	261 (2.0)	63 (2.2)	261 (1.5)			
Central	21 (1.1)	267 (3.6)	17 (1.4)	275 (3.8)	62 (2.0)	275 (2.0)			
West	, , ,	258 (2.4)	19 (1.1)	269 (3.2)	59 (2.6)	270 (2.9)			
STATES	23 (1.9)	230 (2.4)	19 (1.1)	208 (5.2)	39 (2.0)	210 (2.5)			
Alabama	00 (4.4)	040 (0.5)	40 (0.0)	255 (2.4)	64 (1.7)	254 (1.5)			
Arizona	22 (1.4)	242 (3.5)	13 (0.8)		, ,	• •			
	20 (1.1)	257 (1.9)	19 (1.0)	268 (1.8)	61 (1.4)	266 (1.4)			
Arkansas	17 (0.9)	243 (2.3)	15 (1.0)	259 (2.0)	69 (1.4)	258 (1.3)			
California	28 (1.9)	253 (2.8)	20 (1.1)	261 (2.4)	52 (2.4)	264 (1.6)			
Colorado	24 (1.6)	268 (2.0)	21 (1.1)	274 (1.5)	55 (1.8)	273 (1.2)			
Connecticut	21 (1.5)	265 (3.1)	18 (1.0)	280 (2.3)	61 (1.9)	274 (1.2)			
Dolowore	, ,		, ,		64 /4 E\	OGE /4 4)			
Delaware	20 (1.0)	253 (2.6)	17 (1.0)	265 (2.3)	64 (1.5)	265 (1.1)			
Dist. Columbia	39 (1.1)	227 (1.4)	18 (1.0)	240 (2.5)	43 (1.2)	239 (1.4)			
Florida	20 (1.1)	250 (2.8)	16 (0.7)	260 (1.9)	64 (1.4)	262 (1.6)			
Georgia	23 (1.1)	248 (1.7)	16 (0.8)	263 (2.2)	61 (1.6)	262 (1.3)			
Hawaii	31 (1.0)	252 (1.5)	18 (0.7)	262 (2.0)	51 (0.9)	258 (1.1)			
Idaho	19 (1.1)	270 (1.8)	15 (0.8)	276 (1.3)	66 (1.3)	275 (0.9)			
1 att	, ,		• •	, ,	, ,	074 (4.0)			
Indiana	16 (1.4)	263 (2.3)	15 (1.2)	268 (2.0)	68 (2.3)	271 (1.2)			
lowa	16 (1.4)	278 (1.8)	19 (1.2)	285 (1.7)	66 (2.2)	283 (1.1)			
Kentucky	29 (1.6)	257 (2.0)	24 (1.1)	264 (1.5)	48 (1.8)	263 (1.4)			
Louisiana	25 (1.5)	236 (1.9)	15 (0.7)	254 (2.2)	60 (1.6)	254 (1.8)			
Maine	22 (1.6)	276 (1.7)	22 (0.9)	279 (1.7)	57 (1.8)	279 (1.2)			
Maryland	24 (1.3)	257 (2.4)	22 (1.0)	268 (1.7)	54 (1.5)	266 (1.7)			
Massachusetts			, ,	, ,	, ,	• •			
	17 (1.1)	269 (2.1)	18 (1.0)	275 (2.1)	65 (1.5)	273 (1.2)			
Michigan	26 (1.6)	260 (2.0)	19 (0.9)	272 (2.2)	55 (1.9)	268 (1.6)			
Minnesota	25 (1.3)	281 (1.7)	20 (1.1)	285 (2.2)	55 (1.8)	281 (1.1)			
Mississippi	27 (1.4)	235 (2.1)	13 (0.8)	245 (2.1)	60 (1.6)	251 (1.4)			
Missouri	20 (1.3)	261 (2.1)	17 (0.8)	275 (1.8)	63 (1.5)	272 (1.3)			
Nebraska	17 (1.4)	271 (1.9)	18 (1.0)	279 (1.8)	65 (2.0)	278 (1.2)			
New Hampshire	18 (1.3)	275 (1.5)	20 (0.9)	279 (1.7)	62 (1.6)	278 (1.2)			
New Jersey			, ,	• •					
	28 (1.8)	264 (2.5)	20 (1.4)	278 (2.3)	51 (2.1)	273 (1.6)			
New Mexico	18 (1.1)	252 (1.6)	15 (0.8)	257 (1.9)	67 (1.3)	261 (1.2)			
New York	24 (1.2)	254 (3.4)	16 (1.0)	269 (2.7)	60 (1.5)	270 (2.0)			
North Carolina	22 (0.9)	246 (2.4)	17 (0.8)	260 (1.9)	61 (1.1)	261 (1.2)			
North Dakota	16 (1.1)	277 (2.0)	15 (0.8)	282 (2.1)	69 (1.4)	284 (1.5)			
Ohio	20 /4 2\	260 /4 4\	17 /4 4\	268 (2.2)	63 (1.8)	270 (1.8)			
	20 (1.3)	260 (4.1)	17 (1.1)	268 (2.2)		• •			
Oklahoma	15 (1.0)	258 (2.5)	13 (1.0)	268 (2.0)	72 (1.5)	269 (1.2)			
Pennsylvania	18 (1.2)	262 (3.0)	16 (0.8)	275 (2.1)	66 (1.7)	272 (1.4)			
Rhode Island	22 (1.0)	260 (1.9)	16 (0.8)	266 (2.0)	61 (0.9)	267 (1.1)			
South Carolina	23 (1.1)	252 (1.7)	15 (0.8)	265 (1.9)	62 (1.4)	262 (1.2)			
Tennessee	19 (1.2)	250 (2.4)	16 (0.7)	259 (2.2)	65 (1.6)	260 (1.3)			
Texas	28 (1.4)	257 (2.1)	18 (0.9)	262 (2.3)	54 (1.5)	268 (1.6)			
Utah	18 (1.0)	266 (2.0)	16 (0.8)	274 (1.7)	66 (1.2)	276 (0.9)			
Virginia				274 (1.7)	64 (1.6)	269 (1.3)			
	20 (1.3)	259 (2.3)	16 (0.8)						
West Virginia	13 (0.8)	252 (2.1)	15 (0.7)	262 (1.5)	72 (1.1)	259 (1.1)			
Wisconsin	24 (2.2)	275 (3.3)	19 (1.3)	279 (2.2)	57 (1.8)	278 (1.4)			
Wyoming	18 (1.3)	267 (1.4)	19 (0.9)	279 (2.0)	63 (1.6)	275 (0.9)			
TERRITORIES									
Guam	31 (1.0)	227 (1.9)	13 (0.9)	241 (3.0)	56 (1.1)	237 (1.5)			
Virgin Islands	30 (1.2)	217 (2.0)	13 (1.0)	221 (2.1)	57 (1.4)	225 (1.3)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.



TABLE A.72 | Students' Reports on the Frequency with Which They Make Up Mathematics Problems for Other Students to Solve

NATION		Grade 8 - 1992							
NATION NATION NOTHERST 7 (0.9) 240 (4.7) 16 (1.0) 277 (4.7) 77 (0.9) 280 (2.0) 76 (1.9) 287 (3.0) 77 (1.7) 277 (3.0) 287 (3.0) 287 (3.0) 287 (3.0) 287 (3.0) 287 (3.0) 77 (1.7) 277 (3.0) 287 (		At Least	Weekly	Less than O	nce a Week	Never or H	ardly Ever		
Northeast 10 (1-1) 240 (4-7) 16 (1-0) 271 (4-7) 76 (1-3) 277 (5-5) Southeast 10 (1-1) 236 (3.0) 14 (1.9) 277 (3.0) 76 (1.9) 267 (3.0) 267 (1.0) 277 (1.7) 250 (4.9) 15 (1.5) 277 (3.0) 76 (1.9) 267 (1.7) 250 (4.9) 15 (1.5) 273 (3.2) 76 (1.5) 277 (1.7) 277 (1.7) 277 (1.7) 278 (1.8) 278 (1							Average Proficiency		
Northeast 7 (0.9) 240 (4.7) 16 (1.0) 271 (4.7) 76 (1.3) 267 (Southeast 10 (1.1) 236 (3.0) 14 (1.9) 257 (3.0) 76 (1.9) 266 (2.0) 14 (1.9) 257 (3.0) 76 (1.9) 266 (2.0) 15 (1.5) 273 (3.2) 78 (1.5) 274 (3.2) 78 (1.5) 274 (3.2) 78 (1.5) 28 (3.2) 28 (3.2) 12 (0.9) 250 (3.4) 78 (1.2) 253 (3.6) 263 (3.2) 274 (3.0) 274 (1.9) 253 (3.6) 274 (3.0) 274 (1.9) 253 (3.6) 274 (3.0) 274 (1.9) 253 (3.6) 274 (3.0) 274 (1.9	NATION	8 (0.4)	242 (2.0)	14 (0.8)	267 (1.7)	77 (0.9)	269 (1.1)		
Southeast 10 (1.1) 236 (3.0) 14 (1.9) 257 (3.0) 76 (1.9) 287 (Central 7 (0.7) 250 (4.9) 15 (1.5) 273 (3.2) 76 (1.5) 275 (1.5) 281 (1.5) 275 (1.5)	Northeast	7 (n.9)	1	` '			270 (3.1)		
Central 7 (0.7) 280 (4.9) 15 (1.5) 273 (3.2) 78 (1.5) 275  STATES 8 (0.7) 241 (3.8) 14 (1.2) 265 (2.5) 77 (1.7) 277  STATES 8 (0.5) 246 (3.0) 12 (0.7) 284 (2.5) 80 (0.8) 265 (2.7) 80 (0.8) 275 (1.9) 27	Southeast	, ,	, , ,	, ,	, ,	. ,	, ,		
West 9 (0.7) 241 (3.6) 14 (4.2) 265 (2.5) 77 (1.7) 277  Alabama 10 (0.9) 231 (3.9) 13 (0.9) 250 (3.4) 78 (1.4) 254  Arizona 8 (0.5) 246 (3.0) 12 (0.7) 284 (2.5) 80 (0.8) 257  Arizona 8 (0.5) 225 (3.5) 12 (0.7) 284 (2.5) 80 (0.8) 257  Arizona 9 (0.7) 255 (3.6) 17 (0.9) 250 (2.4) 74 (1.2) 255  Colorado 19 (0.7) 255 (3.6) 17 (1.9) 260 (2.4) 74 (1.2) 255  Colorado 7 (0.6) 250 (4.3) 16 (1.2) 274 (1.9) 77 (1.4) 275  Delaware 9 (0.8) 242 (4.1) 14 (0.9) 260 (2.0) 77 (1.1) 265  Dist. Columbia 21 (1.0) 222 (2.3) 17 (0.8) 245 (2.3) 62 (1.1) 275  Elorida 10 (0.7) 239 (2.9) 11 (0.8) 245 (2.3) 62 (1.1) 265  Georgia 10 (0.8) 238 (2.7) 16 (1.1) 257 (1.9) 76 (1.9) 76 (1.4) 266  Idaho 4 (0.3) 259 (3.6) 13 (0.8) 272 (1.5) 82 (0.8) 276  Indiana 5 (0.6) 250 (3.7) 13 (0.9) 268 (2.7) 82 (1.1) 271  Iowa 5 (0.8) 271 (3.2) 17 (1.2) 268 (2.7) 82 (1.1) 271  Iowa 5 (0.8) 241 (3.0) 15 (0.9) 263 (2.2) 77 (1.2) 263  Cousiana 14 (0.9) 232 (2.7) 13 (0.9) 263 (2.2) 77 (1.2) 263  Cousiana 14 (0.9) 232 (2.7) 13 (0.8) 277 (1.7) 78 (1.2) 263  Maryland 8 (0.7) 256 (3.7) 16 (1.1) 273 (3.0) 81 (1.1) 273  Massachusetts 6 (0.5) 264 (3.0) 16 (0.9) 277 (1.7) 78 (1.2) 268  Massachusetts 5 (0.5) 255 (3.4) 13 (1.0) 273 (3.0) 81 (1.1) 273  Michigan 9 (0.7) 289 (3.2) 15 (0.9) 280 (1.9) 79 (1.5) 288  Minnesota 7 (0.7) 286 (3.7) 19 (1.0) 273 (3.0) 81 (1.1) 273  Mississippi 14 (0.9) 232 (2.7) 18 (0.9) 277 (1.7) 78 (1.2) 268  Mississippi 14 (0.9) 232 (2.7) 19 (1.0) 273 (3.0) 81 (1.1) 273  New Hampshire 5 (0.5) 265 (3.7) 19 (1.0) 273 (2.1) 72 (1.6) 82 (2.2) 80 (1.2) 275  New Hampshire 5 (0.5) 264 (3.0) 11 (1.0) 265 (2.4) 80 (1.2) 276  New Hampshire 5 (0.5) 244 (3.8) 11 (1.0) 265 (2.4) 80 (1.2) 278  New Hampshire 5 (0.5) 265 (3.7) 19 (1.0) 268 (2.4) 79 (1.1) 268  Dolind 6 (0.5) 244 (3.8) 11 (1.0) 265 (2.4) 79 (1.1) 268  Dolind 6 (0.5) 244 (3.8) 11 (1.0) 265 (2.4) 79 (1.1) 268  Dolind 6 (0.5) 244 (3.8) 11 (1.0) 265 (2.4) 79 (1.1) 268  Dolind 6 (0.5) 244 (3.8) 14 (1.0) 265 (2.4) 80 (1.2) 278  New Hampshire 6 (0.5) 244 (3.8) 11 (1.0) 265 (2.4) 80 (1.1) 276  Dolind 6 (0.	Central	, <i>,</i>	, ,	, ,		Y 1	261 (1.5)		
STATES Alabama Alabama 10 (0.9) 231 (3.9) 13 (0.9) 250 (3.4) 78 (1.4) 254 Arizona Arizona 8 (0.6) 232 (3.5) 12 (0.7) 264 (2.5) 80 (0.8) 267 Arizona 8 (0.6) 232 (3.5) 12 (0.9) 252 (2.7) 80 (1.2) 255 California 9 (0.7) 238 (3.6) 17 (0.9) 250 (2.4) 74 (1.2) 264 Colorado 9 (0.8) 258 (3.7) 17 (1.0) 274 (1.9) 74 (1.3) 277 Connecticut 7 (0.6) 250 (4.3) 16 (1.2) 274 (3.0) 77 (1.4) 277 Delaware 9 (0.8) 242 (4.1) 14 (0.9) 260 (2.0) 77 (1.1) 265 Colorado 10 (0.7) 239 (2.9) 17 (0.8) 245 (2.0) 77 (1.1) 265 Colorado 10 (0.7) 239 (2.9) 17 (0.8) 245 (2.0) 77 (1.1) 265 Ceorgia 10 (0.8) 238 (2.7) 16 (1.1) 257 (1.9) 74 (1.4) 265 Ceorgia 10 (0.8) 238 (2.7) 16 (1.1) 257 (1.9) 74 (1.4) 265 Ceorgia 10 (0.8) 238 (2.7) 16 (1.1) 257 (1.9) 70 (0.9) 267 Ceorgia 10 (0.8) 238 (2.7) 18 (1.1) 257 (1.9) 70 (0.9) 267 Ceorgia 10 (0.8) 259 (3.6) 13 (0.8) 272 (1.5) 82 (0.8) 277 Ceorgia 10 (0.8) 259 (3.6) 13 (0.8) 272 (1.7) 257 (1.9) 70 (0.9) 267 Ceorgia 10 (0.8) 259 (3.0) 15 (0.7) 257 (1.9) 70 (0.9) 267 Ceorgia 10 (0.8) 259 (3.0) 15 (0.7) 257 (1.9) 70 (0.9) 267 Ceorgia 10 (0.8) 259 (3.0) 15 (0.7) 257 (1.9) 70 (0.9) 267 Ceorgia 10 (0.8) 259 (3.0) 15 (0.7) 257 (1.9) 70 (0.9) 267 Ceorgia 10 (0.8) 259 (3.7) 13 (0.8) 272 (1.7) 70 (1.9) 267 Ceorgia 10 (0.8) 259 (3.7) 13 (0.8) 272 (1.7) 70 (1.9) 267 Ceorgia 10 (0.8) 259 (3.7) 13 (0.8) 259 (2.5) 73 (1.4) 267 Ceorgia 10 (0.8) 239 (2.7) 18 (0.8) 259 (2.5) 73 (1.4) 267 Ceorgia 10 (0.5) 271 (3.2) 17 (1.2) 283 (1.9) 77 (1.7) 78 (1.2) 268 Ceorgia 10 (0.5) 271 (3.2) 17 (1.2) 283 (1.9) 77 (1.7) 78 (1.2) 268 Ceorgia 10 (0.5) 264 (3.0) 16 (0.9) 277 (1.7) 78 (1.2) 268 Ceorgia 10 (0.5) 264 (3.0) 16 (0.9) 277 (1.7) 78 (1.2) 268 Ceorgia 10 (0.5) 264 (3.0) 16 (0.9) 277 (1.7) 78 (1.2) 268 Ceorgia 10 (0.5) 264 (3.0) 16 (0.9) 277 (1.7) 78 (1.2) 278 Ceorgia 10 (0.5) 265 (3.7) 16 (1.1) 271 (2.8) 77 (1.5) 278 Ceorgia 10 (0.5) 265 (3.7) 18 (1.0) 273 (3.0) 88 (1.1) 17 (1.2) 278 Ceorgia 10 (0.5) 266 (3.7) 18 (1.0) 279 (3.0) 18 (1.1) 279 (3.0) 18 (1.1) 279 (3.0) 18 (3.0) 18 (3.0) 18 (3.0) 18 (3.0) 18 (3.0) 18 (3.0) 18 (3.0) 18 (3	,		, ,			, , ,	275 (2.5)		
Alabama Arizona B (0.5) 246 (3.0) 13 (0.9) 250 (3.4) 78 (1.4) 254 Arizona B (0.5) 246 (3.0) 12 (0.7) 264 (2.5) 80 (0.8) 266 Arizona B (0.8) 232 (3.5) 12 (0.9) 252 (2.7) 80 (1.2) 255 Collorado 9 (0.8) 258 (3.7) 17 (1.0) 274 (1.9) 74 (1.3) 275 Connecticut 7 (0.6) 250 (4.3) 16 (1.2) 274 (3.0) 77 (1.4) 275 Delaware 9 (0.8) 242 (4.1) 14 (0.9) 260 (2.0) 77 (1.1) 275 Dist. Columbia Florida 10 (0.7) 239 (2.9) 11 (0.8) 245 (2.3) 62 (1.1) 255 Florida 10 (0.7) 239 (2.9) 11 (0.8) 245 (2.3) 62 (1.1) 255 Florida 10 (0.7) 239 (2.9) 11 (0.8) 259 (3.7) 74 (1.4) 266 Hawaii 15 (0.8) 238 (2.7) 16 (1.1) 257 (1.9) 70 (0.9) 261 Indiana 15 (0.8) 258 (3.7) 17 (1.1) 257 (1.9) 70 (0.9) 261 Indiana 15 (0.8) 259 (3.8) 13 (0.8) 272 (1.5) 82 (0.8) 276 Indiana 15 (0.8) 250 (3.7) 13 (0.9) 268 (2.7) 82 (1.1) 274 Indiana 16 (0.5) 271 (3.2) 17 (1.2) 283 (1.9) 78 (1.4) 284 Kentucky 16 (0.5) 244 (3.0) 15 (0.9) 263 (2.2) 77 (1.2) 263 Louislana 14 (0.9) 232 (2.7) 13 (0.9) 263 (2.2) 77 (1.2) 263 Louislana 14 (0.9) 232 (2.7) 13 (0.9) 263 (2.2) 77 (1.2) 263 Louislana 14 (0.9) 232 (2.7) 13 (0.9) 263 (2.2) 77 (1.2) 263 Maryland 18 (0.7) 236 (3.7) 16 (1.1) 273 (3.0) 81 (1.1) 273 Minnesota 17 (0.7) 286 (3.2) 15 (0.9) 220 (2.5) 77 (1.2) 263 Minnesota 18 (0.7) 286 (3.2) 15 (0.9) 220 (2.5) 77 (1.2) 283 Minnesota 19 (0.7) 249 (3.4) 15 (1.1) 271 (2.8) 77 (1.5) 278 Minnesota 19 (0.7) 249 (3.4) 15 (1.1) 271 (2.8) 77 (1.5) 278 Minnesota 10 (0.8) 253 (3.4) 18 (1.1) 271 (2.8) 77 (1.5) 278 Minnesota 10 (0.8) 253 (3.4) 18 (1.3) 273 (2.1) 72 (1.6) 274 New Hampshire 10 (0.8) 238 (2.7) 19 (1.0) 279 (1.6) 79 (1.2) 278 Mew Jersey 10 (0.8) 238 (2.7) 19 (0.9) 255 (1.4) 17 (1.5) 268 Mew Jersey 10 (0.8) 238 (2.7) 19 (0.9) 255 (1.4) 70 (1.7) 278 New Hampshire 10 (0.5) 244 (3.6) 14 (1.1) 266 (2.3) 80 (1.1) 273 North Dakota 11 (0.7) 239 (2.7) 19 (0.9) 265 (2.4) 77 (1.5) 278 North Dakota 11 (0.7) 239 (2.7) 19 (0.9) 265 (2.4) 77 (1.5) 278 North Dakota 11 (0.9) 244 (3.6) 14 (1.1) 265 (2.4) 77 (1.5) 279 North Dakota 11 (0.9) 244 (3.6) 14 (1.1) 265 (2.4) 77 (1.5) 279 North Dakota 11 (0	I	9 (0.7)	241 (3.6)	14 (1.2)	265 (2.5)	// (1./)	271 (2.2)		
Arizona Arizona Arizona Arizona B (0.5) Arizona B (0.8) Arizon									
Arkansas California 9 (0.7) 232 (3.5) 12 (0.9) 252 (2.7) 80 (1.2) 253 (3.6) 270 (2.8) 271 (1.2) 285 (2.7) 80 (1.2) 285 (2.0) 77 (1.4) 285 (2.0) 285 (2.0) 77 (1.4) 285 (2.0) 285 (2.0) 77 (1.4) 285 (2.0		10 (0.9)	231 (3.9)	13 (0.9)	250 (3.4)	78 (1.4)	254 (1.6)		
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Colorado Colorado Solution Connecticut Con	California	9 (0.7)	235 (3.6)		260 (2.4)	, ,	264 (1.7)		
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Dist. Columbia   21 (1.0)   222 (2.3)   17 (0.8)   245 (2.3)   62 (1.1)   233 (1.1)   234		7 (0.0)	230 (4.3)	10 (1.2)	274 (3.0)	77 (1. <del>4</del> )	275 (1.1)		
Dist. Columbia   21 (1.0)   222 (2.3)   17 (0.8)   245 (2.3)   62 (1.1)   232   Florida   10 (0.7)   239 (2.9)   11 (0.8)   259 (4.0)   79 (1.1)   262   Georgia   10 (0.8)   238 (2.7)   16 (1.1)   257 (1.9)   70 (0.9)   261   Idaho   4 (0.3)   259 (3.6)   13 (0.8)   272 (1.5)   82 (0.8)   276   Idaho   4 (0.3)   259 (3.6)   13 (0.8)   272 (1.5)   82 (0.8)   276   Idaho   5 (0.6)   250 (3.7)   13 (0.9)   268 (2.7)   82 (1.1)   271   Iowa   5 (0.5)   271 (3.2)   17 (1.2)   283 (1.9)   78 (1.4)   284   Kentucky   8 (0.6)   241 (3.0)   15 (0.9)   263 (2.2)   77 (1.2)   263   Louisiana   14 (0.9)   232 (2.7)   13 (0.8)   252 (2.5)   73 (1.4)   252   Maryland   8 (0.7)   236 (3.7)   16 (1.1)   274 (2.4)   76 (1.2)   278   Massachusetts   5 (0.5)   255 (3.4)   13 (1.0)   273 (3.0)   81 (1.1)   273   Michigan   9 (0.7)   249 (3.4)   15 (1.1)   271 (2.8)   77 (1.5)   288   Missispippi   14 (0.9)   230 (2.6)   14 (1.1)   249 (2.5)   71 (1.7)   248   Missouri   7 (0.8)   252 (3.5)   13 (0.9)   277 (2.5)   77 (1.7)   278   New Hampshire   5 (0.5)   265 (3.7)   19 (1.0)   279 (1.6)   76 (1.2)   278   New Hampshire   5 (0.5)   265 (3.7)   19 (1.0)   279 (1.6)   76 (1.2)   278   New Hampshire   5 (0.5)   265 (3.7)   19 (1.0)   279 (1.6)   76 (1.2)   278   New Hampshire   5 (0.5)   265 (3.7)   19 (1.0)   279 (1.6)   76 (1.2)   278   New Mexico   9 (0.8)   238 (2.7)   12 (0.7)   257 (2.2)   79 (1.1)   262   New York   10 (0.9)   236 (4.6)   13 (0.8)   265 (2.9)   84 (1.1)   260   New York   10 (0.9)   236 (4.6)   13 (0.8)   265 (2.9)   84 (1.1)   280   North Carolina   11 (0.7)   239 (2.7)   18 (0.8)   265 (2.9)   84 (1.1)   279 (1.6)   North Dakota   4 (0.5)   271 (3.2)   12 (0.8)   265 (2.4)   80 (1.1)   270   North Carolina   11 (0.7)   250 (3.6)   14 (0.8)   265 (2.4)   80 (1.1)   270   North Carolina   11 (0.9)   244 (4.6)   11 (1.0)   265 (2.4)   80 (1.1)   270   North Carolina   11 (0.9)   244 (2.4)   14 (1.0)   265 (2.4)   80 (1.1)   270   North Carolina   10 (0.8)   244 (2.4)   14 (1.0)   265 (2.4)   80 (1.1)   270   N		9 (0.8)	242 (4.1)	14 (0.9)	260 (2.0)	77 (1.1)	265 (1.0)		
Florida Georgia 10 (0.7) 239 (2.9) 11 (0.8) 258 (3.0) 79 (1.1) 265 Georgia 10 (0.8) 238 (2.7) 16 (1.1) 257 (1.9) 74 (1.4) 265 Georgia 15 (0.8) 236 (2.0) 15 (0.7) 257 (1.9) 70 (0.9) 261 Idaho 4 (0.3) 259 (3.6) 13 (0.8) 272 (1.5) 82 (0.8) 276 Indiana 5 (0.6) 250 (3.7) 13 (0.9) 268 (2.7) 82 (1.1) 271 Iowa 5 (0.5) 271 (3.2) 17 (1.2) 283 (1.9) 78 (1.4) 284 Kentucky 8 (0.6) 241 (3.0) 15 (0.9) 263 (2.2) 77 (1.2) 263 Louisiana 14 (0.9) 232 (2.7) 13 (0.8) 252 (2.5) 73 (1.4) 252 Maine 6 (0.5) 264 (3.0) 16 (0.9) 277 (1.7) 78 (1.2) 278 Maryland 8 (0.7) 236 (3.7) 16 (1.1) 264 (2.4) 76 (1.2) 268 Massachusetts 5 (0.5) 255 (3.4) 13 (1.0) 273 (3.0) 81 (1.1) 273 Michigan 9 (0.7) 249 (3.4) 15 (1.1) 271 (2.8) 77 (1.5) 288 Mississippi 14 (0.9) 230 (2.6) 14 (1.1) 249 (2.5) 77 (1.7) 248 Missouri 7 (0.8) 252 (3.5) 13 (0.9) 272 (2.4) 80 (1.2) 278 New Hampshire 5 (0.5) 265 (3.7) 19 (1.0) 279 (1.6) 79 (1.2) 278 New Hampshire 5 (0.5) 265 (3.7) 19 (1.0) 279 (1.6) 79 (1.2) 278 New Mexico 9 (0.8) 238 (2.7) 16 (1.1) 279 (1.6) 279 (1.7) 278 New Mexico 9 (0.8) 238 (2.7) 17 (1.5) 277 (2.5) 277 (1.7) 278 New Mexico 9 (0.8) 238 (2.7) 19 (1.0) 279 (1.6) 270 11.1) 270 11.1) 270 11.1) 271 272 173 174 175 175 177 177 176 177 177 177 178 177 177 178 178 179 179 179 179 179 179 179 179 179 179	Dist. Columbia	21 (1.0)		` <i>,</i>		, , , , , , , , , , , , , , , , , , ,	235 (1.2)		
Georgia 10 (0.8) 238 (2.7) 16 (1.1) 257 (1.9) 74 (1.4) 262 Hawaii 15 (0.8) 236 (2.0) 15 (0.7) 257 (1.9) 70 (0.9) 261 (2.0) (2.0) 15 (0.7) 257 (1.9) 70 (0.9) 261 (2.0) (	Florida	, , ,	, ,	; ;	, ,	, , , , , , , , , , , , , , , , , , ,	262 (1.3)		
Hawaii		, , ,		• •					
Idaho		١ ,	, ,	, ,	, ,	` '	262 (1.2)		
Indiana 5 (0.6) 250 (3.7) 13 (0.9) 268 (2.7) 82 (1.1) 277 (10wa 5 (0.5) 271 (3.2) 17 (1.2) 283 (1.9) 78 (1.4) 284 (2.1)		, , ,				1 1	261 (1.0)		
Iowa   5 (0.5)   271 (3.2)   17 (1.2)   283 (1.9)   78 (1.4)   284	Idano	4 (0.3)	259 (3.6)	13 (0.8)	272 (1.5)	82 (0.8)	276 (0.9)		
lowa         5 (0.5)         271 (3.2)         17 (1.2)         283 (1.9)         78 (1.4)         284 (1.1)         284 (1.1)         284 (1.1)         284 (1.1)         284 (1.1)         284 (1.1)         284 (1.1)         284 (1.1)         284 (1.1)         284 (1.1)         284 (1.1)         284 (1.1)         284 (1.1)         284 (2.2)         77 (1.2)         285 (2.2)         77 (1.2)         285 (2.5)         73 (1.4)         285 (2.2)         77 (1.2)         285 (2.2)         77 (1.2)         285 (2.2)         78 (1.4)         285 (2.2)         78 (1.4)         285 (2.2)         78 (1.4)         285 (2.5)         73 (1.4)         285 (2.2)         78 (1.4)         285 (2.2)         78 (1.2)         286 (1.1)         284 (2.4)         76 (1.2)         286 (1.2)         78 (1.1)         284 (2.4)         76 (1.2)         286 (1.2)         78 (1.1)         284 (2.4)         76 (1.2)         286 (1.2)         78 (1.1)         273 (3.0)         81 (1.1)         273 (3.0)         81 (1.1)         273 (3.0)         81 (1.1)         273 (3.0)         81 (1.1)         273 (3.0)         81 (1.1)         273 (3.0)         81 (1.1)         273 (3.0)         81 (1.1)         273 (3.0)         81 (1.1)         273 (3.0)         81 (1.1)         273 (3.0)         81 (1.1)         274 (3.2)         286 (3.0)         280 (1.	Indiana	5 (0.6)	250 (3.7)	13 (0.0)	268 (2.7)	PO /4 4\	074 /4 0)		
Kentucky 8 (0.6) 241 (3.0) 15 (0.9) 263 (2.2) 77 (1.2) 263 (3.5) 73 (1.4) 254 (3.0) 16 (0.9) 277 (1.7) 78 (1.2) 278 (3.0) 84 (3.0) 16 (0.9) 277 (1.7) 78 (1.2) 279 (3.0) 84 (3.0) 16 (0.9) 277 (1.7) 78 (1.2) 279 (3.0) 84 (3.0) 16 (0.9) 277 (1.7) 78 (1.2) 279 (3.0) 84 (3.0) 16 (1.1) 264 (2.4) 76 (1.2) 268 (3.2) 16 (1.1) 271 (2.8) 17 (1.5) 268 (3.2) 17 (3.0) 18 (1.1) 273 (3.0) 81 (3.0) 81 (3.0)		- (,	, ,			( ,	271 (1.2)		
Louisiana 14 (0.9) 232 (2.7) 13 (0.8) 255 (2.5) 73 (1.4) 255 (2.6) Maine 6 (0.5) 264 (3.0) 16 (0.9) 277 (1.7) 78 (1.2) 275 (2.7) 78 (1.2) 275 (2.7) 78 (1.2) 275 (2.7) 78 (1.2) 275 (2.7) 78 (1.2) 275 (2.7) 78 (1.2) 275 (2.7) 78 (1.2) 275 (2.7) 78 (1.2) 275 (2.7) 78 (1.2) 275 (2.7) 78 (1.2) 275 (2.7) 78 (1.2) 275 (2.7) 78 (1.2) 275 (2.7) 78 (1.2) 275 (2.7) 78 (1.2) 275 (2.7) 78 (2.7) 283 (2.7) 2	1	` '	, ,	` ,		` ,	284 (1.1)		
Maine         6 (0.5)         264 (3.0)         16 (0.9)         277 (1.7)         78 (1.2)         226           Maryland         8 (0.7)         236 (3.7)         16 (1.1)         264 (2.4)         76 (1.2)         268           Massachusetts Michigan         9 (0.7)         249 (3.4)         13 (1.0)         273 (3.0)         81 (1.1)         273           Minnesota         7 (0.7)         268 (3.2)         15 (0.9)         280 (1.9)         79 (1.2)         283           Missouri         7 (0.7)         268 (3.2)         15 (0.9)         280 (1.9)         79 (1.2)         283           Missouri         7 (0.7)         268 (3.2)         15 (0.9)         280 (1.9)         79 (1.2)         283           Missouri         7 (0.8)         252 (3.5)         13 (0.9)         272 (2.4)         80 (1.2)         272           Nebraska         5 (0.5)         265 (3.7)         19 (1.0)         279 (1.6)         76 (1.2)         278           New Hampshire         5 (0.5)         265 (3.7)         19 (1.0)         279 (1.6)         76 (1.2)         278           New How Work         10 (0.8)         253 (3.4)         18 (1.3)         273 (2.1)         72 (1.6)         274           New York         10 (0	•	, , ,	, , ,	` '			263 (1.0)		
Maryland         8 (0.7)         236 (3.7)         16 (1.1)         264 (2.4)         76 (1.2)         258           Massachusetts Michigan         9 (0.7)         249 (3.4)         13 (1.0)         273 (3.0)         81 (1.1)         273 (3.0)         81 (1.1)         273 (3.0)         81 (1.1)         273 (3.0)         81 (1.1)         273 (3.0)         81 (1.1)         273 (3.0)         81 (1.1)         273 (3.0)         81 (1.1)         273 (3.0)         81 (1.1)         273 (3.0)         81 (1.1)         273 (3.0)         81 (1.1)         273 (3.0)         81 (1.1)         273 (3.0)         81 (1.1)         273 (3.0)         81 (1.1)         273 (3.0)         81 (1.1)         273 (3.0)         81 (1.1)         273 (3.0)         81 (3.1)         273 (3.0)         81 (1.1)         273 (3.0)         81 (3.1)         273 (3.0)         81 (3.1)         273 (3.0)         81 (3.1)         273 (3.0)         81 (3.1)         273 (3.0)         81 (3.1)         273 (3.0)         81 (3.1)         273 (3.0)         81 (3.1)         273 (3.0)         81 (3.1)         273 (3.0)         81 (3.1)         273 (3.0)         81 (3.1)         273 (3.0)         81 (3.1)         273 (3.0)         81 (3.1)         273 (3.0)         81 (3.1)         273 (3.0)         81 (3.1)         273 (3.0)         81 (3.1)         273 (3.0) <td></td> <td></td> <td></td> <td>13 (0.8)</td> <td>252 (2.5)</td> <td>73 (1.4)</td> <td>252 (1.7)</td>				13 (0.8)	252 (2.5)	73 (1.4)	252 (1.7)		
Massachusetts Michigan  9 (0.7)  249 (3.4)  15 (1.1)  273 (3.0)  81 (1.1)  274 (3.0)  274 (2.1)  275 (2.2)  277 (1.7)  278 (3.0)  277 (2.5)  277 (1.7)  278 (3.0)  277 (2.5)  277 (1.7)  278 (3.0)  279 (1.6)  279 (1.6)  270 (1.6)  271 (3.2)  270 (3.0)  271 (3.2)  271 (3.2)  272 (2.4)  273 (3.0)  274 (3.0)  275 (2.2)  279 (1.6)  277 (1.7)  278 (1.1)  279 (1.6)  270 (1.6)  271 (3.2)  270 (3.0)  271 (3.2)  271 (3.2)  272 (3.0)  273 (3.0)  273 (3.0)  274 (3.0)  275 (2.5)  277 (2.5)  277 (1.7)  278 (1.7)  278 (1.7)  279 (1.6)  279 (1.6)  270 (1.6)  271 (3.2)  272 (2.4)  273 (3.0)  273 (3.0)  274 (3.0)  275 (2.2)  279 (1.6)  279 (1.6)  279 (1.6)  270 (1.6)  271 (3.2)  272 (2.4)  273 (3.0)  273 (3.0)  273 (3.0)  274 (3.1)  275 (3.0)  276 (3.0)  277 (3.0)  278 (3.0)  279	***	6 (0.5)		16 (0.9)	277 (1.7)	78 (1.2)	279 (1.0)		
Massachusetts         5 (0.5)         255 (3.4)         13 (1.0)         273 (3.0)         81 (1.1)         273 (3.0)           Michigan         9 (0.7)         249 (3.4)         15 (1.1)         271 (2.8)         77 (1.5)         268 (3.2)           Minnesota         7 (0.7)         268 (3.2)         15 (0.9)         280 (1.9)         79 (1.2)         283 (2.6)           Mississippi         14 (0.9)         230 (2.6)         14 (1.1)         249 (2.5)         71 (1.7)         248 (2.5)           Missouri         7 (0.8)         252 (3.5)         13 (0.9)         272 (2.4)         80 (1.2)         272 (2.4)           Nebraska         5 (0.5)         262 (4.5)         17 (1.5)         277 (2.5)         77 (1.7)         278 (2.7)           New Hampshire         5 (0.5)         265 (3.7)         19 (1.0)         279 (1.6)         76 (1.2)         278 (2.2)           New Jersey         10 (0.8)         233 (2.7)         19 (1.0)         279 (1.6)         76 (1.2)         278 (2.2)           New York         10 (0.9)         236 (4.6)         13 (0.8)         264 (4.1)         78 (1.1)         270 (1.6)           North Carolina         11 (0.7)         239 (2.7)         18 (0.8)         259 (1.9)         71 (1.1)         260 (2.8) <td>Maryland</td> <td>8 (0.7)</td> <td>236 (3.7)</td> <td>16 (1.1)</td> <td>264 (2.4)</td> <td>76 (1.2)</td> <td>268 (1.2)</td>	Maryland	8 (0.7)	236 (3.7)	16 (1.1)	264 (2.4)	76 (1.2)	268 (1.2)		
Michigan         9 (0.7)         249 (3.4)         15 (1.1)         271 (2.8)         77 (1.5)         268 Minnesota           7 (0.7)         268 (3.2)         15 (0.9)         280 (1.9)         79 (1.2)         283 Mississippi           Mississippi         14 (0.9)         230 (2.6)         14 (1.1)         249 (2.5)         71 (1.7)         248 Mississippi           Missouri         7 (0.8)         252 (3.5)         13 (0.9)         272 (2.4)         80 (1.2)         272 Nebraska           Nebraska         5 (0.5)         265 (3.7)         19 (1.0)         279 (1.6)         76 (1.2)         278 New Hampshire           New Jersey         10 (0.8)         253 (3.4)         18 (1.3)         273 (2.1)         72 (1.6)         274 New Mexico         9 (0.8)         238 (2.7)         12 (0.7)         257 (2.2)         79 (1.1)         262 (4.1)         278 New Mexico         9 (0.8)         238 (2.7)         12 (0.7)         257 (2.2)         79 (1.1)         262 (4.1)         274 (4.1)         276 (4.1)         78 (1.1)         270 (1.6)         274 (1.6)         274 (1.6)         274 (1.6)         274 (1.6)         274 (1.6)         274 (1.6)         274 (1.6)         274 (1.6)         274 (1.6)         274 (1.6)         277 (1.7)         278 (1.6)         278 (1.6)         278 (	Massachusetts	5 (0.5)	255 (2.4)	13 (1.0)		04 (4.4)			
Minnesota         7 (0.7)         268 (3.2)         15 (0.9)         280 (1.9)         79 (1.2)         283 (1.9)         79 (1.2)         283 (1.9)         79 (1.2)         283 (1.9)         79 (1.2)         283 (1.9)         79 (1.2)         283 (1.9)         79 (1.2)         283 (1.9)         79 (1.2)         283 (1.9)         79 (1.2)         283 (1.9)         79 (1.2)         283 (1.9)         79 (1.2)         283 (1.9)         79 (1.2)         283 (1.9)         79 (1.2)         283 (1.9)         283 (1.9)         79 (1.2)         283 (1.9)						` ,	273 (1.1)		
Mississippi       14 (0.9)       230 (2.6)       14 (1.1)       249 (2.5)       71 (1.7)       248         Missouri       7 (0.8)       252 (3.5)       13 (0.9)       272 (2.4)       80 (1.2)       272         Nebraska       5 (0.5)       262 (4.5)       17 (1.5)       277 (2.5)       77 (1.7)       278         New Hampshire       5 (0.5)       265 (3.7)       19 (1.0)       279 (1.6)       76 (1.2)       278         New Jersey       10 (0.8)       253 (3.4)       18 (1.3)       273 (2.1)       72 (1.6)       274         New Mexico       9 (0.8)       238 (2.7)       12 (0.7)       257 (2.2)       79 (1.1)       262         New York       10 (0.9)       236 (4.6)       13 (0.8)       264 (4.1)       78 (1.1)       270         North Carolina       11 (0.7)       239 (2.7)       18 (0.8)       259 (1.9)       71 (1.1)       260         North Dakota       4 (0.5)       271 (3.2)       12 (0.8)       285 (2.2)       84 (1.1)       283         Ohio       6 (0.5)       244 (3.6)       14 (1.1)       266 (2.3)       80 (1.1)       270         Oklahoma       5 (0.5)       244 (4.6)       11 (1.0)       264 (2.4)       84 (1.2)       269	•		3 1		, ,	` '	268 (1.3)		
Missouri 7 (0.8) 252 (3.5) 13 (0.9) 272 (2.4) 80 (1.2) 272 Nebraska 5 (0.5) 262 (4.5) 17 (1.5) 277 (2.5) 77 (1.7) 278 New Hampshire New Jersey 10 (0.8) 253 (3.4) 18 (1.3) 273 (2.1) 72 (1.6) 274 New Mexico 9 (0.8) 238 (2.7) 12 (0.7) 257 (2.2) 79 (1.1) 262 New York 10 (0.9) 236 (4.6) 13 (0.8) 264 (4.1) 78 (1.1) 270 North Carolina 11 (0.7) 239 (2.7) 18 (0.8) 259 (1.9) 71 (1.1) 263 North Dakota 4 (0.5) 271 (3.2) 12 (0.8) 285 (2.2) 84 (1.1) 283 Ohio 6 (0.5) 244 (3.6) 14 (1.1) 266 (2.3) 80 (1.1) 270 Oklahoma 5 (0.5) 244 (4.6) 11 (1.0) 264 (2.4) 84 (1.2) 269 Pennsylvania 7 (0.7) 250 (3.6) 14 (0.8) 268 (2.4) 80 (1.0) 273 Rhode Island 8 (0.6) 249 (2.7) 13 (0.8) 264 (1.9) 79 (0.8) 267 New York 10 (9.9) 241 (2.4) 17 (1.0) 262 (1.6) 72 (1.5) 263 Texas 11 (0.8) 244 (2.4) 17 (1.0) 265 (2.4) 75 (1.5) 265 (1.6) 72 (1.5) 265 (1.6) 275 (1.6) 275 (1.6) 275 (1.6) 275 (1.6) 275 (1.6) 275 (1.6) 275 (1.6) 275 (1.6) 275 (1.6) 275 (1.6) 275 (1.6) 275 (1.6) 275 (1.6) 275 (	1	, ,		Y !	, ,	79 (1.2)	283 (1.1)		
Nebraska 5 (0.5) 262 (4.5) 17 (1.5) 277 (2.5) 77 (1.7) 278  New Hampshire 5 (0.5) 265 (3.7) 19 (1.0) 279 (1.6) 76 (1.2) 278  New Jersey 10 (0.8) 253 (3.4) 18 (1.3) 273 (2.1) 72 (1.6) 274  New Mexico 9 (0.8) 238 (2.7) 12 (0.7) 257 (2.2) 79 (1.1) 262  New York 10 (0.9) 236 (4.6) 13 (0.8) 264 (4.1) 78 (1.1) 270  North Carolina 11 (0.7) 239 (2.7) 18 (0.8) 259 (1.9) 71 (1.1) 260  North Dakota 4 (0.5) 271 (3.2) 12 (0.8) 285 (2.2) 84 (1.1) 283  Ohio 6 (0.5) 244 (3.6) 14 (1.1) 266 (2.3) 80 (1.1) 270  Oklahoma 5 (0.5) 244 (4.6) 11 (1.0) 264 (2.4) 84 (1.2) 269  Pennsylvania 7 (0.7) 250 (3.6) 14 (0.8) 268 (2.4) 80 (1.0) 273  Rhode Island 8 (0.6) 249 (2.7) 13 (0.8) 268 (2.4) 80 (1.0) 273  Routh Carolina 11 (0.9) 241 (2.4) 17 (1.0) 262 (1.6) 72 (1.5) 263  Tennessee 8 (0.6) 238 (3.5) 13 (0.7) 255 (1.8) 78 (1.0) 261  Texas 11 (0.8) 244 (2.4) 14 (1.0) 265 (2.4) 75 (1.5) 263  Texas 11 (0.8) 244 (2.4) 14 (1.0) 265 (2.4) 75 (1.5) 267  Virginia 7 (0.6) 248 (3.2) 15 (0.9) 268 (2.1) 78 (1.1) 269  West Virginia 5 (0.5) 242 (2.7) 11 (0.7) 258 (1.6) 83 (0.9) 260  Wisconsin 6 (0.6) 256 (5.1) 17 (1.2) 279 (1.9) 77 (1.5) 279  Wyoming 5 (0.5) 260 (3.7) 15 (1.1) 273 (1.9) 80 (1.3) 276		, ,	230 (2.6)	14 (1.1)	249 (2.5)	71 (1.7)	248 (1.1)		
Nebraska         5 (0.5)         262 (4.5)         17 (1.5)         277 (2.5)         77 (1.7)         278           New Hampshire New Jersey         5 (0.5)         265 (3.7)         19 (1.0)         279 (1.6)         76 (1.2)         278           New Mexico         9 (0.8)         253 (3.4)         18 (1.3)         273 (2.1)         72 (1.6)         274           New York         10 (0.9)         236 (4.6)         13 (0.8)         264 (4.1)         78 (1.1)         270           North Carolina         11 (0.7)         239 (2.7)         18 (0.8)         259 (1.9)         71 (1.1)         260           North Dakota         4 (0.5)         271 (3.2)         12 (0.8)         285 (2.2)         84 (1.1)         283           Ohio         6 (0.5)         244 (3.6)         14 (1.1)         266 (2.3)         80 (1.1)         270           Oklahoma         5 (0.5)         244 (4.6)         11 (1.0)         264 (2.4)         84 (1.2)         269           Pennsylvania         7 (0.7)         250 (3.6)         14 (0.8)         268 (2.4)         80 (1.0)         273           Rhode Island         8 (0.6)         249 (2.7)         13 (0.8)         264 (1.9)         79 (0.8)         267           South Carolina	i i	7 (0.8)	252 (3.5)	13 (0.9)	272 (2.4)	80 (1.2)	272 (1.1)		
New Hampshire New Jersey         5 (0.5)         265 (3.7)         19 (1.0)         279 (1.6)         76 (1.2)         278 (1.6)         274 (1.6)	Nebraska	5 (0.5)	262 (4.5)	17 (1.5)	277 (2.5)	77 (1.7)	278 (1.2)		
New Jersey         10 (0.8)         253 (3.4)         18 (1.3)         273 (2.1)         72 (1.6)         274 (1.6)           New Mexico         9 (0.8)         238 (2.7)         12 (0.7)         257 (2.2)         79 (1.1)         262 (1.6)           New York         10 (0.9)         236 (4.6)         13 (0.8)         264 (4.1)         78 (1.1)         270 (1.1)           North Carolina         11 (0.7)         239 (2.7)         18 (0.8)         259 (1.9)         71 (1.1)         260 (1.1)           North Dakota         4 (0.5)         271 (3.2)         12 (0.8)         285 (2.2)         84 (1.1)         283 (1.1)           Ohio         6 (0.5)         244 (3.6)         14 (1.1)         266 (2.3)         80 (1.1)         270 (1.1)           Oklahoma         5 (0.5)         244 (4.6)         11 (1.0)         264 (2.4)         84 (1.2)         269 (1.2)           Pennsylvania         7 (0.7)         250 (3.6)         14 (0.8)         268 (2.4)         80 (1.0)         273 (1.5)           Rhode Island         8 (0.6)         249 (2.7)         13 (0.8)         264 (1.9)         79 (0.8)         267 (1.5)           South Carolina         11 (0.9)         241 (2.4)         17 (1.0)         262 (1.6)         72 (1.5)         263 (1.5) </td <td>New Hampshire</td> <td>E (0.5)</td> <td>065 (0.7)</td> <td>40 (4.0)</td> <td>070 (4.6)</td> <td>70 (4.0)</td> <td>• •</td>	New Hampshire	E (0.5)	065 (0.7)	40 (4.0)	070 (4.6)	70 (4.0)	• •		
New Mexico         9 (0.8)         238 (2.7)         12 (0.7)         257 (2.2)         79 (1.1)         262           New York         10 (0.9)         236 (4.6)         13 (0.8)         264 (4.1)         78 (1.1)         270           North Carolina         11 (0.7)         239 (2.7)         18 (0.8)         259 (1.9)         71 (1.1)         260           North Dakota         4 (0.5)         271 (3.2)         12 (0.8)         285 (2.2)         84 (1.1)         283           Ohio         6 (0.5)         244 (3.6)         14 (1.1)         266 (2.3)         80 (1.1)         270           Oklahoma         5 (0.5)         244 (4.6)         11 (1.0)         264 (2.4)         84 (1.2)         269           Pennsylvania         7 (0.7)         250 (3.6)         14 (0.8)         268 (2.4)         80 (1.0)         273           Rhode Island         8 (0.6)         249 (2.7)         13 (0.8)         264 (1.9)         79 (0.8)         267           South Carolina         11 (0.9)         241 (2.4)         17 (1.0)         262 (1.6)         72 (1.5)         263           Texas         11 (0.8)         244 (2.4)         14 (1.0)         265 (2.4)         75 (1.5)         267           Utah         6 (0.7)<		, ,	` '		, ,		278 (1.1)		
New York         10 (0.9)         236 (4.6)         13 (0.8)         264 (4.1)         78 (1.1)         262           North Carolina         11 (0.7)         239 (2.7)         18 (0.8)         259 (1.9)         71 (1.1)         260           North Dakota         4 (0.5)         271 (3.2)         12 (0.8)         285 (2.2)         84 (1.1)         283           Ohio         6 (0.5)         244 (3.6)         14 (1.1)         266 (2.3)         80 (1.1)         270           Oklahoma         5 (0.5)         244 (4.6)         11 (1.0)         264 (2.4)         84 (1.2)         269           Pennsylvania         7 (0.7)         250 (3.6)         14 (0.8)         268 (2.4)         80 (1.0)         273           Rhode Island         8 (0.6)         249 (2.7)         13 (0.8)         264 (1.9)         79 (0.8)         267           South Carolina         11 (0.9)         241 (2.4)         17 (1.0)         262 (1.6)         72 (1.5)         263           Texas         11 (0.8)         244 (2.4)         14 (1.0)         265 (2.4)         75 (1.5)         267           Utah         6 (0.7)         258 (3.4)         14 (0.7)         270 (1.7)         80 (1.1)         276           West Virginia         5 (0.	•		, ,	• •		\ <i>,</i>	274 (1.6)		
North Carolina North Dakota				12 (0.7)	257 (2.2)	79 (1.1)	262 (1.0)		
North Dakota 4 (0.5) 271 (3.2) 12 (0.8) 285 (2.2) 84 (1.1) 283 (1.5) (1.5) 261 (1.1) 260 (2.3) 80 (1.1) 270 (2.5) (2.5) 244 (3.6) 14 (1.1) 266 (2.3) 80 (1.1) 270 (2.5) (2.5) 244 (4.6) 11 (1.0) 264 (2.4) 84 (1.2) 269 (2.5) 240 (2.7) 250 (3.6) 14 (0.8) 268 (2.4) 80 (1.0) 273 (2.5) (2.5) 263 (2.5) 241 (2.4) 17 (1.0) 262 (1.6) 72 (1.5) 263 (2.5) 26		10 (0.9)	236 (4.6)	13 (0.8)	264 (4.1)	78 (1.1)	270 (1.8)		
North Dakota 4 (0.5) 271 (3.2) 12 (0.8) 285 (2.2) 84 (1.1) 283 (1.1) 283 (1.1) 283 (1.1) 266 (1.1) 270 (1.1) 266 (1.1) 270 (1.1) 266 (1.1) 270 (1.1) 266 (1.1) 270 (1.1) 266 (1.1) 270 (1.1) 266 (1.1) 270 (1.1) 266 (1.1) 266 (1.1) 270 (1.1) 266 (1.		11 (0.7)	239 (2.7)	18 (0.8)	259 (1.9)	71 (1.1)	260 (1.2)		
Ohio         6 (0.5)         244 (3.6)         14 (1.1)         266 (2.3)         80 (1.1)         270           Oklahoma         5 (0.5)         244 (4.6)         11 (1.0)         264 (2.4)         84 (1.2)         269           Pennsylvania         7 (0.7)         250 (3.6)         14 (0.8)         268 (2.4)         80 (1.0)         273           Rhode Island         8 (0.6)         249 (2.7)         13 (0.8)         264 (1.9)         79 (0.8)         267           South Carolina         11 (0.9)         241 (2.4)         17 (1.0)         262 (1.6)         72 (1.5)         263           Tennessee         8 (0.6)         238 (3.5)         13 (0.7)         255 (1.8)         78 (1.0)         261           Texas         11 (0.8)         244 (2.4)         14 (1.0)         265 (2.4)         75 (1.5)         267           Utah         6 (0.7)         258 (3.4)         14 (0.7)         270 (1.7)         80 (1.1)         276           West Virginia         5 (0.5)         242 (2.7)         11 (0.7)         258 (1.6)         83 (0.9)         260           Wyoming         5 (0.5)         260 (3.7)         15 (1.1)         279 (1.9)         77 (1.5)         279           Wyoming         5 (0.5)	North Dakota	4 (0.5)	271 (3.2)	12 (0.8)		• •	283 (1.3)		
Oklahoma 5 (0.5) 244 (4.6) 11 (1.0) 264 (2.4) 84 (1.2) 269 (2.6) 7 (0.7) 250 (3.6) 14 (0.8) 268 (2.4) 80 (1.0) 273 (2.6) 7 (0.7) 250 (3.6) 14 (0.8) 268 (2.4) 80 (1.0) 273 (2.6) 7 (0.7) 250 (3.6) 14 (0.8) 268 (2.4) 80 (1.0) 273 (2.6) 7 (0.7) 250 (3.6) 14 (0.8) 268 (2.4) 80 (1.0) 273 (2.6) 7 (0.7) 250 (3.6) 14 (0.8) 264 (1.9) 79 (0.8) 267 (1.5) 263 (1.6) 72 (1.5) 263 (1.6) 7 (1.6) 248 (3.5) 13 (0.7) 255 (1.8) 78 (1.0) 261 (1.6) 7 (1.6) 248 (3.2) 15 (0.9) 265 (2.4) 75 (1.5) 267 (1.7) 258 (1.6) 248 (3.2) 15 (0.9) 268 (2.1) 78 (1.1) 276 (1.6) 248 (3.2) 15 (0.9) 268 (2.1) 78 (1.1) 269 (1.6) 248 (1.6) 256 (5.1) 17 (1.2) 279 (1.9) 77 (1.5) 279 (1.9) 270 (1.7) 270 (1	Ohio	0 (0.5)	044 (0.0)	4444	• •	, ,			
Pennsylvania Rhode Island 8 (0.6) 249 (2.7) 13 (0.8) 268 (2.4) 80 (1.0) 273 (1.5) 263 (2.4) 11 (0.9) 241 (2.4) 17 (1.0) 262 (1.6) 72 (1.5) 263 (1.6) 238 (3.5) 13 (0.7) 255 (1.8) 78 (1.0) 261 (1.0) 262 (1.6) 72 (1.5) 263 (1.0) 263 (1.0) 264 (1.0) 265 (1.0) 265 (1.0) 261 (1.0) 261 (1.0) 262 (1.6) 238 (3.5) 244 (2.4) 255 (1.8) 265 (2.4)			` '		· · · · · · · · · · · · · · · · · · ·	` <i>'</i>	270 (1.7)		
Rhode Island South Carolina 11 (0.9) 241 (2.4) 17 (1.0) 262 (1.6) 72 (1.5) 263 (1.6) 238 (3.5) 13 (0.7) 255 (1.8) 78 (1.0) 261 (1.7) 255 (1.8) 78 (1.0) 261 (1.7) 261		, , ,	· ·	` ·		84 (1.2)	269 (1.1)		
Rhode Island         8 (0.6)         249 (2.7)         13 (0.8)         264 (1.9)         79 (0.8)         267           South Carolina Tennessee         11 (0.9)         241 (2.4)         17 (1.0)         262 (1.6)         72 (1.5)         263           Tennessee         8 (0.6)         238 (3.5)         13 (0.7)         255 (1.8)         78 (1.0)         261           Texas         11 (0.8)         244 (2.4)         14 (1.0)         265 (2.4)         75 (1.5)         267           Utah         6 (0.7)         258 (3.4)         14 (0.7)         270 (1.7)         80 (1.1)         276           Virginia         7 (0.6)         248 (3.2)         15 (0.9)         268 (2.1)         78 (1.1)         269            West Virginia         5 (0.5)         242 (2.7)         11 (0.7)         258 (1.6)         83 (0.9)         260           Wisconsin         6 (0.6)         256 (5.1)         17 (1.2)         279 (1.9)         77 (1.5)         279           Wyoming         5 (0.5)         260 (3.7)         15 (1.1)         273 (1.9)         80 (1.3)         276			250 (3.6)	14 (0.8)	268 (2.4)	80 (1.0)	273 (1.5)		
South Carolina         11 (0.9)         241 (2.4)         17 (1.0)         262 (1.6)         72 (1.5)         263           Tennessee         8 (0.6)         238 (3.5)         13 (0.7)         255 (1.8)         78 (1.0)         261           Texas         11 (0.8)         244 (2.4)         14 (1.0)         265 (2.4)         75 (1.5)         267           Utah         6 (0.7)         258 (3.4)         14 (0.7)         270 (1.7)         80 (1.1)         276           Virginia         7 (0.6)         248 (3.2)         15 (0.9)         268 (2.1)         78 (1.1)         269           West Virginia         5 (0.5)         242 (2.7)         11 (0.7)         258 (1.6)         83 (0.9)         260           Wisconsin         6 (0.6)         256 (5.1)         17 (1.2)         279 (1.9)         77 (1.5)         279           Wyoming         5 (0.5)         260 (3.7)         15 (1.1)         273 (1.9)         80 (1.3)         276		8 (0.6)	249 (2.7)	13 (0.8)	264 (1.9)	79 (0.8)	267 (0.9)		
Tennessee         8 (0.6)         238 (3.5)         13 (0.7)         255 (1.8)         78 (1.0)         261           Texas         11 (0.8)         244 (2.4)         14 (1.0)         265 (2.4)         75 (1.5)         267           Utah         6 (0.7)         258 (3.4)         14 (0.7)         270 (1.7)         80 (1.1)         276           Virginia         7 (0.6)         248 (3.2)         15 (0.9)         268 (2.1)         78 (1.1)         269           West Virginia         5 (0.5)         242 (2.7)         11 (0.7)         258 (1.6)         83 (0.9)         260           Wisconsin         6 (0.6)         256 (5.1)         17 (1.2)         279 (1.9)         77 (1.5)         279           Wyoming         5 (0.5)         260 (3.7)         15 (1.1)         273 (1.9)         80 (1.3)         276	South Carolina	11 (0.9)	241 (2.4)	• •	, ,		263 (1.1)		
Texas         11 (0.8)         244 (2.4)         14 (1.0)         265 (2.4)         75 (1.5)         267           Utah         6 (0.7)         258 (3.4)         14 (0.7)         270 (1.7)         80 (1.1)         276           Virginia         7 (0.6)         248 (3.2)         15 (0.9)         268 (2.1)         78 (1.1)         269           West Virginia         5 (0.5)         242 (2.7)         11 (0.7)         258 (1.6)         83 (0.9)         260           Wisconsin         6 (0.6)         256 (5.1)         17 (1.2)         279 (1.9)         77 (1.5)         279           Wyoming         5 (0.5)         260 (3.7)         15 (1.1)         273 (1.9)         80 (1.3)         276	Tennessee	, ,				, ,	261 (1.4)		
Utah     6 (0.7)     258 (3.4)     14 (0.7)     270 (1.7)     80 (1.1)     276       Virginia     7 (0.6)     248 (3.2)     15 (0.9)     268 (2.1)     78 (1.1)     269       West Virginia     5 (0.5)     242 (2.7)     11 (0.7)     258 (1.6)     83 (0.9)     260       Wisconsin     6 (0.6)     256 (5.1)     17 (1.2)     279 (1.9)     77 (1.5)     279       Wyoming     5 (0.5)     260 (3.7)     15 (1.1)     273 (1.9)     80 (1.3)     276	Teyas	` '		` '		, ,	, ,		
Virginia     7 (0.6)     248 (3.2)     15 (0.9)     268 (2.1)     78 (1.1)     269       West Virginia     5 (0.5)     242 (2.7)     11 (0.7)     258 (1.6)     83 (0.9)     260       Wisconsin     6 (0.6)     256 (5.1)     17 (1.2)     279 (1.9)     77 (1.5)     279       Wyoming     5 (0.5)     260 (3.7)     15 (1.1)     273 (1.9)     80 (1.3)     276							267 (1.5)		
West Virginia     5 (0.5)     242 (2.7)     11 (0.7)     258 (1.6)     83 (0.9)     260 (3.7)       Wisconsin     6 (0.6)     256 (5.1)     17 (1.2)     279 (1.9)     77 (1.5)     279 (1.9)       Wyoming     5 (0.5)     260 (3.7)     15 (1.1)     273 (1.9)     80 (1.3)     276							276 (0.8)		
Wisconsin 6 (0.6) 256 (5.1) 17 (1.2) 279 (1.9) 77 (1.5) 279 (1.9) Wyoming 5 (0.5) 260 (3.7) 15 (1.1) 273 (1.9) 80 (1.3) 276							269 (1.2)		
Wisconsin 6 (0.6) 256 (5.1) 17 (1.2) 279 (1.9) 77 (1.5) 279 (1.9) Wyoming 5 (0.5) 260 (3.7) 15 (1.1) 273 (1.9) 80 (1.3) 276					258 (1.6)		260 (1.1)		
Wyoming 5 (0.5) 260 (3.7) 15 (1.1) 273 (1.9) 80 (1.3) 276		6 (0.6)	256 (5.1)	17 (1.2)		77 (1.5)	279 (1.4)		
TERRITORIES							276 (0.9)		
	rerritories	, ,	` '	\ · · · /		()	(5.5)		
Guam 21 (1.0) 215 (2.1) 15 (0.9) 234 (2.9) 65 (1.1) 241	Guam	21 (1.0)	215 (2.1)	15 (0.9)	234 (2.9)	65 (1.1)	241 (1.1)		
Visein telepole 1 and in it	Virgin Islands						225 (1.4)		

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.



## Teachers' Reports on How Often They Ask Students to Discuss Solutions to Mathematics Problems with Other Students

Т	Grade 4 - 1992								
PUBLIC SCHOOLS	Almost Ev	very Day	At Least Or	nce a Week	Less than	Weekly			
	Percentage of students	Average Proficiency	Percentage of students	Average Proficiency	Percentage of students	Average Proficiency			
NATION	34 (2.4)	218 (1.7)	39 (2.1)	217 (1.7)	26 (2.3)	215 (1.9)			
Northeast	41 (7.3)	220 (4.9)!	37 (5.9)	223 (3.7)	22 (6.0)	216 (6.4)!			
Southeast	32 (4.1)	208 (2.5)	48 (3.3)	209 (2.9)	21 (2.7)	203 (3.4)			
Central		226 (2.5)	37 (4.6)	221 (3.2)	36 (5.8)	224 (3.1)			
	27 (3.4)	• •	36 (3.9)	220 (4.1)	25 (3.8)	213 (2.2)			
West	40 (5.1)	218 (2.4)	30 (3.9)	220 (4.1)	20 (0.0)	210 (212)			
STATES	. = 45 =1	000 (0.0)	00 (0.0)	206 (2.2)	27 (3.0)	207 (2.2)			
Alabama	37 (3.6)	209 (2.6)	36 (3.2)	=== • • •	29 (2.9)	213 (2.4)			
Arizona	34 (3.4)	216 (1.6)	37 (3.2)	214 (1.8)		1 1			
Arkansas	22 (3.0)	209 (2.9)	31 (3.0)	211 (1.8)	47 (3.5)	208 (1.5)			
California	36 (3.0)	209 (2.8)	40 (3.2)	211 (2.0)	24 (2.4)	199 (3.0)			
Colorado	35 (2.8)	222 (1.9)	39 (2.8)	221 (1.5)	26 (2.8)	215 (1.9)			
Connecticut	36 (3.6)	231 (2.4)	38 (3.7)	229 (1.9)	26 (3.2)	220 (2.8)			
Delaware	32 (0.7)	226 (1.5)	36 (1.1)	214 (1.3)	32 (1.0)	213 (1.6)			
Dist. Columbia	47 (1.0)	193 (1.1)	38 (1.0)	191 (1.5)	15 (0.8)	186 (2.2)			
Florida	1 1	· · · · · · · · · · · · · · · · · · ·	42 (3.2)	213 (1.7)	22 (2.5)	211 (2.3)			
	36 (3.1)	212 (2.5)		211 (2.3)	28 (3.1)	213 (2.4)			
Georgia	32 (2.9)	218 (2.2)	40 (3.0)	· · · · · · · · · · · · · · · · · · ·	37 (3.1)	211 (2.0)			
Hawaii	27 (2.7)	212 (2.2)	36 (3.1)	215 (2.3)		· · · · · · · · · · · · · · · · · · ·			
ldaho	37 (3.5)	221 (1.6)	36 (3.2)	221 (1.6)	27 (2.7)	219 (1.7)			
Indiana	19 (2.7)	221 (2.5)	39 (3.4)	222 (1.7)	42 (3.3)	216 (1.6)			
lowa	, ,	232 (1.7)	45 (2.9)	229 (1.3)	25 (3.3)	226 (2.2)			
	30 (3.7)		44 (3.3)	214 (1.4)	24 (3.4)	211 (2.0)			
Kentucky	33 (3.4)	214 (1.9)	,	207 (2.1)	21 (2.8)	201 (2.6)			
Louisiana	41 (3.3)	199 (2.6)	38 (3.1)	3 1	25 (2.7)	228 (2.0)			
Maine	33 (3.3)	232 (2.1)	42 (3.3)	231 (1.4)		210 (4.4)			
Maryland	39 (3.4)	221 (2.4)	42 (3.4)	219 (2.0)	19 (2.9)				
Massachusetts	36 (3.3)	229 (2.6)	35 (3.1)	226 (2.0)	30 (2.8)	225 (2.0)			
Michigan	32 (3.2)	217 (3.5)	45 (3.5)	220 (2.1)	23 (2.8)	220 (2.6)			
Minnesota	28 (3.5)	229 (2.2)	43 (3.8)	225 (1.8)	29 (2.7)	229 (1.7)			
Mississippi	36 (3.4)	203 (2.4)	32 (3.2)	199 (2.2)	31 (3.3)	199 (2.5)			
Missouri	, ,	223 (2.5)	41 (3.1)	221 (1.9)	35 (3.3)	223 (2.1)			
Nebraska	24 (2.9)	229 (2.3)	43 (3.7)	225 (2.0)	26 (3.2)	220 (2.3)			
	31 (3.5)	, ,			• •				
New Hampshire	36 (3.6)	234 (1.7)	40 (2.9)	227 (1.8)	24 (3.2)	227 (2.1)			
New Jersey	34 (3.9)	230 (2.9)	38 (3.6)	227 (1.9)	28 (3.6)	224 (3.0)			
New Mexico	30 (3.5)	214 (2.2)	39 (3.8)	212 (2.0)	30 (3.3)	211 (2.1)			
New York	33 (3.4)	216 (2.3)	38 (3.6)	218 (2.3)	29 (3.1)	217 (2.4)			
North Carolina	32 (2.6)	211 (1.9)	42 (2.8)	214 (1.5)	25 (2.8)	211 (2.0)			
North Dakota	17 (3.5)	227 (2.4)!	39 (4.1)	227 (1.3)	44 (3.9)	229 (1.0)			
Ohio	` ,	, ,		216 (1.9)	30 (3.3)	216 (2.0)			
Ohio	27 (3.2)	221 (2.6)	43 (3.5)		31 (3.8)	219 (1.7)			
Oklahoma	30 (3.5)	221 (1.6)	39 (3.6)	219 (1.6)	1 1	219 (2.9)			
Pennsylvania	35 (2.9)	226 (2.2)	38 (2.7)	223 (2.1)	27 (3.1)				
Rhode Island	22 (3.1)	215 (3.8)	40 (3.4)	215 (2.3)	38 (3.3)	212 (2.2)			
South Carolina	40 (2.8)	214 (1.9)	34 (2.9)	213 (2.0)	26 (2.7)	206 (2.0)			
Tennessee	28 (3.1)	208 (2.3)	39 (3.3)	211 (2.1)	34 (3.0)	210 (1.7)			
Texas	35 (3.0)	221 (2.5)	42 (3.4)	216 (2.2)	24 (2.8)	215 (3.0)			
Utah	32 (2.8)	227 (1.8)	38 (3.0)	223 (1.4)	30 (2.7)	220 (1.7)			
Virginia		225 (2.5)	40 (2.8)	217 (2.0)	25 (2.4)	217 (2.1)			
West Virginia	35 (3.5)		34 (3.3)	214 (2.1)	36 (3.5)	211 (1.7)			
	30 (3.5)	215 (1.9)		229 (1.8)	27 (3.0)	224 (2.3)			
Wisconsin	33 (3.1)	231 (1.9)	40 (2.9)			223 (1.7)			
Wyoming TERRITORY	35 (2.9)	224 (1.7)	42 (2.9)	225 (1.4)	23 (2.8)				
Guam	34 (1.1)	194 (1.7)	28 (1.3)	191 (1.3)	38 (1.2)	189 (1.6)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



## Teachers' Reports on How Often They Ask Students to Discuss Solutions to Mathematics Problems with Other Students (continued)

	Grade 8 - 1992							
PUBLIC SCHOOLS	Almost E	ery Day	At Least On	ce a Week	Less than Weekly			
	Percentage of students	Average Proficiency	Percentage of students	Average Proficiency	Percentage of students	Average Proficiency		
NATION	43 (2.6)	273 (1.6)	32 (2.2)	265 (2.1)	25 (2.2)	261 (1.9)		
Northeast	45 (5.1)	275 (4.0)	31 (4.7)	268 (5.0)				
Southeast	31 (5.3)	269 (3.0)			25 (3.1)	255 (4.0)		
Central	38 (4.8)	, ,	40 (5.0)	261 (2.8)	29 (3.7)	<b>255</b> (3.5)		
West		276 (3.9)	33 (6.2)	274 (4.1)!	29 (3.7)	274 (3.9)		
STATES	<b>55</b> (4.9)	273 (2.6)	26 (2.3)	260 (4.0)	19 (5.1)	260 (3.0)!		
Alabama	41 (3.9)	256 (2.2)	39 (3.9)	251 (3.5)	20 (2.8)	244 (3.3)		
Arizona	48 (4.1)	267 (2.0)	35 (3.7)	266 (2.2)	17 (2.7)	, ,		
Arkansas	39 (4.2)	258 (1.8)	32 (3.3)	258 (2.7)		254 (2.9)		
California	49 (3.7)	264 (2.2)		, ,	29 (4.1)	250 (2.2)		
Colorado	53 (3.3)		34 (3.3)	265 (2.9)	17 (2.5)	246 (3.4)		
Connecticut	, , , , , , , , , , , , , , , , , , ,	277 (1.6)	31 (2.8)	267 (2.3)	16 (2.2)	262 (2.5)		
Comicolicat	36 (3.7)	277 (3.4)	39 (3.6)	273 (2.9)	25 (3.2)	269 (2.8)		
Delaware	36 (1.1)	269 (1.5)	46 (1.0)			, ,		
Dist. Columbia	69 (1.2)			259 (1.6)	17 (0.7)	259 (2.5)		
Florida		236 (1.3)	25 (1.1)	236 (2.3)	6 (0.6)	223 (3.2)		
	46 (3.0)	265 (2.0)	39 (3.2)	258 (2.2)	16 (2.1)	246 (2.6)		
Georgia	52 (3.5)	263 (2.0)	31 (3.2)	255 (2.0)	17 (2.6)	250 (2.7)		
Hawaii	34 (0.9)	262 (1.3)	39 (1.0)	257 (1.3)	26 (0.9)	252 (1.7)		
Idaho	53 (2.8)	276 (1.4)	33 (2.3)	274 (1.7)	13 (2.1)			
Indiana			00 (2.0)	214 (1.1)	13 (2.1)	270 (2.8)		
	36 (3.3)	273 (2.0)	36 (3.6)	271 (2.4)	28 (3.3)	263 (2.1)		
lowa	40 (4.0)	287 (1.5)	40 (4.5)	283 (1.9)	21 (3.9)	' '		
Kentucky	41 (4.1)	267 (1.9)	38 (3.7)	262 (1.8)		277 (2.6)!		
Louisiana	43 (3.8)	248 (2.9)	39 (3.5)		21 (3.0)	252 (2.9)		
Maine	42 (3.6)			254 (2.4)	18 (2.8)	246 (2.5)		
Maryland		281 (1.8)	43 (3.4)	279 (1.3)	15 (2.5)	269 (4.0)		
	48 (3.7)	269 (2.3)	33 (3.3)	264 (2.8)	19 (2.8)	258 (3.4)		
Massachusetts	36 (3.5)	279 (2.6)	36 (3.5)	074 (0.4)	20 (2.2)			
Michigan	51 (3.8)	, , ,		271 (2.4)	29 (3.0)	265 (2.8)		
Minnesota		271 (2.6)	30 (3.0)	260 (2.9)	19 (2.6)	268 (2.9)		
Mississippi	41 (3.6)	286 (1.6)	37 (3.6)	279 (2.1)	22 (3.5)	277 (2.3)		
	46 (4.1)	249 (2.0)	33 (3.8)	243 (2.6)	21 (3.1)	242 (2.4)		
Missouri	47 (3.6)	275 (1.7)	31 (2.9)	270 (2.4)	22 (2.8)	265 (2.0)		
Nebraska	47 (4.4)	283 (1.5)	34 (4.0)	273 (2.1)	18 (3.1)	274 (2.0)		
New Homoshire			, ,	270 (2.1)	10 (3.1)	271 (3.1)		
New Hampshire	35 (3.2)	282 (1.5)	53 (3.6)	277 (1.3)	12 (2.4)	269 (1.9)!		
New Jersey	43 (4.3)	276 (2.7)	36 (3.9)	268 (3.1)	20 (3.4)	268 (4.7)		
New Mexico	49 (3.3)	264 (1.2)	38 (3.4)	257 (1.4)	12 (1.9)			
New York	30 (3.4)	269 (4.0)	39 (3.9)	265 (4.2)		250 (2.6)		
North Carolina	42 (3.2)	260 (1.9)		• •	31 (3.3)	264 (3.1)		
North Dakota			33 (2.9)	259 (2.0)	25 (3.0)	251 (2.4)		
ŀ	49 (4.2)	286 (1.8)	28 (3.7)	282 (1.9)	23 (3.3)	277 (2.1)		
Ohio	27 (3.5)	274 (3.4)	42 (4.0)	260 /2 51	24 /4 2)			
Oklahoma	47 (4.0)	7		269 (2.5)	31 (4.2)	265 (4.2)		
Pennsylvania		270 (1.8)	33 (3.7)	267 (1.9)	20 (2.8)	263 (2.5)		
Rhode Island	32 (3.3)	272 (3.6)	40 (3.3)	273 (1.8)	28 (2.9)	267 (2.5)		
	44 (0.9)	270 (1.1)	30 (0.8)	262 (1.7)	26 (0.9)	260 (1.3)		
South Carolina	41 (3.0)	265 (2.2)	40 (3.0)	261 (2.4)	19 (2.7)	250 (2.7)		
Tennessee	40 (3.5)	261 (2.5)	33 (3.4)	257 (1.7)	27 (3.5)			
Гехаѕ	, ,		` '	201 (1.1)	21 (3.3)	254 (3.4)		
	57 (3.2)	266 (2.1)	27 (2.5)	262 (2.5)	15 (2.5)	258 (2.9)		
Utah	60 (2.8)	278 (1.1)	22 (2.0)	270 (1.9)	18 (1.9)	263 (2.3)		
/irginia	42 (3.1)	271 (2.1)	39 (3.0)	267 (1.9)	18 (2.7)			
West Virginia	47 (3.1)	262 (1.5)	31 (2.9)			260 (2.7)		
Wisconsin	48 (4.8)			256 (2.0)	22 (2.5)	254 (2.1)		
Wyoming		282 (2.7)	32 (4.1)	277 (2.1)	20 (4.7)	273 (5.9)!		
ERRITORIES	53 (3.6)	279 (1.2)	30 (3.3)	272 (1.4)	17 (2.3)	266 (2.2)		
					• •	· · · · · ·		
Guam	26 (1.5)	260 (2.0)	33 (1.7)	227 (2.3)	41 (0.9)	222 (1.6)		
/irgin Islands	42 (1.1)	220 (1.5)	, <i>,</i>	224 (1.5)		222 (1.0)		



## Teachers' Reports on How Often They Ask Students to Work and Discuss Mathematics Problems that Reflect Real-Life Situations

	Grade 4 - 1992								
PUBLIC SCHOOLS	Almost Ev	very Day	At Least On	ice a Week	Less than	Weekly			
	Percentage of students	Average Proficiency	Percentage of students	Average Proficiency	Percentage of students	Average Proficiency			
NATION	27 (2.2)	216 (1.8)	47 (2.5)	218 (1.6)	25 (2.3)	216 (1.8)			
Northeast	28 (5.6)	226 (4.8)!	49 (4.7)	219 (3.7)	23 (4.1)	216 (5.1)!			
Southeast		207 (2.6)	52 (3.7)	208 (3.0)	20 (2.8)	206 (2.5)			
Central	28 (4.6)		45 (6.7)	225 (3.0)	33 (6.2)	223 (3.1)!			
	22 (2.6)	223 (3.5)	, ,	222 (3.2)	24 (4.7)	214 (3.1)!			
West	32 (5.0)	214 (2.8)	44 (4.9)	222 (3.2)	24 (4.7)	214 (0.1):			
STATES				000 (0.0)	00 (0.0)	000 (0.4)			
Alabama	29 (3.3)	208 (3.1)	42 (3.4)	208 (2.2)	29 (3.0)	206 (2.1)			
Arizona	21 (2.3)	217 (1.9)	46 (2.4)	216 (1.5)	33 (2.7)	211 (2.1)			
Arkansas	20 (2.9)	210 (2.3)	42 (3.5)	210 (1.7)	39 (3.3)	208 (1.6)			
California	28 (3.4)	211 (3.0)	42 (3.2)	207 (2.2)	30 (3.0)	205 (2.6)			
Colorado	26 (2.8)	224 (2.0)	44 (3.1)	219 (1.6)	30 (3.4)	218 (1.8)			
Connecticut	28 (2.9)	230 (2.2)	45 (3.4)	226 (1.9)	27 (3.4)	227 (3.0)			
Delaware	26 (0.8)	224 (1.6)	41 (1.4)	217 (1.6)	33 (1.1)	213 (1.5)			
Dist. Columbia	29 (0.9)	189 (1.6)	50 (1.2)	194 (1.3)	21 (0.8)	186 (1.8)			
Florida	32 (3.0)	211 (2.0)	49 (2.8)	213 (1.6)	19 (2.2)	212 (3.0)			
Georgia		, ,	48 (3.1)	214 (2.4)	25 (2.6)	212 (2.3)			
•	28 (2.7)	215 (2.5)		1. 1	39 (3.0)	212 (2.2)			
Hawaii	19 (2.6)	215 (2.6)	42 (3.0)	213 (2.0)					
Idaho	21 (2.9)	225 (2.1)	48 (3.0)	219 (1.3)	31 (2.7)	220 (1.4)			
Indiana	23 (3.5)	222 (2.4)	39 (3.5)	220 (1.7)	39 (3.5)	217 (1.4)			
lowa	26 (3.1)	227 (2.1)	46 (3.5)	231 (1.5)	27 (3.3)	228 (1.8)			
Kentucky	31 (3.3)	214 (2.2)	44 (3.7)	215 (1.6)	24 (3.4)	210 (1.9)			
Louisiana	39 (3.1)	206 (2.4)	40 (2.9)	202 (2.2)	21 (3.1)	199 (2.7)			
Maine			48 (3.6)	231 (1.7)	30 (3.7)	230 (1.8)			
Maryland	22 (3.0) 30 (2.4)	230 (2.2) 220 (2.3)	54 (2.5)	217 (2.1)	16 (2.4)	217 (3.5)			
,			` ,	, ,	30 (3.2)	227 (2.0)			
Massachusetts	23 (3.4)	228 (2.8)	47 (3.6)	226 (1.9)	25 (2.8)	221 (2.8)			
Michigan	28 (3.2)	216 (4.2)	46 (3.7)	219 (2.1)		· · · · · · · · · · · · · · · · · · ·			
Minnesota	29 (3.3)	226 (2.0)	41 (2.8)	229 (1.9)	30 (2.7)	226 (1.7)			
Mississippi	30 (3.6)	201 (2.6)	38 (3.5)	202 (2.0)	32 (3.2)	198 (2.2)			
Missouri	28 (3.3)	221 (3.3)	46 (3.3)	222 (2.0)	26 (3.1)	223 (2.1)			
Nebraska	25 (4.0)	230 (2.0)	43 (3.6)	224 (2.0)	32 (4.0)	222 (2.0)			
New Hampshire	19 (2.6)	234 (2.6)	50 (3.5)	229 (1.4)	31 (3.7)	227 (2.2)			
New Jersey	35 (4.0)	229 (2.6)	41 (3.9)	225 (2.3)	24 (3.2)	226 (2.9)			
New Mexico	20 (3.1)	214 (2.9)	47 (3.1)	211 (1.7)	33 (3.3)	212 (1.8)			
New York	27 (2.8)	217 (2.5)	47 (3.7)	218 (2.2)	27 (2.6)	216 (2.4)			
North Carolina	26 (2.7)	212 (2.3)	45 (2.9)	211 (1.6)	30 (2.8)	215 (1.7)			
North Dakota	20 (2.7)	227 (2.4)	37 (3.7)	229 (1.2)	43 (4.2)	227 (1.3)			
		• •	• •	218 (1.8)	29 (3.3)	215 (2.4)			
Ohio	21 (3.5)	220 (3.1)	50 (3.9)	= 1 1	, ,	220 (1.6)			
Oklahoma	23 (2.7)	219 (1.9)	51 (3.4)	219 (1.4)	26 (2.9)	1			
Pennsylvania	29 (3.6)	227 (2.4)	44 (3.3)	222 (1.9)	27 (3.0)	220 (2.9)			
Rhode Island	15 (2.4)	215 (5.0)	47 (3.6)	215 (2.2)	37 (3.6)	212 (2.3)			
South Carolina	34 (3.2)	212 (1.9)	45 (3.2)	212 (1.6)	21 (2.6)	210 (2.4)			
Tennessee	23 (2.5)	208 (2.8)	42 (3.2)	212 (2.1)	35 (3.3)	208 (1.8)			
Texas	45 (3.7)	219 (2.2)	40 (3.4)	216 (2.5)	15 (2.8)	215 (3.2)			
Utah	28 (2.9)	227 (1.7)	45 (2.9)	221 (1.5)	27 (2.6)	222 (1.7)			
Virginia	27 (3.0)	219 (2.7)	46 (2.9)	223 (1.8)	27 (2.7)	215 (2.4)			
West Virginia	23 (2.9)	218 (2.3)	37 (3.3)	213 (1.6)	40 (3.8)	211 (1.6)			
Wisconsin			49 (3.0)	228 (1.7)	23 (2.8)	227 (2.2)			
Wyoming	28 (3.1) 27 (2.5)	230 (2.2) 226 (2.0)	49 (3.0) 45 (3.3)	225 (1.7) 225 (1.2)	28 (3.3)	223 (1.5)			
TERRITORY	21 (2.5)	220 (2.0)	(0.0)			•			
Guam	22 (0.9)	191 (1.9)	45 (1.4)	192 (1.5)	33 (1.2)	191 (1.6)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



TABLE A.74

## Teachers' Reports on How Often They Ask Students to Work and Discuss Mathematics Problems that Reflect Real-Life Situations (continued)

	Grade 8 - 1992							
PUBLIC SCHOOLS	Almost Ev	ery Day	At Least Or	At Least Once a Week		n Weekly		
	Percentage of students	Average Proficiency	Percentage of students	Average Proficiency	Percentage of students	Average Proficiency		
NATION	19 (1.7)	269 (3.0)	51 (2.3)	268 (1.4)	30 (2.2)	067 (4.0)		
Northeast	14 (5.0)	277(10.1)!	57 (6.0)	270 (3.3)		267 (1.9)		
Southeast	23 (3.3)	264 (3.5)	, , ,		29 (3.9)	260 (4.7)		
Central	, ,		40 (4.3)	259 (2.8)	37 (5.5)	263 (3.0)		
West	11 (3.2)	265 (4.7)	64 (4.5)	276 (2.6)	25 (4.5)	276 (5.5)!		
STATES	26 (2.6)	271 (4.3)	46 (4.2)	264 (3.1)	28 (3.4)	271 (3.0)		
					, ,	<b>\</b>		
Alabama	30 (4.2)	253 (2.8)	46 (4.1)	250 (3.0)	24 (3.3)	253 (3.1)		
Arizona	24 (3.0)	265 (2.1)	45 (4.0)	265 (2.1)	31 (4.0)	1 1		
Arkansas	16 (2.7)	252 (2.7)	45 (4.2)	, ,	, ,	262 (2.9)		
California	16 (2.1)	255 (4.2)		253 (1.6)	39 (3.8)	261 (2.4)		
Colorado	25 (3.2)	, , , , , , , , , , , , , , , , , , ,	44 (3.0)	262 (2.4)	40 (2.7)	263 (2.3)		
Connecticut	3 7	273 (2.6)	45 (3.1)	270 (2.0)	30 (3.3)	272 (2.0)		
Commoditati	21 (2.5)	273 (3.3)	50 (3.2)	271 (2.2)	29 (3.0)	277 (2.8)		
Delaware	29 (0.7)	259 (1.9)	42 (1.1)	060 (4.6)				
Dist. Columbia	3 1	\ ·/		262 (1.6)	29 (0.8)	266 (2.0)		
Florida	29 (1.0)	236 (2.2)	53 (1.3)	234 (1.5)	18 (0.9)	236 (2.7)		
	27 (2.9)	260 (2.7)	45 (2.9)	259 (1.8)	28 (2.7)	259 (3.0)		
Georgia	32 (3.5)	257 (2.5)	50 (3.4)	258 (1.9)	19 (2.4)	261 (2.9)		
Hawaii	16 (0.6)	260 (2.1)	42 (1.0)	254 (1.3)	43 (1.0)	260 (1.2)		
Idaho	25 (2.7)	271 (2.0)	46 (3.1)	275 (1.1)	29 (3.1)			
Indiana	, ,		40 (0.1)	215 (1.1)	29 (3.1)	277 (1.8)		
Indiana	15 (2.7)	267 (3.9)	52 (3.4)	271 (1.8)	33 (3.1)	268 (2.3)		
lowa	24 (3.4)	283 (2.1)	52 (3.9)	283 (1.5)	24 (3.9)			
Kentucky	24 (3.2)	265 (2.6)	42 (3.9)		\ <i>F</i>	283 (3.0)		
Louisiana	22 (3.1)			261 (1.9)	34 (3.5)	263 (1.4)		
Maine	` '		48 (4.1)	251 (2.4)	30 (3.5)	250 (2.6)		
Maryland	31 (3.6)	279 (2.1)	44 (3.6)	278 (1.8)	26 (2.6)	278 (2.1)		
Wiai yiailu	22 (3.3)	262 (3.3)	44 (3.6)	265 (2.8)	34 (3.4)	270 (2.3)		
Massachusetts	18 (2.7)	075 (0.7)	45 (0.4)	074 (4.7)	, ,	, ,		
Michigan	3 /	275 (2.7)	45 (3.1)	271 (1.7)	36 (2.9)	272 (2.1)		
Minnesota	31 (3.6)	273 (3.9)	48 (3.0)	261 (2.0)	21 (2.8)	271 (3.5)		
	24 (3.1)	284 (2.1)	44 (4.5)	280 (1.5)	32 (4.4)	281 (2.3)		
Mississippi	31 (4.0)	246 (2.6)	43 (4.4)	244 (2.4)	27 (3.9)	246 (2.9)		
Missouri	22 (2.9)	266 (2.2)	51 (3.3)	271 (1.5)	26 (3.0)			
Nebraska	20 (2.9)	275 (2.2)	50 (3.6)	278 (1.8)	` '	275 (2.3)		
Na 11	(2.5)	2/3 (2.2)	30 (3.0)	270 (1.0)	31 (3.4)	278 (2.4)		
New Hampshire	18 (2.7)	278 (2.4)	51 (3.5)	276 (1.2)	31 (3.6)	281 (1.9)		
New Jersey	29 (3.1)	271 (3.3)	45 (3.7)	268 (3.0)	_ ` ` '			
New Mexico	20 (2.6)	256 (2.1)	51 (3.3)	, ,	27 (3.3)	277 (3.2)		
New York	21 (3.0)			261 (1.0)	29 (2.8)	258 (2.0)		
North Carolina		264 (4.3)	42 (3.1)	264 (3.3)	37 (2.9)	268 (3.7)		
North Dakota	15 (2.1)	254 (3.4)	49 (3.1)	257 (1.7)	36 (3.3)	259 (1.8)		
NOITH DAKULA	26 (3.7)	282 (2.3)	49 (4.2)	282 (1.2)	25 (3.6)	286 (2.6)		
Ohio	19 (3.1)	060 (0.4)		` '	, ,	•		
Oklahoma		268 (2.4)	45 (3.6)	265 (2.2)	36 (3.9)	276 (2.6)		
	24 (3.3)	265 (2.3)	41 (3.2)	267 (2.1)	35 (3.5)	270 (2.5)		
Pennsylvania	19 (2.8)	266 (4.2)	45 (3.2)	270 (1.9)	36 (3.2)	274 (2.5)		
Rhode Island	27 (0.9)	265 (1.1)	37 (1.1)	265 (1.4)	36 (1.0)			
South Carolina	27 (2.7)	258 (2.6)	47 (3.5)	, , , ,		265 (1.3)		
Tennessee	22 (3.1)	255 (2.8)	, ,		26 (3.1)	259 (2.6)		
_	22 (3.1)	233 (2.0)	47 (4.0)	261 (2.3)	32 (4.0)	255 (2.3)		
Texas	41 (3.0)	266 (2.7)	43 (2.7)	264 (2.2)	16 (2.4)			
Utah	18 (2.2)	274 (2.4)	46 (2.7)			261 (2.6)		
Virginia	19 (2.5)			273 (1.1)	36 (2.8)	274 (1.8)		
West Virginia		264 (3.1)	40 (2.6)	267 (1.7)	40 (2.6)	269 (2.2)		
	16 (2.7)	257 (2.1)	50 (3.7)	258 (1.3)	34 (3.4)	261 (2.3)		
Wisconsin	22 (3.1)	277 (3.3)	58 (4.0)	279 (2.2)	20 (3.2)	277 (2.2)		
Wyoming	23 (2.6)	276 (2.1)	42 (3.1)	275 (1.5)	35 (2.5)			
ERRITORIES	, ,	\/	- (0.1)	2.0 (1.0)	SV (2.3)	274 (1.3)		
Guam	28 (1.3)	244 (1.7)	24 (4 6)	000 (0.0)	40 /4 5			
Virgin Islands			24 (1.6)	232 (3.3)	48 (1.5)	228 (1.4)		
	5 (0.5)	223 (3.6)	61 (1.3)	219 (1.5)	· 34 (1.3)	225 (1.3)		



# Calculators and Computers



#### TABLE A.75 |

Teachers' Reports on Permitting the Use of Calculators in Mathematics Class

	Grade 4 - 1992							
-	Unrestric	ted Use	Restrict	ed Use				
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency				
NATION	5 (1.2)	219 (6.0)!	95 (1.2)	217 (1.0)				
Northeast	10 (4.3)	232 (8.8)!	90 (4.3)	219 (2.3)				
Southeast	5 (2.0)	209 (6.3)!	95 (2.0)	207 (2.1)				
Central	3 (0.9)	*** (***)	97 (0.9)	224 (1.9)				
		` ,	95 (1.8)	218 (2.2)				
West	5 (1.8)	211 (5.2)!	<b>35</b> (1.6)	210 (2.2)				
STATES		(F -)	00 (4.0)	207 (1.6)				
Alabama	7 (1.8)	206 (5.0)!	93 (1.8)					
Arizona	6 (1.2)	221 (5.2)!	94 (1.2)	214 (1.1)				
Arkansas	5 (1.1)	200 (4.3)!	95 (1.1)	210 (1.0)				
California	11 (2.5)	204 (4.8)!	89 (2.5)	208 (1.8)				
Colorado	9 (1.9)	220 (4.7)!	91 (1.9)	220 (1.2)				
Connecticut	11 (2.5)	231 (3.4)!	89 (2.5)	227 (1.4)				
Som Cottout	11 (2.5)		• •	• •				
Delaware	3 (0.2)	*** (***)	97 (0.2)	218 (0.9)				
Dist. Columbia	25 (0.8)	190 (1.5)	75 (0.8)	191 (0.9)				
Florida	9 (1.7)	212 (3.9)	91 (1.7)	213 (1.3)				
Georgia	7 (1.4)	211 (5.5)!	93 (1.4)	214 (1.4)				
Hawaii		212 (3.7)	88 (1.7)	213 (1.4)				
1	12 (1.7)		94 (1.4)	220 (1.1)				
Idaho	6 (1.4)	218 (2.9)!	54 (1.4)	220 (1.1)				
Indiana	4 (1.3)	228 (4.1)!	96 (1.3)	219 (1.2)				
lowa	, ,	229 (2.7)!	94 (1.3)	229 (1.1)				
	6 (1.3)		87 (2.4)	212 (1.2)				
Kentucky	13 (2.4)	220 (2.9)		203 (1.6)				
Louisiana	8 (1.8)	194 (7.8)!	92 (1.8)	• •				
Maine	8 (1.9)	233 (3.3)!	92 (1.9)	230 (1.1)				
Maryland	15 (2.7)	221 (3.3)	85 (2.7)	218 (1.7)				
14		000 (6.4)	91 (2.1)	226 (1.3)				
Massachusetts	9 (2.1)	230 (6.1)!		219 (2.0)				
Michigan	10 (2.5)	219 (6.7)!	90 (2.5)					
Minnesota	10 (2.5)	231 (2.5)!	90 (2.5)	227 (1.2)				
Mississippi	9 (2.0)	196 (3.6)!	91 (2.0)	200 (1.3)				
Missouri	4 (1.6)	214 (9.4)!	96 (1.6)	222 (1.3)				
Nebraska	11 (2.6)	237 (3.3)!	89 (2.6)	223 (1.3)				
	, ,		04 (0.0)	000 (4.3)				
New Hampshire	9 (2.2)	232 (3.3)!	91 (2.2)	229 (1.3)				
New Jersey	8 (1.9)	227 (7.0)!	92 (1.9)	227 (1.5)				
New Mexico	6 (1.5)	218 (3.2)!	94 (1.5)	212 (1.3)				
New York	7 (1.5)	231 (4.5)!	93 (1.5)	216 (1.4)				
North Carolina	9 (1.5)	217 (2.6)	91 (1.5)	212 (1.1)				
North Dakota	5 (1.3)	227 (2.1)!	95 (1.3)	228 (0.9)				
	3 (1.3)	, ,	, ,	, ,				
Ohio	3 (1.0)	198 (4.3)!	97 (1.0)	218 (1.2)				
Oklahoma	4 (1.3)	221 (4.6)!	96 (1.3)	219 (1.0)				
Pennsylvania	4 (1.3)	232 (7.4)!	96 (1.3)	223 (1.4)				
Rhode Island	5 (1.3)	209 (4.8)!	<b>95</b> (1.3)	214 (1.6)				
South Carolina	5 (1.3)	216 (5.4)!	95 (1.2)	211 (1.2)				
Tennessee	, , ,	208 (5.1)!	95 (1.1)	210 (1.4)				
i Cillicaace	5 (1.1)	200 (3.1)!	, ,	• •				
Texas	7 (1.2)	217 (4.0)	93 (1.2)	217 (1.5)				
Utah	6 (1.6)	231 (4.6)!	94 (1.6)	223 (1.0)				
Virginia		214 (4.8)!	94 (1.5)	220 (1.4)				
•	6 (1.5)		92 (1.7)	213 (1.1)				
West Virginia	8 (1.7)	217 (3.8)!	90 (2.1)	228 (1.2)				
Wisconsin	10 (2.1)	229 (4.4)!	• • • • • • • • • • • • • • • • • • • •					
Wyoming	6 (1.4)	227 (4.3)!	94 (1.4)	224 (1.0)				
TERRITORY				404 (0.0)				
Guam	19 (0.7)	192 (2.6)	81 (0.7)	191 (0.8)				

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



TABLE A.75 | Teachers' Reports on Permitting the Use of Calculators in Mathematics Class (continued)

	Grade 8 - 1992								
PUBLIC	Unrestric	ted Use	Restrict	ed Use					
SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency					
NATION	30 (2.5)	279 (2.4)	70 (2.5)	060 (4.4)					
Northeast	24 (4.0)	283 (9.0)	76 (4.0)	262 (1.4)					
Southeast	20 (3.1)	275 (3.0)		263 (4.6)					
Central	37 (7.4)		80 (3.1)	258 (1.5)					
West	38 (4.7)	286 (3.2)!	63 (7.4)	268 (3.1)					
STATES	30 (4.7)	275 (3.3)	62 (4.7)	262 (2.7)					
Alabama	04 (0.0)								
Arizona	21 (3.3) >>	259 (4.2)	79 (3.3)≪	250 (1.8)					
Arkansas	30 (3.4) >	273 (3.1)	70 (3.4) <	261 (1.4)					
	20 (2.4)**	267 (3.4)	80 (2.4)≪	253 (1.5)					
California	39 (3.5)	268 (2.2)	61 (3.5)	257 (2.1)					
Colorado	46 (2.9)>>	276 (2.0)	54 (2.9) <b>«</b>	267 (1.4)>					
Connecticut	37 (3.4)>	286 (1.8)	63 (3.4) <	266 (1.6)					
Delaware	29 (0.9)>>	268 (2.0)	, ,						
Dist. Columbia	45 (1.1) >>	239 (1.6)	71 (0.9) <b>«</b>	260 (1.1)					
Florida	31 (2.6) >>		55 (1.1) <b>«</b>	231 (1.3)					
Georgia	27 (2.9) >>	274 (2.6)	69 (2.6) <<	253 (1.6)					
Hawaii		269 (2.9)	73 (2.9)≪	254 (1.5)					
idaho	25 (0.8)*	269 (2.1)	75 (0.8) <b>«</b>	253 (1.0) >					
l.	44 (3.0)>>	283 (1.4)>	56 (3.0) <<	268 (1.2)					
indiana	14 (2.3)	287 (4.4)	86 (2.3)	267 (1.3)					
iowa	31 (4.3)>	289 (1.9)	69 (4.3) <	280 (1.4)>					
Kentucky	38 (3.4) >>	271 (2.4)	62 (3.4) <<	•					
Louisiana	19 (3.2) >>	251 (3.6)		257 (1.3)					
Maine <sup>1</sup>	48 (3.6)	282 (1.8)	81 (3.2) <b>«</b>	250 (1.8)					
Maryland	33 (3.6) >	280 (2.9)	52 (3.6) 67 (3.6) <	274 (1.5)					
Massachusetts¹	, ,	, ,	` '	258 (1.9)					
Michigan	21 (3.1)	287 (2.9)	79 (3.1)	268 (1.2)					
Minnesota	48 (3.7)>>	271 (2.3)	52 (3.7) <b>&lt;</b>	262 (1.6)					
	57 (4.3)>>	287 (1.4)	43 (4.3) <<	274 (1.7)					
Mississippi <sup>1</sup>	11 (2.1)	257 (6.0)!	89 (2.1)	244 (1.2)					
Missouri <sup>1</sup>	44 (3.7)	276 (1.9)	56 (3.7)	267 (1.0)					
Nebraska	36 (4.3) >	286 (2.1)	64 (4.3) <	273 (1.3)					
New Hampshire	31 (2.9)>	283 (2.4)	69 (2.9) <						
New Jersey	20 (3.5) >	278 (4.7)		275 (1.3) >					
New Mexico	27 (3.1)>		80 (3.5) <	270 (1.7)					
New York	18 (2.1)>>	263 (1.8)	73 (3.1) <	258 (1.1)					
North Carolina		274 (4.4) >	82 (2.1)≪	264 (2.3)					
North Dakota	19 (2.9) >	264 (2.3)	81 (2.9) <	256 (1.5)>					
1	39 (3.1) >>	288 (1.4)	61 (3.1)≪	280 (1.7)					
Ohio	21 (2.8)	277 (3.9)	79 (2.8)	267 (1.7)					
Oklahoma	14 (3.2)	272 (4.8)!	86 (3.2)						
Pennsylvania	25 (3.4)>	278 (3.4)	75 (3.4) <	267 (1.3) >					
Rhode Island	25 (0.9) >>	274 (1.5)>>	75 (5.4) < 75 (0.9) <<	268 (1.7)					
South Carolina1	20 (2.6)	277 (2.6)		263 (0.9) >					
ennessee1	12 (2.6)	277 (2.6)	80 (2.6)	256 (1.4)					
exas	•	• •	88 (2.6)	256 (1.3)					
Itah¹	38 (3.5) >>	271 (2.8)	62 (3.5)≪	260 (1.6)>					
	58 (2.8)	279 (1.2)	42 (2.8)	267 (1.4)					
/irginia	20 (2.4)	276 (3.2)	80 (2.4)	265 (1.4)					
Vest Virginia	24 (2.6) >>	271 (2.7)	76 (2.6) <b>«</b>	255 (1.1)					
Visconsin	38 (4.2)	284 (1.9)	62 (4.2)	275 (2.1)					
Vyoming	43 (3.7)	280 (1.4)	57 (3.7)						
ERRITORIES	,,	200 (114)	01 (0.1)	271 (1.1)					
uam	17 (0.8)≪	254 (3.1) >>	83 (0.8) >>	224 /4 4\					
irgin Islands	15 (0.7)»	225 (2.5)	85 (0.7) <<	231 (1.1) 222 (1.3)					

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. (The value for 1992 was significantly lower than the value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.

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### TABLE A.76 | Teachers' Reports on Permitting the Use of Calculators on Mathematics Tests

	Grade 4 - 1992						
PUBLIC	Ye	s	No				
SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	5 (1.2)	227 (4.4)!	95 (1.2)	216 (1.1)			
Northeast	9 (4.0)	236 (7.8)!	91 (4.0)	219 (2.7)			
Southeast	2 (0.9)	*** (***)	98 (0.9)	208 (2.0)			
Central		*** /***	95 (2.8)	224 (2.2)			
	5 (2.8)		` ,	, ,			
West	6 (1.9)	*** (***)	94 (1.9)	217 (2.0)			
STATES				4			
Alabama	2 (0.8)	*** (***)	98 (0.8)	207 (1.6)			
Arizona	4 (1.2)	217 (3.8)!	96 (1.2)	214 (1.1)			
Arkansas	3 (1.2)	208 (9.6)!	97 (1.2)	209 (0.9)			
California	12 (2.2)	214 (3.9)	88 (2.2)	207 (1.7)			
Colorado	9 (2.2)	227 (3.0)!	91 (2.2)	219 (1.2)			
Connecticut	7 (1.8)	228 (3.7)!	93 (1.8)	227 (1.4)			
	` '	, ,	` <i>'</i>	, ,			
Delaware	3 (0.6)	*** (***)	97 (0.6)	217 (0.9)			
Dist. Columbia	32 (1.1)	190 (1.4)	68 (1.1)	192 (1.1)			
Florida	5 (1.2)	212 (4.1)!	95 (1.2 <b>)</b>	212 (1.3)			
Georgia	4 (1.1)	217 (6.5)!	96 (1.1)	214 (1.4)			
Hawaii	14 (1.7)	211 (3.1)	86 (1.7)	213 (1.5)			
Idaho	1 1	223 (3.1)!	92 (2.1)	220 (1.1)			
Idano	8 (2.1)	223 (3.1)!	52 (2.1)	220 (1.1)			
Indiana	1 (0.6)	*** (***)	99 (0.6)	219 (1.2)			
lowa	2 (1.0)	*** (***)	98 (1.0)	229 (1.1)			
Kentucky	13 (2.5)	213 (2.7)	87 (2.5)	213 (1.2)			
Louisiana	7 (2.0)	200 (4.0)!	93 (2.0)	203 (1.7)			
Maine	, ,	, ,	91 (1.9)	230 (1.1)			
	9 (1.9)	235 (3.9)!		217 (1.6)			
Maryland	20 (2.9)	222 (3.1)	80 (2.9)	217 (1.0)			
Massachusetts	5 (1.3)	242 (5.5)!	<b>95</b> (1.3)	226 (1.2)			
Michigan	19 (3.2)	214 (4.5)	81 (3.2)	220 (2.0)			
Minnesota	11 (2.6)	234 (2.3)!	89 (2.6)	226 (1.3)			
Mississippi	1 1	192 (7.0)!	92 (2.4)	200 (1.3)			
Missouri	8 (2.4)		97 (1.2)	222 (1.4)			
	3 (1.2)		· · · · · · · · · · · · · · · · · · ·	1 :			
Nebraska	3 (1.0)	*** (***)	97 (1.0)	225 (1.4)			
New Hampshire	6 (1.7)	231 (5.1)!	94 (1.7)	229 (1.2)			
New Jersey	4 (1.5)	241 (9.7)!	96 (1.5)	226 (1.4)			
New Mexico	2 (0.9)	*** (***)	98 (0.9)	212 (1.3)			
New York	2 (0.9) 4 (1.2)	222 (6.2)!	96 (1.2)	217 (1.3)			
North Carolina	, ,	, ,	94 (1.4)	217 (1.3)			
	6 (1.4)	213 (4.5)!	· · · · · · · · · · · · · · · · · · ·				
North Dakota	2 (1.1)	*** (***)	98 (1.1)	228 (0.9)			
Ohio	4 (1.8)	228 (5.5)!	96 (1.8)	217 (1.3)			
Oklahoma	0 (0.3)	*** (***)	100 (0.3)	220 (1.1)			
Pennsylvania	4 (1.5)	236 (6.8)!	96 (1.5)	222 (1.5)			
Rhode Island	` <i>'</i>	230 (4.1)!	96 (1.3)	213 (1.7)			
South Carolina	4 (1.3)	· , ,	: :	` !			
	3 (1.0)	210(10.1)!	97 (1.0)	211 (1.2)			
Tennessee	2 (0.7)	*** (***)	98 (0.7)	210 (1.4)			
Texas	6 (1.4)	224 (2.8)!	94 (1.4)	217 (1.6)			
Utah	6 (1.5)	230 (4.6)!	94 (1.5)	223 (1.0)			
Virginia		226 (5.9)!	96 (1.2)	219 (1.3)			
West Virginia	4 (1.2)	1 - 1	, ,	213 (1.2)			
• 1	6 (1.8)	218 (2.4)!	94 (1.8)	` '			
Wisconsin	7 (1.8)	232 (3.8)!	93 (1.8)	228 (1.2)			
Wyoming	8 (1.6)	229 (2.2)!	92 (1.6)	224 (1.0)			
TERRITORY							
Guam	6 (0.5)	190 (3.5)	94 (0.5)	192 (0.9)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Trial State Mathematics Assessment.

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### TABLE A.76 | Teachers' Reports on Permitting the Use of Calculators on Mathematics Tests (continued)

	Grade 8 - 1992							
PUBLIC	Ye	rs -	N	<del></del>				
SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency				
NATION	49 (3.1)	275 (1.9)	51 (3.1)	064 (4.6)				
Northeast	46 (6.8)	279 (5.1)	54 (6.8)	261 (1.6)				
Southeast	36 (5.7)	271 (2.1)		259 (5.1)				
Central	62 (6.9)	278 (4.3)	64 (5.7)	256 (2.2)				
West	53 (5.4)		38 (6.9)	271 (3.2)!				
STATES	00 (0.4)	272 (2.8)	47 (5.4)	263 (3.0)				
Alabama	41 (4.4)>>	050 (0.7)	· · · · · · · · · · · · · · · · · ·					
Arizona		259 (2.7)	59 (4.4) <<	247 (2.1)				
Arkansas	45 (4.2)>>	271 (2.0)	<b>55</b> (4.2)≪	259 (1.8)				
California	34 (3.7)*	264 (1.9)	66 (3.7)≪	251 (1.6) <				
Colorado	57 (3.6)	266 (1.9)	43 (3.6)	256 (2.9)				
	65 (3.1) <b>»</b>	276 (1.4)	35 (3.1) <b>«</b>	263 (1.7)				
Connecticut	56 (3.5) >	284 (1.4)	44 (3.5)<	260 (2.5)				
Delaware	50 (0.9)>>	067 (4.0)	, , , ,	, ,				
Dist. Columbia	• • •	267 (1.3)	50 (0.9) «	257 (1.4)				
Florida	60 (1.1)>>	239 (1.5)	40 (1.1)≪	228 (1.7)				
Georgia	44 (3.3)*	271 (1.9)	56 (3:3) <b>&lt;&lt;</b>	250 (1.7)				
•	46 (3.7)>	263 (2.1)	<b>54</b> (3.7)<	254 (1.7)				
Hawaii	38 (1.0)>>	268 (1.4)	62 (1.0)«	251 (0.9)				
Idaho	62 (2.9)>>	278 (1.0)>	38 (2.9)«	269 (1.4)				
Indiana	24 /2 5\>>	• •	, ,					
Iowa	31 (3.5) <b>&gt;&gt;</b>	275 (2.0)	69 (3.5) <b>«</b>	267 (1.6)				
Kentucky	64 (4.0)>>	286 (1.2)>	36 (4.0)≪	278 (2.0)				
Louisiana	64 (3.2)*	267 (1.7)	36 (3.2)≪	255 (1.8)				
	29 (3.9)>	254 (3.1)	71 (3.9) <	249 (1.9)				
Maine <sup>1</sup>	71 (4.1)	. 281 (1.3)	29 (4.1)	272 (2.1)				
Maryland	54 (4.0) <i>&gt;</i> >	276 (2.2)	46 (4.0)«	253 (2.4)				
Massachusetts1	29 (3.7)	080 (0.4)	, ,					
Michigan	• •	280 (2.4)	71 (3.7)	269 (1.6)				
Minnesota	74 (3.3) <b>»</b>	269 (2.0)	26 (3.3) <b>«</b>	259 (3.2)				
Mississippi <sup>1</sup>	71 (3.6) >>	284 (1.3)	29 (3.6)≪	275 (2.4)				
Missouri¹	20 (3.2)	254 (4.4)	80 (3.2)	243 (1.3)				
Nebraska	76 (4.0)	273 (1.3)	24 (4.0)	265 (2.0)				
	64 (4.7)>>	280 (1.5)	36 (4.7) <<	274 (1.8)				
New Hampshire	57 (3.5)>>	279 (1.2)	, ,					
New Jersey	41 (4.1)>>		43 (3.5) «	276 (1.7)>				
New Mexico		280 (2.7)	59 (4.1) <<	266 (2.3)				
New York	40 (3.1)>>	265 (1.3)>	60 (3.1) <<	255 (1.2)				
North Carolina	24 (2.9) >	278 (3.3) >>	76 (2.9)<	262 (2.6)				
North Dakota	34 (3.2)>>	262 (1.9)	66 (3.2)≪	2 <b>55</b> (1.6)>				
TOTAL DAKULA	59 (3.5)>>	284 (1.3)	41 (3.5) <i>«</i>	281 (2.0)				
Ohio	44 (4.3)	273 (2.5)	, ,	, ,				
Oklahoma	23 (3.2)		56 (4.3)	266 (2.2)				
Pennsylvania	42 (3.8) <b>&gt;</b>	272 (2.3)	77 (3.2)	266 (1.6)				
Rhode Island		277 (2.3)	58 (3.8) «	266 (1.7)				
South Carolina¹	42 (0.9) >>	269 (1.2)	58 (0.9)≪	262 (1.0)>				
ennessee¹	40 (3.0)	270 (1.7)	60 (3.0)	254 (1.6)				
CHICOSCE	22 (3.4)	268 (3.0)	78 (3.4)	255 (1.6)				
Texas	54 (3.3)>>							
Jtah¹	67 (3.3)	270 (2.2)	46 (3.3) <b>«</b>	257 (1.6)				
/irginia		277 (1.2)	33 (3.3)	267 (1.8)				
Vest Virginia	34 (3.4)	275 (2.4)	66 (3.4)	263 (1.5)				
Visconsin	39 (3.4)>>	266 (1.6)	61 (3.4)«	254 (1.3)				
l l	64 (5.5) >	281 (1.9)	36 (5.5) <	273 (3.2)				
Vyoming	66 (3.2) <b>»</b>	275 (1.2)	34 (3.2)«	274 (1.5)				
ERRITORIES		• •	- · (5)	214 (1.0)				
Suam	7 (0.7) <	264 (4.2)>>	93 (0.7)>	233 (1.1)				
/irgin Islands	34 (0.9)>>	225 (1.3)	66 (0.9)«	221 (1.4)				

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. "The value for 1992 was significantly lower than the value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.

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## Teachers' Reports on Students' Access to School-Owned Calculators for Mathematics Schoolwork

	Grade 4 - 1992						
PUBLIC	Yes		No.				
SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	62 (3.2)	221 (1.4)	38 (3.2)	211 (1.9)			
Northeast	63 (7.0)	224 (3.4)	37 (7.0)	215 (4.2)			
Southeast	49 (4.9)	212 (3.1)	51 (4.9)	203 (2.7)			
Central	66 (8.0)	225 (1.7)	34 (8.0)	221 (4.7)!			
West	69 (5.1)	222 (2.9)	31 (5.1)	209 (3.1)			
STATES	09 (3.1)	222 (2.9)	01 (0.1)	200 (0.17			
Alabama	34 (3.9)	209 (3.0)	66 (3.9)	206 (1.6)			
Arizona	, ,	218 (1.6)	45 (3.7)	210 (1.8)			
Arkansas	55 (3.7)		61 (4.4)	208 (1.4)			
	39 (4.4)	211 (1.6)	14 (3.0)	201 (3.5)!			
California	86 (3.0)	208 (1.8)					
Colorado	76 (3.5)	222 (1.3)	24 (3.5)	214 (2.1)			
Connecticut	81 (3.0)	230 (1.3)	19 (3.0)	217 (3.7)			
Delaware	72 (0.8)	218 (0.9)	28 (0.8)	217 (1.9)			
Dist. Columbia	89 (0.5)	192 (0.8)	11 (0.5)	185 (2.3)			
Florida	66 (3.4)	215 (1.3)	34 (3.4)	208 (2.5)			
Georgia	53 (3.8)	217 (2.0)	47 (3.8)	211 (2.0)			
Hawaii	, ,	214 (1.5)	19 (3.1)	209 (2.6)			
Idaho	81 (3.1) 76 (3.7)		24 (3.7)	218 (1.4)			
luano	76 (3.7)	221 (1.2)	24 (3.1)	210 (1.4)			
Indiana	63 (3.9)	221 (1.4)	37 (3.9)	217 (1.6)			
lowa	75 (3.4)	231 (1.1)	25 (3.4)	224 (2.0)			
Kentucky	79 (3.7)	214 (1.2)	21 (3.7)	212 (2.1)			
Louisiana	31 (4.1)	212 (2.3)	69 (4.1)	198 (2.0)			
Maine	71 (4.2)	232 (1.2)	29 (4.2)	227 (2.3)			
Maryland	83 (2.4)	221 (1.4)	17 (2.4)	204 (3.4)			
,	, ,	, .					
Massachusetts	62 (4.1)	231 (1.6)	38 (4.1)	219 (2.2)			
Michigan	94 (1.5)	219 (1.8)	6 (1.5)	217 (4.9)!			
Minnesota	83 (3.2)	227 (1.3)	17 (3.2)	227 (2.0)!			
Mississippi	44 (4.7)	199 (2.3)	56 (4.7)	200 (1.8)			
Missouri	61 (4.4)	226 (1.4)	39 (4.4)	215 (2.3)			
Nebraska	69 (4.2)	227 (1.7)	31 (4.2)	221 (2.3)			
New Hampshire	63 (4.2)	231 (1.4)	37 (4.2)	225 (1.9)			
New Jersey	58 (4.7)	233 (1.7)	42 (4.7)	219 (2.6)			
New Mexico	• •	215 (1.7)	63 (3.6)	210 (1.5)			
New York	37 (3.6)	1 /	68 (4.4)	215 (1.7)			
North Carolina	32 (4.4)	222 (2.6)	, ,	209 (3.0)			
North Dakota	78 (3.2)	213 (1.1)	22 (3.2)	209 (3.0)			
NOITH Dakota	54 (4.0)	229 (1.0)	46 (4.0)	221 (1.4)			
Ohio	66 (4.1)	218 (1.6)	34 (4.1)	215 (2.3)			
Okiahoma	28 (4.0)	224 (1.8)	72 (4.0)	218 (1.1)			
Pennsylvania	69 (4.0)	226 (1.6)	31 (4.0)	217 (2.9)			
Rhode Island	57 (4.7)	219 (2.3)	43 (4.7)	208 (2.6)			
South Carolina	70 (3.4)	212 (1.4)	30 (3.4)	210 (1.9)			
Tennessee	29 (3.7)	215 (2.6)	71 (3.7)	207 (1.7)			
Texas			, ,	212 (3.3)			
Utah	71 (4.6)	220 (1.8)	29 (4.6)	` ` . · ·			
	61 (3.7)	224 (1.2)	39 (3.7)	221 (1.8)			
Virginia	62 (3.5)	223 (1.5)	38 (3.5)	213 (2.3)			
West Virginia	66 (4.0)	213 (1.4)	34 (4.0)	213 (2.3)			
Wisconsin	79 (3.7)	228 (1.4)	21 (3.7)	227 (2.2)			
Wyoming FERRITORY	83 (2.9)	225 (1.1)	17 (2.9)	222 (2.6)			
Guam	5 (0.6)	194 (4.0)	95 (0.6)	191 (0.9)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



TABLE A.78

### Teachers' Reports on Students' Access to School-Owned Four-Function and Scientific Calculators

			92, 4-Function			Grade 8 - 1992, Scientific			
	Ye	S	N	0	Ye	es	N	<del></del>	
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	
NATION	66 (3.4)	268 (1.6)	34 (3.4)	268 (1.9)	37 (3.3)	272 (2.4)	<u> </u>	200 (4 4)	
Northeast	69 (7.5)	267 (5.2)	31 (7.5)	272 (4.2)!	40 (9.8)		63 (3.3)	266 (1.4)	
Southeast	58 (6.5)	261 (1.3)	42 (6.5)	261 (2.9)		274 (5.2)!	60 (9.8)	263 (4.5)	
Central	71 (6.5)	275 (2.7)	29 (6.5)	, ,	33 (3.3)	265 (2.8)	67 (3.3)	261 (2.0)	
West	67 (6.1)	268 (2.4)		275 (5.5)!	34 (8.5)	274 (6.2)	66 (8.5)	276 (3.0)	
STATES	0. (0.1).	200 (2.4)	33 (6.1)	266 (3.5)!	40 (5.0)	274 (4.0)	60 (5.0)	265 (2.2)	
Alabama	49 (4.7)	050 (0.0)	54 (4 T)						
Arizona	, , , , ,	252 (2.9)	51 (4.7)	251 (1.8)	20 (3.8)	260 (4.1)	80 (3.8)	250 (1.8)	
Arkansas	70 (4.0)	266 (1.6)	30 (4.0)	261 (2.8)	21 (3.0)	272 (2.6)	79 (3.0)	263 (1.6)	
California	61 (4.3)	257 (1.6)	39 (4.3)	254 (2.2)	20 (3.3)	260 (3.4)	80 (3.3)	256 (1.3)	
Colorado	78 (3.5)	261 (1.6)	22 (3.5)	262 (4.2)	25 (4.2)	261 (3.6)	75 (4.2)	261 (2.1)	
	64 (3.8)	270 (1.4)	36 (3.8)	274 (2.2)	24 (3.7)	278 (2.6)	76 (3.7)	270 (1.4)	
Connecticut	85 (2.6)	274 (1.3)	15 (2.6)	265 (5.2)	37 (3.7)	279 (2.6)	63 (3.7)		
Delaware	68 (0.7)	060 (4.0)	00 (0.7)		` '		00 (0.1)	271 (2.0)	
Dist. Columbia		260 (1.3)	32 (0.7)	264 (1.3)	29 (0.6)	263 (2.1)	71 (0.6)	262 (1.1)	
Florida	71 (1.4)	233 (1.4)	29 (1.4)	229 (2.5)	84 (0.9)	235 (1.1)	16 (0.9)	236 (3.3)	
Georgia	64 (4.1)	261 (1.9)	36 (4.1)	256 (2.6)	41 (3.8)	267 (2.4)	59 (3.8)	256 (2.0)	
<del>-</del> .	84 (2.8)	257 (1.3)	16 (2.8)	258 (3.8)	26 (4.0)	270 (3.2)	74 (4.0)	257 (1.6)	
Hawaii	78 (0.7)	257 (1.0)	22 (0.7)	260 (1.7)	41 (0.9)	262 (1.2)	59 (0.9)	255 (1.2)	
Idaho	56 (3.3)	274 (1.2)	44 (3.3)	276 (1.6)	38 (3.4)	280 (1.4)	62 (3.4)	272 (1.2)	
Indiana	72 (3.6)	070 (4.5)	00 (0.0)	-	, ,		OZ (3.4)	212 (1.2)	
lowa		270 (1.5)	28 (3.6)	269 (2.7)	15 (2.9)	282 (4.1)	85 (2.9)	268 (1.3)	
Kentucky	70 (4.0)	282 (1.2)	30 (4.0)	286 (2.3)	31 (4.4)	285 (2.1)	69 (4.4)	283 (1.4)	
Louisiana	77 (3.3)	262 (1.4)	23 (3.3)	263 (2.9)	35 (4.6)	265 (2.5)	65 (4.6)	261 (1.3)	
1	49 (4.7)	254 (2.9)	51 (4.7)	246 (1.8)	20 (3.3)	251 (3.6)	80 (3.3)	250 (2.0)	
Maine	88 (2.3)	278 (1.4)	12 (2.3)	282 (2.9)	41 (4.6)	280 (1.9)	59 (4.6)	278 (1.3)	
Maryland	81 (3.5)	268 (1.6)	19 (3.5)	259 (4.6)	50 (3.4)	272 (2.5)	50 (3.4)		
Massachusetts	59 (3.8)	074 (4.0)	44 (0.0)		` ,			261 (2.5)	
Michigan	, ,	274 (1.9)	41 (3.8)	271 (2.0)	17 (3.7)	281 (3.6)!	83 (3.7)	269 (1.3)	
Minnesota	83 (2.9)	266 (1.4)	17 (2.9)	271 (4.1)	40 (4.5)	269 (2.8)	60 (4.5)	267 (1.9)	
Mississippi	64 (4.3)	281 (1.5)	36 (4.3)	281 (1.9)	33 (4.2)	286 (2.2)	67 (4.2)	279 (1.3)	
Missouri	40 (4.1)	245 (2.3)	60 (4.1)	246 (1.8)	7 (2.4)	245 (9.7)!	93 (2.4)	245 (1.5)	
Nebraska	70 (3.7)	271 (1.4)	30 (3.7)	271 (1.7)	26 (4.0)	276 (2.2)	74 (4.0)	270 (1.3)	
Neuraska	66 (3.6)	275 (1.6)	34 (3.6)	280 (1.8)	30 (4.4)	282 (2.8)	70 (4.4)	275 (1.2)	
New Hampshire	75 (3.7)	270 /4 2\	05 (0.7)	·		. ,	10 (4.4)	275 (1.2)	
New Jersey	71 (4.7)	278 (1.2)	25 (3.7)	277 (1.9)	24 (3.8)	280 (2.1)	76 (3.8)	276 (1.0)	
New Mexico	, ,	277 (1.9)	29 (4.7)	261 (5.0)	42 (4.8)	272 (2.6)	58 (4.8)	273 (2.2)	
New York	71 (3.5)	261 (1.0)	29 (3.5)	256 (2.1)	19 (3.2)	262 (1.7)	81 (3.2)	258 (1.2)	
North Carolina	70 (3.8)	270 (2.6)	30 (3.8)	257 (4.9)	8 (2.4)	269 (8.4)!	92 (2.4)	266 (2.4)	
North Dakota	74 (3.6)	258 (1.4)	26 (3.6)	255 (2.5)	33 (3.6)	264 (2.1)	67 (3.6)	255 (1.6)	
HOLLII DAKOLA	45 (3.7)	283 (1.5)	<b>55</b> (3.7)	282 (1.8)	26 (3.2)	288 (1.7)	74 (3.2)	281 (1.5)	
Ohio	69 (4.2)	269 (1.9)	21 /4 2\	000 (0.0)			, ,		
Oklahoma	43 (4.1)	267 (2.0)	31 (4.2) 57 (4.1)	268 (2.0)	38 (4.8)	269 (2.6)	62 (4.8)	270 (2.4)	
Pennsylvania	64 (3.5)		57 (4.1)	267 (2.0)	14 (2.9)	265 (4.1)!	86 (2.9)	268 (1.5)	
Rhode Island		271 (1.7)	36 (3.5)	270 (2.8)	31 (4.1)	271 (2.9)	69 (4.1)	270 (2.1)	
South Carolina	71 (0.9)	267 (0.9)	29 (0.9)	260 (1.7)	29 (1.0)	263 (1.1)	71 (1.0)	266 (1.1)	
Tennessee	77 (3.0)	260 (1.3)	23 (3.0)	260 (2.7)	29 (3.6)	265 (2.8)	71 (3.6)	259 (1.5)	
. 511105566	41 (4.0)	259 (2.4)	59 (4.0)	257 (1.8)	18 (3.5)	257 (3.1)	82 (3.5)	258 (1.8)	
Texas	70 (3.5)	265 (1.5)	30 (3.5)	263 (2.5)	, ,	, ,	` '		
Utah	38 (3.8)	271 (1.8)	62 (3.8)		47 (4.3)	271 (2.7)	53 (4.3)	260 (1.6)	
Virginia	76 (3.4)	268 (1.5)		275 (1.3)	22 (2.7)	279 (1.9)	78 (2.7)	273 (1.0)	
West Virginia	74 (3.7)		24 (3.4)	264 (2.7)	26 (3.6)	272 (2.3)	74 (3.6)	266 (1.4)	
Wisconsin		258 (1.0)	26 (3.7)	259 (2.4)	22 (3.6)	263 (2.4)	78 (3.6)	258 (1.2)	
Wyoming	58 (4.7)	276 (1.8)	42 (4.7)	281 (2.3)	41 (5.6)	281 (3.5)	59 (5.6)	278 (1.6)	
TERRITORIES	80 (2.9)	274 (1.0)	20 (2.9)	275 (2.0)	34 (4.5)	280 (1.9)	66 (4.5)	272 (1.1)	
Guam						. ,	,,		
	79 (1.3)	237 (1.2)	21 (1.3)	228 (2.6)	10 (0.5)	229 (2.4)	90 (0.5)	. 236 (1.3)	
Virgin Islands	49 (1.2)	226 (1.3)	51 (1.2)	219 (1.6)	20 (0.9)	212 (1.9)	80 (0.9)	222 (1.3)	

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



TABLE A.79 | Students' Reports on Having a Calculator to Use for Mathematics Schoolwork

	Grade 4 - 1992					
PUBLIC	Ye	<b>S</b>	No			
SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency		
NATION	47 (1.4)	219 (1.0)	53 (1.4)	217 (0.9)		
Northeast	51 (3.2)	226 (2.4)	49 (3.2)	220 (2.4)		
Southeast	43 (2.6)	207 (2.6)	57 (2.6)	210 (1.8)		
Central	48 (2.4)	224 (2.3)	52 (2.4)	221 (2.4)		
West	46 (3.0)	217 (2.0)	54 (3.0)	218 (1.6)		
STATES						
Alabama	47 (2.1)	206 (1.7)	53 (2.1)	208 (1.8)		
Arizona			57 (1.4)	214 (1.4)		
	43 (1.4)	214 (1.4)	· · · · · · · · · · · · · · · · · · ·	1 - 1		
Arkansas	38 (1.5)	207 (1.3)	62 (1.5)	210 (1.2)		
California	55 (2.0)	209 (2.1)	45 (2.0)	206 (1.7)		
Colorado	51 (1.9)	220 (1.2)	49 (1.9)	220 (1.3)		
Connecticut		, ,	• • • • • • • • • • • • • • • • • • • •	225 (1.4)		
Connecticut	50 (1.8)	227 (1.5)	50 (1.8)	225 (1.4)		
Delaware	52 (1.3)	217 (1.1)	48 (1.3)	217 (1.1)		
	` '	, ,	, ,	1 1		
Dist. Columbia	71 (0.8)	193 (0.8)	29 (0.8)	190 (1.1)		
Florida	39 (2.1)	212 (2.0)	61 (2.1)	213 (1.6)		
Georgia	42 (1.6)	212 (2.0)	58 (1.6)	217 (1.2)		
Hawaii	58 (1.5)	213 (1.5)	42 (1.5)	213 (1.6)		
	, ,		• • •			
Idaho	48 (2.4)	221 (1.2)	52 (2.4)	220 (1.1)		
Indiana	00 /4 5)	000 (4.4)	61 (1.5)	220 (1.2)		
	39 (1.5)	220 (1.4)				
lowa	46 (1.8)	230 (1.3)	54 (1.8)	228 (1.1)		
Kentucky	66 (1.4)	215 (1.2)	34 (1.4)	211 (1.6)		
Louisiana	45 (1.7)	205 (1.8)	55 (1.7)	202 (1.6)		
Maine	` '			231 (1.4)		
	50 (2.2)	231 (1.3)	50 (2.2)			
Maryland	55 (1.7)	218 (1.9)	45 (1.7)	215 (1.3)		
Massachusetts	44 (2.3)	229 (1.6)	56 (2.3)	223 (1.6)		
		· · · · · · · · · · · · · · · · · · ·		· , ,		
Michigan	55 (1.7)	218 (1.8)	45 (1.7)	220 (2.1)		
Minnesota	55 (1.7)	229 (1.2)	45 (1.7)	226 (1.1)		
Mississippi	50 (1.9)	200 (1.6)	50 (1.9)	200 (1.4)		
Missouri	41 (1.7)	222 (1.9)	59 (1.7)	221 (1.3)		
	• • • • • • • • • • • • • • • • • • • •		• • •			
Nebraska	46 (1.7)	226 (1.7)	54 (1.7)	223 (1.3)		
New Hampshire	43 (1.8)	230 (1.5)	57 (1.8)	228 (1.3)		
, ,	,			· :		
New Jersey	49 (2.3)	229 (1.8)	51 (2.3)	224 (1.7)		
New Mexico	34 (1.3)	211 (2.1)	66 (1.3)	213 (1.6)		
New York	39 (2.1)	217 (1.9)	61 (2.1)	218 (1.5)		
North Carolina	51 (1.4)	213 (1.4)	49 (1.4)	211 (1.2)		
North Dakota	` '					
NOTHI Dakota	42 (2.3)	227 (1.3)	58 (2.3)	228 (0.9)		
Ohio	49 (1.7)	218 (1.4)	51 (1.7)	218 (1.4)		
	, ,	, ,	! !	· · ·		
Oklahoma	34 (1.4)	218 (1.6)	66 (1.4)	220 (1.1)		
Pennsylvania	53 (1.7)	224 (1.6)	47 (1.7)	223 (1.6)		
Rhode Island	37 (2.0)	213 (2.1)	63 (2.0)	215 (1.6)		
South Carolina	45 (1.4)	210 (1.3)	55 (1.4)	212 (1.4)		
Tennessee	· · · · · · · · · · · · · · · · · · ·		-	` ,		
1611162266	36 (1.3)	209 (1.5)	64 (1.3)	210 (1.5)		
Texas	50 (1.7)	218 (1.5)	50 (1.7)	217 (1.6)		
Utah	• • •			, ,		
	44 (1.9)	223 (1.5)	56 (1.9)	223 (1.2)		
Virginia	41 (1.5)	220 (1.6)	59 (1.5)	220 (1.6)		
West Virginia	47 (1.6)	214 (1.3)	53 (1.6)	214 (1.2)		
Wisconsin	` '	228 (1.2)	42 (2.1)	228 (1.5)		
I	58 (2.1)			· · ·		
Wyoming FERRITORY	46 (2.0)	225 (1.1)	54 (2.0)	224 (1.2)		
Guam I	39 (1.2)	186 (1.6)	61 (1.2)	195 (1.1)		

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.



TABLE A.79 | Students' Reports on Having a Calculator to Use for Mathematics Schoolwork (continued)

	Grade 8 - 1992						
PUBLIC SCHOOLS	Ye	S	No				
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	81 (1.0)	269 (1.1)	19 (1.0)	255 (1.3)			
Northeast	78 (2.6)	270 (3.4)	22 (2.6)	262 (4.2)			
Southeast	75 (2.1)	261 (1.2)	25 (2.1)	248 (2.4)			
Central	87 (1.7)	275 (2.4)	13 (1.7)				
West '	82 (2.1)	270 (2.3)	18 (2.1)	261 (2.0)			
STATES	02 (2.1)	210 (2.3)	10 (2.1)	254 (2.1)			
Alabama	77 (1.4)	050 (4.9)	00 (4.4)	0.5 (0.0)			
Arizona	75 (1.5)	253 (1.8)	23 (1.4)	245 (2.2)			
Arkansas		268 (1.3)	25 (1.5)	, 256 (2.0)			
California	74 (1.2)	258 (1.3)	26 (1.2)	248 (1.8)			
Colorado	81 (1.2)	264 (1.7)	19 (1.2)	244 (2.3)			
L	85 (1.0)	274 (1.1)	15 (1.0)	261 (1.9)			
Connecticut	81 (1.3)	277 (1.0)	19 (1.3)	258 (2.5)			
Delaware	83 (0.6)	265 (1.2)	47 (0.0)				
Dist. Columbia	77 (1.0)		17 (0.6)	250 (2.0)			
Florida		236 (1.0)	23 (1.0)	229 (2.3)			
Georgia	74 (1.4)	264 (1.4)	26 (1.4)	246 (2.2)			
Hawaii	78 (1.3)	261 (1.2)	22 (1.3)	251 (1.8)			
	74 (1.1)	261 (1.1)	26 (1.1)	245 (1.6)			
Idaho	84 (0.9)	276 (0.8)	16 (0.9)	264 (1.7)			
Indiana	81 (1.1)	271 (1.2)	19 (1.1)				
lowa	88 (1.4)		· · · · · · · · · · · · · · · · · · ·	262 (2.1)			
Kentucky		284 (1.0)	12 (1.4)	275 (2.5)			
Louisiana	86 (0.9)	264 (1.2)	14 (0.9)	249 (2.3)			
Maine	74 (1.5)	252 (1.8)	26 (1.5)	243 (1.9)			
Maryland	89 (0.9)	279 (1.0)	11 (0.9)	267 (2.8)			
iviai yiailu	81 (1.4)	268 (1.2)	19 (1.4)	251 (2.1)			
Massachusetts	73 (1.5)	276 (1.1)	27 (1.5)	262 (1.7)			
Michigan	87 (1.0)	269 (1.4)	13 (1.0)				
Minnesota	90 (1.1)	283 (0.9)		252 (2.3)			
Mississippi	67 (1.4)		10 (1.1)	271 (2.5)			
Missouri		248 (1.3)	33 (1.4)	242 (1.7)			
Nebraska	89 (1.1)	272 (1.2)	11 (1.1)	258 (2.4)			
	90 (1.0)	278 (1.2)	10 (1.0)	273 (2.2)			
New Hampshire	86 (1.1)	279 (1.0)	14 (1.1)	270 (2.1)			
New Jersey	80 (1.3)	275 (1.4)	20 (1.3)	256 (3.0)			
New Mexico	78 (1.4)	261 (0.9)	22 (1.4)				
New York	72 (1.4)	270 (1.7)		251 (1.5)			
North Carolina	77 (1.0)	260 (1.1)	28 (1.4)	256 (3.1)			
North Dakota	88 (1.4)		23 (1.0)	250 (2.1)			
	, ,	283 (1.2)	12 (1.4)	278 (2.7)			
Ohio	83 (1.1)	. 270 (1.6)	17 (1.1)	256 (2.7)			
Oklahoma	73 (1.6)	269 (1.2)	27 (1.6)	265 (1.6)			
Pennsylvania	79 (1.4)	274 (1.4)	21 (1.4)	261 (2.3)			
Rhode Island	80 (1.0)	267 (0.9)	20 (1.0)	257 (2.2)			
South Carolina	79 (1.1)	263 (1.0)	· · · · · · · · · · · · · · · · · · ·				
Tennessee	77 (1.6)	261 (1.5)	21 (1.1) 23 (1.6)	251 (2.0)			
	• ,		23 (1.6)	248 (2.0)			
Texas	80 (1.2)	267 (1.5)	20 (1.2)	252 (1.9)			
Jtah	84 (0.9)	275 (0.8)	16 (0.9)	267 (1.8)			
/irginia	80 (1.0)	269 (1.2)	20 (1.0)	259 (2.0)			
West Virginia	80 (1.4)	260 (1.1)	20 (1.4)	259 (2.0) 252 (1.8)			
Wisconsin	89 (1.1)	279 (1.3)	11 (1.1)				
<b>W</b> yoming	88 (1.0)	· · · · · · · · · · · · · · · · · · ·		266 (3.9)			
ERRITORIES	00 (1.0)	276 (0.9)	12 (1.0)	267 (2.4)			
Suam	60 /4 0\	040 (4.5)	10 /= 5				
/irgin Islands	60 (1.2)	240 (1.5)	40 (1.2)	228 (1.4)			
virgiri islanus	62 (1.1)	225 (1.3)	38 (1.1)	217 (1.5)			



#### TABLE A.80 | Teachers' Reports on the Frequency of Calculator Use in Mathematics Class

	Grade 4 - 1992							
Ī	At Least	Weekly	Less than O	nce a Week	Never or H	ardly Ever		
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency		
NATION	18 (2.3)	222 (3.1)	34 (2.1)	220 (1.6)	48 (2.9)	213 (1.5)		
Northeast	22 (4.8)	225 (5.5)!	21 (4.7)	220 (7.5)!	57 (6.6)	218 (3.7)		
Southeast	17 (4.6)	212 (7.1)!	26 (3.3)	211 (2.8)	57 (4.8)	205 (2.4)		
Central	13 (5.1)	232 (5.2)!	45 (3.4)	224 (1.9)	41 (6.8)	221 (2.7)		
West	21 (3.8)	221 (6.8)	40 (5.3)	221 (2.9)	39 (4.4)	213 (2.6)		
STATES	21 (0.0)	221 (0.0)	40 (0.0)	221 (2.0)	55 (4.4)	210 (2.0)		
Alabama	22 (3.4)	213 (2.9)	33 (3.6)	208 (2.8)	45 (4.6)	204 (1.8)		
Arizona	15 (2.7)	217 (2.9)	27 (2.7)	219 (2.1)	58 (3.2)	211 (1.6)		
Arkansas		, ,			67 (3.3)	208 (1.2)		
California	8 (2.4)	213 (4.0)!	25 (3.3)	211 (2.3)	• •			
Colorado	34 (4.1)	215 (2.9)	39 (3.4)	204 (2.3)	27 (3.4)	202 (3.3)		
	31 (2.7)	223 (2.1)	38 (2.8)	221 (2.1)	31 (3.1)	217 (2.1)		
Connecticut	29 (3.3)	234 (2.1)	40 (3.4)	228 (1.7)	31 (3.6)	221 (3.0)		
Delaware	24 (0.9)	220 (1.4)	38 (0.8)	218 (1.6)	38 (0.7)	215 (1.6)		
Dist. Columbia	59 (1.0)	192 (1.0)	28 (0.9)	191 (1.5)	13 (0.6)	185 (2.1)		
Florida	21 (2.4)	218 (2.5)	36 (3.0)	213 (1.8)	43 (3.4)	209 (2.0)		
Georgia	14 (3.0)	220 (5.0)!	33 (3.1)	215 (2.6)	52 (4.6)	211 (1.7)		
Hawaii	35 (2.8)	217 (1.9)	40 (2.7)	212 (1.9)	25 (3.0)	208 (2.1)		
Idaho	28 (3.2)	223 (1.9)	<b>39</b> (3.3)	221 (1.5)	33 (3.6)	218 (1.3)		
Indiana	12 (2.1)	226 (3.7)	31 (3.2)	221 (1.5)	57 (4.0)	217 (1.4)		
lowa	18 (2.6)	233 (2.1)	44 (3.8)	230 (1.7)	38 (3.8)	226 (1.7)		
Kentucky	47 (3.8)	216 (1.5)	36 (3.9)	211 (1.6)	16 (3.1)	210 (2.8)!		
Louisiana	3 1	207 (3.7)		, ,	62 (4.2)	199 (1.9)		
Maine	18 (3.2)		20 (2.5)	211 (2.3)				
Maryland	23 (3.2) 39 (3.8)	233 (2.6) 224 (2.2)	41 (3.6) 36 (3.0)	232 (1.3) 220 (2.1)	35 (3.8) 25 (3.1)	227 (1.8) 206 (2.9)		
Massachusetts			, ,		· · · · · · · · · · · · · · · · · · ·			
	18 (2.6)	236 (2.3)	35 (3.4)	231 (2.2)	48 (4.1)	220 (1.7)		
Michigan	38 (4.1)	219 (2.7)	43 (3.7)	219 (2.7)	19 (3.0)	218 (3.5)		
Minnesota	28 (3.7)	230 (2.5)	42 (3.8)	226 (1.6)	30 (3.4)	225 (1.6)		
Mississippi	16 (3.1)	209 (3.1)!	29 (3.5)	201 (2.8)	55 (4.4)	197 (1.8)		
Missouri	14 (2.6)	228 (4.0)	32 (3.5)	224 (1.8)	54 (3.9)	219 (1.9)		
Nebraska	22 (3.2)	232 (2.5)	42 (4.7)	225 (2.2)	36 (4.0)	221 (1.5)		
New Hampshire	25 (3.4)	237 (2.2)	30 (3.5)	229 (1.9)	44 (3.8)	225 (1.5)		
New Jersey	26 (3.3)	236 (2.7)	28 (3.3)	231 (2.5)	46 (4.4)	220 (2.6)		
New Mexico	9 (2.5)	211 (2.2)!	25 (3.0)	215 (2.1)	66 (3.5)	211 (1.7)		
New York	14 (2.0)	226 (3.1)	19 (3.1)	222 (3.3)	67 (3.9)	214 (1.6)		
North Carolina	21 (2.4)	213 (2.9)	39 (2.9)	213 (2.0)	40 (3.4)	211 (1.8)		
North Dakota	14 (2.6)	229 (1.9)	38 (4.5)	226 (1.4)	48 (4.6)	229 (1.5)		
Ohio	19 (3.2)	222 (3.4)	35 (3.8)	219 (1.8)	46 (4.3)	214 (1.9)		
Oklahoma	8 (2.2)	227 (4.3)!	16 (2.9)	221 (2.6)	76 (3.3)	218 (1.1)		
Pennsylvania	18 (3.2)	232 (2.9)	34 (3.7)	227 (2.0)	48 (3.8)	217 (2.0)		
Rhode Island	18 (2.7)	223 (3.3)	29 (3.7)	216 (2.9)	53 (4.3)	210 (2.4)		
South Carolina		3 7	29 (3.7) 33 (3.4)	, ,	1 1			
Tennessee	15 (2.1) 7 (1.9)	219 (2.9) 208 (6.1)!	33 (3.4) 22 (2.6)	214 (1.8) 215 (2.8)	51 (3.6) 70 (3.1)	208 (1.5) 209 (1.6)		
Texas	, ,	, , ,	• •	` '	, ,	, ,		
Utah	24 (3.7)	225 (2.6)	38 (3.3)	219 (2.0)	38 (4.6)	210 (2.8)		
Virginia	21 (3.2)	228 (2.4)	30 (2.9)	221 (1.5)	49 (3.8)	222 (1.5)		
	14 (2.3)	229 (3.7)	36 (3.4)	224 (2.2)	50 (3.7)	214 (2.0)		
West Virginia	24 (3.0)	217 (2.0)	32 (3.2)	213 (1.9)	45 (3.4)	212 (1.9)		
Wisconsin	34 (3.7)	231 (2.0)	37 (3.6)	228 (2.1)	29 (3.8)	225 (1.7)		
Wyoming FERRITORY	24 (3.1)	226 (1.7)	43 (3.5)	225 (1.6)	32 (2.8)	223 (1.5)		
Guam	10 (0.8)	189 (3.0)	22 (1.1)	199 (1.6)	68 (1.1)	189 (1.1)		

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



TABLE A.80 | Teachers' Reports on the Frequency of Calculator Use in Mathematics Class (continued)

	Grade 8 - 1992							
	At Least Weekly		Less than O	Less than Once a Week		lardly Ever		
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency		
NATION	56 (3.0)	274 (1.5)	21 (2.2)	257 (2.3)	00 (0.5)	000 (0.0)		
Northeast	<b>55</b> (6.5)	272 (3.8)	` '		23 (2.5)	263 (2.2)		
Southeast			22 (4.6)	264 (5.9)!	23 (3.9)	260 (6.3)		
Central	43 (4.6)	270 (1.6)	24 (4.4)	250 (3.4)	33 (5.9)	260 (3.3)		
	64 (7.6)	281 (2.5)	25 (6.3)	258 (4.5)!	11 (4.7)	280 (3.4)!		
West	60 (5.4)	272 (2.8)	16 (2.4)	257 (4.3)	24 (4.4)	262 (3.4)		
STATES				` ,	_ , ,	(,		
Alabama	45 (4.2) >>	257 (2.7)	26 (4.0)	250 (2.4)	29 (4.0)	246 (4.1)		
Arizona	52 (3.8)>>	269 (1.8)	19 (2.9) «	263 (3.4)	29 (3.3)			
Arkansas	39 (3.9)	262 (1.9)	23 (3.1) <	254 (2.4)		258 (2.3)		
California	65 (4.2)			, ,	39 (4.0)	251 (2.2)		
Colorado		266 (2.1)	21 (3.2) <	252 (4.1)	14 (2.1)	252 (4.3)		
Connecticut	73 (2.6)>>	275 (1.3)	11 (1.9) «	257 (3.9)	15 (2.5)	266 (2.7)		
Connecticut	61 (3.3)	281 (1.2)>	29 (3.3) <	263 (3.0)	10 (1.9)	260 (6.1)		
Delaware	57 (0.8)>>	262 (1.4)	22 (0.0)	060 (4.0)	, ,			
Dist. Columbia	, , ,	, ,	23 (0.9)	263 (1.9)	19 (0.7) «	261 (2.0)		
Florida	61 (1.1)	235 (1.5)>	28 (1.1) <b>«</b>	238 (2.4)	12 (0.6)>	228 (3.8)		
	50 (3.6) >>	269 (2.1)	20 (3.1)≪	<b>254</b> (3,0)	30 (3.2)	248 (2.5)		
Georgia	52 (3.3)	262 (2.0)	30 (2.6)	254 (2.1)	18 (2.4)	254 (3.2)		
Hawaii	42 (0.9)>>	265 (1.4)	34 (0.9)	257 (1.2)>	24 (0.8) <<	246 (2.0)		
Idaho	73 (2.3)»	277 (0.9)	12 (2.4) <<	273 (2.2)!	15 (2.1) <	267 (2.1)		
Indiana	, ,			• •	` ,	201 (2.1)		
3	39 (3.4)>	272 (2.2)	27 (3.4)≪	269 (1.8)	34 (3.2)	268 (2.4)		
lowa	68 (4.2)	285 (1.1) <b>»</b>	20 (3.7) <	277 (3.0)!	11 (2.6)	279 (3.2)!		
Kentucky	73 (2.9)>>	266 (1.5)	19 (2.9) <	253 (3.2)	9 (2.0) «	251 (3.9)!		
Louisiana	38 (4.0)**	256 (2.9)	25 (3.1) <	244 (3.1)	37 (3.9)			
Maine <sup>1</sup>	79 (3.9)	279 (1.2)	17 (3.5)			247 (2.2)		
Maryland	61 (3.8) >>	272 (2.0)	26 (3.1) <b>«</b>	275 (2.8)!	4 (1.7)	281 (6.2)!		
	01 (5.0)	212 (2.0)	20 (3.1) **	259 (2.8)	14 (2.1)	248 (4.1)		
Massachusetts¹	35 (3.5)	279 (2.2)	19 (2.7)	272 (3.2)	46 (3.8)	267 (1.6)		
Michigan	76 (3.2)>>	269 (1.9)	15 (2.6)≪	256 (4.8)	9 (2.0) <	266 (4.9)!		
Minnesota	77 (3.8)>>	283 (1.2)>	15 (3.2) «	278 (2.2)!	8 (2.2)	• • •		
Mississippi <sup>1</sup>	25 (3.2)	252 (3.4)	` ·			271 (4.1)!		
Missouri <sup>1</sup>	78 (3.8)		22 (3.6)	244 (4.2)	53 (4.1)	243 (1.8)		
Nebraska		273 (1.1)	11 (2.2)	259 (4.2)!	11 (2.9)	271 (2.9)!		
, TODI GSAG	66 (4.9)	280 (1.5)	19 (2.8)	269 (2.5)	15 (3.6)	276 (2.5)!		
New Hampshire	62 (3.4)	279 (1.3) >	22 (3.2)<	275 (2.0)>	15 (2.6)	074 (0.0)		
New Jersey	51 (4.2)>>	276 (1.9)				274 (2.9)		
New Mexico			25 (3.9) <	271 (3.6)	23 (3.0) <	261 (4.2)		
New York	44 (3.4) >>	265 (1.4)	27 (3.3) <b>«</b>	258 (1.5)	29 (3.8)	253 (2.0)		
	25 (3.4)	272 (3.3)>	32 (3.1)	269 (2.7)	43 (3.9)	259 (4.2)		
North Carolina	42 (3.3) >	262 (1.7)>	34 (2.9) <<	256 (1.8)	24 (2.7)	250 (2.9)		
North Dakota	68 (4.5)>	284 (1.4)	10 (2.9) <<	284 (3.1)!	21 (3.4)	280 (2.0)		
Ohio	49 (4.2)	070 (0.6)	, ,			, ,		
Oklahoma	\	273 (2.6)	23 (3.3)	263 (3.4)	29 (4.4)	269 (4.1)		
	33 (4.1)	270 (2.2)	23 (3.4)	267 (2.4)	44 (4.3)	266 (1.8)		
Pennsylvania	46 (4.2) >	276 (2.2)	24 (2.9) <	267 (2.7)	30 (3.4)	267 (2.6)		
Rhode Island	47 (0.8)>>	269 (1.2)>>	18 (0.5) <<	261 (2.5)	36 (0.8) «	261 (1.0)		
South Carolina <sup>1</sup>	47 (3.5)	268 (1.8)	29 (3.0)	254 (1.9)	24 (2.7)	254 (3.2)		
Tennessee¹	37 (4.3)	265 (2.3)	23 (3.1)	256 (2.6)	41 (4.1)			
Tevas	, ,	, ,	` ,	, ,	71 (7.1)	253 (2.2)		
Texas	64 (3.5) >>	269 (1.9)	24 (3.0) <b>«</b>	256 (3.0)	13 (2.0)	260 (2.4)		
Utah¹	77 (3.0)	275 (1.0)	8 (1.4)	266 (3.5)	15 (2.3)	269 (2.4)		
√irginia	40 (3.3)	274 (2.1)	30 (2.6)	263 (1.9)	31 (2.6)	263 (2.3)		
West Virginia	43 (4.0)>>	264 (1.7)	27 (3.7)	254 (1.8)				
Wisconsin	83 (3.2)>				30 (3.5)	255 (1.9)		
Wyoming		280 (1.7)	11 (2.1) <	273 (3.3)	6 (2.2)	270 (4.3)!		
ERRITORIES	73 (3.2) <b>»</b>	277 (0.9)	12 (2.2) <<	268 (2.6)	16 (2.5)	270 (2.2)		
	00.44.55	****						
Guam	26 (1.0)>	244 (2.1)	27 (1.2)>	224 (2.3)	47 (1.3) <b>«</b>	236 (1.4) >		
Virgin Islands	39 (1.0) >>	227 (1.5)>	23 (0.7) «	217 (1.7) <<	38 (1.2)≪	217 (2.0)		

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. (The value for 1992 was significantly lower than the value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.



### TABLE A.81 | Students' Reports on the Frequency of Calculator Use in Mathematics Class

	Grade 4 - 1992							
<u> </u>	At Least Weekly		Less than O	nce a Week	Never or H	ardly Ever		
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency		
NATION	22 (1.2)	215 (1.9)	21 (1.4)	227 (1.2)	57 (1.9)	215 (1.0)		
Northeast	23 (2.0)	222 (4.2)	25 (3.3)	232 (3.4)	52 (3.8)	220 (2.6)		
Southeast	22 (2.0)	204 (4.4)	14 (1.2)	219 (2.6)	64 (3.0)	209 (2.0)		
Central	19 (2.3)	220 (3.0)	26 (3.8)	230 (1.6)	55 (4.6)	220 (2.5)		
West	23 (2.4)	215 (4.4)	22 (2.1)	224 (2.1)	55 (3.1)	216 (1.4)		
STATES	23 (2.4)	210 (4.4)	22 (2.1)	224 (2.1)	30 (0.17	210 (111)		
Alabama	28 (2.0)	202 (2.0)	17 (1.2)	217 (2.5)	56 (2.5)	207 (1.8)		
Arizona	, ,	210 (2.1)	17 (1.2)	222 (2.0)	62 (1.9)	213 (1.3)		
	21 (1.5)					210 (1.0)		
Arkansas	20 (1.7)	203 (2.1)	10 (0.9)	213 (2.5)	70 (2.1)			
California	29 (1.9)	204 (3.2)	24 (1.5)	211 (2.5)	47 (2.6)	208 (1.6)		
Colorado	27 (1.5)	216 (1.7)	26 (1.3)	230 (1.5)	47 (2.1)	217 (1.3)		
Connecticut	30 (1.7)	225 (1.8)	22 (1.3)	231 (1.6)	48 (2.3)	224 (1.6)		
Delaware	31 (1.0)	211 (1.7)	19 (0.9)	228 (1.7)	50 (1.2)	216 (1.2)		
Dist. Columbia	61 (1.1)	191 (0.8)	14 (0.7)	200 (1.8)	25 (1.0)	189 (1.4)		
Florida	22 (1.4)	204 (2.4)	18 (1.1)	223 (1.9)	59 (1.9)	213 (1.7)		
Georgia	21 (1.5)	205 (2.6)	17 (1.2)	224 (2.1)	62 (2.1)	215 (1.3)		
Hawaii	44 (2.0)	211 (1.7)	21 (1.0)	222 (2.0)	35 (2.0)	210 (1.5)		
Idaho	27 (1.9)	221 (1.8)	25 (1.4)	225 (1.2)	48 (2.3)	218 (1.3)		
Indiana	18 (1.4)	215 (2.3)	17 (1.2)	227 (1.5)	65 (2.0)	219 (1.2)		
Iowa	21 (1.5)	227 (2.0)	25 (1.3)	235 (1.6)	53 (2.2)	227 (1.2)		
Kentucky		· · · · · · · · · · · · · · · · · · ·	, ,	222 (1.2)	30 (2.1)	211 (1.7)		
Louisiana	49 (2.4)	212 (1.4)	21 (1.2)	, ,	61 (2.3)	202 (1.6)		
Maine	26 (1.9)	201 (2.2)	14 (1.2)	214 (2.6)	49 (2.8)			
Maryland	22 (2.3) 31 (1.9)	228 (2.4) 212 (2.3)	29 (1.6) 29 (1.3)	235 (1.6) 226 (1.4)	49 (2.8) 40 (2.2)	230 (1.2) 213 (1.4)		
·	• •				, ,			
Massachusetts	28 (2.3)	225 (2.4)	20 (1.3)	235 (1.5)	52 (2.9)	223 (1.5)		
Michigan	33 (2.0)	213 (2.6)	30 (1.4)	228 (1.7)	37 (1.8)	217 (2.3)		
Minnesota	24 (1.9)	225 (1.9)	25 (1.2)	234 (1.6)	51 (2.1)	226 (1.1)		
Mississippi	31 (2.0)	196 (1.8)	13 (1.0)	212 (2.3)	56 (2.4)	200 (1.3)		
Missouri	19 (1.5)	213 (2.3)	19 (1.3)	231 (1.7)	62 (2.2)	221 (1.4)		
Nebraska	21 (2.1)	223 (2.5)	22 (1.4)	232 (2.1)	57 (2.3)	222 (1.4)		
New Hampshire	22 (2.3)	230 (2.0)	23 (1.6)	237 (1.7)	55 (2.9)	225 (1.3)		
New Jersey	27 (2.3)	225 (2.4)	20 (1.5)	235 (1.9)	53 (2.9)	223 (1.9)		
New Mexico	16 (1.3)	204 (3.2)	11 (0.8)	219 (3.0)	74 (1.4)	213 (1.4)		
New York	22 (1.9)	210 (2.4)	14 (1.2)	221 (2.2)	64 (2.6)	220 (1.3)		
North Carolina	28 (1.7)	206 (1.5)	20 (1.2)	224 (1.6)	52 (2.1)	210 (1.4)		
North Dakota	18 (2.1)	221 (1.9)	22 (1.8)	232 (1.4)	59 (2.6)	228 (1.0)		
Ohio	24 (2.0)	214 (2.1)	23 (1.5)	226 (1.7)	53 (2.6)	216 (1.4)		
Oklahoma	15 (1.2)	211 (2.3)	10 (0.7)	225 (2.4)	75 (1.4)	220 (1.1)		
Pennsylvania	3 1	, ,		230 (2.2)	48 (2.5)	222 (1.5)		
Rhode Island	28 (2.0)	220 (2.4)	24 (1.5) 16 (1.1)	230 (2.2)	: :	213 (1.7)		
South Carolina	23 (2.0)	211 (2.3)	16 (1.1)	, ,	61 (2.6)	1 1		
Tennessee	26 (1.5) 17 (1.3)	208 (1.6) 201 (2.4)	17 (1.0) 13 (0.9)	221 (2.3) 214 (2.2)	58 (1.9) 70 (1.8)	210 (1.4) 211 (1.4)		
Texas				• •	, ,	, ,		
	28 (1.9)	214 (2.1)	22 (1.1)	229 (1.9)	50 (2.5)	214 (1.6)		
Utah	25 (2.3)	220 (2.0)	20 (1.2)	228 (1.4)	55 (2.6)	222 (1.2)		
Virginia	19 (1.4)	213 (2.2)	19 (1.1)	231 (2.0)	62 (1.9)	219 (1.4)		
West Virginia	28 (1.7)	212 (1.5)	19 (1.2)	220 (1.6)	53 (2.3)	213 (1.4)		
Wisconsin	31 (2.3)	226 (1.8)	25 (1.3)	234 (1.6)	43 (2.7)	226 (1.3)		
Wyoming TERRITORY	26 (1.9)	222 (1.5)	26 (1.4)	230 (1.3)	48 (2.2)	222 (1.3)		
Guam	26 (0.9)	178 (1.5)	12 (0.8)	189 (2.6)	62 (1.2)	198 (1.1)		

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.





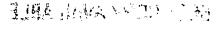
#### TABLE A.81 |

### Students' Reports on the Frequency of Calculator Use in Mathematics Class (continued)

	Grade 8 - 1992							
	At Least Weekly		Less than O	nce a Week	Never or H	ardiy Ever		
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency		
NATION	53 (2.1)	272 (1.4)	18 (0.9)	263 (1.6)	29 (1.6)	259 (1.6)		
Northeast	45 (4.1)	272 (4.0)	20 (2.4)	266 (3.6)				
Southeast	44 (4.1)	264 (1.2)	18 (1.6)		35 (2.6)	264 (5.2)		
Central	63 (5.2)	3 3		258 (2.6)	38 (3.5)	252 (1.8)		
West		277 (2.2)	17 (2.3)	268 (3.6)	20 (3.3)	267 (3.2)		
STATES	58 (3.6)	272 (2.8)	16 (1.2)	262 (3.5)	26 (3.4)	259 (2.5)		
Alabama	10 (0 1) >>							
Arizona	49 (3.1) >>	254 (2.3)	17 (1.4)	251 (2.9)	34 (2.6)≪	249 (1.9)		
	49 (2.8) >>	270 (1.6) <b>»</b>	18 (1.1)	262 (1.9)	33 (2.6)≪	257 (1.9)		
Arkansas	42 (2.5)>>	261 (1.6)	17 (1.2)	257 (1.7)	40 (2.3)	249 (1.7)		
California	56 (2.7)	266 (2.1)	17 (1.2)	259 (2.5)	27 (2.1)	250 (2.7)		
Colorado	70 (2.5)>>	275 (1.2)>	13 (1.0)≪	264 (2.0)	17 (1.9) <	264 (2.0)		
Connecticut	53 (2.0) <b>»</b>	280 (1.3)>	21 (1.3)«	269 (1.7)	25 (1.7)	263 (2.2)		
Delaware	53 (1.0)>>	265 (1.3)	, ,	, ,	• •	• •		
Dist. Columbia	56 (1.3)		21 (0.9)	263 (1.9)	26 (0.9) <b>«</b>	257 (1.4)		
Florida		234 (1.2)>>	19 (1.0)	238 (2.2)	25 (1.2)	232 (2.1)		
Georgia	46 (2.5) >>	268 (1.8)>>	16 (1.0)<	259 (2.5)	38 (2.5)≪	249 (2.0)		
Hawaii	47 (2.4)	264 (1.7)	20 (1.4)	257 (1.9)	33 (2.0)	253 (1.8)		
	46 (1.0) >>	259 (1.3)>	20 (0.9)	258 (1.8)	34 (1.0)≪	254 (1.5)		
Idaho	69 (2.1) <b>»</b>	277 (0.9)>	13 (1.2)<	271 (1.7)	19 (1.2) <b>≪</b>	266 (1.7)		
Indiana	41 (2.6)>	273 (1.7)>	21 (1.4)<	271 (1.9)	38 (2.5)			
Iowa	67 (3.3) >	285 (1.2)>			, /	265 (1.8)		
Kentucky	\ ,		15 (1.5) «	281 (1.8)	18 (2.7)	277 (2.1)		
Louisiana	66 (2.4)»	265 (1.4)>	18 (1.5)	260 (2.1)	16 (1.6) «	249 (2.0) <		
Maine¹	39 (2.6) >	252 (2.0)	21 (1.5)	250 (2.7)	40 (2.8)≪	246 (1.8)		
	73 (2.7)	279 (1.2)	15 (1.6)	277 (1.8)	12 (1.6)	274 (2.5)		
Maryland	49 (2.4)>>	271 (1.6)	23 (1.4)	263 (2.2)	28 (2.0)≪	255 (2.3)		
Massachusetts <sup>1</sup>	35 (2.7)	278 (1.8)	17 (1.3)	275 (2.0)	47 (2.8)	267 (1.5)		
Michigan	68 (2.9)>>	272 (1.9)	14 (1.5)	• •	` '	, ,		
Minnesota	75 (2.5) >>	283 (1.1)>	• • • • • • • • • • • • • • • • • • • •	260 (2.4)	18 (2.0) <<	254 (2.7)		
Mississippi <sup>1</sup>	31 (2.3)	248 (2.2)	12 (1.1) <b>«</b>	278 (2.3)	13 (1.9) <<	277 (2.8)		
Missouri <sup>1</sup>	, ,		16 (1.3)	250 (2.1)	53 (2.5)	243 (1.5)		
Nebraska	75 (2.8)	272 (1.3)	10 (1.2)	272 (2.3)	14 (2.3)	261 (2.9)		
TODI GSRG	69 (3.2)>>	278 (1.4)	13 (1.3)<	279 (2.5)	17 (2.4)≪	273 (2.1)		
New Hampshire	61 (2.4)>>	279 (1.2)	20 (1.6) <	278 (1.8)	19 (1.7)≪	274 (1.9)		
New Jersey	46 (2.9)>>	275 (2.1)	22 (1.7)	276 (1.9)	32 (2.6) «	, ,		
New Mexico	46 (2.2) >>	262 (1.0)	20 (1.2)	263 (1.9)		262 (3.6)		
New York	29 (2.3) >	268 (2.1)	22 (1.3)	271 (3.1)	34 (2.2) «	252 (1.6)		
North Carolina	44 (2.3) >>	261 (1.4)>>	22 (1.3)		49 (2.6) <	262 (3.1)		
North Dakota	72 (2.8)	283 (1.3)		259 (1.8)	33 (2.0) <	252 (1.8)		
	12 (2.0)	203 (1.3)	9 (1.1) «	282 (2.4)	19 (2.2) <	281 (1.9)		
Ohio	52 (3.1)>	271 (1.8)	19 (1.6)	266 (2.1)	29 (2.4) <	263 (2.9)		
Oklahoma	36 (2.9)	270 (1.7)	16 (1.3)	264 (2.5)	48 (2.6)	267 (1.6)		
Pennsylvania	42 (3.0)>>	274 (2.1)	20 (1.3)	270 (2.4)	38 (2.7) «	268 (1.9)		
Rhode Island	47 (0.8) >>	268 (1.2)>>	19 (0.9)	265 (1.7)	• • • • • • • • • • • • • • • • • • • •			
South Carolina1	46 (2.1)	265 (1.3)	20 (1.2)		33 (0.8) <<	262 (1.2)		
Tennessee <sup>1</sup>	42 (3.0)	263 (1.9)		261 (1.9)	34 (2.2)	253 (1.6)		
	, ,		18 (1.0)	262 (1.9)	40 (2.9)	252 (1.7)		
Texas	62 (2.5)>>	268 (1.7)	16 (1.3)≪	262 (2.1)	21 (1.9)≪	254 (2.3)		
Utah¹	67 (2.1)	275 (0.9)	12 (1.1)	272 (1.8)	21 (1.6)	271 (1.8)		
√irginia	43 (2.2)	271 (1.8)	20 (1.1)	267 (1.7)	37 (2.2)	263 (1.9)		
West Virginia	43 (2.8)>>	262 (1.4)	21 (1.6)	258 (2.0)	37 (2.7) <b>«</b>			
Wisconsin	71 (4.1)	280 (1.5)	14 (1.4) <	272 (3.1)	14 (3.4)	255 (1.4)		
Wyoming	71 (2.5)>>	276 (1.1)	11 (1.3) «	272 (3.1)		273 (5.6)!		
ERRITORIES	11 (2.5)	210 (1.1)	11 (1.3)**	272 (1.9)	19 (2.0) <	271 (1.6)		
Guam	30 (1.2)>>	238 (2.2)	45 (0.0)	040 (0.5)	FF (4 4) 44	004 (4.5)		
Virgin Islands		238 (2.2)	15 (0.9)	242 (2.5)	55 (1.1) <b>«</b>	231 (1.3)		
	40 (1.1)>>	226 (1.4)>>	15 (0.8)	225 (2.3)	46 (1.0)≪	217 (1.6)		

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. 
The value for 1990 at about the 95 percent certainty level. 
These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated. Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.





### TABLE A.82 | Students' Understanding of When to Use a Calculator in Solving Mathematics Problems

	Grade 4 - 1992						
PUBLIC	High Calculate	or-Use Group	Other Group				
SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	23 (0.9)	217 (1.7)	77 (0.9)	217 (1.0)			
Northeast	24 (2.8)	220 (4.2)	76 (2.8)	223 (2.1)			
Southeast	27 (1.5)	207 (3.4)	73 (1.5)	209 (2.4)			
Central		225 (4.4)	80 (1.7)	221 (2.3)			
	20 (1.7)	• • •		• •			
West	23 (1.1)	218 (2.2)	77 (1.1)	216 (1.9)			
STATES							
Alabama	26 (1.2)	207 (2.2)	74 (1.2)	207 (2.0)			
Arizona	22 (1.1)	214 (2.0)	78 (1.1)	212 (1.2)			
Arkansas	31 (1.4)	212 (1.9)	69 (1.4)	206 (1.1)			
California	19 (1.1)	206 (2.7)	81 (1.1)	208 (1.6)			
Colorado		, ,	• •	220 (1.1)			
	20 (1.1)	221 (1.8)	80 (1.1)				
Connecticut	21 (1.0)	224 (2.1)	79 (1.0)	227 (1.3)			
Delaware	24 (1.5)	217 (2.0)	76 (1.5)	216 (0.9)			
Dist. Columbia		• • •	74 (1.2)	190 (1.0)			
	26 (1.2)	193 (1.9)					
Florida	24 (1.2)	216 (2.2)	77 (1.2)	213 (1.5)			
Georgia	27 (1.4)	214 (2.0)	73 (1.4)	213 (1.8)			
Hawaii	23 (1.1)	214 (2.0)	77 (1.1)	213 (1.4)			
Idaho	24 (1.2)	222 (1.8)	76 (1.2)	220 (1.1)			
1	• •		, ,				
Indiana	26 (1.1)	222 (1.8)	74 (1.1)	219 (1.1)			
lowa	· 27 (1.1)	229 (1.5)	73 (1.1)	229 (1.3)			
Kentucky	26 (1.2)	219 (1.5)	74 (1.2)	212 (1.2)			
Louisiana	28 (1.3)	202 (2.4)	72 (1.3)	203 (1.7)			
Maine	24 (1.4)	230 (1.8)	76 (1.4)	231 (1.4).			
			77 (1.0)	215 (1.6)			
Maryland	23 (1.0)	220 (1.9)	77 (1.0)	213 (1.0)			
Massachusetts	22 (1.1)	224 (2.2)	78 (1.1)	225 (1.5)			
Michigan	19 (1.1)	221 (2.6)	81 (1.1)	218 (1.7)			
Minnesota	22 (1.1)	229 (1.9)	78 (1.1)	227 (1.1)			
Mississippi			69 (1.3)	198 (1.5)			
	31 (1.3)	202 (1.7)	1 1				
Missouri	26 (1.4)	223 (1.9)	74 (1.4)	220 (1.4)			
Nebraska	26 (1.5)	226 (1.5)	74 (1.5)	223 (1.5)			
New Hampshire	22 (1.4)	227 (2.1)	78 (1.4)	227 (1.4)			
New Jersey	, ,	• • •	77 (1.4)	227 (1.8)			
	23 (1.4)	224 (2.1)					
New Mexico	25 (1.6)	214 (1.8)	75 (1.6)	212 (2.1)			
New York	21 (1.3)	216 (2.2)	79 (1.3)	217 (1.5)			
North Carolina	24 (1.1)	212 (1.9)	76 (1.1)	211 (1.5)			
North Dakota	27 (1.4)	229 (1.5)	73 (1.4)	228 (1.0)			
Ohio			77 (4.4)	217 (1.4)			
	23 (1.1)	219 (1.8)	77 (1.1)	1 7			
Oklahoma	29 (1.1)	218 (1.5)	71 (1.1)	219 (1.2)			
Pennsylvania	25 (1.4)	223 (1.8)	75 (1.4)	223 (1.6)			
Rhode Island	22 (1.1)	215 (2.6)	78 (1.1)	213 (1.7)			
South Carolina	29 (1.2)	213 (1.8)	71 (1.2)	210 (1.2)			
Tennessee	27 (1.2)	211 (2.1)	73 (1.2)	209 (1.6)			
	, ,	, ,	, ,	· ·			
Texas	27 (1.3)	216 (1.6)	73 (1.3)	217 (1.6)			
Utah	24 (1.2)	225 (1.5)	76 (1.2)	222 (1.2)			
Virginia	26 (1.1)	220 (1.7)	74 (1.1)	219 (1.4)			
West Virginia	25 (1.0)	213 (2.0)	75 (1.0)	213 (1.2)			
Wisconsin	22 (1.2)	228 (1.8)	78 (1.2)	228 (1.3)			
Wyoming		, ,		224 (1.1)			
TERRITORY	29 (1.2)	225 (1.5)	71 (1.2)	224 (1.1)			
	07 (4.4)	407 (4.0)	70 /4 4\	400 /4 4\			
Guam	27 (1.4)	197 (1.9)	73 (1.4)	189 (1.1)			

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. Students in the "High" group used the calculator for at least 65 percent of the calculator-suitable items and used the calculator for no more than one of the calculator-unsuitable items. Students in the "Other" group used the calculator for less than 65 percent of the calculator-suitable items or used it for more than one of the calculator-unsuitable items.

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SOURCE: National Assessment of Educational Progress (NAEP), 1992 Trial State Mathematics Assessment.



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TABLE A.82 | Students' Understanding of When to Use a Calculator in Solving Mathematics Problems (continued)

	Grade 8 - 1992						
PUBLIC SCHOOLS	High Calculate	or-Use Group	Other Group				
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	26 (0.9)	280 (1.6)	74 (0.9)	260 (4.4)			
Northeast	22 (1.4)	283 (2.9)	78 (1.4)	260 (1.1)			
Southeast	25 (1.1)	• •	` '	261 (2.9)			
Central	25 (2.6)	273 (2.1)	75 (1.1)	251 (1.6)			
West		285 (3.5)	75 (2.6)	269 (2.4)			
STATES	31 (1.9)	281 (3.1)	69 (1.9)	261 (2.7)			
	41						
Alabama	27 (1.3)	262 (2.5)	73 (1.3)	247 (1.7)			
Arizona	26 (1.3)	275 (2.3)	74 (1.3)	260 (1.6)			
Arkansas	25 (1.2)	269 (2.1)	75 (1.2)	251 (1.5)			
California	24 (1.4)	273 (2.9)	76 (1.4)	256 (1.9)			
Colorado	30 (1.3)	282 (1.4)	70 (1.3)	266 (1.2)			
Connecticut	28 (1.1)	290 (1.7)	72 (1.1)	268 (1.4)			
Delevere	• •	, ,		208 (1.4)			
Delaware	24 (1.4)	275 (2.3)	76 (1.4)	258 (1.8)			
Dist. Columbia	20 (1.5)	241 (3.8)	80 (1.5)	233 (1.3)			
Florida	20 (1.3)	275 (3.2)	80 (1.3)	254 (1.7)			
Georgia	26 (1.3)	271 (2.2)	74 (1.3)	255 (1.4)			
Hawaii	23 (1.3)	273 (2.4)	77 (1.3)				
idaho	34 (1.3)	283 (1.5)	66 (1.3)	252 (1.2)			
1	, ,	200 (1.0)	00 (1.3)	269 (0.9)			
Indiana	30 (1.4)	280 (1.9)	70 (1.4)	263 (1.4)			
lowa	39 (1.5)	291 (1.5)	61 (1.5)	278 (1.4)			
Kentucky	30 (1.3)	277 (1.7)	70 (1.3)	255 (1.3)			
Louisiana	23 (1.1)	261 (2.2)	77 (1.1)	246 (1.9)			
Maine	33 (1.4)	290 (1.8)	67 (1.4)				
Maryland	28 (1.4)	282 (2.0)	72 (1.4)	272 (1.5) 250 (4.5)			
Massachusetts	, ,	, ,	, ,	259 (1.5)			
l l	27 (1.6)	284 (1.7)	73 (1.6)	267 (1.4)			
Michigan	30 (1.5)	281 (2.1)	70 (1.5)	260 (1.6)			
Minnesota	35 (1.8)	292 (1.6)	65 (1.8)	275 (1.2)			
Mississippi	27 (1.4)	253 (2.3)	73 (1.4)	242 (1.3)			
Missouri	34 (1.6)	281 (1.7)	66 (1.6)	264 (1.3)			
Nebraska	33 (1.6)	288 (1.7)	67 (1.6)	273 (1.4)			
New Hampshire		, ,	, ,				
New Jersey	30 (1.5)	285 (1.8)	70 (1.5)	275 (1.4)			
New Mexico	30 (1.7)	287 (1.5)	70 (1.7)	265 (2.0)			
	25 (1.1)	271 (2.0)	75 (1.1)	255 (1.1)			
New York	26 (1.4)	281 (2.2)	74 (1.4)	262 (2.2)			
North Carolina	26 (1.1)	270 (2.0)	74 (1.1)	254 (1.5)			
North Dakota	39 (1.5)	287 (1.3)	61 (1.5)	277 (1.6)			
Ohio	31 (1.5)	084 (0.5)	` <i>'</i>	, ,			
Oklahoma		281 (2.5)	69 (1.5)	263 (1.5)			
Pennsylvania	29 (1.4)	278 (2.0)	71 (1.4)	263 (1.4)			
Rhode island	27 (1.5)	283 (2.1)	73 (1.5)	265 (1.8)			
· · · · · · · · · · · · · · · · · · ·	24 (1.3)	276 (2.0)	76 (1.3)	262 (1.5)			
South Carolina	28 (1.1)	270 (1.6)	72 (1.1)	257 (1.3)			
Tennessee	26 (1.3)	269 (2.1)	74 (1.3)	254 (1.8)			
Гехаѕ	28 (1.0)	279 (2.6)					
Jtah	28 (1.0)		72 (1.0) 73 (1.0)	257 (1.3)			
/irginia		284 (1.4)	72 (1.0)	268 (1.1)			
West Virginia	27 (1.3) 25 (1.3)	279 (1.8)	73 (1.3)	263 (1.4)			
Wisconsin	25 (1.2)	270 (2.0)	75 (1.2)	254 (1.1)			
	33 (1.4)	288 (1.5)	67 (1.4)	272 (1.9)			
Wyoming	34 (1.4)	286 (1.5)	66 (1.4)	269 (1.1)			
ERRITORIES Suam	20 // 5			• •			
	23 (1.6)	237 (3.0)	77 (1.6)	232 (1.4)			
/irgin Islands	15 (1.0)	230 (2.9)	85 (1.0)	220 (1.4)			



### TABLE A.83 | Schools' Reports on the Availability of Computers for Student Use in Mathematics Class

	Grade 4 - 1992						
PUBLIC	Yes, Computers Available All the Time in Mathematics Classrooms	Yes, Computers Grouped in Laboratory Available to Mathematics Classrooms	Yes, Computers Available to Bring to Classrooms When Needed				
SCHOOLS	Percentage of Students	Percentage of Students	Percentage of Students				
NATION	47 (3.5)	65 (3.7)	51 (3.7)				
Northeast	46 (6.1)	56 (9.5)	67 (9.8)				
Southeast	42 (6.8)	66 (8.3)	52 (7.4)				
Central	46 (7.4)	63 (6.8)	50 (6.8)				
West	51 (7.1)	73 (5.8)	38 (5.6)				
STATES	31 (7.1)	75 (0.5)	,				
Alabama	26 (5.4)	65 (4.8)	49 (5.2)				
	36 (5.4)	90 (3.2)	40 (4.9)				
Arizona	41 (5.1)		29 (4.1)				
Arkansas	32 (5.0)	69 (4.1)	43 (5.4)				
California	44 (5.8)	82 (4.0)	· · · · · · · · · · · · · · · · · · ·				
Colorado	49 (5.0)	82 (3.6)	67 (4.3)				
Connecticut	55 (5.1)	50 (5.7)	65 (5.5)				
Delaware	31 (0.2)	58 (0.3)	56 (0.3)				
Dist. Columbia	11 (0.2)	95 (0.1)	36 (0.3)				
Florida	1 (	75 (4.5)	54 (4.5)				
	58 (4.9)	65 (4.7)	66 (5.2)				
Georgia	38 (4.9)		42 (5.0)				
Hawaii	14 (2.7)	95 (2.1)					
Idaho	35 (4.3)	69 (3.7)	19 (3.9)				
Indiana	62 (4.8)	67 (4.3)	47 (5.3)				
lowa	56 (4.3)	59 (4.7)	63 (3.9)				
Kentucky		61 (4.7)	43 (4.5)				
Louisiana	32 (4.8)	56 (5.1)	30 (4.6)				
	13 (3.5)	· · · · · · · · · · · · · · · · · · ·	58 (5.6)				
Maine	55 (6.2)	45 (5.2)	63 (4.6)				
Maryland	39 (4.4)	78 (4.4)	·				
Massachusetts	52 (4.4)	57 (4.8)	52 (4.4)				
Michigan	52 (4.7)	54 (5.4)	58 (5.0)				
Minnesota	22 (4.4)	97 (1.9)	65 (5.1)				
Mississippi	13 (3.5)	78 (4.2)	20 (4.4)				
Missouri	37 (5.0)	57 (4.7)	58 (5.3)				
Nebraska	48 (5.2)	58 (5.2)	73 (4.5)				
11CDI a3Ka	46 (3.2)						
New Hampshire	73 (5.3)	38 (5.9)	52 (6.6)				
New Jersey	50 (5.5)	66 (5.7)	52 (6.0)				
New Mexico	41 (5.6)	70 (4.8)	44 (6.7)				
New York	39 (5.4)	85 (3.8)	58 (5.5)				
North Carolina	37 (4.6)	75 (3.9)	45 (5.0)				
North Dakota	45 (4.2)	66 (4.1)	66 (4.2) ·				
	, ,	, ,	04 (5.0)				
Ohio	44 (4.0)	46 (4.1)	64 (5.2)				
Oklahoma	22 (3.3)	67 (4.7)	47 (4.0)				
Pennsylvania	39 (5.2)	67 (4.5)	51 (4.3)				
Rhode Island	58 (4.6)	45 (4.9)	65 (5.1)				
South Carolina	30 (5.2)	71 (4.8)	44 (5.4)				
Tennessee	31 (4.6)	53 (5.5)	54 (5.8)				
Tevac		93 (2.7)	29 (4.7)				
Texas	12 (3.0)	93 (2.7)	30 (4.6)				
Utah	26 (4.1)	89 (3.2)					
Virginia	46 (5.0)	71 (4.6)	65 (5.5)				
West Virginia	51 (4.4)	54 (5.0)	37 (4.6)				
Wisconsin	51 (5.2)	72 (4.3)	59 (5.7)				
Wyoming	61 (4.4)	89 (2.7)	56 (4.4)				
TERRITORY			- ()				
Guam	9 (0.1)	93 (0.1)	6 (0.1)				

The standard errors of the estimated percentages appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.



# Schools' Reports on the Availability of Computers for Student Use in Mathematics Class (continued)

		Grade 8 - 1992									
PUBLIC	Yes, Computers Available Ali the Time in Mathematics Classrooms	Yes, Computers Grouped in Laboratory Available to Mathematics Classrooms	Yes, Computers Available to Bring to Classrooms When Needed								
SCHOOLS	Percentage of Students	Percentage of Students	Percentage of Students								
NATION	16 (2.9)	71 (3.4)	54 (3.9)								
Northeast	6 (4.7)	78 (7.5)	41(10.6)								
Southeast	9 (4.4)	59 (7.9)	, ,								
Central	24 (6.7)	79 (6.6)	48 (7.2)								
West	· · · · · · · · · · · · · · · · · · ·	: :	57 (9.7)								
STATES	23 (6.5)	69 (4.6)	65 (4.7)								
Alabama	05 (15)										
	25 (4.7)>	61 (5.5)	47 (5.8)								
Arizona	23 (3.9)	67 (5.2)	33 (4.9)								
Arkansas	19 (3.9)	55 (5.4)	21 (4.2)<								
California	17 (3.6)	64 (4.5)	33 (5.0) <								
Colorado	19 (3.6)	75 (4.2)	60 (5.7)								
Connecticut	13 (3.3)	81 (4.1)									
Dataman		01 (4.1)	59 (5.2)								
Delaware	8 (0.1)	55 (0.2)≪	37 (0.2)>>								
Dist. Columbia	34 (0.5)>>	83 (0.6) <b>«</b>	35 (0.7)>>								
Florida	<b>35</b> (5.2)	65 (5.3)	46 (5.0) <								
Georgia	13 (2.9)	56 (5.9)									
Hawaii	2 (0.1)«		60 (5.4)								
Idaho	7 (2.7)	92 (0.1) <	34 (0.3)**								
	1 (2.1)	56 (4.2)	32 (4.4)								
Indiana	15 (3.8)	71 (4.1)	50 (5.3)								
lowa	18 (3.9)	75 (4.6)	57 (5.7)								
Kentucky	10 (3.4)	64 (4.9)									
Louisiana	6 (2.5)		29 (4.7)								
Maine <sup>1</sup>	17 (3.5)	52 (4.7)	26 (4.0)								
Maryland		60 (4.9)	55 (5.8)								
-	10 (3.3)	90 (3.4)	54 (5.0)								
Massachusetts1	11 (3.2)	89 (3.5)	49 (6.1)								
Michigan	14 (3.6)	56 (5.5)	• • • • • • • • • • • • • • • • • • • •								
Minnesota	18 (4.3)	95 (2.3)	50 (5.5)								
Mississippi <sup>1</sup>	4 (2.1)	, , ,	54 (5.9)								
Missouri <sup>1</sup>		54 (5.0)	19 (4.7)								
Nebraska	20 (3.8)	70 (4.4)	46 (4.6)								
·	21 (4.0)	77 (3.9)	55 (5.1)≪								
New Hampshire	21 (3.6)≪	62 (3.0)	54 (4.4)≪								
New Jersey	26 (5.5)>	64 (5.3)	` '								
New Mexico	13 (2.4)		51 (5.2)								
New York	9 (2.8)	72 (4.0)	41 (4.0)«								
North Carolina		88 (4.1)	48 (5.5)								
North Dakota	15 (3.5)	71 (4.9)	46 (5.9)								
	17 (3.9)	75 (3.3)	47 (4.4)≪								
Ohio	18 (4.6)	56 (5.9)	56 (5.2)								
Oklahoma	14 (3.3)	56 (5.6)	, , ,								
Pennsylvania	11 (3.0)	, , ,	37 (4.0)								
Rhode Island	6 (0.1)«	78 (4.6)	46 (5.3)								
South Carolina <sup>1</sup>	, , ,	84 (0.2)>>	<b>54</b> (0.3) >								
Tennessee <sup>1</sup>	15 (3.4)	62 (4.3)	45 (5.4)								
1	13 (3.8)	59 (5.5)	35 (5.0)								
Texas	20 (4.3)	50 (5.8)	29 (4.7)								
Utah¹	6 (2.4)	59 (4.2)									
/irginia	27 (4.0)>		35 (4.3)								
West Virginia		89 (3.9)	70 (4.8)								
Visconsin	16 (3.4)	69 (4.4)	29 (3.9)								
Wyoming	16 (4.1)	80 (4.1)	63 (5.5)								
	28 (3.8)	84 (2.9)	46 (4.0)								
TERRITORIES			,								
Guam	0 (0.0)	39 (0.2)	27 (0.3)>>								
Virgin Islands	19 (0.1)	80 (0.1)*	21 (0.1)								

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. The value for 1992 was significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent.



## TABLE A.84 | Teachers' Reports on the Availability of Computers for Student Use in Mathematics Class

			Grade 4	- 1992		
·	Available in	Classroom	Difficult to	Access	Not Ava	ailable
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	45 (3.0)	218 (1.9)	38 (2.8)	219 (1.5)	17 (2.7)	210 (3.0)
Northeast	48 (7.3)	224 (3.9)!	32 (4.6)	217 (4.3)	19 (6.1)	216 (7.8)!
Southeast	42 (3.5)	207 (3.5)	33 (6.6)	211 (2.5)	25 (6.6)	203 (4.7)!
Central	49 (7.0)	222 (2.8)	41 (5.8)	226 (2.5)	11 (3.4)	222 (5.3)!
West	, ,		44 (4.7)	219 (3.6)	14 (4.1)	208 (4.0)!
STATES	42 (6.0)	219 (3.8)	44 (4.7)	219 (3.0)	14 (4.1)	200 ( 1.0).
Alabama	38 (3.8)	210 (2.7)	45 (3.8)	207 (2.3)	17 (3.2)	201 (2.5)
Arizona	30 (2.9)	212 (1.9)	53 (3.5)	216 (1.6)	17 (2.6)	213 (2.3)
Arkansas	43 (4.0)	210 (1.6)	33 (4.1)	209 (2.6)	25 (4.3)	208 (2.5)
California	<b>50</b> (4.0)	207 (2.1)	36 (3.5)	212 (2.4)	14 (2.2)	197 (3.5)
Colorado	1 1	221 (2.0)	43 (3.5)	220 (1.4)	11 (2.1)	216 (4.2)!
Connecticut	47 (3.8) 57 (3.9)	230 (1.6)	<b>35</b> (3.6)	228 (2.1)	8 (2.0)	208 (7.7)!
	, ,	` '	, ,	219 (1.2)	20 (1.0)	215 (2.4)
Delaware	30 (0.8)	216 (1.7)	49 (0.9) 51 (0.9)	1	20 (1.0)	184 (1.5)
Dist. Columbia	27 (1.0)	196 (1.6)	51 (0.9)	191 (1.1)	7 (1.9)	205 (3.2)!
Florida	63 (3.7)	216 (1.4)	30 (3.3)	207 (2.4)		
Georgia	47 (4.2)	212 (2.1)	45 (4.5)	215 (2.6)	8 (1.9)	215 (3.7)!
Hawaii	30 (2.9)	215 (2.0)	47 (3.1)	212 (2.3)	23 (2.5)	214 (2.4)
Idaho	35 (3.4)	219 (1.5)	47 (3.5)	220 (1.4)	19 (2.8)	222 (2.0)
Indiana	47 (3.9)	221 (1.7)	43 (3.8)	218 (1.7)	10 (2.3)	219 (3.0)!
lowa	54 (4.3)	229 (1.4)	37 (4.3)	231 (1.7)	9 (2.0)	223 (2.8)!
Kentucky	39 (4.7)	215 (1.8)	40 (4.9)	212 (1.7)	21 (3.3)	214 (2.2)
Louisiana	25 (3.8)	207 (3.0)	26 (3.7)	207 (3.5)	49 (4.5)	198 (2.1)
Maine	53 (4.5)	230 (1.4)	37 (4.3)	231 (1.8)	10 (2.6)	230 (2.8)!
Maryland	49 (3.5)	220 (2.5)	39 (3.8)	219 (1.8)	12 (2.4)	209 (4.2)!
Massachusetts	49 (3.9)	229 (2.0)	39 (3.8)	225 (2.2)	12 (2.4)	224 (3.3)!
Michigan		222 (2.3)	42 (4.3)	215 (2.3)	7 (1.8)	216 (9.8)!
· ·	51 (4.5)	, ,	· - · ·	227 (1.3)	7 (1.9)	222 (5.9)!
Minnesota	33 (3.9)	228 (2.4)	60 (3.7)		33 (3.4)	202 (2.4)
Mississippi	24 (3.7)	199 (2.6)	43 (3.4)	199 (1.9)	17 (3.5)	213 (3.6)!
Missouri	44 (3.7)	223 (2.0)	39 (3.6)	224 (2.0)	3	
Nebraska	47 (3.7)	227 (2.0)	47 (3.9)	223 (1.7)	6 (1.9)	224 (4.7)!
New Hampshire	57 (3.9)	228 (1.2)	37 (3.6)	233 (2.0)	7 (1.6)	219 (4.3)!
New Jersey	45 (4.1)	233 (2.0)	38 (3.7)	227 (2.1)	17 (2.9)	211 (5.0)
New Mexico	34 (5.0)	215 (2.1)	51 (4.6)	213 (1.8)	16 (3.1)	203 (3.2)
New York	32 (3.5)	218 (2.7)	42 (3.8)	218 (1.7)	26 (3.0)	214 (2.8)
North Carolina	39 (3.3)	215 (1.6)	50 (3.3)	210 (1.3)	11 (2.1)	213 (2.9)
North Dakota	40 (5.1)	225 (1.7)	46 (4.6)	230 (1.3)	14 (3.3)	228 (1.8)!
Ohio	43 (3.7)	218 (2.1)	40 (3.4)	217 (2.0)	17 (3.0)	214 (3.1)
Oklahoma	28 (3.6)	219 (1.7)	52 (3.3)	222 (1.5)	20 (3.0)	215 (2.0)
Pennsylvania	26 (3.5) 34 (3.5)	224 (2.3)	47 (3.6)	225 (2.0)	19 (3.3)	215 (4.3)
Rhode Island			37 (4.0)	219 (2.6)	20 (3.4)	203 (3.0)
South Carolina	43 (4.7)	215 (2.4)	47 (3.4)	212 (1.6)	14 (2.3)	209 (3.4)
Tennessee	38 (3.8) 42 (3.9)	212 (1.9) 207 (2.1)	36 (3.7)	213 (2.5)	22 (3.1)	210 (2.0)
	, ,	, ,		217 (2.0)	19 (3.1)	214 (3.1)
Texas	25 (3.1)	220 (2.6)	56 (4.0) 51 (3.2)	217 (2.0) 224 (1.1)	18 (2.3)	221 (2.1)
Utah	31 (3.4)	223 (1.8)	51 (3.2)		10 (2.3)	216 (4.5)
Virginia	51 (4.2)	222 (2.1)	40 (3.8)	217 (2.4)	16 (3.3)	209 (2.9)!
West Virginia	50 (3.9)	214 (1.6)	34 (3.3)	215 (1.6)		
Wisconsin	41 (4.3)	227 (2.2)	51 (4.4)	228 (1.3)	8 (2.2)	234 (3.3)!
Wyoming TERRITORY	50 (3.8)	226 (1.2)	45 (3.7)	224 (1.4)	5 (1.5)	221 (3.7)!
Guam	17 (1.1)	185 (2.5)	57 (1.1)	194 (1.0)	26 (0.7)	190 (1.7)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



TABLE A.84

# Teachers' Reports on the Availability of Computers for Student Use in Mathematics Class (continued)

	Grade 8 - 1992										
	Available in	Classroom	Difficult to	o Access	Not Ava	aitable					
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency					
NATION	19 (2.2)	264 (2.1)	56 (3.0)	271 (1.8)	24 (2.2)	062 (4.0)					
Northeast	19 (5.2)	265 (4.7)!	64 (6.1)	, , ,		263 (1.9)					
Southeast	23 (5.2)		, , ,	270 (5.0)	18 (4.2)	262 (5.0)!					
Central		264 (3.2)!	48 (5.5)	265 (2.0)	29 (4.6)	254 (2.4)					
West	17 (5.0)	268 (4.7)!	65 (8.3)	279 (4.4)!	18 (4.1)	269 (4.4)!					
STATES	19 (2.5)	259 (4.6)	53 (3.9)	270 (2.5)	29 (4.0)	269 (3.2)					
Alabama											
	15 (3.2)	249 (4.6)!	60 (4.1)	253 (2.6)	26 (3.8)	252 (2.8)					
Arizona	17 (2.8)	265 (3.3)	48 (4.1)	264 (2.0)	35 (3.5)	264 (1.8)					
Arkansas	23 (3.6)	254 (3.3)	33 (3.8)	256 (2.3)	44 (4.3)	257 (1.9)					
California	24 (3.4)	259 (3.3)	48 (4.0)	263 (2.1)	28 (3.7)	259 (3.4)					
Colorado	15 (2.3)	272 (3.0)	69 (2.9)	273 (1.3)>							
Connecticut	22 (3.5)	270 (4.3)	58 (3.4)	278 (1.6)	17 (2.7)	263 (2.0)					
Dalama	• •	210 (4.5)	30 (3.4)	270 (1.0)	19 (2.8)	265 (4.4).					
Delaware	18 (0.7) >>	251 (2.8)	39 (1.0) <<	266 (1.7)	43 (0.7)>>	263 (1.3)>					
Dist. Columbia	20 (1.0)	242 (2.2)>>	67 (1.1) <i>&lt;</i>	232 (1.3)	13 (0.6)>	235 (2.9)					
Florida	27 (3.2)	254 (2.6)	48 (3.7)	265 (1.9)>	25 (2.9) <						
Georgia	27 (3.5)	258 (2.6)	50 (3.9)	258 (1.8)		254 (3.0)					
Hawaii	11 (0.7)	252 (3.4)			23 (3.7)	258 (2.6)					
Idaho	15 (2.1)		68 (0.9) >	258 (1.0)>>	21 (0.6) <<	261 (1.8)>>					
	13 (2.1)	274 (2.1) <b>»</b>	39 (3.6)	274 (1.5)	46 (3.7)	276 (1.0)					
Indiana	15 (2.9)	273 (2.4)	66 (4.7)	270 (1.7)	19 (4.5)	000 (0.4)					
lowa	20 (3.8)	281 (2.6)	58 (4.6)	285 (1.4)»		268 (2.4)!					
Kentucky	13 (2.8)	252 (3.5)!			21 (3.7) >	279 (2.1)					
Louisiana	, , ,		57 (3.8) >	265 (1.6)>	30 (3.5)	261 (1.7)					
Maine¹	12 (2.9)	252 (6.5)!	37 (4.3)	250 (3.0)	52 (4.6)	249 (2.3)					
Maryland	19 (4.0)	274 (2.3)!	61 (4.5)	280 (1.4)	20 (3.6)	276 (1.9)!					
Maryianu	19 (3.0)	271 (3.9)	73 (3.6)	266 (1.7)	8 (2.4) <	252 (8.0)!					
Massachusetts1	19 (3.4)	273 (3.7)	60 (2.4)			• •					
Michigan	13 (2.8)		60 (3.4)	275 (1.6)	20 (3.1)	263 (2.5)					
Minnesota	, ,	277 (4.4)!	60 (3.7)>	268 (2.4)	28 (3.7)	259 (3.6)					
Mississippi <sup>1</sup>	19 (3.2)	280 (2.5)	70 (4.0)	283 (1.2)>>	11 (2.5)	274 (3.4)!					
1.1	10 (2.3)	236 (3.7)!	37 (4.1)	246 (2.6)	53 (4.5)	247 (1.9)					
Missouri¹	19 (2.9)	265 (2.6)	56 (4.2)	275 (1.3)	26 (3.5)	266 (2.1)					
Nebraska	22 (3.3)	276 (3.2)	62 (4.2)	278 (1.7)	16 (3.1)	276 (2.1)!					
New Hampshire	40 (2.0)			, ,	, ,	270 (2.1):					
New Jersey	19 (3.2)	279 (3.1)	60 (3.8)	278 (1.3)>	21 (2.7)	274 (1.8)					
New Mexico	27 (3.7)	271 (4.3)	50 (4.0)	273 (2.4)	24 (2.8)	269 (3.4)					
	13 (2.0)	256 (2.1)	62 (4.0)	260 (1.1)	25 (3.5)	259 (2.0)					
New York	21 (3.6) >	273 (4.4)	58 (4.2)	269 (2.9)	21 (3.1)	249 (5.1)					
North Carolina	13 (2.4)	251 (2.9)	68 (3.3)	258 (1.4)»	19 (3.3)	258 (2.7)					
North Dakota	17 (3.0)	281 (2.5)	57 (3.7)	284 (1.4)	26 (3.1)	282 (2.0)					
Ohio	40 (0.0)	` '	` ,	20 ( ( ) /	20 (3.1)	202 (2.0)					
	18 (3.8)	264 (5.7)!	60 (4.9)	272 (2.3)	22 (4.1)	266 (3.7)!					
Oklahoma	20 (3.3)	265 (2.6)	45 (4.0)	269 (1.6)	35 (3.3)	267 (2.6)					
Pennsylvania	14 (2.6)	268 (2.5)	57 (4.1)	273 (2.1)	29 (3.6)	269 (3.2)					
Rhode Island	15 (0.5)	269 (2.0) >	62 (0.9) <	264 (1.1)	24 (0.9)>>	264 (1.3)>>					
South Carolina1	24 (3.1)	250 (3.1)	48 (3.6)	265 (1.4)	28 (3.3)	263 (2.8)					
Tennessee¹	18 (2.9)	256 (3.3)	41 (3.9)	257 (2.0)							
Toyae	, ,		, ,		41 (4.2)	260 (2.3)					
Texas	15 (2.5)	260 (4.6)	41 (4.3)	270 (2.6)>	44 (4.6)	261 (1.9)>					
Jtah¹	12 (1.3)	265 (2.6)	44 (3.5)	274 (1.3)	44 (3.7)	275 (1.2)					
/irginia	23 (2.7)	268 (3.0)	64 (3.1)	269 (1.5)	13 (2.6)	256 (2.9)					
West Virginia	21 (3.7)	255 (2.1)	54 (4.3)	260 (1.3)							
Visconsin	16 (2.6)	273 (2.6)	73 (3.4)		25 (3.0)	259 (2.6)					
Wyoming i	18 (3.1)			280 (1.8)	11 (2.4)	274 (4.4)!					
ERRITORIES	10 (3.1)	268 (2.6)	69 (3.5)	276 (0.9)>	13 (2.0)	277 (3.5)					
Guam	0 /0 0\//	*** /***	P 4 /2 -1 bb								
/irgin Islands	0 (0.2)«	*** (***)	54 (1.0) >>	234 (1.4)	45 (0.9) <b>«</b>	238 (1.6)>					
ringin islanus	3 (0.4)>>	*** (***)	27 (1.2)≪	223 (1.9)	71 (1.3)>>	221 (1.4)>					

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible. The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. They and the value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.



## Students' Reports on the Frequency of Computer Use for Schoolwork

		Grade 4 - 1992											
	Almost Ev	ery Day	Once or Tw	ice a Week	Once or Twi	ce a Month	Never or Ha	ardly Ever					
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency					
NATION	6 (0.7)	202 (2.3)	18 (1.3)	216 (1.8)	10 (0.6)	233 (1.9)	66 (1.5)	217 (1.0)					
Northeast	3 (0.7)	*** (***)	13 (1.9)	221 (6.1)	14 (1.7)	240 (3.4)	69 (2.5)	220 (2.3)					
Southeast	9 (2.0)	192 (4.4)!	16 (2.4)	206 (2.7)	7 (1.1)	224 (4.2)	68 (2.4)	210 (2.3)					
Central	5 (1.0)	212 (4.6)!	15 (3.1)	219 (4.4)!	11 (1.4)	231 (3.2)	69 (3.7)	222 (2.6					
West	7 (1.2)	205 (4.9)	24 (2.7)	217 (3.0)	9 (0.7)	233 (3.7)	59 (3.0)	216 (1.5					
STATES	/ (/	,	, ,				44 .1	/					
Alabama	6 (0.7)	192 (2.6)	21 (2.3)	201 (2.6)	6 (0.6)	214 (3.8)	66 (2.4)	209 (1.7					
Arizona	6 (1.0)	198 (4.2)	20 (2.3)	213 (3.0)	8 (0.6)	226 (2.4)	65 (2.3)	214 (1.0					
Arkansas	16 (1.7)	206 (2.2)	20 (1.9)	208 (1.4)	4 (0.5)	218 (5.3)	59 (2.6)	209 (1.1					
California	1 1	193 (3.9)	25 (2.5)	207 (2.8)	10 (1.0)	219 (2.9)	57 (2.7)	207 (1.6					
Colorado	7 (1.2)	217 (3.6)	21 (1.7)	219 (1.8)	12 (0.9)	228 (2.2)	62 (1.8)	219 (1.2					
_	5 (0.5)	1	16 (1.6)	223 (2.5)	13 (1.0)	238 (2.1)	62 (2.1)	226 (1.3					
Connecticut	10 (1.5)	214 (4.2)	10 (1.0)	225 (2.5)				040 (0.0					
Delaware	6 (0.7)	208 (2.5)	11 (0.8)	214 (3.2)	9 (0.7)	231 (3.7)	74 (1.1)	216 (0.9					
Dist. Columbia	10 (0.6)	179 (1.8)	18 (0.7)	191 (1.4)	8 (0.5)	206 (3.0)	64 (0.9)	192 (0.8					
Florida	8 (1.4)	203 (3.9)	19 (1.8)	211 (2.1)	8 (0.7)	227 (3.2)	64 (2.4)	212 (1.7					
Georgia	10 (1.3)	194 (3.0)	17 (2.0)	207 (2.3)	8 (0.7)	224 (3.0)	65 (2.3)	218 (1.4					
Hawaii		190 (3.5)	29 (2.1)	212 (2.0)	9 (0.6)	224 (2.6)	57 (2.0)	214 (1.4					
	5 (0.5)	214 (3.5)	21 (2.2)	222 (1.9)	7 (0.7)	230 (1.8)	68 (2.4)	219 (1.1					
idaho	3 (0.4)	214 (3.3)	21 (2.2)					040 /4 3					
Indiana	5 (0.6)	215 (4.8)	21 (1.9)	222 (1.8)	8 (0.6)	229 (2.1)	66 (1.9)	218 (1.3					
lowa	7 (1.1)	227 (3.0)	15 (1.8)	227 (2.9)	12 (0.9)	237 (2.2)	66 (2.2)	228 (1.2					
Kentucky	8 (1.5)	207 (4.6)	19 (1.8)	212 (1.7)	6 (0.7)	225 (4.2)	68 (2.1)	214 (0.9					
Louisiana	6 (0.8)	186 (3.0)	14 (1.9)	200 (3.2)	- 6 (1.1)	217 (4.9)	74 (2.4)	204 (1.5					
Maine	3 (0.6)	*** (***)	15 (1.7)	233 (2.0)	15 (1.2)	238 (1.9)	67 (2.4)	229 (1.0					
Maryland	11 (1.9)	206 (6.1)	21 (1.8)	216 (2.3)	10 (0.8)	228 (2.3)	58 (2.3)	216 (1.6					
Massachusetts	5 (1.3)	219 (5.6)!	21 (2.1)	223 (2.5)	13 (0.9)	234 (2.4)	61 (2.6)	225 (1.3					
Michigan	5 (1.0)	206 (4.6)	17 (1.8)	218 (2.7)	10 (0.9)	225 (2.6)	68 (2.3)	219 (1.9					
Minnesota	5 (0.9)	223 (3.6)	22 (1.5)	226 (1.8)	13 (1.1)	234 (1.9)	60 (1.9)	228 (0.9					
Mississippi	13 (1.7)	189 (2.3)	28 (2.7)	195 (2.3)	3 (0.5)	204 (4.1)	55 (2.9)	205 (1.3					
Missouri	1	217 (7.5)!	15 (1.8)	224 (2.3)	8 (0.8)	229 (2.8)	71 (2.3)	220 (1.4					
Nebraska	6 (1.5) 5 (1.1)	219 (5.3)!	18 (2.3)	225 (2.5)	11 (1.1)	234 (2.4)	66 (2.6)	223 (1.4					
New Hampshire	1	226 (2.7)	18 (1.9)	232 (1.8)	14 (0.8)	239 (1.8)	64 (2.2)	226 (1.3					
New Jersey	5 (0.8)	215 (4.0)	21 (2.3)	230 (2.9)	10 (1.0)	235 (2.5)	63 (2.6)	225 (1.5					
-			22 (2.0)	214 (2.0)	6 (0.8)	219 (3.9)	68 (2.1)	211 (1.5					
New Mexico	5 (0.6)	205 (5.2)	25 (2.6)	216 (2.2)	9 (0.8)	227 (3.1)	60 (3.1)	217 (1.4					
New York	6 (1.3)	215 (4.7)!	1 1	210 (2.1)	7 (0.6)	224 (2.8)	61 (2.6)	212 (1.4					
North Carolina North Dakota	9 (1.4) 4 (0.9)	199 (3.2) 216 (3.5)!	23 (2.3) 14 (1.9)	230 (1.8)	7 (0.8)	234 (2.4)	75 (2.3)	227 (0.9					
Ohio	1 ' '	204 (5.9)	10 (0.9)	215 (2.3)	10 (0.9)	231 (2.6)	76 (1.6)	217 (1.2					
	4 (0.7)		22 (2.4)	220 (1.8)	6 (0.7)	229 (3.2)	66 (2.6)	218 (1.2					
Oklahoma	6 (1.5)	215 (3.5)! 221 (8.6)!	20 (2.0)	221 (2.3)	10 (0.8)	234 (2.3)	64 (2.6)	223 (1.					
Pennsylvania	6 (1.7)		14 (1.6)	208 (2.7)	10 (0.8)	224 (2.9)	69 (2.1)	215 (1.)					
Rhode Island	6 (1.2)	202 (4.0)		211 (2.6)	7 (0.6)	220 (2.8)	64 (2.4)	214 (1.					
South Carolina	13 (1.8)	192 (2.2)	16 (1.7) 13 (1.5)	206 (3.0)	6 (0.6)	216 (3.1)	74 (1.9)	211 (1.4					
Tennessee	6 (1.2)	196 (3.6)				227 (3.1)	56 (3.2)	217 (1.					
Texas	9 (2.0)	210 (4.1)!	28 (2.5)	218 (1.9)	7 (0.6)		52 (2.9)	221 (1.					
Utah	12 (2.2)	221 (2.7)	26 (2.7)	226 (1.5)	10 (0.9)	228 (2.1)	1	220 (1.					
Virginia	6 (1.0)	211 (3.1)	19 (1.6)	215 (2.4)	13 (1.6)	230 (3.4)	62 (2.5)						
West Virginia	6 (1.0)	209 (3.9)	15 (1.9)	214 (2.3)	7 (0.7)	227 (2.4)	71 (2.5)	213 (1.1					
Wisconsin	7 (1.3)	213 (5.2)!	17 (1.7)	228 (2.3)	10 (0.8)	234 (2.2)	66 (2.2)	228 (1.					
Wyoming TERRITORY	9 (1.5)	220 (2.5)	29 (2.1)	225 (1.4)	9 (0.7)	231 (2.0)	54 (2.5)	223 (1.					
Guam	10 (0.7)	173 (2.7)	33 (0.9)	191 (1.3)	5 (0.4)	186 (5.0)	53 (1.0)	195 (1.					

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



## TABLE A.85 | Students' Reports on the Frequency of Computer Use for School Work (continued)

	Grade 8 - 1992										
	Almost Ev	very Day	Once or Tw	ice a Week	Once or Tw	ce a Month	Never or Hardly Ever				
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	8 (0.8)	266 (2.6)	13 (0.7)	271 (2.1)	19 (0.9)	281 (1.6)	60 (1.3)	064 (0.0)			
Northeast	6 (1.2)	*** (***)	15 (1.5)	272 (5.2)	21 (1.8)	284 (4.4)		264 (0.8)			
Southeast	7 (0.7)	252 (4.3)	8 (1.1)	262 (3.5)	14 (1.2)		58 (3.5)	264 (2.4)			
Central	7 (1.7)	273 (4.1)	14 (1.8)	276 (3.3)	23 (1.8)	270 (2.9)	71 (1.8)	258 (1.2)			
West	11 (2.0)	268 (3.8)	15 (1.1)	272 (3.6)	19 (1.9)	284 (3.0)	57 (3.0)	271 (2.0)			
STATES	''' (=,	200 (0.0)	10 (1.17	272 (5.0)	15 (1.5)	282 (2.8)	55 (2.7)	264 (2.1)			
Alabama	6 (0.9)	247 (2.9)	10 (1.1)	254 (2.7)	40 (4.0)	000 (0.0)					
Arizona	8 (0.8)	266 (3.1)	12 (1.0)	251 (3.7)	13 (1.0)	262 (3.3)	70 (1.9)	253 (1.7)			
Arkansas	8 (1.1)			267 (3.2)	20 (1.3)	278 (2.3)	60 (2.0)	263 (1.1)			
California	7 (0.6)	247 (3.3)	11 (1.2)	254 (2.2)	10 (0.7)	269 (2.9)	71 (1.7)	257 (1.3)			
Colorado		268 (4.3)	15 (1.7)	273 (3.5)	22 (1.2)	272 (2.4)	56 (1.9)	259 (1.5)			
Connecticut	11 (0.8)	274 (2.6)	17 (1.1)	282 (2.1)	24 (1.1)	279 (1.7)	48 (1.8)	266 (1.2)			
_	5 (0.5)	274 (4.8)	18 (1.3)	278 (2.8)	27 (1.0)	285 (1.7)	50 (1.6)	269 (1.6)			
Delaware	6 (0.5)	258 (4.9)	13 (0.7)	267 (2.4)	18 (1.1)	277 (2.2)					
Dist. Columbia	9 (0.8)	230 (3.6)	17 (1.1)	240 (2.6)	20 (1.3)		. 63 (1.2)	260 (1.1)			
Florida	7 (0.8)	267 (3.4)	9 (0.8)	265 (3.0)	16 (1.0)	248 (2.4)	53 (1.2)	234 (1.4)			
Georgia	7 (0.8)	246 (3.8)	10 (1.0)	260 (3.1)		274 (2.7)	68 (1.5)	257 (1.4)			
Hawaii	7 (0.5)	262 (3.6)	11 (0.7)		16 (1.2)	272 (2.0)	67 (1.8)	259 (1.2)			
ldaho	10 (1.4)	279 (2.6)		266 (3.0)	20 (0.9)	267 (2.0)	63 (1.0)	257 (0.9)			
landing.	10 (1.4)	213 (2.0)	10 (0.8)	278 (2.2)	21 (1.1)	282 (1.7)	58 (1.8)	273 (0.9)			
Indiana	6 (0.6)	274 (3.3)	12 (1.1)	275 (2.5)	19 (0.9)	281 (2.4)	63 (1.6)	266 (1.3)			
lowa	9 (1.1)	282 (2.1)	18 (1.6)	287 (1.7)	25 (1.3)	290 (1.5)	48 (2.1)	279 (1.2)			
Kentucky	5 (0.8)	261 (3.2)	13 (1.7)	266 (2.8)	18 (1.3)	271 (2.1)	63 (1.9)				
Louisiana	7 (1.1)	246 (4.5)	10 (1.0)	253 (3.1)	12 (0.8)	260 (3.0)		260 (1.3)			
Maine	11 (1.0)	282 (2.5)	26 (1.7)	285 (2.0)	24 (1.2)	284 (1.5)	71 (1.7)	250 (1.6)			
Maryland	4 (0.5)	266 (4.1)	16 (1.7)	264 (2.8)	27 (1.3)	278 (1.8)	39 (2.0)	271 (1.2)			
Massachusetts					27 (1.5)	270 (1.0)	53 (2.1)	262 (1.7)			
Michigan	5 (0.8)	273 (5.4)	17 (1.2)	281 (2.3)	25 (1.3)	284 (1.7)	53 (2.0)	266 (1.3)			
Minnesota	10 (1.1)	269 (2.2)	12 (1.2)	279 (2.7)	18 (1.0)	279 (2.3)	60 (1.9)	264 (1.4)			
	5 (0.6)	285 (3.7)	11 (1.0)	286 (2.4)	32 (1.1)	288 (1.3)	52 (1.4)	279 (1.3)			
Mississippi	7 (0.8)	239 (3.7)	13 (1.4)	236 (2.7)	9 (0.9)	259 (2.8)	71 (1.8)	250 (1.3)			
Missouri	7 (0.7)	270 (3.0)	10 (0.8)	276 (2.9)	16 (1.1)	283 (1.7)	67 (1.7)	269 (1.1)			
Nebraska	10 (1.4)	278 (2.4)	16 (1.5)	283 (2.5)	23 (1.4)	283 (1.9)	51 (2.5)	274 (1.1)			
New Hampshire	7 (0.9)	279 (2.9)	40 /4 4\								
New Jersey	6 (0.6)		18 (1.1)	286 (1.8)	26 (1.0)	283 (1.4)	48 (1.7)	273 (1.1)			
New Mexico	11 (1.1)	278 (4.0) 264 (2.1)	19 (1.4)	280 (2.5)	21 (1.3)	285 (1.4)	54 (1.7)	266 (2.0)			
New York	6 (0.7)	264 (2.1)	11 (0.8)	266 (1.9)	21 (1.1)	265 (1.5)	56 (1.6)	257 (1.1)			
North Carolina	, ,	277 (5.2)	16 (1.4)	262 (3.9)	21 (1.1)	281 (2.5)	57 (1.8)	266 (2.0)			
North Dakota	5 (0.7)	251 (3.6)	13 (1.1)	255 (3.1)	18 (0.9)	270 (1.9)	_ 64 (1.5)	259 (1.0)			
i	8 (1.1)	284 (2.9)	11 (1.2)	286 (3.2)	23 (1.4)	287 (1.6)	59 (1.7)	281 (1.3)			
Ohio	5 (0.8)	271 (4.5)	10 (0.9)	271 (3.1)	19 (1.2)	276 (2.1)	RR (4.7)				
Oklahoma	7 (0.9)	270 (3.7)	10 (1.1)	269 (2.8)	18 (1.5)	277 (2.1)	66 (1.7) 65 (2.1)	266 (1.7)			
Pennsylvania	5 (0.7)	274 (4.2)	15 (1.0)	272 (2.7)	21 (1.2)		65 (2.1) 58 (1.4)	266 (1.3)			
Rhode Island	5 (0.4)	268 (3.3)	16 (0.8)	273 (1.6)	22 (1.0)	285 (2.1)	58 (1.4) 57 (4.0)	267 (1.4)			
South Carolina	12 (1.1)	248 (2.3)	12 (1.1)	262 (2.6)		272 (2.0)	57 (1.2)	263 (1.4)			
Tennessee	4 (0.6)	261 (4.7)	8 (1.0)	259 (3.2)	16 (1.0)	275 (1.5)	60 (1.5)	261 (1.2)			
Texas					14 (0.8)	265 (2.5)	75 (1.4)	258 (1.4)			
	15 (1.5)	266 (2.4)	14 (0.9)	271 (2.5)	16 (1.0)	278 (2.9)	55 (1.7)	263 (1.7)			
Utah	10 (0.8)	276 (2.8)	18 (0.9)	280 (1.4)	29 (1.2)	279 (1.4)	44 (1.4)	270 (1.2)			
Virginia	7 (1.1)	267 (3.0)	11 (0.7)	274 (2.4)	24 (1.2)	279 (1.7)	57 (1.7)	264 (1.4)			
West Virginia	7 (0.6)	257 (3.5)	10 (0.9)	258 (2.2)	16 (1.1)	270 (2.0)	68 (1.5)	258 (1.1)			
Nisconsin	7 (0.8)	279 (3.6)	18 (1.9)	283 (2.7)	25 (1.7)	284 (1.6)	51 (2.8)	274 (1.6)			
Wyoming	12 (0.8)	276 (2.1)	14 (1.0)	279 (1.9)	25 (1.0)	279 (1.3)	49 (1.5)				
ERRITORIES	• •	. ,	,,	( , , , , ,	(1.0)	2.0 (1.5)	70 (1.0)	271 (1.2)			
Guam	6 (0.8)	257 (5.6)	21 (1.0)	236 (2.7)	12 (1.0)	250 (2.9)	61 (4 4)	040 (4.6)			
/irgin Islands	6 (0.8)	231 (4.1)	7 (0.7)	225 (4.6)	7 (0.7)	233 (3.3)	61 (1.4) 80 (1.3)	242 (1.6) 223 (1.2)			



## Teachers' Reports on the Frequency of Computer Use in Mathematics Class

	Grade 4 - 1992										
ŀ	At Least	Weekly	Less than O	nce a Week	Never or H	ardly Ever					
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency					
NATION	55 (3.3)	218 (1.5)	20 (2.2)	218 (2.8)	24 (2.9)	214 (2.5)					
Northeast	43 (8.9)	223 (4.1)!	25 (6.9)	221 (5.7)!	32 (7.8)	217 (5.3)!					
Southeast	51 (6.0)	207 (1.7)	21 (3.1)	214 (5.5)	27 (5.8)	203 (3.6)!					
Central	61 (6.2)	222 (2.6)	16 (4.3)	224 (3.7)!	23 (5.0)	227 (5.0)!					
West	, ,	220 (2.6)	19 (3.5)	216 (7.2)!	18 (4.2)	212 (3.2)!					
TATES	63 (5.0)	220 (2.0)	19 (3.3)	210 (1.2):	10 (4.2)	2.2 (0.2).					
Alabama	60 (0.0)	208 (2.1)	13 (3.1)	206 (4.0)!	24 (3.5)	205 (2.9)					
1	63 (3.8)	, ,	20 (2.3)	217 (2.4)	21 (3.0)	213 (2.6)					
Arizona	59 (3.4)	214 (1.5)		217 (2.4)	29 (4.6)	208 (2.8)					
Arkansas	63 (4.9)	209 (1.5)	8 (1.7)	1		204 (3.7)					
California	64 (3.9)	208 (2.0)	15 (2.6)	207 (4.8)	21 (3.1)	221 (2.0)					
Colorado	51 (3.3)	220 (1.6)	25 (2.8)	219 (2.6)	24 (2.9)	, ,					
Connecticut	52 (3.7)	228 (1.9)	19 (2.0)	229 (2.4)	30 (3.6)	226 (3.0)					
Delaware	25 (1.1)	219 (2.1)	28 (1.0)	216 (1.3)	48 (1.3)	218 (1.4)					
Dist. Columbia	42 (0.7)	195 (1.4)	23 (0.8)	193 (1.6)	35 (1.0)	185 (1.4)					
Florida	72 (2.8)	213 (1.6)	15 (2.1)	212 (3.0)	13 (2.0)	212 (2.6)					
Georgia	57 (3.7)	212 (1.9)	24 (3.3)	215 (2.5)	20 (2.9)	218 (2.4)					
Hawaii	44 (3.4)	212 (2.2)	15 (2.2)	215 (2.9)	41 (3.2)	214 (2.0)					
daho	54 (3.1)	220 (1.5)	17 (2.3)	221 (2.1)	29 (3.1)	220 (1.4)					
	, ,		, ,	` '		047 (2.0)					
ndiana	54 (3.6)	219 (1.4)	26 (3.2)	221 (2.0)	20 (3.7)	217 (3.0)					
lowa	50 (4.1)	230 (1.5)	27 (2.6)	229 (1.9)	23 (3.3)	227 (2.2)					
Kentucky	50 (3.2)	214 (1.6)	19 (2.9)	215 (2.7)	31 (3.1)	211 (1.8)					
Louisiana	28 (3.9)	204 (2.7)	12 (2.5)	212 (4.4)!	60 (4.6)	200 (2.0)					
Maine	42 (4.1)	231 (1.4)	21 (2.8)	232 (2.1)	37 (3.9)	229 (1.8)					
Maryland	54 (3.8)	219 (2.1)	18 (2.9)	218 (3.3)	28 (3.7)	217 (2.9)					
Massachusetts	53 (4.3)	226 (2.0)	17 (2.6)	229 (2.5)	30 (3.9)	227 (2.7)					
Michigan	47 (3.8)	222 (2.5)	25 (3.1)	219 (2.7)	29 (3.2)	213 (4.0)					
Minnesota	49 (3.9)	229 (1.3)	26 (3.5)	230 (2.3)	25 (3.6)	221 (2.6)					
Mississippi	1 1	200 (1.8)	8 (2.4)	197 (5.3)!	40 (4.4)	201 (2.4)					
Missouri	52 (4.6)		17 (2.5)	220 (3.0)	30 (3.8)	221 (2.3)					
	53 (3.8)	223 (2.3)	1 1	226 (2.8)	21 (3.7)	222 (2.4)					
Nebraska	56 (4.3)	225 (1.7)	23 (3.7)		, ,						
New Hampshire	47 (3.9)	229 (1.5)	27 (2.9)	232 (2.4)	26 (3.7)	225 (2.4)					
New Jersey	39 (4.1)	228 (2.5)	20 (3.2)	234 (2.5)	41 (4.0)	222 (2.6)					
New Mexico	54 (3.8)	215 (1.7)	17 (2.6)	210 (2.1)	29 (4.0)	207 (2.4)					
New York	48 (4.1)	218 (2.1)	16 (1.6)	220 (2.5)	36 (4.1)	214 (2.7)					
North Carolina	64 (4.0)	212 (1.4)	17 (2.3)	212 (2.7)	19 (3.1)	213 (3.3)					
North Dakota	52 (4.1)	226 (1.2)	24 (3.7)	229 (2.4)	24 (3.5)	230 (2.0)					
Ohio	41 (4.2)	219 (2.1)	22 (3.0)	216 (2.6)	37 (4.1)	216 (1.9)					
Oklahoma	· · · · · · · · · · · · · · · · · · ·	220 (1.3)	18 (2.8)	220 (2.9)	25 (3.6)	219 (2.2)					
Pennsylvania	57 (4.1)	1 1	26 (3.3)	226 (2.5)	32 (4.2)	220 (3.3)					
Rhode Island	42 (4.1)	224 (2.2) 215 (2.3)	20 (3.3)	216 (2.2)	41 (4.1)	212 (2.8)					
South Carolina	38 (3.7)		21 (2.7)	216 (2.6)	25 (2.8)	212 (2.3)					
Tennessee	54 (3.5) 53 (4.4)	210 (1.5) 208 (2.1)	21 (3.0) 17 (3.1)	211 (3.2)	29 (3.8)	213 (2.5)					
		• •	, ,	, ,	, ,						
Texas	61 (4.5)	216 (2.0)	12 (2.4)	224 (2.5)!	27 (3.9)	216 (3.0)					
Utah	60 (4.0)	223 (1.3)	14 (2.5)	228 (2.4)	26 (3.1)	221 (2.3)					
Virginia	56 (2.9)	220 (1.8)	25 (2.5)	219 (2.8)	19 (2.5)	219 (3.4)					
West Virginia	52 (4.1)	215 (1.6)	15 (2.5)	213 (2.3)	33 (3.9)	211 (1.8)					
Wisconsin	54 (3.4)	226 (1.8)	22 (2.5)	233 (2.2)	24 (3.4)	229 (1.9)					
Wyoming FERRITORY	64 (4.1)	225 (1.2)	20 (2.8)	223 (1.7)	16 (2.8)	225 (2.4)					
Guam	75 (0.8)	192 (0.9)	7 (0.8)	182 (3.9)	18 (0.7)	193 (2.1)					

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



## Teachers' Reports on the Frequency of Computer Use in Mathematics Class (continued)

	Grade 8 - 1992										
	At Least	Weekly	Less than Or	nce a Week	Never or H	ardly Ever					
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency					
NATION	8 (1.3)	252 (3.9)	18 (2.1)	266 (2.3)	74 (0.4)	070 (4.4)					
Northeast	9 (2.5)	240 (7.3)!	11 (2.8)		74 (2.1)	270 (1.4)					
Southeast	, ,			266 (6.9)!	80 (3.7)	271 (3.9)					
Central	6 (2.5)	251 (6.3)!	26 (4.4)	265 (2.6)	67 (4.5)	262 (1.9)					
	8 (3.1)	265 (9.0)!	17 (3.6)	273 (3.9)!	75 (3.9)	276 (3.1)					
West	9 (2.0)	253 (7.7)!	17 (3.9)	261 (5.8)!	74 (4.1)	270 (2.0)					
STATES		, ,	(,	20. (0.0).	1 + (4.1)	270 (2.0)					
Alabama	11 (2.5)	243 (3.8)!	20 (2.8) <	056 (4.0)	CO (O O) >	050 (0.0)					
Arizona	15 (3.1)	256 (3.4)!		256 (4.0)	69 (3.8) >	252 (2.3)					
Arkansas			12 (2.7) <	267 (4.3)!	73 (4.6)	266 (1.5)					
California	17 (2.9)	247 (4.2)	12 (2.3)	257 (3.3)!	71 (3.4)	258 (1.6)					
	13 (2.6)	258 (4.8)!>	16 (2.1) <	254 (4.6)	72 (3.4)>	263 (1.9)					
Colorado	7 (1.3)	268 (5.6)	22 (2.8) <	275 (2.9)	71 (3.0)>						
Connecticut	10 (2.2)	252 (6.2)!	21 (2.8)			271 (1.2)					
Dolowers	, ,	(0.2):	2. (2.0)	277 (2.7)	69 (3.5)>	275 (2.0)>					
Delaware	7 (0.5)	245 (5.7)	19 (0.7)≪	259 (2.4) <	74 (0.7)>>	265 (1.0)					
Dist. Columbia	15 (0.8) <<	238 (2.6)	26 (1.0) «	233 (1.8)		, ,					
Florida	10 (1.8)	251 (3.8)	, , ,	233 (1.0)	59 (1.3) <b>»</b>	236 (1.6) >					
Georgia	` '		17 (1.9)	262 (3.7)	72 (2.6)	260 (1.7)					
Hawaii	12 (2.0)	250 (3.6)	14 (1.8) <<	258 (3.8)	75 (2.9) <b>&gt;&gt;</b>	259 (1.5)					
1	4 (0.3)	236 (4.4)	17 (0.8)≪	256 (2.3) >	78 (0.8)»	259 (0.9)					
Idaho	7 (1.4)	273 (4.5)	12 (2.2)	274 (2.6)	80 (2.6)	275 (0.8)					
Indiana		• •	·- (=.=,	214 (2.0)	00 (2.0)	215 (0.6)					
	8 (1.9)	270 (3.3)!	21 (3.1) <	269 (3.1)	71 (3.7)	270 (1.5)					
lowa	5 (1.8)	276 (5.3)!	18 (3.4) <<	282 (3.0)	77 (3.5) >>						
Kentucky	9 (2.5)	248 (3.9)!	25 (3.6)	264 (2.9)	· · ·	284 (1.2)>					
Louisiana	13 (3.2)	252 (5.4)!			66 (4.2)	264 (1.3)>					
Maine <sup>1</sup>			7 (1.9)	256 (5.7)!	80 (3.6)	249 (1.7)					
Maryland	10 (3.2)	275 (5.2)!	27 (4.2)	278 (2.7)	62 (5.0)	279 (1.1)					
Mai yiailu	10 (2.4)	258 (5.4)!	38 (3.4)	268 (2.6)	51 (4.0)>	266 (2.3)>					
Massachusetts1	10 (2.7)	060 (6.6)	40 (0.0)		, ,	200 (2.0)					
Michigan	, ,	260 (6.6)!	19 (2.8)	270 (2.6)	71 (3.7)	274 (1.5)					
•	4 (1.6)	265 (7.9)!	14 (2.5) <	269 (6.1)	83 (2.8) >	266 (1.6)					
Minnesota	4 (1.6)	279 (6.6)!	22 (3.7) «	282 (2.7)	74 (3.7)>>	281 (1.2)>					
Mississippi <sup>1</sup>	12 (2.7)	233 (4.0)!	11 (2.6)	238 (5.6)!							
Missouri¹	8 (2.6)	259 (5.0)!			77 (3.9)	248 (1.5)					
Nebraska			17 (2.5)	269 (2.3)	75 (3.5)	273 (1.4)					
i	9 (2.5)	277 (4.7)!	19 (3.1)	277 (2.9)	71 (3.6)	278 (1.3)					
New Hampshire	4 (2.0) <	280 (5.0)!	22 (3.1) <<	000 (0.4)	74 (0.0)						
New Jersey	15 (2.6)		, ,	280 (2.4)	74 (3.3)>>	277 (1.1)>					
New Mexico		245 (5.2)	18 (3.0) <	270 (4.6)	67 (4.0)	278 (1.9)					
	5 (0.9) <b>«</b>	253 (3.4)	22 (3.0) <<	256 (1.5)	73 (3.0) >>	261 (1.1)					
New York	12 (2.8)	237 (8.2)!	14 (1.8) <<	272 (3.3)	74 (3.1)>	269 (2.2) >					
North Carolina	9 (2.3)	248 (4.6)!	29 (3.8)	255 (2.0)	62 (3.9) >						
North Dakota	7 (2.0)	283 (3.1)!	15 (2.6) <			260 (1.5) >>					
	, ,	200 (0.7):	15 (2.0) **	278 (2.1)	78 (3.4) <b>»</b>	284 (1.3)					
Ohio	6 (1.5)	252 (5.5)!	20 (3.4) <	271 (3.9)	75 (3.8)>	270 /4 61					
Oklahoma	13 (2.4)	260 (3.0)	15 (3.2)	3 1	, ,	270 (1.6)					
Pennsylvania	5 (1.4)		, , ,	266 (2.8)!	72 (3.7)	269 (1.5)>					
Rhode Island	· · · · · · · · · · · · · · · · · · ·	259 (5.7)!	21 (3.6) <	277 (3.1)	74 (4.2)>	270 (1.6)					
South Carolina1	6 (0.4) «	260 (1.7)	20 (0.5) <<	265 (1.6)>	74 (0.6)>>	266 (0.9)>>					
	15 (2.7)	240 (4.1)	14 (2.6)	258 (3.3)	70 (3.2)	265 (1.6)					
Tennessee'	9 (2.1)	248 (4.6)!	19 (3.4)	252 (2.7)	72 (4.0)						
exas			` '	, ,	12 (4.0)	260 (1.7)					
. 1	10 (2.4)	257 (5.0)!	13 (2.4)	266 (5.3)	77 (3.4)	265 (1.6)>>					
Jtah¹ ·	7 (1.3)	265 (3.4)	14 (1.8)	273 (2.2)	79 (2.2)	275 (1.0)					
/irginia	7 (1.7)	258 (5.7)!	24 (2.5) «	268 (2.7)	68 (2.9)»	213 (1.0)					
West Virginia	9 (2.1)	248 (3.6)!				268 (1.4)>					
Visconsin	9 (2.5)		15 (2.3) <	256 (2.6)	76 (3.1) >	260 (1.2)					
Vyoming		270 (4.9)!	26 (3.7)	277 (3.0)	65 (4.8) <i>&gt;</i>	280 (1.9)					
	8 (1.7)<<	264 (4.9)!	33 (3.3)<	276 (1.4)>	60 (3.6)>>	275 (1.2)					
ERRITORIES			· ·	* *	· - \/	( )					
Suam	12 (0.5)	242 (2.7)>	8 (0.9)	228 (7.5)	80 (1.0)	234 (1.2)					
/irgin Islands	0 (0.0)	*** (***)	- (3.0)	220 (1.0)	00 (1.01	2.54 (1.21					

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

"The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. ("The value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.

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## Students' Reports on the Frequency of Computer Use in Mathematics Class

	Grade 4 - 1992										
<u> </u>	At Least	Weekly	Less than O	nce a Week	Never or H	ardly Ever					
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency					
NATION	33 (1.2)	214 (1.1)	9 (0.6)	227 (1.8)	58 (1.4)	218 (1.0)					
Northeast	26 (2.2)	218 (2.7)	10 (1.4)	232 (4.6)	64 (3.1)	224 (2.6)					
Southeast	34 (1.6)	203 (2.0)	7 (1.1)	217 (4.1)	59 (1.9)	212 (2.3)					
Central	30 (2.3)	220 (2.4)	12 (1.6)	228 (2.6)	59 (2.9)	222 (2.5)					
West	40 (2.7)	217 (2.1)	9 (1.0)	228 (3.3)	51 (3.0)	216 (1.9)					
STATES	40 (2.7)	217 (2.17	<b>O</b> ()		- , ,	, ,					
Alabama	33 (2.2)	203 (2.1)	9 (0.8)	213 (3.7)	59 (2.3)	209 (1.7)					
Arizona	, ,	213 (2.0)	9 (0.6)	220 (2.6)	61 (1.6)	214 (1.1)					
	30 (1.6)		5 (0.4)	212 (3.4)	52 (2.9)	210 (1.3)					
Arkansas	43 (2.9)	207 (1.2)	10 (0.9)	210 (2.3)	54 (2.2)	210 (1.9)					
California	36 (2.4)	204 (2.5)	, ,	, ,	58 (1.5)	219 (1.3)					
Colorado	29 (1.6)	220 (1.6)	13 (0.7)	226 (1.9)		227 (1.6)					
Connecticut	32 (2.0)	223 (1.7)	13 (1.1)	232 (2.1)	55 (2.2)	221 (1.0)					
Delaware	23 (0.7)	213 (1.8)	9 (0.8)	218 (3.1)	68 (0.9)	218 (0.9)					
Dist. Columbia	29 (0.8)	188 (1.1)	9 (0.6)	198 (3.0)	62 (0.9)	193 (0.7)					
Florida	33 (1.9)	211 (1.7)	9 (0.7)	216 (3.3)	57 (1.7)	213 (1.7)					
Georgia	33 (2.7)	205 (2.1)	10 (0.9)	220 (2.7)	<b>57 (2.5)</b>	219 (1.3)					
· ·	, ,	209 (2.0)	8 (0.6)	215 (2.9)	57 (1.5)	216 (1.4)					
Hawaii	35 (1.6)		9 (0.7)	224 (2.2)	63 (1.7)	220 (1.0)					
Idaho	27 (1.6)	220 (1.5)	9 (0.7)		•	, ,					
Indiana	31 (1.8)	219 (1.7)	11 (0.7)	226 (2.0)	59 (1.8)	219 (1.2)					
Iowa	27 (1.7)	227 (1.9)	14 (1.0)	236 (2.1)	59 (1.8)	229 (1.1)					
Kentucky	32 (2.1)	210 (1.8)	8 (0.7)	220 (3.1)	61 (2.1)	215 (1.1)					
Louisiana	21 (1.9)	195 (2.2)	7 (0.8)	208 (4.3)	72 (2.2)	205 (1.5)					
Maine	24 (2.1)	229 (2.0)	14 (1.1)	233 (2.3)	62 (2.1)	232 (1.1)					
Maryland	37 (2.3)	214 (2.4)	10 (0.7)	222 (2.9)	53 (2.3)	218 (1.5)					
· 1	• •		12 (0.9)	231 (2.6)	57 (2.1)	227 (1.3)					
Massachusetts	31 (2.1)	222 (1.8)		227 (2.1)	59 (2.0)	219 (2.1)					
Michigan	30 (2.0)	216 (2.3)	11 (0.8)	232 (1.7)	54 (1.5)	228 (1.1)					
Minnesota	31 (1.4)	226 (1.3)	15 (0.9)		53 (2.5)	205 (1.3)					
Mississippi	41 (2.7)	196 (1.6)	6 (0.6)	199 (4.2)		222 (1.4)					
Missouri	28 (1.6)	220 (2.1)	10 (0.9)	226 (2.5)	62 (2.0)						
Nebraska	29 (1.9)	221 (1.9)	12 (0.9)	235 (2.2)	59 (1.9)	224 (1.4)					
New Hampshire	27 (2.0)	231 (2.0)	13 (1.0)	232 (1.9)	60 (2.4)	227 (1.3)					
New Jersey	27 (2.1)	225 (2.2)	10 (1.0)	231 (2.6)	63 (2.4)	226 (1.6)					
New Mexico	27 (2.1)	211 (1.6)	7 (0.7)	222 (4.1)	66 (1.7)	212 (1.6)					
New York	33 (2.2)	216 (2.0)	10 (0.8)	223 (2.7)	58 (2.3)	218 (1.3)					
North Carolina	38 (2.2) 38 (2.2)	210 (2.5)	10 (0.7)	218 (2.2)	52 (2.2)	213 (1.4)					
North Dakota	36 (2.2) 28 (2.2)	226 (1.3)	9 (0.9)	232 (2.0)	63 (2.0)	228 (1.1)					
	20 (2.2)	` '			,						
Ohio	20 (1.5)	216 (2.2)	11 (1.0)	228 (2.5)	69 (1.9)	217 (1.3)					
Oklahoma	31 (1.9)	219 (1.5)	8 (0.6)	223 (2.9)	62 (1.8)	219 (1.2)					
Pennsylvania	31 (2.2)	222 (2.0)	12 (0.8)	230 (2.2)	57 (2.2)	224 (1.5)					
Rhode Island	28 (2.0)	210 (2.5)	11 (0.9)	218 (2.8)	61 (2.3)	216 (1.6)					
South Carolina	32 (2.1)	206 (1.8)	9 (0.7)	217 (2.6)	59 (2.1)	214 (1.2)					
Tennessee	27 (2.0)	204 (2.1)	7 (O.6)	208 (2.8)	65 (2.0)	212 (1.5)					
Tayas	• •	220 (1.8)	7 (0.6)	217 (3.1)	54 (2.8)	216 (1.4)					
Texas	40 (2.8)		9 (0.8)	226 (2.5)	50 (2.0)	221 (1.3)					
Utah	41 (2.2)	225 (1.3)		226 (3.0)	57 (1.9)	221 (1.5)					
Virginia	30 (1.9)	216 (1.7)	13 (1.0)		61 (2.2)	214 (1.2)					
West Virginia	29 (2.0)	212 (1.9)	10 (0.9)	222 (1.8)		229 (1.1)					
Wisconsin	30 (1.8)	223 (1.7)	12 (0.9)	234 (2.2)	59 (2.0)	229 (1.1)					
Wyoming TERRITORY	40 (1.6)	225 (1.1)	10 (0.7)	225 (1.9)	50 (1.7)	, ,					
Guam	50 (1.2)	191 (1.1)	5 (0.5)	178 (4.5)	45 (1.2)	194 (1.3)					

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample.



TABLE A.87 | Students' Reports on the Frequency of Computer Use in Mathematics Class (continued)

NATION Northeast Northeast Southeast Central Central STATES Alabama Arkansas California Colorado Connecticut Delaware Dist. Columbia Florida Georgia Hawaii Idaho Indiana Ilowa Kentucky Louisiana Maine¹ Maryland Massachusetts¹ Michigan Minnesota Mississippi¹ Minnesota New Hampshire New Jersey New Mexico New York North Carolina	At Least W  Itage of	254 (1.9) 250 (3.5) 243 (3.9) 265 (3.7) 254 (3.7) 254 (3.7) 241 (3.0) 258 (2.6) 246 (2.8) 253 (3.8) 266 (2.1) 256 (3.5) 247 (3.5) 230 (1.9) 251 (2.7) > 241 (2.2) 243 (2.8) 272 (1.9) 268 (2.7) > 278 (1.9)	12 (0.8) 10 (1.2) 10 (1.5) 14 (2.0) 12 (1.5) 11 (1.3) 12 (1.3) 9 (0.9) 13 (1.1) 14 (0.8) 14 (1.0) 12 (0.7) 14 (0.7) 10 (0.9) 11 (1.1) 12 (0.8) 10 (0.9) 13 (1.1)	Proficiency  270 (2.2) 264 (5.6) 264 (2.5) 278 (3.1) 270 (5.3)  254 (2.5) 268 (2.9) 262 (3.7) 257 (2.7) 273 (2.2) 278 (2.5) 265 (2.9) 237 (2.5) 261 (3.6) 263 (2.5) 251 (2.3) 275 (2.7)	73 (1.3) 73 (2.4) 78 (2.5) 69 (3.3) 72 (2.0) 74 (2.3) 74 (2.6) 71 (2.2) 73 (1.6) 73 (1.3) 72 (1.8) 77 (0.8) > 66 (1.0) 78 (1.5) 78 (1.4) > 76 (0.9) 76 (1.6)	269 (1.0) 269 (1.0) 273 (3.4) 260 (1.4) 274 (2.1) 269 (1.9) 253 (1.8) 266 (1.2) 257 (1.3) 262 (1.8) 273 (1.1)> 276 (1.4) 264 (1.0) 235 (1.3) 260 (1.4) 261 (1.3) 260 (1.0)» 275 (0.8)
NATION Northeast Southeast Central Central West STATES Alabama Arizona Arizona Arkansas California Colorado Connecticut Delaware Dist. Columbia Florida Georgia Hawaii Idaho Indiana Ilowa Kentucky Louisiana Maine¹ Maryland Massachusetts¹ Michigan Minnesota Mississippi¹ Missouri¹ Nebraska New Hampshire New Jersey New Mexico New York North Carolina Nor	(0.9) (1.6) (1.4) (2.8) (1.4) (1.7) (2.0) (1.3) (0.9) (1.4) (0.8) (0.9) (1.2) (0.9) (1.4) (1.7) (1.7)	254 (1.9) 250 (3.5) 243 (3.9) 265 (3.7) 254 (3.7) 241 (3.0) 258 (2.6) 246 (2.8) 253 (3.8) 266 (2.1) 256 (3.5) 247 (3.5) 230 (1.9) 251 (2.7)> 241 (2.2) 243 (2.8) 272 (1.9) 268 (2.7)>	12 (0.8) 10 (1.2) 10 (1.5) 14 (2.0) 12 (1.5) 11 (1.3) 12 (1.3) 9 (0.9) 13 (1.1) 14 (0.8) 14 (1.0) 12 (0.7) 14 (0.7) 10 (0.9) 11 (1.1) 12 (0.8) 10 (0.9)	270 (2.2) 264 (5.6) 264 (2.5) 278 (3.1) 270 (5.3)  254 (2.5) 268 (2.9) 262 (3.7) 257 (2.7) 273 (2.2) 278 (2.5) 265 (2.9) 237 (2.5) 261 (3.6) 263 (2.5) 251 (2.3)	73 (1.3) 73 (2.4) 78 (2.5) 69 (3.3) 72 (2.0)  74 (2.3) 74 (2.6) 71 (2.2) 73 (1.6) 73 (1.3) 72 (1.8)  77 (0.8) 66 (1.0) 78 (1.5) 78 (1.4) 76 (0.9)	269 (1.0) 273 (3.4) 260 (1.4) 274 (2.1) 269 (1.9) 253 (1.8) 266 (1.2) 257 (1.3) 262 (1.8) 273 (1.1) > 276 (1.4) 264 (1.0) 235 (1.3) 260 (1.4) 261 (1.3) 260 (1.0) >>
Northeast	(1.6) (1.4) (2.8) (1.7) (1.7) (2.0) (1.3) (0.9) (1.4) (0.8) « (0.9) (1.2) (0.9) (1.2) (1.2) (1.1) (1.1)	250 (3.5) 243 (3.9) 265 (3.7) 254 (3.7) 241 (3.0) 258 (2.6) 246 (2.8) 253 (3.8) 266 (2.1) 256 (3.5) 247 (3.5) 230 (1.9) 251 (2.7) > 241 (2.2) 243 (2.8) 272 (1.9) 268 (2.7) >	10 (1.2) 10 (1.5) 14 (2.0) 12 (1.5) 11 (1.3) 12 (1.3) 9 (0.9) 13 (1.1) 14 (0.8) 14 (1.0) 12 (0.7) 14 (0.7) 10 (0.9) 11 (1.1) 12 (0.8) 10 (0.9)	264 (5.6) 264 (2.5) 278 (3.1) 270 (5.3) 254 (2.5) 268 (2.9) 262 (3.7) 257 (2.7) 273 (2.2) 278 (2.5) 265 (2.9) 237 (2.5) 261 (3.6) 263 (2.5) 251 (2.3)	73 (2.4) 78 (2.5) 69 (3.3) 72 (2.0)  74 (2.3) 74 (2.6) 71 (2.2) 73 (1.6) 73 (1.3) 72 (1.8)  77 (0.8) > 66 (1.0) 78 (1.5) 78 (1.4) > 76 (0.9)	269 (1.0) 273 (3.4) 260 (1.4) 274 (2.1) 269 (1.9) 253 (1.8) 266 (1.2) 257 (1.3) 262 (1.8) 273 (1.1) > 276 (1.4) 264 (1.0) 235 (1.3) 260 (1.4) 261 (1.3) 260 (1.0) >
Southeast	(1.4) (2.8) (1.4) (1.7) (1.7) (2.0) (1.3) (0.9) (1.4) (0.9) (1.2) (0.9) (1.2) (0.9) (1.2) (1.4) (1.6) (1.1)	250 (3.5) 243 (3.9) 265 (3.7) 254 (3.7) 241 (3.0) 258 (2.6) 246 (2.8) 253 (3.8) 266 (2.1) 256 (3.5) 247 (3.5) 230 (1.9) 251 (2.7) > 241 (2.2) 243 (2.8) 272 (1.9) 268 (2.7) >	10 (1.2) 10 (1.5) 14 (2.0) 12 (1.5) 11 (1.3) 12 (1.3) 9 (0.9) 13 (1.1) 14 (0.8) 14 (1.0) 12 (0.7) 14 (0.7) 10 (0.9) 11 (1.1) 12 (0.8) 10 (0.9)	264 (5.6) 264 (2.5) 278 (3.1) 270 (5.3) 254 (2.5) 268 (2.9) 262 (3.7) 257 (2.7) 273 (2.2) 278 (2.5) 265 (2.9) 237 (2.5) 261 (3.6) 263 (2.5) 251 (2.3)	73 (2.4) 78 (2.5) 69 (3.3) 72 (2.0)  74 (2.3) 74 (2.6) 71 (2.2) 73 (1.6) 73 (1.3) 72 (1.8)  77 (0.8) > 66 (1.0) 78 (1.5) 78 (1.4) > 76 (0.9)	273 (3.4) 260 (1.4) 274 (2.1) 269 (1.9) 253 (1.8) 266 (1.2) 257 (1.3) 262 (1.8) 273 (1.1) > 276 (1.4) 264 (1.0) 235 (1.3) 260 (1.4) 261 (1.3) 260 (1.0) >
Southeast	(1.4) (2.8) (1.4) (1.7) (1.7) (2.0) (1.3) (0.9) (1.4) (0.9) (1.2) (0.9) (1.2) (0.9) (1.2) (1.4) (1.6) (1.1)	243 (3.9) 265 (3.7) 254 (3.7) 241 (3.0) 258 (2.6) 246 (2.8) 253 (3.8) 266 (2.1) 256 (3.5) 247 (3.5) 230 (1.9) 251 (2.7) > 241 (2.2) 243 (2.8) 272 (1.9) 268 (2.7) >	10 (1.5) 14 (2.0) 12 (1.5) 11 (1.3) 12 (1.3) 9 (0.9) 13 (1.1) 14 (0.8) 14 (1.0) 12 (0.7) 14 (0.7) 10 (0.9) 11 (1.1) 12 (0.8) 10 (0.9)	264 (2.5) 278 (3.1) 270 (5.3) 254 (2.5) 268 (2.9) 262 (3.7) 257 (2.7) 273 (2.2) 278 (2.5) 265 (2.9) 237 (2.5) 261 (3.6) 263 (2.5) 251 (2.3)	78 (2.5) 69 (3.3) 72 (2.0)  74 (2.3) 74 (2.6) 71 (2.2) 73 (1.6) 73 (1.3) 72 (1.8)  77 (0.8) > 66 (1.0) 78 (1.5) 78 (1.4) > 76 (0.9)	260 (1.4) 274 (2.1) 269 (1.9) 253 (1.8) 266 (1.2) 257 (1.3) 262 (1.8) 273 (1.1) > 276 (1.4) 264 (1.0) 235 (1.3) 260 (1.4) 261 (1.3) 260 (1.0) >
Central West 16 STATES Alabama 15 Arizona 14 Arkansas 20 California 14 Colorado 13 Connecticut 14 Delaware 12 Dist. Columbia 13 Florida 13 Georgia 11 Hawaii 12 Idaho 13 Indiana 11 Iowa 14 Kentucky 14 Kentucky 14 Kentucky 14 Kentucky 14 Kentucky 14 Kindiana 15 Maryland 15 Massachusetts¹ 16 Mississippi¹ 16 Mississippi¹ 17 Missouri¹ 11 Nebraska 13 New Hampshire 13 New Jersey 15 New Mexico 12 New York 14 North Carolina 16 Netatona 16 New Hampshire 16 New York 14 North Carolina 16 Netatona 16 New Hampshire 16 New York 14 North Carolina 16 New Hampshire 16 New York 14 North Carolina 16 New Hampshire 16 New York 14 North Carolina 16 New Hampshire 16 New York 14 North Carolina 16 New Hampshire 16 New York 14 North Carolina 16 New Hampshire 16 New York 14 North Carolina 16 New Hampshire 16 New York 16 New Yo	(2.8) (1.4) (1.7) (2.0) (1.3) (0.9) (1.4) (0.8) « (0.9) (1.2) (0.9) (1.2) (0.7) (1.4) (1.6) (1.1)	265 (3.7) 254 (3.7) 241 (3.0) 258 (2.6) 246 (2.8) 253 (3.8) 266 (2.1) 256 (3.5) 247 (3.5) 230 (1.9) 251 (2.7) > 241 (2.2) 243 (2.8) 272 (1.9) 268 (2.7) >	14 (2.0) 12 (1.5) 11 (1.3) 12 (1.3) 9 (0.9) 13 (1.1) 14 (0.8) 14 (1.0) 12 (0.7) 14 (0.7) 10 (0.9) 11 (1.1) 12 (0.8) 10 (0.9)	278 (3.1) 270 (5.3) 254 (2.5) 268 (2.9) 262 (3.7) 257 (2.7) 273 (2.2) 278 (2.5) 265 (2.9) 237 (2.5) 261 (3.6) 263 (2.5) 251 (2.3)	69 (3.3) 72 (2.0)  74 (2.3) 74 (2.6) 71 (2.2) 73 (1.6) 73 (1.3) 72 (1.8)  77 (0.8) > 66 (1.0) 78 (1.5) 78 (1.4) > 76 (0.9)	274 (2.1) 269 (1.9) 253 (1.8) 266 (1.2) 257 (1.3) 262 (1.8) 273 (1.1) > 276 (1.4) 264 (1.0) 235 (1.3) 260 (1.4) 261 (1.3) 260 (1.0) >
West STATES         16           Alabama Arizona         15           Arizona         14           Arkansas         20           California         14           Colorado         13           Connecticut         14           Delaware         12           Dist. Columbia         21           Fiorida         13           Georgia         11           Hawaii         12           Idaho         13           Indiana         11           Iowa         14           Kentucky         14           Louisiana         13           Maine¹         16           Maryland         15           Missaschusetts¹         11           Michigan         11           Minnesota         11           Mississippi¹         17           Missouri¹         11           New Hampshire         13           New Jersey         15           New Mexico         12           New York         14           North Carolina         16	(1.4) (1.7) (1.7) (2.0) (1.3) (0.9) (1.4) (0.8) « (0.9) (1.2) (0.9) (1.2) (0.9) (1.4) (1.6) (1.1)	254 (3.7)  241 (3.0) 258 (2.6) 246 (2.8) 253 (3.8) 266 (2.1) 256 (3.5)  247 (3.5) 230 (1.9) 251 (2.7) > 241 (2.2) 243 (2.8) 272 (1.9) 268 (2.7) >	12 (1.5)  11 (1.3)  12 (1.3)  9 (0.9)  13 (1.1)  14 (0.8)  14 (1.0)  12 (0.7)  14 (0.7)  10 (0.9)  11 (1.1)  12 (0.8)  10 (0.9)	270 (5.3)  254 (2.5) 268 (2.9) 262 (3.7) 257 (2.7) 273 (2.2) 278 (2.5) 265 (2.9) 237 (2.5) 261 (3.6) 263 (2.5) 251 (2.3)	72 (2.0)  74 (2.3)  74 (2.6)  71 (2.2)  73 (1.6)  73 (1.3)  72 (1.8)  77 (0.8) >  66 (1.0)  78 (1.5)  78 (1.4) >  76 (0.9)	269 (1.9)  253 (1.8) 266 (1.2) 257 (1.3) 262 (1.8) 273 (1.1)> 276 (1.4) 264 (1.0) 235 (1.3) 260 (1.4) 261 (1.3) 260 (1.0)
Alabama 15 Arizona 14 Arizona 14 Colorado 13 Connecticut 14 Delaware 12 Dist. Columbia 21 Florida 13 Georgia 11 Hawaii 12 Idaho 13 Indiana 11 Iowa 14 Kentucky 14 Louisiana 13 Maine¹ 16 Maryland 15 Massachusetts¹ 11 Michigan 11 Minnesota 11 Mississippi¹ 17 Missouri¹ 17 Nebraska 13 New Hampshire 13 New Hampshire 13 New Jersey 15 New Mexico 12 New York 14 North Carolina 16 Nerth Carolina 16 Nerth Carolina 16 Nerth Carolina 16 Nerth Carolina 16 New Hampshire 16 North Carolina 16 New Hampshire 16 North Carolina 16 New Horth Carolina 16 New Hampshire 16 North Carolina 16 North Carolina 16 New Hampshire 16 North Carolina 16 No	(1.7) (1.7) (2.0) (2.0) (1.3) (0.9) (1.4) (0.8) « (0.9) (1.2) (0.9) (0.7) (1.4) (1.6) (1.1) (1.7)	241 (3.0) 258 (2.6) 246 (2.8) 253 (3.8) 266 (2.1) 256 (3.5) 247 (3.5) 230 (1.9) 251 (2.7) > 241 (2.2) 243 (2.8) 272 (1.9) 268 (2.7) >	11 (1.3) 12 (1.3) 9 (0.9) 13 (1.1) 14 (0.8) 14 (1.0) 12 (0.7) 14 (0.7) 10 (0.9) 11 (1.1) 12 (0.8) 10 (0.9)	254 (2.5) 268 (2.9) 262 (3.7) 257 (2.7) 273 (2.2) 278 (2.5) 265 (2.9) 237 (2.5) 261 (3.6) 263 (2.5) 251 (2.3)	74 (2.3) 74 (2.6) 71 (2.2) 73 (1.6) 73 (1.3) 72 (1.8) 77 (0.8) > 66 (1.0) 78 (1.5) 78 (1.4) > 76 (0.9)	253 (1.8) 266 (1.2) 257 (1.3) 262 (1.8) 273 (1.1) > 276 (1.4) 264 (1.0) 235 (1.3) 260 (1.4) 261 (1.3) 260 (1.0) >
Arizona 14 Arkansas 20 California 14 Colorado 13 Connecticut 14 Delaware 12 Dist. Columbia 11 Florida 13 Georgia 11 Hawaii 12 Idaho 13 Indiana 11 Iowa 14 Kentucky 14 Louisiana 13 Maine¹ 16 Maryland 15 Massachusetts¹ 11 Michigan 11 Minnesota 11 Mississippi¹ 17 Missouri¹ 17 Nebraska 13 New Hampshire 13 New Hampshire 14 New Jersey 15 New Mexico 12 New York 14 North Carolina 16 Neceptical 16 New Hampshire 16 New Hampshire 17 New Mexico 12 New York 14 North Carolina 16 New Hampshire 16 New York 16	(1.7) (2.0) (1.3) (0.9) (1.4) (0.8) « (0.9) (1.2) (0.9) (1.4) (1.6) (1.1) (1.7)	258 (2.6) 246 (2.8) 253 (3.8) 266 (2.1) 256 (3.5) 247 (3.5) 230 (1.9) 251 (2.7) > 241 (2.2) 243 (2.8) 272 (1.9) 268 (2.7) >	12 (1.3) 9 (0.9) 13 (1.1) 14 (0.8) 14 (1.0) 12 (0.7) 14 (0.7) 10 (0.9) 11 (1.1) 12 (0.8) 10 (0.9)	268 (2.9) 262 (3.7) 257 (2.7) 273 (2.2) 278 (2.5) 265 (2.9) 237 (2.5) 261 (3.6) 263 (2.5) 251 (2.3)	74 (2.6) 71 (2.2) 73 (1.6) 73 (1.3) 72 (1.8) 77 (0.8) > 66 (1.0) 78 (1.5) 78 (1.4) > 76 (0.9)	266 (1.2) 257 (1.3) 262 (1.8) 273 (1.1) > 276 (1.4) 264 (1.0) 235 (1.3) 260 (1.4) 261 (1.3) 260 (1.0) >
Arizona	(1.7) (2.0) (1.3) (0.9) (1.4) (0.8) (0.9) (1.2) (0.9) (1.2) (1.4) (1.6) (1.1) (1.7)	258 (2.6) 246 (2.8) 253 (3.8) 266 (2.1) 256 (3.5) 247 (3.5) 230 (1.9) 251 (2.7) > 241 (2.2) 243 (2.8) 272 (1.9) 268 (2.7) >	12 (1.3) 9 (0.9) 13 (1.1) 14 (0.8) 14 (1.0) 12 (0.7) 14 (0.7) 10 (0.9) 11 (1.1) 12 (0.8) 10 (0.9)	268 (2.9) 262 (3.7) 257 (2.7) 273 (2.2) 278 (2.5) 265 (2.9) 237 (2.5) 261 (3.6) 263 (2.5) 251 (2.3)	74 (2.6) 71 (2.2) 73 (1.6) 73 (1.3) 72 (1.8) 77 (0.8) > 66 (1.0) 78 (1.5) 78 (1.4) > 76 (0.9)	266 (1.2) 257 (1.3) 262 (1.8) 273 (1.1) > 276 (1.4) 264 (1.0) 235 (1.3) 260 (1.4) 261 (1.3) 260 (1.0) >
Arkansas 20 California 14 Colorado 13 Connecticut 14 Delaware 12 Dist. Columbia 21 Florida 13 Georgia 11 Hawaii 12 Idaho 13 Indiana 11 Iowa 14 Kentucky 14 Louisiana 13 Maine¹ 16 Maryland 15 Massachusetts¹ 11 Michigan 11 Minnesota 11 Minnesota 11 Mississippi¹ 17 Missouri¹ 17 Nebraska 13 New Hampshire 13 New Hampshire 13 New Jersey 15 New Mexico 12 New York 14 North Carolina 16 Net 13 New Hampshire 16 New York 14 North Carolina 16 New Hampshire 16 North Carolina 16 North Caroli	(2.0) (1.3) (0.9) (1.4) (0.8) <b>«</b> (0.9) (1.2) (0.9) (0.7) (1.4) (1.6) (1.1)	246 (2.8) 253 (3.8) 266 (2.1) 256 (3.5) 247 (3.5) 230 (1.9) 251 (2.7) > 241 (2.2) 243 (2.8) 272 (1.9) 268 (2.7) >	9 (0.9) 13 (1.1) 14 (0.8) 14 (1.0) 12 (0.7) 14 (0.7) 10 (0.9) 11 (1.1) 12 (0.8) 10 (0.9)	262 (3.7) 257 (2.7) 273 (2.2) 278 (2.5) 265 (2.9) 237 (2.5) 261 (3.6) 263 (2.5) 251 (2.3)	71 (2.2) 73 (1.6) 73 (1.3) 72 (1.8) 77 (0.8) > 66 (1.0) 78 (1.5) 78 (1.4) > 76 (0.9)	257 (1.3) 262 (1.8) 273 (1.1) > 276 (1.4) 264 (1.0) 235 (1.3) 260 (1.4) 261 (1.3) 260 (1.0) >
California Colorado Connecticut  Delaware Dist. Columbia Florida Georgia Hawaii Idaho  Indiana	(1.3) (0.9) (1.4) (0.8) « (0.9) (1.2) (0.9) (0.7) (1.4) (1.6) (1.1)	253 (3.8) 266 (2.1) 256 (3.5) 247 (3.5) 230 (1.9) 251 (2.7) > 241 (2.2) 243 (2.8) 272 (1.9) 268 (2.7) >	13 (1.1) 14 (0.8) 14 (1.0) 12 (0.7) 14 (0.7) 10 (0.9) 11 (1.1) 12 (0.8) 10 (0.9)	257 (2.7) 273 (2.2) 278 (2.5) 265 (2.9) 237 (2.5) 261 (3.6) 263 (2.5) 251 (2.3)	73 (1.6) 73 (1.3) 72 (1.8) 77 (0.8) > 66 (1.0) 78 (1.5) 78 (1.4) > 76 (0.9)	257 (1.3) 262 (1.8) 273 (1.1) > 276 (1.4) 264 (1.0) 235 (1.3) 260 (1.4) 261 (1.3) 260 (1.0) >
Colorado Connecticut  Delaware Dist. Columbia Florida Georgia Hawaii Idaho Indiana Iowa Kentucky Louisiana Maine' Maryland Massachusetts' Michigan Minnesota Mississippi' Missouri' Nebraska New Hampshire New Jersey New Mexico New York North Carolina Ist. 14 12 14 12 14 12 14 14 15 16 16 16 17 17 18 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	(0.9) (1.4) (0.8) <b>«</b> (0.9) (1.2) (0.9) (0.7) (1.4) (1.6) (1.1)	266 (2.1) 256 (3.5) 247 (3.5) 230 (1.9) 251 (2.7) > 241 (2.2) 243 (2.8) 272 (1.9) 268 (2.7) >	14 (0.8) 14 (1.0) 12 (0.7) 14 (0.7) 10 (0.9) 11 (1.1) 12 (0.8) 10 (0.9)	273 (2.2) 278 (2.5) 265 (2.9) 237 (2.5) 261 (3.6) 263 (2.5) 251 (2.3)	73 (1.6) 73 (1.3) 72 (1.8) 77 (0.8) > 66 (1.0) 78 (1.5) 78 (1.4) > 76 (0.9)	262 (1.8) 273 (1.1) > 276 (1.4) 264 (1.0) 235 (1.3) 260 (1.4) 261 (1.3) 260 (1.0) >
Connecticut  Delaware Dist. Columbia Florida Georgia Hawaii Idaho Indiana Indiana Iowa Kentucky Louisiana Maine¹ Maryiand Massachusetts¹ Michigan Minnesota Mississippi¹ Missouri¹ Nebraska Indiana In	(1.4) (0.8) « (0.9) (1.2) (0.9) (0.7) (1.4) (1.6) (1.1)	256 (3.5) 247 (3.5) 230 (1.9) 251 (2.7) > 241 (2.2) 243 (2.8) 272 (1.9) 268 (2.7) >	14 (1.0) 12 (0.7) 14 (0.7) 10 (0.9) 11 (1.1) 12 (0.8) 10 (0.9)	273 (2.2) 278 (2.5) 265 (2.9) 237 (2.5) 261 (3.6) 263 (2.5) 251 (2.3)	73 (1.3) 72 (1.8) 77 (0.8) > 66 (1.0) 78 (1.5) 78 (1.4) > 76 (0.9)	273 (1.1) > 276 (1.4) 264 (1.0) 235 (1.3) 260 (1.4) 261 (1.3) 260 (1.0) >>
Delaware Dist. Columbia Florida Georgia Hawaii Idaho Indiana Iowa Kentucky Louisiana Maine¹ Maryland Massachusetts¹ Michigan Minnesota Mississippi¹ Missouri¹ Nebraska New Hampshire New Jersey New Mexico New York North Carolina 12 12 12 12 12 13 13 14 14 15 16 16 17 17 17 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	(0.8) « (0.9) (1.2) (0.9) (0.7) (1.4) (1.6) (1.7)	247 (3.5) 230 (1.9) 251 (2.7) > 241 (2.2) 243 (2.8) 272 (1.9) 268 (2.7) >	12 (0.7) 14 (0.7) 10 (0.9) 11 (1.1) 12 (0.8) 10 (0.9)	278 (2.5) 265 (2.9) 237 (2.5) 261 (3.6) 263 (2.5) 251 (2.3)	72 (1.8)  77 (0.8) > 66 (1.0) 78 (1.5) 78 (1.4) > 76 (0.9)	276 (1.4) 264 (1.0) 235 (1.3) 260 (1.4) 261 (1.3) 260 (1.0) >>
Dist. Columbia Florida Florida Georgia Hawaii Hawaii Indiana I	(0.9) (1.2) (0.9) (0.7) (1.4) (1.6) (1.7)	247 (3.5) 230 (1.9) 251 (2.7) > 241 (2.2) 243 (2.8) 272 (1.9) 268 (2.7) >	12 (0.7) 14 (0.7) 10 (0.9) 11 (1.1) 12 (0.8) 10 (0.9)	265 (2.9) 237 (2.5) 261 (3.6) 263 (2.5) 251 (2.3)	77 (0.8) > 66 (1.0) 78 (1.5) 78 (1.4) > 76 (0.9)	264 (1.0) 235 (1.3) 260 (1.4) 261 (1.3) 260 (1.0)»
Dist. Columbia Florida Florida Georgia Hawaii Hawaii Indiana I	(0.9) (1.2) (0.9) (0.7) (1.4) (1.6) (1.7)	230 (1.9) 251 (2.7) > 241 (2.2) 243 (2.8) 272 (1.9) 268 (2.7) >	14 (0.7) 10 (0.9) 11 (1.1) 12 (0.8) 10 (0.9)	237 (2.5) 261 (3.6) 263 (2.5) 251 (2.3)	66 (1.0) 78 (1.5) 78 (1.4)> 76 (0.9)	235 (1.3) 260 (1.4) 261 (1.3) 260 (1.0)
Florida 13 Georgia 11 Hawaii 12 Idaho 13 Indiana 11 Iowa 14 Kentucky 14 Louisiana 13 Maine¹ 16 Maryland 15 Massachusetts¹ 11 Michigan 11 Minnesota 11 Mississippi¹ 17 Missouri¹ 11 Nebraska 13 New Hampshire 13 New Jersey 15 New Mexico 12 New York 14 North Carolina 16	(1.2) (0.9) (0.7) (1.4) (1.6) (1.1) (1.7)	251 (2.7) > 241 (2.2) 243 (2.8) 272 (1.9) 268 (2.7) >	10 (0.9) 11 (1.1) 12 (0.8) 10 (0.9)	261 (3.6) 263 (2.5) 251 (2.3)	78 (1.5) 78 (1.4)> 76 (0.9)	235 (1.3) 260 (1.4) 261 (1.3) 260 (1.0)
Georgia Hawaii Idaho I3 Indiana Indiana Iowa Kentucky Louisiana Maine¹ Maryland Massachusetts¹ Michigan Minesota Mississippi¹ Missouri¹ Nebraska I3 New Hampshire New Jersey New Mexico New York North Carolina I1 Indiana I1 I2 I2 I2 I2 I2 I2 I3 II I4 II	(0.9) (0.7) (1.4) (1.6) (1.1) (1.7)	241 (2.2) 243 (2.8) 272 (1.9) 268 (2.7)>	11 (1.1) 12 (0.8) 10 (0.9)	263 (2.5) 251 (2.3)	78 (1.5) 78 (1.4)> 76 (0.9)	260 (1.4) 261 (1.3) 260 (1.0)»
Hawaii	(0.7) (1.4) (1.6) (1.1) (1.7)	243 (2.8) 272 (1.9) 268 (2.7)>	12 (0.8) 10 (0.9)	251 (2.3)	78 (1.4)> 76 (0.9)	261 (1.3) 260 (1.0) <b>»</b>
Idaho 13 Indiana 11 Iowa 14 Kentucky 14 Louisiana 13 Maine¹ 16 Maryland 15 Massachusetts¹ 11 Michigan 11 Minnesota 11 Mississippi¹ 17 Missouri¹ 11 Nebraska 13 New Hampshire 13 New Jersey 15 New Mexico 12 New York 14 North Carolina 16	(1.4) (1.6) (1.1) (1.7)	272 (1.9) 268 (2.7)>	10 (0.9)	251 (2.3)	76 (0.9)	260 (1.0)>>
Indiana 11 lowa 14 Kentucky 14 Louisiana 13 Maine¹ 16 Maryland 15 Massachusetts¹ 11 Michigan 11 Minnesota 11 Mississippi¹ 17 Missouri¹ 11 Nebraska 13 New Hampshire New Jersey New Mexico New York 14 (North Carolina 16 (New Lamb New Lamb N	(1.6) 1.1) 1.7)	268 (2.7)>	, ,			
Iowa	1.1) 1.7)		, ,	,	70 (1.0)	
Iowa	1.1) 1.7)		13 (1 1)			273 (0.6)
Kentucky Louisiana Maine¹ Maryland  Massachusetts¹ Michigan Minnesota Mississippi¹ Missouri¹ Nebraska  New Hampshire New Jersey New Mexico New York North Carolina  11 14 16 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	1.7)	278 (1.9)		270 (2.5)	75 (2.1)	270 (1.2)
Louisiana Maine¹ Maryland  Massachusetts¹ Michigan Minnesota Mississippi¹ Missouri¹ Nebraska  New Hampshire New Jersey New Mexico New York North Carolina  13 16 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18			14 (1.1)	283 (2.1)	72 (1.5)	284 (1.0)>>
Maine¹ 16 Maryland 15 Massachusetts¹ 11 Michigan 11 Minnesota 11 Mississippi¹ 17 Missouri¹ 11 Nebraska 13 Mew Hampshire New Jersey 15 New Mexico New York 14 North Carolina 16 (Maryland 16 Maryland 15 Maryland 1		255 (2.9)	12 (1.2)	260 (2.1)	75 (2.2)	263 (1.2)>
Maryland 15  Massachusetts¹ 11  Michigan 11  Minnesota 11  Mississippi¹ 17  Missouri¹ 11  Nebraska 13  New Hampshire 13  New Jersey 15  New Jersey 15  New Mexico 12  New York 14  North Carolina 16		246 (3.4)	7 (0.9)	253 (3.8 <b>)</b>	80 (2.1)	249 (1.7)
Massachusetts¹ Michigan Minnesota Mississippi¹ Missouri¹ Nebraska  New Hampshire New Jersey New Mexico New York North Carolina  11 11 11 11 11 11 11 11 11 11 11 11 1	1.5)	275 (2.6)	11 (1.0)	280 (2.6)	73 (1.8)	
Michigan 11 (Minnesota 11 (Mississippi¹ 17 (Missouri¹ 11 (Nebraska 13 (New Hampshire New Jersey 15 (New Mexico New York 14 (North Carolina 16 (Mississippi)	1.7)	245 (2.7)	21 (1.4)	270 (2.1)	63 (2.5)	278 (1.0)
Michigan 11 (Minnesota 11 (Mississippi¹ 17 (Missouri¹ 11 (Nebraska 13 (New Hampshire New Jersey 15 (New Mexico New York 14 (North Carolina 16 (Mississippi New Mexico New York 14 (North Carolina 16 (Mississippi New Mexico New York 14 (North Carolina 16 (Mississippi New Mexico New York 14 (North Carolina 16 (Mississippi New Mexico New York 14 (North Carolina 16 (Mississippi New York North Carolina 16 (Mis	4.4\	004 (0.0)			03 (2.5)	267 (1.7) >
Minnesota 11 ( Mississippi¹ 17 ( Missouri¹ 11 ( Nebraska 13 ( New Hampshire 13 ( New Jersey 15 ( New Mexico 12 ( New York 14 ( North Carolina 16 (	,	261 (3.8)	11 (1.1)	269 (3.1)	78 (1.8)	274 (1.2)
Mississippi 1 17 ( Missouri 1 11 ( Nebraska 13 ( New Hampshire 13 ( New Jersey 15 ( New Mexico 12 ( New York 14 ( North Carolina 16 (		263 (2.8)	10 (0.8)	268 (3.1)	79 (1.2)	267 (1.5)
Missouri 1 11 ( Nebraska 13 ( New Hampshire 13 ( New Jersey 15 ( New Mexico 12 ( New York 14 ( North Carolina 16 (		277 (2.5)	18 (1.1)	279 (2.0)	71 (1.5)	283 (1.0)>>
Nebraska         13           New Hampshire         13           New Jersey         15           New Mexico         12           New York         14           North Carolina         16		231 (2.5)	7 (0.9)	243 (3.3)	76 (2.2)	249 (1.4)
New Hampshire New Jersey New Mexico New York North Carolina Newth Deleta		264 (2.5)	11 (0.8)	273 (2.5)	79 (1.5)	271 (1.4)
New Jersey         15 (           New Mexico         12 (           New York         14 (           North Carolina         16 (	1.2)	270 (2.6)	14 (1.3)	276 (3.1)	73 (1.9)	279 (1.1)
New Jersey         15 (           New Mexico         12 (           New York         14 (           North Carolina         16 (	4.0\		, ,	• •	, ,	219 (1.1)
New Mexico 12 (New York 14 (North Carolina 16 (		271 (2.4)	12 (0.9)	276 (2.8)	75 (1.7)>	279 (1.1) >
New York 14 (North Carolina 16 (		261 (2.9)	10 (1.0)	275 (3.4)	76 (1.9)	273 (1.7)
North Carolina 16 (		255 (2.1)	12 (1.3)	259 (2.6)	77 (1.8)	259 (1.1)
North Daliana		246 (4.1)	10 (0.8)	272 (3.1)	76 (1.4)	269 (2.1)
		243 (2.4)	13 (1.3) <	260 (2.5)>	71 (2.0)	260 (1.1) >>
10 (	0.9) <	281 (3.0)	13 (0.9)	281 (1.7)	77 (1.3)>>	200 (1.1)**
Ohio 11 (	1.0\	000 (0.0)	, ,		77 (1.5)	283 (1.1)
Oldahama		263 (2.6)	12 (1.3)	270 (2.9)	77 (1.9)	268 (1.6)
Dannas de la 15 (		260 (2.6)	12 (1.4)	268 (2.4)	76 (2.2)	269 (1.2)
- · · · · · · · · · · · · · · · · · · ·		262 (3.3)	12 (1.3)	272 (3.0)	76 (1.6)	272 (1.4)
South Caratinal		258 (2.2)	15 (0.7)	268 (1.8)	72 (0.7)	266 (1.0)>>
Tonnococal		243 (2.1)	11 (1.2)	261 (2.3)	70 (1.9)	265 (1.2)
Tennessee¹ 10 (	1.0)	251 (3.1)	9 (0.7)	251 (2.6)	81 (1.3)	260 (1.4)
Texas 17 (	. 41	054 (0.0)	, ,		01 (1.5)	200 (1.4)
Litabil I II (		254 (2.3)	11 (1.1)	274 (3.6)	72 (1.9)	265 (1.4) >
Mirainia		272 (1.9)	15 (0.9)	271 (1.7)	69 (1.5)	275 (0.9)
NATORA NESTREET		255 (2.6)	17 (1.2)	272 (2.5)	72 (1.4)	268 (1.3)
West Virginia		248 (2.2)	11 (1.0)	262 (2.1)	77 (1.8)	260 (1.1)
Wisconsin 16 (		270 (2.4)	16 (1.2)	280 (1.8)	68 (2.1)	279 (1.5)
Wyoming 15 (	1.3)	268 (2.5)	16 (1.2)«	279 (1.3)	69 (1.9)>>	
TERRITORIES		, ,	/	. 210 (1.0)	03 (1.3)**	275 (0.9)
Guam 18 (0	•	230 (2.9)	9 (0.5)>>	227 (3.8)	74 /4 0\	007 (4.0)
Virgin Islands 8 (		224 (3.2)>	4 (0.5)	227 (3.0) *** (***)	74 (1.0) 88 (0.8)	237 (1.3) 222 (1.2)

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. Where value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.

\*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students.



## TABLE A.88 | Teachers' Reports on the Primary Use of Computers for Instruction

				Grade	4 - 1992			
	Drill and	Practice	Learning N	lew Topics	Playing Lear	ning Games	Do Not Use	Computers
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	33 (2.8)	213 (1.9)	3 (0.8)	219 (7.9)!	40 (2.6)	221 (1.8)	25 (3.0)	213 (2.5)
Northeast	27 (5.9)	220 (4.8)!	3 (1.9)	*** (***)	35 (4.9)	227 (3.6)	35 (7.3)	217 (3.2)!
Southeast	39 (5.5)	205 (2.4)	1 (0.5)	*** (***)	31 (5.1)	211 (4.1)	29 (6.2)	205 (4.4)!
Central	33 (7.0)	221 (3.8)!	2 (1.3)	*** (***)	52 (5.7)	223 (3.7)	14 (4.6)	229 (8.8)!
West	30 (4.6)	211 (4.3)!	6 (2.4)	*** (***)	42 (4.8)	221 (2.8)	23 (5.5)	211 (3.3)!
STATES				*** (***)	00 (4.0)	000 (0.5)	00 (2.6)	200 (3.0)
Alabama	41 (4.0)	208 (2.5)	0 (0.3)	*** (***)	38 (4.2)	209 (2.5)	20 (3.6) 23 (3.3)	213 (2.4)
Arizona	31 (3.2)	214 (2.1)	4 (1.2)	213 (6.4)!	41 (3.1)	216 (1.8)	29 (4.5)	206 (2.5)
Arkansas	50 (4.6)	208 (1.5)	5 (1.8)	212 (4.0)!	16 (2.6)	216 (3.2)	20 (2.8)	202 (4.1)
California	29 (3.2)	209 (2.6)	4 (1.5)	197 (7.3)!	47 (3.5)	210 (2.3)	20 (2.0)	217 (2.8)
Colorado	30 (2.8)	218 (2.0)	6 (1.8)	224 (4.0)!	45 (3.3)	222 (1.7) 230 (1.6)	21 (3.0)	220 (4.1)
Connecticut	28 (3.4)	226 (3.2)	3 (1.1)	()	48 (3.2)	230 (1.0)		
Delaware	23 (1.2)	220 (1.7)	3 (0.3)	*** (***)	37 (0.8)	216 (1.3)	37 (0.9)	218 (1.7)
Dist. Columbia	28 (0.6)	191 (1.6)	7 (0.5)	201 (4.0)	28 (1.2)	197 (1.7)	37 (1.0)	184 (1.2)
Florida	39 (3.6)	210 (2.0)	3 (1.0)	217 (7.8)!	44 (3.5)	215 (1.7)	13 (2.8)	208 (3.1)!
Georgia	42 (3.5)	210 (2.4)	4 (1.4)	193 (6.7)!	42 (3.5)	219 (2.3)	13 (2.6)	217 (3.1)
Hawaii	13 (2.2)	203 (3.3)	4 (1.2)	212 (6.7)!	33 (2.9)	213 (2.4)	50 (3.1)	216 (1.9)
Idaho	28 (3.2)	220 (1.6)	1 (0.6)	*** (***)	42 (4.0)	220 (1.6)	29 (3.9)	222 (1.8)
		000 (4.6)	6 (1.8)	232 (3.4)!	47 (3.5)	218 (1.4)	13 (3.2)	220 (3.3)!
Indiana	34 (3.3)	220 (1.6)	4 (1.5)	221 (8.9)!	46 (3.7)	230 (1.5)	18 (3.1)	229 (3.0)
lowa	33 (3.8)	229 (2.0)	5 (1.6)	221 (6.2)!	25 (3.7)	214 (1.9)	31 (3.9)	213 (2.2)
Kentucky	39 (4.1)	213 (2.1)	2 (0.8)	*** (***)	22 (3.2)	212 (3.8)	58 (4.2)	200 (2.0)
Louisiana I Maine	18 (2.9)	200 (2.7)	5 (1.8)	236 (3.8)!	49 (3.8)	233 (1.4)	28 (3.9)	228 (2.5)
1	17 (3.1)	229 (2.4) 217 (2.7)	8 (2.0)	228 (5.5)!	36 (3.3)	220 (2.6)	21 (3.2)	213 (3.5)
Maryland	35 (3.5)	217 (2.1)	• •		` ′	• •		224 (3.0)
Massachusetts	25 (3.8)	222 (2.4)	9 (2.3)	230 (4.8)!	41 (4.4)	230 (2.2)	25 (3.5)	211 (4.5)
Michigan	26 (3.0)	218 (3.1)	4 (1.3)	217(10.6)!	48 (4.2)	220 (2.5)	22 (3.1)	1
Minnesota	44 (3.9)	228 (1.7)	3 (1.6)	*** (***)	40 (3.9)	226 (2.2)	12 (3.1)	227 (3.3)! 201 (2.2)
Mississippi	42 (3.7)	195 (1.7)	2 (1.1)	*** (***)	15 (3.0)	206 (3.9)!	40 (4.3)	218 (3.3)
Missouri	31 (3.2)	222 (2.0)	3 (1.5)	227 (5.1)!	38 (3.8)	225 (1.8)	27 (4.2)	225 (3.7)!
Nebraska	34 (3.1)	223 (1.6)	7 (2.1)	227 (5.6)!	47 (4.0)	227 (2.2)	12 (2.5)	, ,
New Hampshire	30 (3.8)	228 (1.9)	3 (1.0)	*** (***)	49 (4.1)	231 (1.8)	18 (3.4)	227 (2.6)
New Jersey	23 (3.8)	234 (2.4)	1 (0.7)	*** (***)	38 (4.1)	231 (2.2)	38 (4.1)	219 (3.0)
New Mexico	31 (3.8)	212 (2.1)	2 (1.3)	*** (***)	45 (4.7)	215 (1.8)	22 (3.3)	205 (3.2)
New York	21 (2.6)	221 (2.2)	3 (1.1)	*** (***)	35 (3.5)	221 (2.5)	42 (4.4)	211 (2.5)
North Carolina	36 (3.0)	213 (2.0)	6 (1.6)	219 (4.5)!	44 (3.0)	211 (1.7)	14 (2.4)	213 (3.6)
North Dakota	33 (4.0)	226 (1.3)	3 (1.2)	235 (4.1)!	49 (4.3)	227 (1.8)	15 (3.1)	231 (2.1)!
		, ,	0 (0 0)	*** (***)	46 (4.0)	220 (1.8)	23 (3.6)	216 (2.6)
Ohio	29 (3.5)	216 (2.3)	2 (0.9)	224 (3.8)	31 (3.8)	221 (2.2)	27 (3.9)	219 (2.2)
Oklahoma	38 (4.3)	219 (1.1)	4 (1.4) 7 (2.2)	231 (4.4)!	24 (3.0)	226 (2.4)	29 (4.0)	216 (3.1)
Pennsylvania	39 (4.0)	224 (1.8)	7 (2.2) 2 (1.1)	231 (4.4)!	35 (3.5)	218 (2.8)	32 (3.6)	210 (3.0)
Rhode Island	31 (3.7)	215 (2.6)	2 (1.1) 1 (0.5)	*** }***	34 (3.4)	217 (1.8)	23 (2.5)	209 (2.5)
South Carolina	42 (3.2)	208 (2.0) 204 (2.2)	3 (1.3)	204 (8.5)	33 (3.5)	214 (1.8)	30 (3.9)	212 (2.4)
Tennessee	34 (2.9)		, ,	, ,	, ,	, ,	•	216 (3.2)
Texas	34 (3.8)	213 (2.5)	6 (1.7)	221 (5.3)!	32 (4.2)	222 (3.1)	28 (4.0)	
Utah	38 (4.0)	222 (1.5)	4 (1.6)	227 (5.2)!	35 (3.3)	224 (1.6)	23 (3.0)	224 (2.5) 218 (4.8)
Virginia	34 (3.4)	218 (2.0)	3 (1.1)	*** (***)	43 (3.6)	222 (2.3)	20 (3.3)	209 (2.3)
West Virginia	32 (3.2)	215 (2.0)	5 (1.8)	222 (4.1)!	40 (3.2)	214 (1.9)	23 (4.0)	230 (2.3)
Wisconsin	43 (3.3)	226 (1.7)	4 (1.2)	229 (8.4)!	39 (3.2)	232 (1.8)	15 (2.4)	
Wyoming	44 (3.8)	225 (1.3)	7 (1.7)	224 (3.2)!	38 (3.6)	225 (1.5)	11 (2.3)	223 (2.9)!
TERRITORY				(2 = 1	40 (0.6)	400 (0.5)	40 (0.7)	189 (2.4)
Guam	59 (1.0)	191 (1.1)	9 (0.8)	197 (3.7)	13 (0.8)	192 (2.5)	19 (0.7)	105 (2.4)

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. When the proportion of students is either 0 percent or 100 percent, the standard error is inestimable. However, percentages 99.5 percent and greater were rounded to 100 percent and percentages 0.5 percent and less were rounded to 0 percent. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



TABLE A.88 | Teachers' Reports on the Primary Use of Computers for Instruction (continued)

	Grade 8 - 1992										
	Drill and	Practice	Learning N	lew Topics	Working V	With Data	Do Not Use	Computers			
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency			
NATION	22 (2.6)	262 (2.4)	8 (1.4)	269 (4.1)	9 (1.6)	278 (2.9)	61 (2.8)	069 (4.6)			
Northeast	16 (5.7)	250 (5.9)!	7 (3.3)	272(10.1)!	5 (2.0)		61 (2.8)	268 (1.6)			
Southeast	25 (5.1)	259 (3.1)	5 (2.3)	266(11.9)!	8 (3.8)	275(14.0)!	71 (4.8)	272 (4.8)			
Central	28 (5.9)	277 (3.6)!	6 (2.1)	280 (9.2)!	16 (2.9)	274 (3.6)!	62 (7.5)	260 (1.4)			
West	20 (4.4)	257 (5.4)!	11 (3.2)	263 (4.7)!	8 (3.0)	279 (4.7)	49 (4.6)	273 (3.1)			
STATES	` ′	().	(0.2)	200 (4.7):	0 (3.0)	282 (5.6)!	61 (4.6)	270 (2.0)			
Alabama	38 (4.8)	246 (3.7)	6 (2.2)	271 (6.0)!	2 (0.9)	*** (***)	50 (4.0)				
Arizona	21 (3.2)	260 (3.6)	8 (2.4)	268 (3.6)!	8 (2.5)	( )	53 (4.6)	253 (2.2)			
Arkansas	31 (3.9)	252 (2.7)	2 (0.9)	*** (***)		266 (3.3)!	63 (4.5)	265 (1.5)			
California	22 (3.1)	258 (2.9)	13 (2.2)	<b>,</b> ,	3 (1.5)	258 (5.6)!	63 (4.2)	258 (1.8)			
Colorado	22 (3.0)	265 (3.0)	12 (2.0)	, ,	5 (1.4)	259 (4.0)!	61 (3.8)	261 (2.2)			
Connecticut	22 (2.5)	273 (3.0)		283 (3.0)	10 (1.7)	284 (3.9)	57 (3.7)	269 (1.4)			
Deleviere	22 (2.5)	273 (3.0)	11 (2.0)	282 (4.0)	11 (2.6)	278 (5.7)!	57 (4.3)	272 (2.2)			
Delaware	28 (0.8)	253 (2.1)	2 (0.2)	*** (***)	6 (0.3)	265 (3.7)	64 (0.7)	266 (1.1)			
Dist. Columbia	40 (1.0)	232 (1.4)	19 (0.6)	237 (2.0)	6 (0.5)	224 (4.1)	35 (1.0)	240 (1.1)			
Florida	28 (2.8)	251 (2.4)	4 (1.5)	282 (6.0)!	7 (1.8)	268 (4.1)!	60 (3.2)	262 (1.9)			
Georgia	35 (3.4)	256 (2.1)	4 (1.1)	263 (7.8)	2 (0.6)	*** (***)	59 (3.9)				
Hawaii	19 (0.8)	252 (2.3)	7 (0.6)	262 (3.8)	7 (0.6)	258 (2.8)	67 (1.0)	259 (1.7)			
idaho	18 (2.1)	271 (2.3)	9 (2.6)	275 (2.7)!	5 (1.5)	284 (4.5)!	68 (3.2)	260 (1.0)			
Indiana	20 (4.4)		, ,		0 (1.0)	204 (4.5):	00 (3.2)	275 (1.1)			
lowa	32 (4.1)	263 (2.3)	9 (2.2)	271 (4.5)!	7 (2.1)	284 (6.5)!	52 (4.5)	272 (1.7)			
Kentucky	27 (4.1)	281 (1.8)	8 (2.5)	286 (3.1)!	8 (1.5)	295 (3.8)	57 (4.3)	282 (1.6)			
Louisiana	29 (3.8)	257 (2.4)	6 (1.6)	270 (4.1)!	6 (1.5)	269 (4.8)!	59 (4.0)	263 (1.3)			
Maine	19 (3.6)	245 (4.1)	2 (1.0)	*** (***)	4 (1.8)	249(16.0)!	75 (4.1)	251 (1.7)			
Maryland	26 (4.4)	276 (2.9)	8 (1.7)	283 (3.2)	16 (3.9)	284 (4.6)!	50 (5.3)	278 (1.6)			
wai yiariu	35 (3.7)	258 (2.9)	20 (3.3)	267 (4.7)	13 (2.9)	277 (5.4)!	31 (4.0)	267 (3.2)			
Massachusetts	23 (3.8)	266 (3.0)	9 (2.3)	278 (6.4)!	7 (0.0)	` ·		` '			
Michigan	15 (3.1)	260 (4.8)!	7 (1.9)		7 (2.0)	281 (5.0)!	61 (4.4)	274 (1.7)			
Minnesota	22 (4.1)	272 (2.3)	14 (2.3)	267 (7.8)!	4 (1.1)	288 (7.4)!	73 (3.7)	268 (1.4)			
Mississippi	26 (4.2)	240 (2.7)	1 (0.8)	290 (3.5) *** (***)	13 (2.4)	284 (3.7)	51 (4.2)	284 (1.5)			
Missouri	24 (3.0)	267 (2.2)	11 (2.7)	( /	3 (1.3)	*** (***)	70 (4.6)	247 (1.9)			
Nebraska	16 (3.1)	268 (4.1)		278 (4.3)!	9 (2.2)	274 (2.7)!	56 (3.7)	272 (1.6)			
Now Hammahina	` '		16 (3.6)	282 (2.7)!	6 (2.1)	289 (3.3)!	63 (3.9)	278 (1.4)			
New Hampshire	20 (2.7)	275 (2.1)	7 (1.6)	281 (3.0)!	11 (2.7)	284 (4.3)!	61 (3.8)	276 (1.3)			
New Jersey	27 (3.7)	263 (4.5)	8 (2.4)	285 (7.1)!	5 (1.8)	282 (5.3)!	60 (4.6)	274 (2.1)			
New Mexico	29 (3.4)	256 (1.8)	8 (1.9)	262 (4.2)!	10 (1.2)	269 (2.8)	53 (4.1)				
New York	25 (3.3)	264 (4.1)	9 (2.6)	262 (6.8)!	8 (2.6)	268(13.8)!	58 (4.5)	' '			
North Carolina	42 (3.9)	253 (1.7)	4 (1.3)	268 (5.0)!	3 (0.8)	261 (6.7)!	50 (4.2)	267 (3.0) 259 (1.7)			
North Dakota	18 (3.1)	279 (2.4)	6 (1.3)	294 (4.3)!	9 (1.8)	291 (2.3)	67 (3.2)				
Ohio	26 (3.5)	004 (0.4)				, ,	01 (3.2)	281 (1.3)			
Oklahoma		264 (3.1)	9 (2.3)	274 (4.9)!	6 (2.0)	271 (4.7)!	59 (4.6)	271 (1.9)			
Pennsylvania	30 (4.0)	264 (2.3)	4 (1.5)	266 (6.7)!	4 (1.7)	*** (***)	63 (4.5)	269 (1.5)			
Rhode Island	25 (3.5)	270 (3.2)	8 (2.2)	278 (4.6)!	5 (1.3)	275 (6.0)!	61 (4.3)	270 (2.1)			
South Carolina	17 (0.8)	253 (2.3)	11 (0.5)	276 (1.6)	6 (0.9)	270 (2.4)	66 (0.9)	264 (1.2)			
Tennessee	36 (3.4)	250 (2.3)	5 (1.4)	268 (5.6)!	3 (0.6)	278 (5.3)!	55 (3.9)	266 (1.8)			
	25 (3.3)	251 (2.7)	6 (2.4)	261 (4.9)!	5 (1.8)	274 (4.6)!	64 (4.3)	259 (1.8)			
Texas	21 (3.2)	258 (3.5)	7 (1.6)	283 (8.0)!	7 (1.8)						
Utah	18 (2.6)	266 (2.1)	6 (1.1)	269 (4.7)		285 (6.0)!	66 (4.3)	263 (1.6)			
√irginia	41 (2.9)	263 (2.0)	7 (1.2)	282 (4.3)	10 (1.8)	284 (4.1)!	66 (3.2)	274 (1.2)			
West Virginia	34 (3.6)	257 (2.1)	2 (0.9)	*** (***)	6 (1.3)	286 (6.6)!	46 (3.4)	266 (1.9)			
Visconsin	23 (3.8)	269 (3.1)	19 (5.2)		3 (1.5)	256 (3.8)!	61 (3.7)	259 (1.4)			
Myoming	28 (2.7)	270 (1.9)		280 (4.1)!	17 (3.6)	288 (1.8)!	41 (4.7)	279 (2.9)			
ERRITORIES	( /	210 (1.0)	17 (2.1)	280 (2.1)	7 (1.1)	281 (2.8)	48 (3.3)	276 (1.5)			
Guam	35 (1.2)	226 (1.6)	6 (0.5)	250 (45)	0 (0 0)	*** /***	4/				
/irgin Islands	11 (0.8)	211 (2.4)	6 (0.5)	259 (4.5)	2 (0.3)	*** (***)	57 (1.3)	235 (1.7)			
	(3.0)	- 11 (2.4)	0 (0.0)	*** (***)	0 (0.0)	*** (***)	89 (0.8)	223 (1.4)			



# Students' Perceptions of Mathematics



#### TABLE A.89 | Students' Responses to the Statement "I Like Mathematics"

	Grade 4 - 1992										
	Agr	ee	Undecided o	or Disagree							
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency							
NATION	72 (0.9)	219 (0.9)	28 (0.9)	214 (1.1)							
Northeast	71 (1.8)	225 (2.4)	29 (1.8)	218 (2.5)							
Southeast	74 (1.9)	210 (2.3)	26 (1.9)	204 (1.5)							
		1 1	27 (2.0)	218 (2.7)							
Central	73 (2.0)	224 (2.2)									
West	70 (1.6)	219 (1.7)	30 (1.6)	215 (2.0)							
STATES											
Alabama	72 (1.2)	207 (1.6)	28 (1.2)	207 (2.0)							
Arizona	73 (0.9)	217 (1.1)	27 (0.9)	208 (1.7)							
Arkansas	74 (1.1)	210 (1.0)	26 (1.1)	206 (1.7)							
California	, ,	210 (1.7)	29 (1.1)	203 (2.0)							
	71 (1.1)	, ,	, ,	215 (1.4)							
Colorado	72 (1.1)	222 (1.1)	28 (1.1)	• •							
Connecticut	. 72 (1.1)	228 (1.2)	28 (1.1)	221 (1.6)							
Delaware	74 (1.1)	219 (0.9)	26 (1.1)	211 (1.7)							
	, ,	, ,		189 (1.6)							
Dist. Columbia	78 (0.9)	193 (0.6)	22 (0.9)								
Florida	75 (1.2)	215 (1.5)	25 (1.2)	207 (2.4)							
Georgia	76 (0.8)	216 (1.3)	24 (0.8)	211 (1.9)							
Hawaii	75 (1.1)	216 (1.4)	25 (1.1)	207 (1.9)							
Idaho	70 (1.1)	222 (1.0)	30 (1.1)	217 (1.5)							
	• •	, .	, ,	, ,							
Indiana	76 (1.1)	221 (1.2)	24 (1.1)	216 (1.4)							
owa	72 (1.0)	231 (1.2)	28 (1.0)	224 (1.3)							
Kentucky	70 (1.1)	216 (1.1)	30 (1.1)	210 (1.5)							
Louisiana	76 (1.3)	204 (1.4)	24 (1.3)	201 (2.1)							
Maine			27 (0.9)	225 (1.5)							
	73 (0.9)	234 (1.1)	_ , , , ,	213 (1.7)							
Maryland	71 (1.0)	218 (1.5)	29 (1.0)	213 (1.7)							
Massachusetts	72 (1.3)	228 (1.3)	28 (1.3)	221 (1.9)							
Michigan	72 (1.3)	221 (1.9)	28 (1.3)	214 (1.9)							
Minnesota		230 (1.0)	26 (1.0)	222 (1.3)							
	74 (1.0)		, ,	198 (1.9)							
Mississippi	76 (1.0)	201 (1.0)	24 (1.0)								
Missouri	74 (1.0)	223 (1.2)	26 (1.0)	218 (1.8)							
Nebraska	73 (1.2)	226 (1.4)	27 (1.2)	219 (1.9)							
New Hampshire	70 (1.4)	232 (1.3)	30 (1.4)	223 (1.5)							
, ,	\ '		` , ,								
New Jersey	76 (1.1)	228 (1.6)	24 (1.1)	221 (2.0)							
New Mexico	74 (1.1)	213 (1.6)	26 (1.1)	210 (1.8)							
New York	75 (1.3)	220 (1.3)	25 (1.3)	213 (1.8)							
North Carolina	73 (0.9)	214 (1.2)	27 (0.9)	207 (1.5)							
North Dakota	71 (1.4)	230 (0.9)	29 (1.4)	221 (1.3)							
	, .	, ,	, ,	222 (2.2)							
Ohio [	74 (1.1)	220 (1.3)	26 (1.1)	212 (1.8)							
Oklahoma	75 (1.1)	221 (1.1)	25 (1.1)	215 (1.4)							
Pennsylvania	78 (1.0)	226 (1.4)	22 (1.0)	217 (2.3)							
Rhode Island	72 (1.1)	217 (1.5)	28 (1.1)	209 (2.3)							
South Carolina	, ,	212 (1.2)	24 (0.9)	209 (1.5)							
Tennessee	76 (0.9)	• • •		204 (1.8)							
1 5111153355	72 (1.1)	212 (1.3)	28 (1.1)	204 (1.0)							
Texas	76 (0.9)	219 (1.3)	24 (0.9)	212 (1.8)							
Utah	69 (0.8)	226 (1.1)	31 (0.8)	217 (1.3)							
			, , ,	218 (2.0)							
Virginia	74 (0.9)	221 (1.3)	26 (0.9)								
West Virginia	77 (1.0)	216 (1.1)	23 (1.0)	208 (1.6)							
Wisconsin	75 (1.0)	230 (1.1)	25 (1.0)	223 (1.8)							
Wyoming	74 (0.8)	226 (1.0)	26 (0.8)	220 (1.4)							
TERRITORY	` '	• •									
Guam	66 (1.2)	194 (1.1)	34 (1.2)	187 (1.5)							

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. At grade 4, students were not given the "strongly agree" and "strongly disagree" options.



#### TABLE A.89 |

#### Students' Responses to the Statement "I Like Mathematics" (continued)

	i		Grade 6	- 1992				
PUBLIC SCHOOLS	Strongly	Agree	Agr	ee		Undecided, Disagree, or Strongly Disagree		
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency		
NATION	18 (0.7)	274 (1.5)	39 (0.8)	269 (1.2)	43 (0.9)	262 (1.3)		
Northeast	16 (1.1)	275 (4.4)	39 (2.3)	273 (3.0)	45 (2.6)	262 (4.1)		
Southeast	20 (1.5)	264 (2.2)	40 (1.4)	259 (1.9)	41 (0.8)	254 (1.8)		
Central	21 (1.2)	279 (2.3)	40 (1.6)	275 (2.7)	40 (2.0)	268 (2.3)		
West STATES	16 (1.4)	278 (3.3)	39 (1.5)	269 (2.3)	45 (1.8)	262 (2.3)		
Alabama	40 (4.0)	000 (0.0)						
Arizona	19 (1.3)	260 (2.8)	43 (1.3)	252 (2.1)	38 (1.5)	247 (1.8)		
Arkansas	15 (0.7)	273 (2.6)	40 (1.0)	267 (1.4)	46 (1.2)	260 (1.5)>		
California	19 (1.0)	260 (2.2)	40 (1.1)	257 (1.5)	41 (1.1)	252 (1.5)		
Colorado	17 (0.9)	271 (2.9)	40 (1.2)	263 (2.0)	43 (1.5)	256 (1.7)		
Connecticut	19 (0.9) >	282 (1.8) >	41 (1.0)	275 (1.5)	40 (1.1) <	264 (1.4)		
1	20 (0.8)	276 (2.0)	41 (0.9)	276 (1.4)	39 (1.2)	270 (1.5)		
Delaware	20 (1.0)	267 (2.5)	39 (1.4)	265 (1.1)	41 (1.1)	258 (1.3)		
Dist. Columbia	31 (1.0)	242 (1.6)	45 (1.4)	-233 (1.3)	25 (1.1)	228 (1.9)		
Florida	21 (0.8) >>	266 (2.2)	41 (1.3)	260 (1.9)	39 (1.4)	255 (1.8)		
Georgia	23 (0.9)>	263 (1.9)	43 (1.1)	258 (1.4)	<b>35</b> (1.3)	257 (1.5)		
Hawaii	18 (0.8)	263 (1.9)	40 (1.1)>	261 (1.6)>>	42 (0.9) <	251 (1.4)		
Idaho	16 (0.9)	285 (2.1)	39 (1.1)	278 (1.0)	45 (1.5)	268 (0.9)>		
Indiana	22 (1.1)	278 (2.1)	44 (1.1)	272 (1.4)	34 (1.3)	261 (1.5)		
lowa	20 (1.0)	293 (1.5)	44 (0.9)	285 (1.2)>	36 (1.3)	- 1		
Kentucky	19 (1.0)	270 (1.8)	41 (1.0)	263 (1.4)>	39 (1.1)	274 (1.5)		
Louisiana	21 (0.9)	251 (2.2)	40 (1.3)	249 (1.9)		256 (1.6)		
Maine¹ [	18 (0.9)	286 (2.2)	41 (1.1)	282 (1.0)	39 (1.4) 41 (1.3)	249 (2.0)		
Maryland	19 (1.1)	266 (2.4)	41 (1.1)	266 (1.7)	40 (1.3)	271 (1.2) 263 (1.3)		
Massachusetts1	18 (1.0)	280 (2.1)	42 (1.2)	` ,	· · ·			
Michigan	21 (1.0)	272 (2.2)	39 (1.3) <	275 (1.3)	41 (1.5)	266 (1.5)		
Minnesota	16 (1.0)	291 (1.5)	41 (1.4)	270 (2.0)	40 (1.6)	262 (1.8)		
Mississippi <sup>1</sup>	23 (1.1)	253 (2.0)	46 (0.9)	286 (1.3)>>	43 (1.8)	275 (1.2)>>		
Missouri 1	20 (1.0)	279 (1.8)	42 (1.0)	246 (1.4)	32 (1.3)	241 (1.6)		
Nebraska	19 (1.1)	286 (1.9)	43 (1.2)	274 (1.4) 280 (1.5)	38 (1.4) 38 (1.4)	263 (1.5) 269 (1.2)		
New Hampshire	18 (0.9)	285 (1.4)		, ,		` '		
New Jersey	20 (1.1)	274 (2.9)	40 (1.3) 43 (0.9)	280 (1.3)	41 (1.5)	272 (1.3)>		
New Mexico	16 (1.1)	270 (1.7)	, ,	274 (1.6)	37 (1.4)	267 (2.0)		
New York	21 (1.2)	275 (2.8)	39 (0.9) 43 (1.2)	261 (1.3)	45 (1.4)	253 (1.2)		
North Carolina	23 (1.0)	263 (1.5)>	41 (0.9)	267 (2.1)	36 (1.3)	261 (2.5)		
North Dakota	16 (1.0)	294 (2.2)	42 (1.3)	257 (1.7) <i>&gt;</i> 286 (1.4)	36 (1.2) 42 (1.3)	255 (1.6) >>		
Ohio	20 (0.9)	, ,	, ,		` '	275 (1.2)		
Oklahoma	19 (1.0)	279 (2.7)	41 (1.0)	271 (2.0)	39 (1.4)	259 (1.9)		
Pennsylvania		275 (1.8)	43 (1.1)	271 (1.4)>	38 (1.2)	260 (1.6)		
Rhode Island	19 (0.8) 18 (0.8)	278 (2.4)	42 (1.0)	272 (1.6)	39 (1.2)	266 (1.8)		
South Carolina <sup>1</sup>	24 (1.1)	270 (2.2)	42 (1.3)	266 (1.2)	40 (1.2)	263 (1.5)>		
Tennessee¹	19 (0.9)	261 (1.6) 264 (2.0)	43 (1.2)	260 (1.4)	33 (1.3)	259 (1.5)		
			44 (1.0)	261 (1.9)	37 (1.2)	251 (1.6)		
Texas Jtah¹	18 (1.1)	273 (2.0)	40 (1.2)	265 (1.6)>	42 (1.3)	259 (2.0)		
/irginia	15 (0.8)	286 (1.7)	39 (1.1)	277 (1.2)	46 (1.1)	268 (0.9)		
West Virginia	19 (0.8)	270 (1.8)	41 (1.1)	270 (1.4)	39 (1.4)	263 (1.5)		
Wisconsin	21 (0.9)	266 (1.4)	43 (1.0)	260 (1.2)	37 (1.3)	253 (1.5)		
Vyoming	19 (1.3)	288 (2.2)	40 (1.3)	281 (1.7)	40 (1.7)	<b>26</b> 9 (1.7)		
ERRITORIES	18 (0.9)>	284 (1.6)	40 (1.1)	278 (1.2)	42 (1.5)	266 (1.0)		
Suam	21 (1.0)	246 (1.6)	40 (6.0)	000 (4.0)	<b>66</b> / 5 - 5			
/irgin Islands	29 (1.2)	246 (1.6) 227 (1.7)	40 (1.3) 40 (1.3)	236 (1.9) 222 (1.4)	39 (1.1) 31 (1.4)<	231 (1.7) 218 (1.7)		

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. "The value for 1992 was significantly lower than the value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.



# Students' Responses to the Statement "Mathematics Is Useful for Solving Everyday Problems"

T	Grade 4 - 1992								
PUBLIC	Agr	ee	Undecided or Disagree						
SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency					
NATION	66 (1.1)	222 (0.9)	34 (1.1)	212 (1.2)					
Northeast	67 (2.0)	229 (2.4)	33 (2.0)	215 (2.3)					
Southeast	65 (1.6)	214 (2.1)	35 (1.6)	203 (1.7)					
Central	61 (3.0)	225 (1.7)	39 (3.0)	220 (3.3)					
West	69 (1.9)	222 (1.9)	31 (1.9)	210 (2.0)					
STATES	09 (1.9)	222 (1.5)	37 (1.5)	210 (2.0)					
Alabama	63 (1.3)	210 (1.8)	37 (1.3)	205 (1.6)					
Arizona		219 (1.0)	38 (1.1)	209 (1.4)					
Arkansas	62 (1.1)		39 (1.1)	205 (1.5)					
	61 (1.1)	212 (0.9)	` '	- , ,					
California	64 (1.2)	214 (1.8)	36 (1.2)	204 (1.9)					
Colorado	65 (1.0)	225 (1.0)	35 (1.0)	214 (1.3)					
Connecticut	66 (1.1)	230 (1.0)	34 (1.1)	221 (1.9)					
Delaware	61 (1.2)	221 (1.2)	39 (1.2)	212 (1.6)					
Dist. Columbia	63 (1.1)	198 (0.9)	37 (1.1)	186 (1.2)					
Florida	63 (1.1)	217 (1.3)	37 (1.1)	208 (1.9)					
Georgia	63 (1.1)	217 (1.3) 219 (1.4)	37 (1.3)	209 (1.5)					
Hawaii		• • •	40 (1.1)	208 (1.7)					
Idaho	60 (1.1)	219 (1.5)	` '	215 (1.3)					
luano	66 (1.1)	224 (1.0)	34 (1.1)	213 (1.3)					
Indiana	63 (1.0)	223 (1.2)	37 (1.0)	215 (1.3)					
lowa	64 (1.1)	232 (1.2)	36 (1.1)	226 (1.3)					
Kentucky	66 (1.1)	218 (1.2)	34 (1.1)	208 (1.2)					
Louisiana	65 (1.2)	207 (1.5)	35 (1.2)	201 (1.6)					
Maine	68 (1.5)	234 (1.2)	32 (1.5)	227 (1.4)					
Maryland	68 (1.0)	222 (1.2)	32 (1.0)	209 (2.0)					
- 1	, ,	, ,		` '					
Massachusetts	65 (1.2)	230 (1.2)	35 (1.2)	221 (1.7)					
Michigan	65 (1.3)	223 (1.9)	35 (1.3)	214 (1.8)					
Minnesota	69 (1.1)	232 (1.0)	31 (1.1)	220 (1.4)					
Mississippi	64 (1.1)	204 (1.1)	36 (1.1)	196 (1.6)					
Missouri	65 (1.4)	224 (1.3)	35 (1.4)	219 (1.5)					
Nebraska	67 (1.1)	228 (1.3)	33 (1.1)	219 (1.7)					
New Hampshire	68 (1.3)	232 (1.3)	32 (1.3)	225 (1.4)					
New Jersey	· · · · · · · · · · · · · · · · · · ·		35 (1.3)	222 (1.9)					
	65 (1.3)	230 (1.6)							
New Mexico	62 (1.3)	216 (1.8)	38 (1.3)	208 (1.5)					
New York	65 (1.2)	222 (1.5)	35 (1.2)	215 (1.4)					
North Carolina	66 (1.1)	216 (1.3)	34 (1.1)	206 (1.4)					
North Dakota	65 (1.1)	230 (0.9)	35 (1.1)	225 (1.2)					
Ohio	64 (1.2)	222 (1.3)	36 (1.2)	212 (1.6)					
Oklahoma	62 (1.5)	222 (1.2)	38 (1.5)	217 (1.1)					
Pennsylvania	67 (1.3)	227 (1.6)	34 (1.3)	218 (1.5)					
Rhode Island	61 (1.4)	218 (1.6)	39 (1.4)	212 (1.9)					
South Carolina	66 (1.0)	216 (1.0)	34 (1.0)	205 (1.2)					
Tennessee	59 (1.4)	216 (1.2)	41 (1.4)	206 (1.6)					
		` ·	, ,	, ,					
Texas	68 (1.1)	222 (1.4)	32 (1.1)	212 (1.6)					
Utah	67 (1.1)	227 (1.0)	33 (1.1)	218 (1.4)					
Virginia	65 (1.1)	223 (1.5)	35 (1.1)	216 (1.6)					
West Virginia	60 (1.2)	218 (1.2)	40 (1.2)	210 (1.4)					
Wisconsin	66 (1.1)	231 (1.2)	34 (1.1)	223 (1.6)					
Wyoming	66 (o.9)	227 (0.9)	34 (0.9)	221 (1.5)					
TERRITORY	• •								
Guam	56 (1.3)	197 (1.2)	44 (1.3)	188 (1.3)					

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. At grade 4, students were not given the "strongly agree" and "strongly disagree" options.

SOURCE: National Assessment of Educational Progress (NAEP), 1992 Trial State Mathematics Assessment.





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# Students' Responses to the Statement "Mathematics Is Useful for Solving Everyday Problems" (continued)

·	•		Grade 8	3 - 1992		
PUBLIC SCHOOLS	Strongly Agree		Agı	'ee	Undecided, Disag	ree, or Strongly
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	38 (0.7)	268 (1.3)	43 (0.7)	269 (1.1)	19 (0.6)	263 (1.5)
Northeast	37 (2.2)	269 (3.8)	42 (2.0)	273 (3.6)	21 (1.5)	
Southeast	37 (1.0)	260 (1.4)	42 (1.2)	261 (2.0)	21 (0.9)	267 (4.1)
Central	38 (1.4)	274 (2.4)	44 (1.8)	275 (2.1)	· · · · · · · · · · · · · · · · · · ·	253 (2.2)
West	39 (1.2)	269 (2.6)	44 (1.3)		18 (1.4)	271 (3.3)
STATES	33 (1.2)	20,3 (2.0)	44 (1.3)	269 (2.3)	17 (1.1)	262 (3.2)
Alabama	40 (1.3)>	253 (2.1)	40 (4.0)	050 (4.0)	40 (4.0)	
Arizona	34 (1.3)>>		40 (1.0)	253 (1.9)	19 (1.0)	249 (2.2)
Arkansas		266 (1.6)	43 (1.4)	268 (1.3)>	23 (1.1) <	261 (2.1)
California	38 (1.3)*	257 (1.5)	43 (1.2)	259 (1.4)	18 (0.9)≪	250 (1.9)
Colorado	39 (1.4)>>	264 (2.1)	40 (1.3) **	264 (1.9)	22 (1.1)	259 (2.2)
	36 (1.1)>>	274 (1.4)	45 (1.0)	275 (1.3)>	19 (0.9) <<	264 (1.6)
Connecticut	35 (1.1) <b>»</b>	275 (1.5)	45 (0.9) <	277 (1.3)	20 (0.9)	268 (1.9)
Delaware	40 (1.5)>>	261 (1.7)	41 (1.1)	266 (1.2)	, ,	
Dist. Columbia	42 (1.1)>	236 (1.6)			19 (1.1) <	261 (2.2)
Florida	36 (1.3)>>	259 (1.8)	40 (1.2)	238 (1.3)	17 (0.9) «	232 (2.6)
Georgia			42 (1.0) <	264 (1.9)	22 (1.1)	255 (1.8)
Hawaii	42 (1.2)>>	258 (1.4)	41 (1.1)	263 (1.5)	17 (0.9) <<	258 (2.1)
Idaho	39 (1.2) <b>»</b>	260 (1.3)	38 (1.1)	260 (1.5)>	23 (0.8)	253 (2.0)>
ioano	39 (1.2) <b>»</b>	277 (1.1)>	43 (1.2)	277 (0.9)	18 (0.9)	267 (1.9)
Indiana	37 (1.2) >	272 (1.6)	43 (1.2)	272 (1.4)	10 (1.0)	000 (0.0)
lowa	39 (1.1)	285 (1.3)>	46 (1.1)		19 (1.0)	262 (2.0)
Kentucky	38 (0.9)>	264 (1.4)>	, , ,	284 (1.3)	15 (1.0)	277 (1.7)
Louisiana	41 (1.3)>		45 (1.0)	265 (1.4)>	18 (0.7) <<	253 (1.8)
Maine¹		248 (1.9)	40 (1.1)	253 (2.1)	19 (0.9)	250 (2.0) >
Maryland	39 (0.9)	279 (1.3)	44 (1.2)	281 (1.3)	16 (1.0)	271 (2.3)
	37 (1.2)>	266 (1.8)	43 (1.1)	268 (1.5)	20 (1.0)	260 (2.1)
Massachusetts1	34 (1.1)	275 (1.7)	45 (1.2)	275 (1.4)	21 (1.2)	265 (2.3)
Michigan	39 (1.1)×	268 (1.8)	43 (1.1)	271 (1.6)		
Minnesota	34 (1.0)>	283 (1.2)	48 (1.0)		18 (0.8) «	260 (2.2)
Mississippi <sup>1</sup>	42 (1.2)	246 (1.5)		284 (1.5)>	18 (0.9)	276 (1.9)>
Missouri 1	38 (1.3)		40 (0.9)	249 (1.5)	17 (0.9)	243 (2.0)
Nebraska		271 (1.7)	44 (1.0)	274 (1.3)	18 (0.9)	263 (1.9)
	39 (1.4)	279 (1.6)	46 (1.2)	279 (1.3)	15 (0.8) <	270 (2.2)
New Hampshire	37 (1.0)>	280 (1.2)>	45 (1.0)<	279 (1.3)	19 (1.0)	273 (1.7)
New Jersey	37 (1.2)>>	272 (1.7)	45 (1.3)	276 (1.6)	18 (1.0) «	, ,
New Mexico	35 (1.1)»	261 (1.4)	44 (1.1)	260 (1.1)	21 (0.8)	265 (2.7)
New York	34 (1.3)»	266 (2.4)	45 (1.3)	272 (2.1)>	, ,	256 (1.8)
North Carolina	39 (1.2)	257 (1.3)>	43 (1.3) 44 (1.2)		21 (1.0) «	261 (2.9)
North Dakota	38 (1.2)	285 (1.5)	3 1	262 (1.5) <b>»</b>	17 (0.7) <	252 (2.0)>
1	, ,		48 (0.8)	284 (1.3)	15 (0.9)	273 (1.9)
Ohio	41 (1.3)>>	272 (1.9)	41 (1.0) <<	270 (1.6)	19 (1.0)	258 (1.9)
Okłahoma	36 (1.0)	269 (1.6)	45 (1.2)	270 (1.2)	19 (1.1)	262 (2.1)
Pennsylvania	35 (1.1) <b>&gt;&gt;</b>	271 (2.1)	44 (1.0)<	273 (1.6)	20 (0.9) <	267 (2.0)>
Rhode Island	34 (1.0)»	266 (1.4)	45 (1.3)	268 (1.0)	21 (1.0) «	264 (2.0)»
South Carolina1	43 (1.0)	259 (1.3)	42 (1.1)	264 (1.2)	15 (0.7)	
Tennessee <sup>1</sup>	35 (1.1)	257 (1.8)	44 (1.0)	261 (1.5)	20 (1.0)	257 (1.9) 258 (2.5)
Гехаѕ					20 (1.0)	258 (2.5)
Jtah <sup>1</sup>	42 (1.3) >>	266 (1.6)	42 (1.0)	267 (1.7)>	16 (0.9) <<	260 (2.2)>
	35 (0.9)	275 (1.3)	45 (0.9)	276 (1.0)	19 (0.8)	271 (1.5)
/irginia	38 (1.0)>>	267 (1.6)	45 (0.9)	270 (1.4)	18 (1.0)	267 (1.7)>
West Virginia	34 (1.0)	260 (1.4)	43 (0.9)	262 (1.3)	23 (1.0)	253 (1.6)
Nisconsin	38 (1.3)>>	280 (1.9)	46 (1.2)	279 (1.3)	16 (1.0) <	271 (2.4)
Wyoming	37 (1.1)>>	277 (1.3)	44 (1.0)	277 (1.1)	18 (1.0)	265 (1.7)
ERRITORIES	· •	· · · - /		( ,	10 (1.0)	200 (1.1)
Guam	41 (1.3)>>	244 (1.8)	38 (1.5)	240 (2.1)	22 (1.2) <	221 (2.6)
/irgin Islands	55 (1.3)>>	223 (1.4)	31 (1.2)	225 (1.7)	14 (0.9) <	231 (2.6)

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. "The value for 1990 at about the 95 percent certainty level indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.



#### TABLE A.91 | Students' Responses to the Statement "Almost All People Use Mathematics in Their Jobs"

	Grade 4 - 1992								
PUBLIC SCHOOLS	Agr	<del>00</del>	Undecided or Disagree						
	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency					
NATION	73 (1.0)	222 (0.8)	27 (1.0)	210 (1.4)					
Northeast	76 (1.8)	227 (2.2)	24 (1.8)	215 (3.8)					
Southeast	74 (1.7)	214 (1.8)	26 (1.7)	199 (2.5)					
Central	72 (1.7)	225 (1.8)	28 (1.7)	218 (3.6)					
West			27 (2.1)	210 (5.5)					
	73 (2.1)	222 (1.8)	21 (2.1)	210 (1.5)					
STATES			04 (4 0)	004 (0.4)					
Alabama	69 (1.3)	211 (1.6)	31 (1.3)	201 (2.1)					
Arizona	73 (1.1)	218 (1.0)	27 (1.1)	206 (1.5)					
Arkansas	69 (1.2)	213 (1.0)	31 (1.2)	202 (1.6)					
California	68 (1.5)	215 (1.8)	32 (1.5)	201 (2.0)					
Colorado	76 (1.0)	223 (1.0)	24 (1.0)	213 (1.4)					
Connecticut	68 (1.4)	230 (1.0)	32 (1.4)	220 (1.9)					
Delaware	70 (1.4)	222 (1.2)	30 (1.4)	208 (1.4)					
Dist. Columbia	63 (1.0)	199 (0.9)	37 (1.0)	184 (1.2)					
Fiorida	71 (0.9)	217 (1.4)	29 (0.9)	205 (2.1)					
Georgia				208 (1.8)					
	71 (1.1)	218 (1.2)	29 (1.1)	, ,					
Hawaii	72 (1.1)	218 (1.3)	28 (1.1)	205 (1.9)					
idaho	77 (1.0)	223 (1.0)	23 (1.0)	215 (1.5)					
Indiana	71 (1.1)	221 (1.1)	29 (1.1)	217 (1.5)					
lowa	73 (1.1)	232 (1.0)	27 (1.1)	224 (1.7)					
Kentucky	73 (1.3)	217 (1.0)	27 (1.3)	207 (1.8)					
Louisiana	66 (1.5)	209 (1.5)	34 (1.5)	196 (2.0)					
Maine	74 (1.2)	235 (1.1)	26 (1.2)	224 (1.6)					
Maryland	74 (1.2)	222 (1.2)	29 (1.3)	206 (2.2)					
Massachusetts	71 (1.0)	229 (1.2)	29 (1.0)	220 (1.7)					
Michigan			29 (1.3)	212 (2.3)					
•	71 (1.3)	223 (1.7)							
Minnesota	72 (1.2)	231 (0.8)	28 (1.2)	221 (1.7)					
Mississippi	66 (1.3)	206 (1.2)	34 (1.3)	191 (1.4)					
Missouri	74 (0.9)	224 (1.2)	26 (0.9)	216 (1.8)					
Nebraska	73 (1.2)	227 (1.3)	27 (1.2)	219 (1.7)					
New Hampshire	75 (1.3)	231 (1.3)	25 (1.3)	223 (1.5)					
New Jersey	71 (1.3)	229 (1.5)	29 (1.3)	222 (1.9)					
New Mexico	73 (1.2)	216 (1.5)	27 (1.2)	204 (2.2)					
New York	67 (1.4)	222 (1.2)	33 (1.4)	213 (1.8)					
North Carolina	71 (1.0)	216 (1.1)	29 (1.0)	205 (2.0)					
North Dakota	71 (1.0) 75 (1.1)	229 (0.9)	25 (1.1)	224 (1.3)					
Ohio	72 (1.0)	220 (1.1)	28 (1.0)	212 (1.9)					
Oklahoma		, ,	26 (1.2)	215 (1.7)					
Pennsylvania	74 (1.2)	221 (1.0)							
•	70 (1.1)	227 (1.5)	30 (1.1)	218 (1.8)					
Rhode Island	64 (1.3)	219 (1.4)	36 (1.3)	209 (2.1)					
South Carolina	73 (1.2)	216 (1.1)	27 (1.2)	202 (1.6)					
Tennessee	68 (1.1)	214 (1.3)	32 (1.1)	203 (1.8)					
Texas	72 (1.2)	222 (1.3)	28 (1.2)	209 (1.8)					
Utah	76 (1.1)	225 (1.0)	24 (1.1)	220 (1.7)					
Virginia	74 (1.1)	224 (1.4)	26 (1.1)	212 (1.6)					
West Virginia	· · · · · · · · · · · · · · · · · · ·	218 (1.2)	28 (1.2)	207 (1.6)					
Wisconsin	72 (1.2) 72 (1.2)		28 (1.2)	223 (1.7)					
Wyoming	72 (1.2)	230 (1.2)		219 (1.4)					
TERRITORY	76 (1.1)	227 (1.0)	24 (1.1)						
Guam	58 (1.3)	. 199 (1.2)	42 (1.3)	185 (1.5)					

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. At grade 4, students were not given the "strongly agree" and "strongly disagree" options.



TABLE A.91

# Students' Responses to the Statement "Almost All People Use Mathematics in Their Jobs" (continued)

	Grade 8 - 1992									
	Strongly Agree		Agr	ee	Undecided, Disag	ree, or Strongly gree				
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency				
NATION	45 (1.0)	268 (1.2)	42 (0.8)	269 (1,2)	12 (0.6)	264 (1.7)				
Northeast	43 (2.1)	270 (3.4)	44 (1.3)	271 (3.3)	14 (1.8)	266 (5.1)				
Southeast	45 (1.4)	259 (1.4)	41 (1.4)	260 (2.5)	14 (0.8)	255 (2.1)				
Central	45 (2.5)	273 (2.3)	43 (2.0)	276 (2.1)	11 (1.0)	272 (3.9)				
West	48 (2.0)	269 (2.6)	41 (1.5)	268 (2.4)	11 (1.2)	264 (3.1)				
STATES	•	,	()		11 (1.2)	204 (3.1)				
Alabama	49 (1.3)>>	251 (1.9)	41 (0.9) <<	254 (2.0)	11 (0.7) <<	251 (3.0)				
Arizona	45 (1.0)»	265 (1.5)	43 (0.9) <<	267 (1.5)>	12 (0.8) <	262 (2.1)				
Arkansas	44 (1.1)>>	256 (1.4)	43 (1.1) «	258 (1.6)	13 (0.7) <					
California	44 (1.2)>>	265 (1.8)>	42 (1.1) «	263 (2.1)	14 (0.7)	254 (2.6)				
Colorado	46 (1.3)>>	274 (1.5)>	43 (1.2) «	272 (1.0)>		257 (2.7)				
Connecticut	40 (1.1) >>	275 (1.4)>	47 (1.1) «	, , ,	11 (0.7) <	268 (2.5)				
Dalaura	• •	213 (1.4)	47 (1.1)	274 (1.6)	13 (0.8) <<	275 (2.2)				
Delaware	46 (1.3) <b>&gt;&gt;</b>	261 (1.7)	44 (1.0) <b>«</b>	265 (1.1)	10 (0.7)«	265 (2.7)>				
Dist. Columbia	44 (1.5)>	235 (1.8)	44 (1.4)	236 (1.2)	12 (0.7) <	238 (3.2)>				
Florida	46 (0.9)>>	259 (1.7)>	42 (0.9) <b>«</b>	261 (1.7)	12 (0.7) «	258 (2.8)				
Georgia	47 (1.3)>>	259 (1.2)	41 (1.0) <i>«</i>	261 (1.5)	12 (0.8) <	259 (2.7)				
Hawaii	49 (1.2)>>	259 (1.3)>	41 (1.1) <<	259 (1.3)>>	10 (0.7) <	251 (3.5)				
Idaho	48 (1.3)>>	276 (1.1)>	42 (1.3) <<	275 (0.8)	9 (0.7) <	267 (2.0)				
Indiana	45 (4.0)				• •	201 (2.0)				
lowa	45 (1.3) >>	270 (1.4)	44 (1.4) <	270 (1.4)	10 (0.8)≪	268 (2.5)				
Kentucky	48 (1.3)>>	283 (1.3)>	<b>42 (1.0)≪</b>	284 (1.3)>	9 (0.7)<	279 (2.5)				
	42 (1.1)>>	263 (1.5)>	46 (1.0) <	263 (1.5)	12 (0.6) <	258 (2.1)				
Louisiana Maine¹	45 (1.3)**	249 (1.9)	42 (1.2)≪	252 (1.9)	13 (0.8)	248 (2.6)				
	45 (1.2)	279 (1.2)	44 (1.2)	280 (1.3)	11 (0.8)	272 (2.2)				
Maryland	43 (1.3) <b>»</b>	263 (1.6)	44 (1.3)≪	269 (1.6)	13 (0.8) <	262 (2.4)				
Massachusetts <sup>1</sup>	40 (1.1)	273 (1.3)	45 (1.0)	•	45 (0.0)					
Michigan	45 (1.0)>>	268 (1.8)	, , , , , , , , , , , , , , , , , , , ,	273 (1.4)	15 (0.9)	270 (2.4)				
Minnesota	45 (1.3)»		43 (1.0) <	269 (1.6)	12 (0.7) «	264 (2.4)				
Mississippi <sup>1</sup>	48 (1.3)	283 (1.2)>	45 (1.3) <<	282 (1.3)>	10 (0.7) «	275 (2.6)				
Missouri <sup>1</sup>	, ,	247 (1.2)	42 (1.2)	246 (1.6)	10 (0.7)	248 (3.1)				
Nebraska	45 (1.6)	271 (1.7)	43 (1.3)	273 (1.2)	12 (0.8)	268 (2.3)				
	46 (1.3) <b>»</b>	278 (1.4)	<b>44</b> (1.0)≪	278 (1.3)	10 (0.8) <	271 (2.9)				
New Hampshire	44 (1.3)>>	280 (1.0)	44 (1.2)<<	277 (1.4)	12 (0.7)≪	275 (2.5) >				
New Jersey	42 (1.1)>>	272 (1.8)	44 (1.1)«	273 (1.7)	14 (1.0) <	275 (2.4)				
New Mexico	47 (1.2)>>	260 (1.3)	44 (1.0) «	260 (1.1)	9 (0.7) «	· · ·				
New York	42 (1.2)>>	266 (2.3)>	45 (1.2) <<	268 (2.2)	13 (0.8) «	256 (2.4)>				
North Carolina	44 (1.0)>>	258 (1.4)>	45 (1.0) <	260 (1.6)>>	11 (0.6) <<	269 (2.7)				
North Dakota	44 (1.5)>>	284 (1.5)	47 (1.4) <	283 (1.3)	9 (0.7)	257 (2.4) >				
Ohio	• •		, ,		9 (0.7)	275 (2.4)				
=	48 (2.0)>>	269 (1.8)	41 (1.5) <b>«</b>	269 (1.7)	11 (0.8) <	261 (2.4)				
Oklahoma	44 (1.2)*	268 (1.7)	44 (1.1)<	270 (1.4)	12 (0.9)	264 (2.4)				
Pennsylvania	43 (1.1) <b>»</b>	271 (1.9)	44 (1.1) <b>«</b>	271 (1.4)	13 (0.8)<	272 (2.8)>				
Rhode Island	40 (1.0)>>	265 (1.3)>	46 (1.0)≪	266 (1.1)	15 (0.8)≪	270 (1.7)>>				
South Carolina <sup>1</sup>	50 (1.3)	260 (1.2)	41 (1.4)	262 (1.4)	10 (0.8)	262 (3.2)				
Tennessee1	41 (1.3)	259 (1.7)	46 (1.0)	260 (1.7)	12 (0.9)	256 (2.2)				
Texas	51 (1.2)>>	265 (1.5)								
Utah¹	46 (1.1)		42 (1.0)≪ 42 (4.4)	266 (1.7)>	7 (0.6) <<	263 (3.2)				
Virginia	45 (1.1) 45 (0.9)»	275 (1.0)	42 (1.1)	276 (1.1)	12 (0.6)	269 (2.0)				
West Virginia		267 (1.7)	43 (0.8) <b>«</b>	269 (1.2)	12 (0.6) <	271 (2.2)				
Wisconsin	43 (1.0)>>	259 (1.2)	43 (1.0) <<	260 (1.3)	14 (0.8)	258 (1.9)				
Wyoming	46 (1.1)>>	280 (1.9)	44 (0.9) «	278 (1.4)	10 (0.8) <	268 (3.0)				
ERRITORIES	48 (1.1)>>	275 (1.0)>	42 (1.1) <b>≪</b>	276 (1.3)	10 (0.8)	267 (1.8)				
Guam	40.44				•	, ,				
	49 (1.4)>>	241 (1.6) >>	39 (1.2) <	238 (2.0)	12 (1.0)	237 (4.4)				
Virgin Islands	60 (1.3)>>	223 (1.4)	33 (1.2)≪	224 (1.6)>	7 (0.8)	215 (4.7)				

Did not participate in the 1990 Trial State Assessment Program, so comparisons with 1990 values are not possible.

"The value for 1992 was significantly higher than the value for 1990 at about the 95 percent certainty level. "The value for 1990 at about the 95 percent certainty level. These notations indicate statistical significance from a multiple comparison procedure based on the 37 jurisdictions participating in both 1992 and 1990. If looking at only one state, then > and < also indicate differences that are significant. Statistically significant differences between 1990 and 1992 for the state comparison samples for the nation and regions are not indicated.



# Students' Reports on How Important It Was for Them to Perform Well on the NAEP Mathematics Test

	Grade 4 - 1992									
	Very Important		Impo	rtant	Somewhat	Important	Not Imp	ortant		
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency								
NATION	67 (1.0)	216 (0.9)	22 (0.7)	224 (1.2)	7 (0.4)	221 (2.2)	4 (0.4)	212 (3.4)		
Northeast	61 (2.1)	221 (2.8)	25 (1.3)	228 (3.2)	7 (1.6)	230 (4.3)!	6 (1.2)	*** (***)		
Southeast	70 (2.0)	207 (2.1)	19 (1.4)	217 (3.2)	6 (0.5)	209 (4.1)	5 (0.7)	201 (5.5)		
Central	68 (1.3)	220 (2.5)	24 (1.7)	228 (1.9)	6 (0.7)	227 (4.1)	2 (0.5)	*** (***)		
West	67 (2.5)	216 (1.5)	22 (1.5)	223 (2.0)	8 (0.7)	217 (4.0)	4 (0.8)	*** (***)		
STATES	` ′									
Alabama	77 (1.0)	206 (1.6)	16 (0.7)	212 (2.4)	4 (0.4)	210 (4.9)	3 (0.4)	196 (5.0)		
Arizona	63 (1.2)	214 (1.1)	25 (1.0)	215 (2.2)	8 (0.5)	212 (2.5)	4 (0.4)	208 (3.3)		
Arkansas	76 (1.1)	209 (0.9)	16 (0.9)	213 (2.3)	5 (0.4)	207 (3.7)	3 (0.3)	198 (3.8)		
California	64 (1.3)	207 (1.6)	23 (0.8)	212 (2.4)	8 (0.6)	206 (3.3)	5 (0.5)	198 (4.0)		
Colorado	64 (1.1)	219 (1.1)	24 (0.8)	222 (1.4)	8 (0.6)	224 (2.4)	4 (0.4)	214 (3.4)		
Connecticut	60 (1.5)	223 (1.4)	26 (1.0)	232 (1.4)	9 (0.7)	236 (2.4)	5 (0.5)	221 (3.6)		
Delaware	66 (1.0)	215 (1.1)	22 (1.0)	222 (1.8)	7 (0.7)	224 (3.3)	5 (0.6)	207 (6.0)		
Dist. Columbia	80 (0.9)	191 (0.7)	13 (0.8)	198 (2.3)	4 (0.4)	185 (3.7)	3 (0.3)	191 (4.4)		
Florida	70 (1.1)	212 (1.7)	20 (0.9)	215 (2.0)	6 (0.5)	219 (3.7)	4 (0.5)	203 (4.4)		
Georgia	71 (1.3)	213 (1.3)	20 (0.9)	222 (1.7)	6 (0.5)	217 (3.5)	4 (0.5)	216 (5.0)		
Hawaii	72 (1.2)	214 (1.4)	21 (1.0)	214 (2.1)	5 (0.4)	203 (4.0)	3 (0.3)	196 (4.6)		
Idaho	66 (0.9)	220 (1.0)	23 (0.8)	223 (1.8)	8 (0.6)	219 (2.9)	3 (0.4)	215 (4.5)		
Indiana	l ' '	• .	. ,		1 1		• • •	211 (3.8)		
•	69 (1.1)	218 (1.2)	22 (0.8)	225 (1.5)	7 (0.5)	223 (2.8)	3 (0.3)	, ,		
lowa	68 (1.3)	228 (1.0)	23 (1.0)	233 (1.5)	6 (0.5)	228 (2.9)	3 (0.4)	220 (5.1)		
Kentucky	74 (1.1)	213 (1.0)	18 (0.8)	217 (2.2)	5 (0.5)	215 (2.9)	3 (0.4)	207 (4.5)		
Louisiana	78 (1.1)	204 (1.3)	15 (0.8)	207 (2.0)	5 (0.5)	197 (4.5)	3 (0.3)	191 (5.1)		
Maine Maryiand	62 (1.3)	230 (1.2)	26 (1.1)	235 (1.5)	8 (0.8)	229 (2.4)	4 (0.4)	222 (5.0)		
-	65 (1.3)	213 (1.3)	24 (0.9)	225 (1.7)	8 (0.6)	221 (3.3)	3 (0.4)	213 (5.5)		
Massachusetts	63 (1.5)	224 (1.3)	25 (1.0)	231 (1.7)	8 (0.6)	230 (2.7)	4 (0.4)	216 (4.7)		
Michigan	68 (1.4)	218 (1.5)	22 (1.0)	224 (2.3)	7 (0.7)	217 (3.9)	3 (0.4)	214 (4.2)		
Minnesota	62 (1.3)	228 (1.1)	26 (0.9)	231 (1.3)	8 (0.5)	221 (2.5)	4 (0.5)	218 (4.7)		
Mississippi	82 (0.9)	201 (1.1)	13 (0.7)	201 (2.6)	3 (0.3)	200 (5.1)	2 (0.3)	*** (***)		
Missouri	71 (1.2)	221 (1.3)	20 (0.9)	225 (2.0)	7 (0.6)	222 (3.3)	3 (0.4)	211 (3.6)		
Nebraska	65 (1.2)	224 (1.4)	27 (1.0)	226 (1.7)	6 (0.6)	224 (2.8)	2 (0.3)	*** (***)		
New Hampshire	57 (1.2)	228 (1.2)	28 (1.1)	232 (1.5)	11 (0.8)	228 (2.6)	5 (0.6)	219 (3.9)		
New Jersey	61 (1.5)	223 (1.8)	24 (1.0)	233 (1.5)	8 (0.7)	232 (3.0)	6 (0.6)	225 (3.3)		
New Mexico	70 (1.5)	212 (1.3)	20 (1.3)	214 (2.6)	6 (0.6)	216 (4.1)	4 (0.5)	203 (4.1)		
New York	62 (1.5)	216 (1.4)	23 (1.1)	223 (1.5)	8 (0.7)	222 (2.3)	6 (0.6)	215 (3.1)		
North Carolina	71 (1.3)	211 (1.2)	19 (0.9)	216 (1.9)	6 (0.5)	219 (3.1)	4 (0.5)	201 (3.7)		
North Dakota	63 (1.3)	227 (O.9)	27 (1.0)	229 (1.6)	7 (0.6)	228 (2.6)	3 (0.6)	*** (***)		
Ohio	68 (1.2)	216 (1.3)	21 (1.0)	223 (1.9)	6 (0.5)	220 (2.8)	4 (0.5)	212 (3.3)		
Oklahoma	73 (1.1)	218 (1.0)	18 (0.8)	222 (1.9)	5 (0.5)	224 (2.8)	3 (0.5)	213 (5.1)		
Pennsylvania	63 (1.4)	222 (1.5)	27 (1.1)	227 (1.5)	6 (0.7)	225 (3.7)	3 (0.4)	215 (3.9)		
Rhode Island	62 (1.1)	212 (1.7)	24 (0.9)	219 (1.8)	10 (0.7)	222 (2.5)	4 (0.5)	211 (4.7)		
South Carolina	76 (1.2)	210 (1.1)	16 (0.8)	218 (2.0)	4 (0.5)	210 (3.4)	3 (0.4)	206 (4.3)		
Tennessee	75 (1.1)	209 (1.4)	18 (0.8)	212 (2.1)	5 (0.5)	213 (3.7)	2 (0.3)	205 (4.8)		
Texas	76 (1.2)	217 (1.3)	17 (0.9)	222 (2.5)	4 (0.4)	211 (4.0)	3 (0.4)	206 (4.4)		
Utah	66 (1.4)	223 (1.0)	24 (1.0)	226 (1.5)	7 (0.6)	218 (2.5)	3 (0.4)	218 (3.7)		
Virginia	69 (1.1)	218 (1.3)	20 (0.9)	226 (1.9)	7 (0.6)	223 (3.9)	4 (0.4)	216 (4.2)		
West Virginia	71 (1.1)	214 (1.1)	. 21 (0.9)	216 (1.5)	6 (0.4)	216 (2.8)	3 (0.4)	203 (4.3)		
Wisconsin	63 (1.3)	227 (1.1)	26 (0.9)	230 (1.7)	9 (0.7)	230 (2.8)	3 (0.4)	219 (4.2)		
Wyoming	69 (1.1)	227 (1.1)	22 (1.0)	225 (1.5)	6 (0.4)	225 (2.8)	3 (0.4)	214 (3.5)		
TERRITORY	55 (1.1)	220 (1.0)	22 (1.0)	220 (1.0)	○ (0. <del>+</del> )	220 (0.2)	J (0.4)	214 (0.0)		
Guam	69 (0.9)	194 (0.9)	20 (0.8)	192 (2.2)	6 (0.5)	169 (3.9)	5 (0.6)	175 (3.4)		
		(/		()	- ()		- \/	- 17		

The standard errors of the estimated percentages and proficiencies appear in parentheses. It can be said with 95 percent certainty that for each population of interest, the value for the whole population is within plus or minus two standard errors of the estimate for the sample. \*\*\*Sample size insufficient to permit reliable estimate. There were fewer than 62 students. ! Interpret with caution - the nature of the sample does not allow accurate determination of the variability of this estimated statistic.



TABLE A.92 | Students' Reports on How Important It Was For Them to Perform Well on the NAEP Mathematics Test (continued)

				Grade	8 - 1992			
	Very Imp	ortant	Impo	rtant	Somewhat	Important	Not Imp	ortant
PUBLIC SCHOOLS	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency	Percentage of Students	Average Proficiency
NATION	26 (0.8)	259 (1.3)	34 (1.0)	269 (1.3)	27 (0.7)	269 (1.5)	13 (0.6)	269 (1.8)
Northeast	25 (1.3)	262 (3.9)	34 (2.0)	269 (4.0)	28 (1.6)	270 (5.0)	13 (1.4)	264 (4.5)
Southeast	30 (2.0)	251 (1.8)	32 (1.8)	261 (2.0)	25 (1.5)	263 (1.9)	, ,	
Central	24 (1.6)	267 (3.0)	34 (2.1)	1 1		, ,	13 (1.0)	259 (2.7)
West	26 (1.5)	260 (2.7)		275 (2.2)	28 (1.2)	275 (2.5)	14 (1.6)	277 (5.0)
STATES	20 (1.5)	200 (2.1)	36 (1.9)	269 (2.6)	2 <u>5</u> (1.1)	268 (2.0)	13 (1.0)	274 (2.8)
Alabama	39 (1.5)	247 (2.4)	31 (0.8)	254 (1.8)	23 (1.0)	253 (2.3)	7 (0.7)	257 (2.7)
Arizona	26 (1.2)	262 (1.8)	37 (1.1)	266 (1.8)	27 (1.1)	266 (1.5)		265 (2.4)
Arkansas	35 (1.3)	251 (1.5)	35 (1.2)				10 (0.7)	
California	29 (1.6)			256 (1.5)	21 (1.1)	262 (1.9)	9 (0.7)	258 (2.6)
Colorado	1 '	256 (2.6)	36 (1.0)	260 (2.0)	25 (1.2)	266 (2.0)	10 (0.8)	262 (3.2)
Connecticut	27 (1.1)	269 (1.7)	39 (0.9)	272 (1.4)	24 (0.8)	274 (1.5)	10 (0.9)	272 (2.4)
	24 (1.2)	266 (2.4)	34 (1.0)	274 (1.7)	28 (1.0)	277 (1.5)	13 (0.8)	280 (2.1)
Delaware	26 (1.2)	256 (2.2)	34 (1.0)	264 (1.5)	27 (1.0)	268 (2.0)	12 (0.8)	262 (3.3)
Dist. Columbia	47 (1.4)	231 (1.5)	31 (1.0)	234 (1.7)	17 (1.2)	240 (2.2)	5 (0.7)	253 (7.9)
Florida	30 (1.1)	254 (2.1)	35 (1.0)	261 (2.1)	25 (1.0)	262 (1.8)	10 (0.7)	262 (3.4)
Georgia	42 (1.2)	252 (1.6)	34 (0.9)	263 (1.2)	19 (0.8)	264 (2.2)	6 (0.5)	
Hawaii	28 (0.9)	254 (1.5)	35 (1.0)	259 (1.3)				264 (3.4)
Idaho	28 (1.1)	275 (1.4)	37 (1.0)	274 (1.0)	26 (1.1) 25 (0.9)	259 (1.5)	11 (0.8)	257 (2.4)
	, ,		37 (1.0)	, ,	25 (0.9)	275 (1.1)	10 (0.7)	273 (2.3)
Indiana	29 (1.2)	268 (1.8)	36 (1.2)	271 (1.5)	25 (1.0)	269 (1.7)	9 (0.7)	269 (3.3)
lowa	28 (1.1)	283 (1.5)	39 (1.0)	283 (1.1)	24 (1.0)	284 (1.4)	8 (0.6)	280 (2.9)
Kentucky'	37 (1.2)	259 (1.4)	36 (0.8)	263 (1.5)	20 (0.8)	264 (1.9)	7 (0.6)	260 (3.0)
Louisiana	46 (1.4)	245 (1.6)	29 (1.1)	250 (2.1)	19 (1.1)	256 (2.6)	6 (0.7)	250 (3.1)
Maine	24 (0.8)	277 (1.6)	35 (1.2)	280 (1.3)	27 (1.1)	278 (1.6)	14 (0.9)	274 (2.2)
Maryland	29 (1.3)	257 (2.2)	37 (1.1)	266 (1.7)	25 (1.1)	267 (1.8)	10 (0.9)	274 (2.8)
Massachusetts	24 (1.3)		• •			` '		
Michigan		266 (1.5)	36 (1.1)	272 (1.5)	28 (0.9)	276 (1.7)	12 (1.0)	276 (2.9)
Minnesota	32 (1.5)	261 (1.8)	37 (0.8)	268 (1.8)	23 (1.1)	271 (1.9)	8 (0.6)	271 (3.5)
Mississippi	22 (1.4)	283 (1.8)	36 (1.1)	283 (1.4)	31 (1.2)	281 (1.5)	11 (0.8)	283 (2.5)
	50 (1.7)	241 (1.4)	31 (1.0)	248 (2.0)	15 (1.3)	253 (2.1)	4 (0.5)	254 (4.5)
Missouri	33 (1.6)	268 (2.0)	37 (0.9)	272 (1.3)	22 (1.0)	273 (1.8)	8 (0.7)	270 (2.5)
Nebraska	26 (1.1)	278 (1.8)	38 (1.3)	277 (1.5)	27 (0.9)	278 (1.6)	10 (0.6)	272 (2.4)
New Hampshire	21 (1.2)	276 (1.7)	32 (1.1)	278 (1.1)	31 (0.9)	278 (1.4)	16 (0.8)	077 (4.7)
New Jersey	28 (1.4)	263 (2.2)	37 (1.4)	275 (1.6)	25 (1.1)	273 (2.0)	, , ,	277 (1.7)
New Mexico	28 (1.2)	257 (1.6)	35 (1.1)	258 (1.2)	26 (0.9)		10 (1.0)	280 (2.5)
New York	24 (1.5)	260 (3.1)	34 (1.1)	268 (2.3)		260 (1.5)	10 (0.7)	262 (2.6)
North Carolina	34 (1.4)	252 (1.7)	35 (1.1)		29 (0.9)	269 (2.0)	12 (0.9)	266 (3.7)
North Dakota	26 (1.2)	284 (1.6)		261 (1.7)	22 (0.9)	260 (1.8)	8 (0.6)	260 (3.4)
	20 (1.2)	204 (1.0)	38 (1.1)	284 (1.7)	27 (1.0)	281 (1.5)	8 (0.8)	277 (2.9)
Ohio	33 (1.1)	265 (1.9)	37 (1.4)	269 (1.8)	22 (1.2)	270 (1.9)	8 (0.7)	273 (3.2)
Oklahoma	32 (1.5)	264 (1.5)	38 (1.3)	270 (1.5)	23 (1.2)	269 (1.6)	7 (0.6)	264 (3.6)
Pennsylvania	26 (1.4)	266 (2.0)	36 (1.1)	275 (1.5)	26 (1.0)	272 (1.9)	11 (0.9)	266 (3.2)
Rhode Island	22 (1.0)	258 (1.6)	36 (0.9)	267 (1.3)	27 (1.0)	269 (1.5)	15 (0.9)	266 (2.1)
South Carolina	43 (1.3)	254 (1.3)	31 (1.1)	263 (1.6)	20 (1.0)	266 (1.7)	6 (0.6)	266 (2.1)
Tennessee	35 (1.2)	256 (1.9)	37 (0.8)	259 (1.7)	22 (1.1)	262 (2.3)	7 (0.6)	255 (3.0)
Texas	, ,		, ,	` '	` ,		` '	
Utah	36 (1.4)	260 (1.5)	36 (1.1)	266 (1.9)	20 (1.1)	268 (2.2)	7 (0.6)	267 (3.4)
	27 (1.2)	272 (1.3)	39 (1.0)	274 (1.1)	25 (1.1)	274 (1.3)	8 (0.6)	277 (2.2)
Virginia	32 (1.2)	264 (1.7)	35 (1.0)	269 (1.6)	24 (1.0)	268 (1.5)	9 (0.6)	271 (2.5)
West Virginia	31 (1.3)	258 (1.4)	36 (0.9)	259 (1.2)	25 (1.1)	259 (1.4)	9 (0.6)	254 (2.6)
Wisconsin	24 (1.0)	276 (2.2)	39 (1.0)	276 (1.7)	27 (1.0)	280 (1.8)	11 (0.7)	278 (2.4)
Wyoming	26 (1.2)	274 (1.6)	37 (1.1)	277 (1.3)	26 (0.9)	274 (1.1)	11 (O.8)	269 (2.2)
TERRITORIES				, ,	` ,	` '	, <i>,</i>	\ <i>\</i>
Guam	49 (1.5)	232 (1.5)	31 (1.4)	239 (1.9)	15 (0.9)	239 (3.1)	4 (0.5)	225 (6.2)
Virgin Islands	46 (1.2)	222 (1.3)	32 (1.3)	221 (1.8)	15 (1.0)	227 (2.7)	7 (0.6)	217 (3.7)



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