

National Assessment of Educational Progress

The Nation's Report Card™

Mathematics 2005

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U.S. Department of Education
Institute of Education Sciences
NCES 2006-453



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OCTOBER 2005

What is The Nation's Report Card™?

The Nation's Report Card™, the National Assessment of Educational Progress (NAEP), is a nationally representative and continuing assessment of what America's students know and can do in various subject areas. For over three decades, assessments have been conducted periodically in reading, mathematics, science, writing, history, geography, and other subjects.

By making objective information on student performance available to policymakers at the national, state, and local levels, NAEP is an integral part of our nation's evaluation of the condition and progress of education. Only information related to academic achievement and relevant variables is collected under this program. The privacy of individual students and their families is protected, and the identities of participating schools are not released.

NAEP is a congressionally mandated project of the National Center for Education Statistics within the Institute of Education Sciences of the U.S. Department of Education. The Commissioner of Education Statistics is responsible, by law, for carrying out the NAEP project through competitive awards to qualified organizations.

In 1988, Congress established the National Assessment Governing Board (NAGB) to oversee and set policy for NAEP. The Board is responsible for selecting the subject areas to be assessed; setting appropriate student achievement levels; developing assessment objectives and test specifications; developing a process for the review of the assessment; designing the assessment methodology; developing guidelines for reporting and disseminating NAEP results; developing standards and procedures for interstate, regional, and national comparisons; determining the appropriateness of all assessment items and ensuring the assessment items are free from bias and are secular, neutral, and nonideological; taking actions to improve the form, content, use, and reporting of results of the National Assessment; and planning and executing the initial public release of NAEP reports.

Executive Summary

This report presents the national and state results of the NAEP assessment in mathematics and compares them to results from assessments in 2003 and in the first year data were available, usually 1990. In 2005, nationally representative samples of about 172,000 fourth-grade and 162,000 eighth-grade students nationwide participated in that assessment.

National Mathematics Results

Fourth-graders' average score was 3 points higher, and eighth-graders' average score was 1 point higher in 2005 than in 2003 on a 0 to 500 point scale. The average scores increased since the first assessment year, 1990, by 25 points at grade 4 and by 16 points at grade 8.

Between 1990 and 2005, the percentage of fourth-graders performing at or above *Basic* increased by 30 percentage points, from 50 to 80 percent, and the percentage performing at or above *Proficient* increased from 13 to 36 percent. The percentage of eighth-graders performing at or above *Basic* was 17 percentage points higher in 2005 (69 percent) than in 1990 (52 percent), and the percentage performing at or above *Proficient* increased from 15 to 30 percent.



Average mathematics scores increased between 2003 and 2005 at both grades 4 and 8.

percentage points, from 50 to 80 percent, and the percentage performing at or above *Proficient* increased from 13 to 36 percent. The percentage of eighth-graders performing at

Mathematics Results for Student Groups at Grade 8

The average scores for White, Black, and Hispanic eighth-graders were higher in 2005 than in any previous assessment year.

Students who were eligible for free or reduced-price lunch and those who were not eligible scored higher on average in 2005 than in any previous assessment year from 1996 through 2003.

Average scores for male and female eighth-graders were both higher in 2005 than in 1990 or in 2003.



Average scores for White, Black, and Hispanic students were higher in 2005 than in any previous assessment year at both grades 4 and 8.

Mathematics Results for the States

Examining the short-term trends between 2003 and 2005, when all 50 states and the District of Columbia and Department of Defense Schools were assessed, shows average scores for students at grade 4 increased in 31 states and both jurisdictions. The percentage of students performing at or above *Basic* increased in 23 states and the District of Columbia.

At grade 8, there were 7 states with higher average scores in 2005 than in 2003. The percentage of students performing at or above *Basic* increased in 5 states.

Turning to the longer trend, the first state assessment at grade 4 was given in 1992 in 42 states and jurisdictions. Each of them had a higher average score and showed a greater percentage of students performing at or above *Basic* in 2005 compared to 1992.

At grade 8, there were 38 states and jurisdictions that participated in both 1990 and 2005. Each of them had a higher average score and showed a greater percentage of students performing at or above *Basic* in 2005 than in 1990.

Mathematics Results for Student Groups at Grade 4

White fourth-graders scored higher on average in mathematics than their Black and Hispanic peers in 2005. The average scores for all three racial/ethnic groups were higher in 2005 than in any previous assessment year.

In 2005, students who were eligible for free or reduced-price school lunch and those who were not eligible had higher average scores in 2005 than in 1996.

In 2005, male students scored higher on average than their female counterparts. Both male and female fourth-graders' average scores were higher in 2005 than in any previous assessment year.

For More Information...

The NAEP initial release website (www.nationsreportcard.gov) provides additional information on the NAEP assessments, including an interactive view of state results and links to PDF versions of all NAEP reports, a data tool for exploring results and calculating the statistical significance of differences, and a tool for examining released questions.

Understanding NAEP Results

Results are presented in two ways: in terms of scale scores and as the percentage of students scoring at or above three benchmarks called *achievement levels*. For results to be presented in this report, each reporting group must meet minimum reporting standards. Reporting standards were met for public schools in the nation and the states. However, too few private schools participated for their results to be reported separately. See the Technical Notes on page 32 for more information.

Scale Scores

NAEP mathematics scores are reported for grades 4 and 8 on a 0–500 scale. Scale score results also are presented for students at various percentiles. An examination of scores at different percentiles on the 0–500 scale indicates whether or not the trends seen in the overall national average score results are reflected in the performance of lower-, middle-, and higher-performing students.

Item maps, presented on pages 26 and 30, provide interpretive information about a scale score in terms of the skills and knowledge students with a certain score are likely to have. Items placed along the scale in an item map demonstrate how skills correspond to levels of performance.

Scales are created for other subjects independently, so even when another subject's scale has the same numerical range (0–500), average scores should not be compared across subjects.

Achievement Levels

NAEP results are reported at three achievement levels: *Basic*, *Proficient*, and *Advanced*. Achievement levels are performance standards showing what students should know and be able to do. They are set by the National Assessment Governing Board (NAGB), based on recommendations from panels of educators and members of the public, to provide a context for interpreting student performance on NAEP. In this report, the achievement-level results are reported as percentages of students performing at or above *Basic* and at or above *Proficient*.

As provided by law, the National Center for Education Statistics (NCES), upon review of congressionally mandated evaluations of NAEP, has determined that achievement levels are to be used on a trial basis and should be interpreted with caution. However, NCES and NAGB have affirmed the usefulness of these performance standards for understanding trends in achievement. NAEP achievement levels have been widely used by national and state officials.

Interpreting Results

NAEP uses widely accepted statistical standards in analyzing data. For instance, this report discusses only findings that are statistically significant at the .05 level. However, some differences that are statistically significant appear small, particularly in recent assessment years, when the sample sizes have been larger. See the Technical Notes on page 33 for more information on interpreting the size of score differences.

Differences between scale scores or percentages are calculated using unrounded numbers. In some instances, the result of the subtraction differs from what would be obtained by subtracting the rounded values shown in the accompanying figure or table. The first part of the report presents the national results of all schools. However, when state results are compared to the nation, only public school results are shown. The national public numbers may differ slightly from overall national numbers.

Finally, most figures show data for two samples. One sample includes students who received accommodations when they needed them, and the other includes students for whom no accommodations were permitted. In 1996, administration procedures were first introduced that allowed the use of accommodations for students who needed them. Therefore, the results from more recent years are more inclusive than results from earlier years. See tables A-1–A-3 for exclusion rates. Any comparisons between 2005 and 1998 will be made with the accommodated sample.

NAEP Achievement-Level Descriptions

The three NAEP achievement levels, from lowest to highest, are

Basic—denotes partial mastery of the knowledge and skills that are fundamental for proficient work at a given grade.

Proficient—represents solid academic performance. Students reaching this level have demonstrated competency over challenging subject matter.

Advanced—signifies superior performance.

Detailed descriptions of the NAEP achievement levels for each subject and grade can be found on the NAGB website (<http://www.nagb.org/pubs/pubs.html>).



KEY FINDINGS

► Average scores were higher in 2005 than in any previous assessment year for students in both grades 4 and 8.

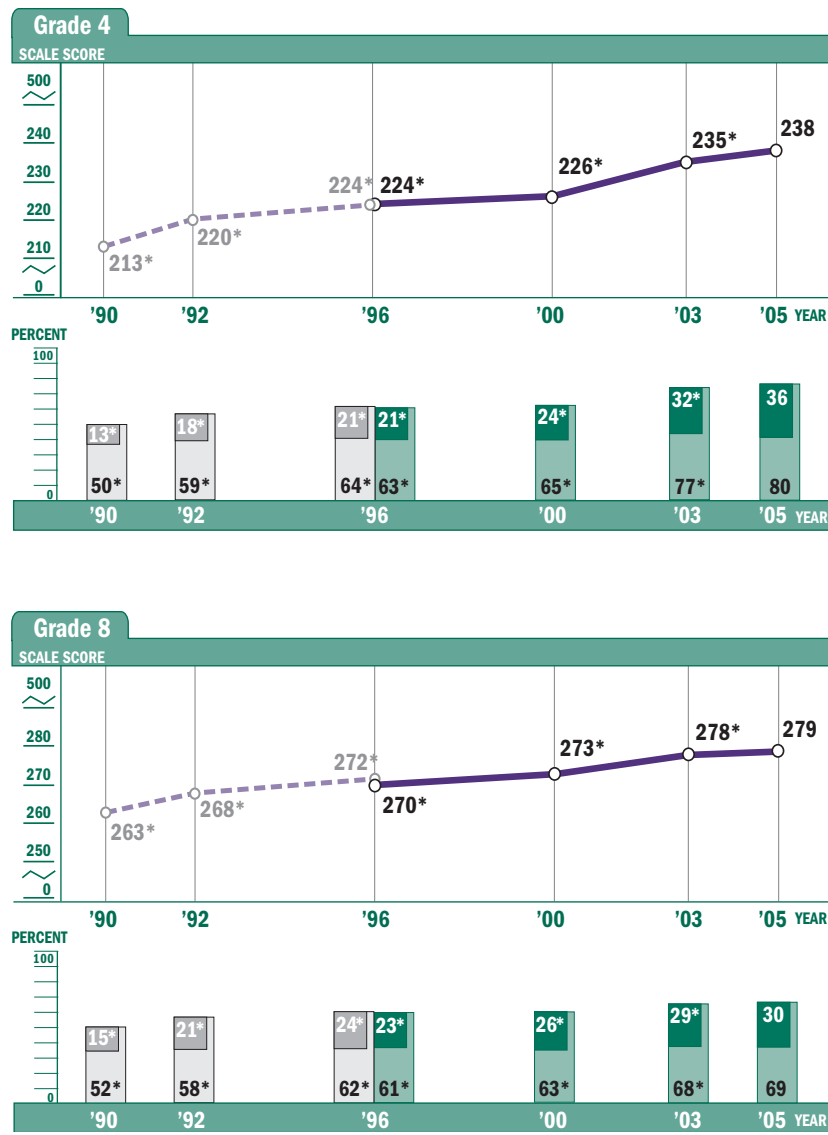
GRADE 4

- The national average mathematics scale score increased by 3 points from 2003 to 2005 and by 25 points from 1990 to 2005.
- In 2005, the percentages of students performing at or above *Basic* (80 percent) and at or above *Proficient* (36 percent) were higher than in any previous assessment year.

GRADE 8

- The national average mathematics score was 16 points higher in 2005 than in 1990 and showed a 1-point increase between 2003 and 2005.
- Higher percentages of students performed at or above *Basic* (69 percent) and at or above *Proficient* (30 percent) in 2005 than in any previous assessment year.

Figure 1. Average scale scores and achievement-level results in mathematics, grades 4 and 8: Various years, 1990–2005



* Significantly different from 2005.
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2005 Mathematics Assessments.

NATIONAL RESULTS

Reporting Student Groups

In addition to national results, NAEP reports results for specified groups of students. Because performance of a particular student group can be significantly different from the performance of the overall student population, it is important to examine separately the performance of each major student group.

Results are provided on the following pages for student groups defined by race/ethnicity, eligibility for free/reduced-price school lunch, and gender. These results show how these groups of students performed in comparison with one another, and over time. More information, including interactive charts of performance for various student groups, can be found at www.nationsreportcard.gov.

Typically, NAEP reports also show results separately for public and private schools. However, overall, an insufficient proportion of private schools participated in NAEP in 2005, so the results are shown in the Technical Notes for Catholic and Lutheran schools only.

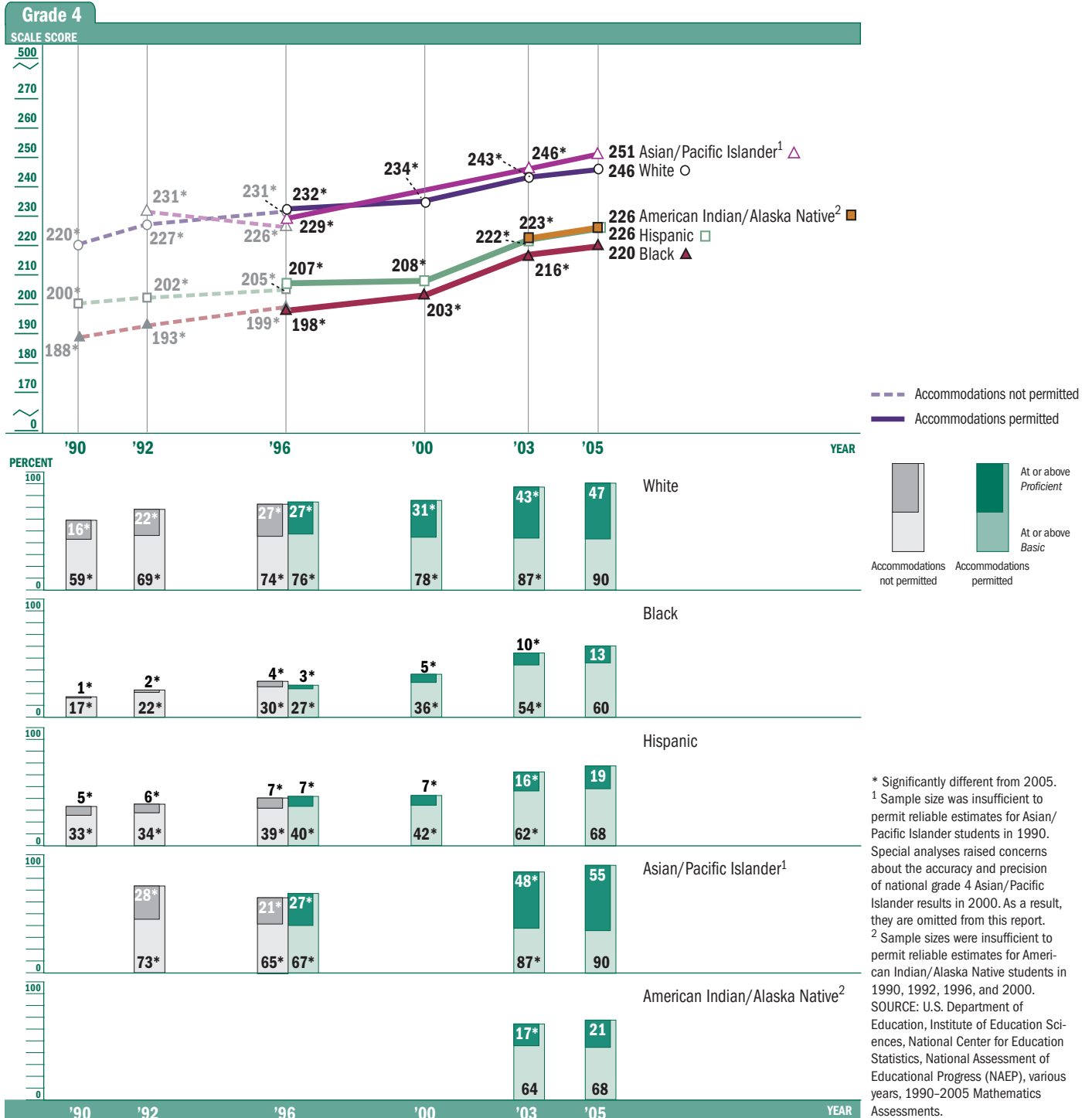
Results for Groups of Students

Results by Race/Ethnicity

NAEP reports data on student race/ethnicity based on information obtained from school rosters. Figures 2 and 3 show results for five mutually exclusive categories: White, Black, Hispanic, Asian/Pacific Islander, and American Indian/Alaska Native. Black includes African American,

Hispanic includes Latino, and Pacific Islander includes Native Hawaiian. Race categories exclude Hispanic origin unless specified. For information about the performance of students not classified in one of these categories, visit www.nationsreportcard.gov.

Figure 2. Average scale scores and achievement-level results in mathematics, by race/ethnicity, grade 4: Various years, 1990–2005





KEY FINDINGS

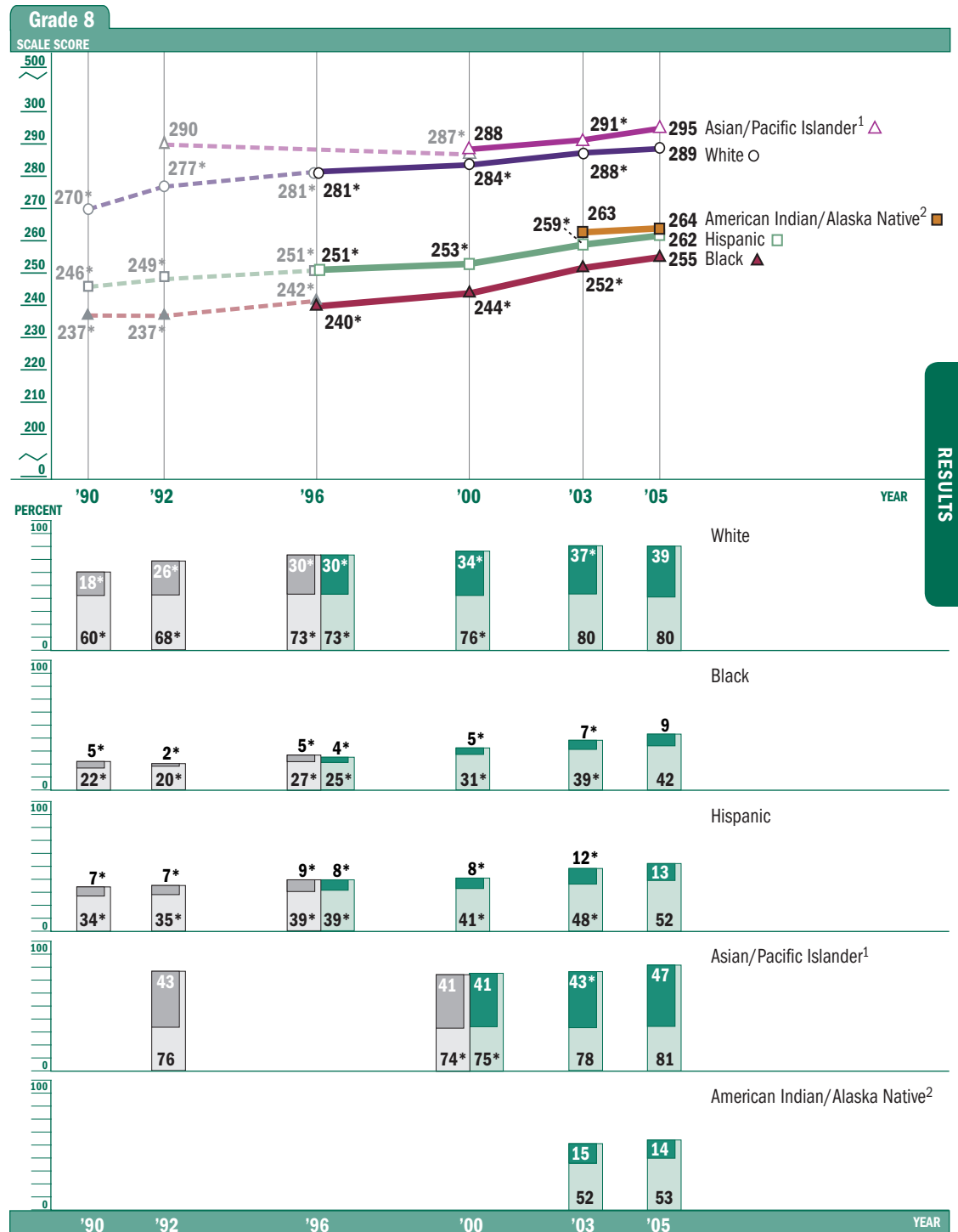
GRADE 4

- ▶ Students from all five racial/ethnic groups scored higher, on average, in 2005 than in 2003.
- ▶ White, Black, and Hispanic students scored higher, on average, in 2005 than in the first assessment year, 1990.
- ▶ Higher percentages of White, Black, Hispanic, and Asian/Pacific Islander students scored at or above *Basic* in 2005 than in any previous assessment year.
- ▶ Higher percentages of students from all five NAEP racial/ethnic groups scored at or above *Proficient* in 2005 than in 2003.

GRADE 8

- ▶ White, Black, and Hispanic students all showed higher average scores in 2005 than in any previous assessment year.
- ▶ Higher percentages of Black and Hispanic students scored at or above *Basic* than in any previous assessment year.
- ▶ Higher percentages of White, Black, and Hispanic students performed at or above *Proficient* in 2005 than in any previous assessment year.

Figure 3. Average scale scores and achievement-level results in mathematics, by race/ethnicity, grade 8: Various years, 1990–2005



* Significantly different from 2005.
¹ Sample size was insufficient to permit reliable estimates for Asian/Pacific Islander students in 1990. Special analyses raised concerns about the accuracy and precision of national grade 8 Asian/Pacific Islander results in 1996. As a result, they are omitted from this report.
² Sample sizes were insufficient to permit reliable estimates for American Indian/Alaska Native students in 1990, 1992, 1996, and 2000.
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2005 Mathematics Assessments.

Accommodations not permitted
 Accommodations permitted
 At or above Proficient
 At or above Basic
 Accommodations not permitted
 Accommodations permitted

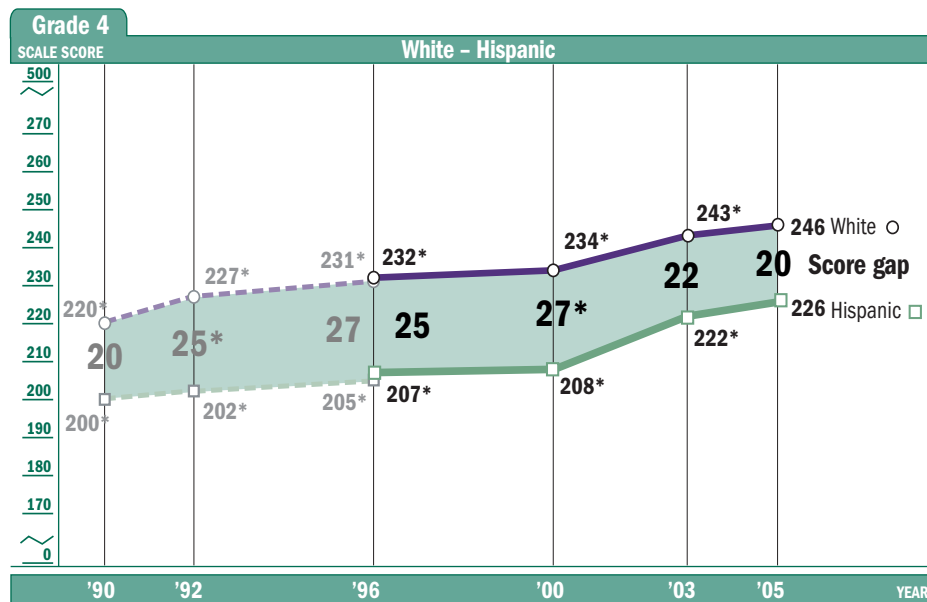
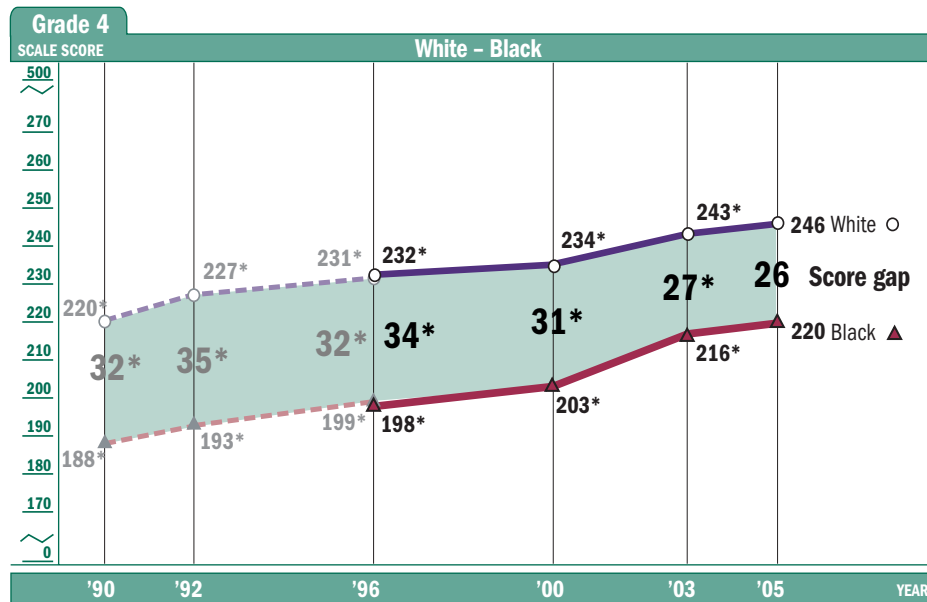
STUDENT GROUP RESULTS

White – Black and White – Hispanic Score Gaps

Another way to view trends in student performance is to determine whether the score “gap” between student groups has narrowed or widened since earlier years. Figures 4 and 5 show the score gaps between White and Black students and between White and Hispanic students

across assessment years. Score gaps are calculated by subtracting the unrounded average scale score of one student group from that of another. Here, the average score for Black or Hispanic students is subtracted from the average score for White students.

Figure 4. Average mathematics scale scores and score gaps for White – Black and White – Hispanic students, grade 4: Various years, 1990–2005



* Significantly different from 2005.

NOTE: Score gaps, displayed in the shaded area, are calculated based on differences between unrounded average scale scores.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2005 Mathematics Assessments.

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 --- Accommodations permitted



KEY FINDINGS

▶ In 2005, at both grades 4 and 8, White students scored higher, on average, than Black and Hispanic students.

GRADE 4

▶ The White - Black score gap was narrower in 2005 than in any previous assessment year.

▶ The apparent change between 2005 and 2003 in the White - Hispanic score gap was not statistically significant.

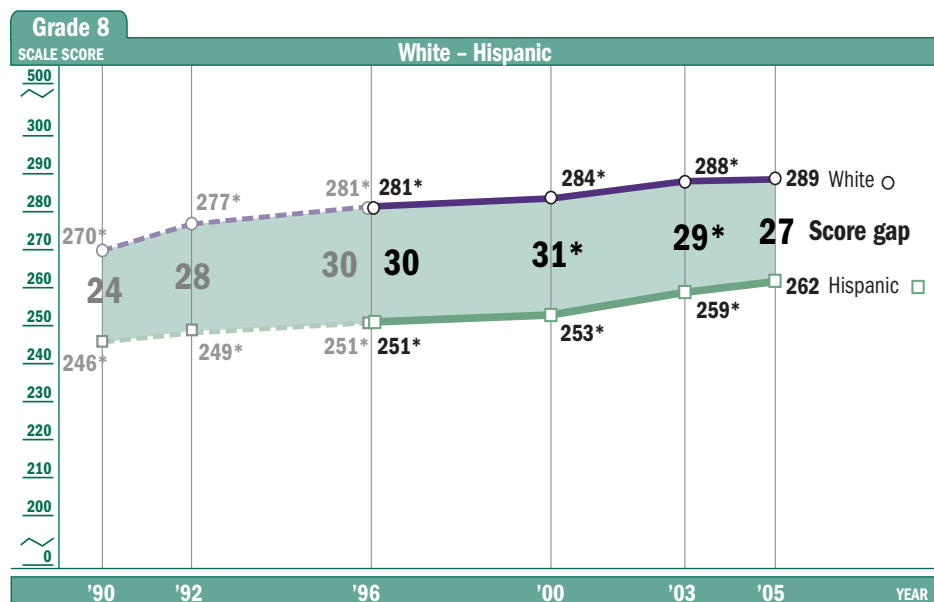
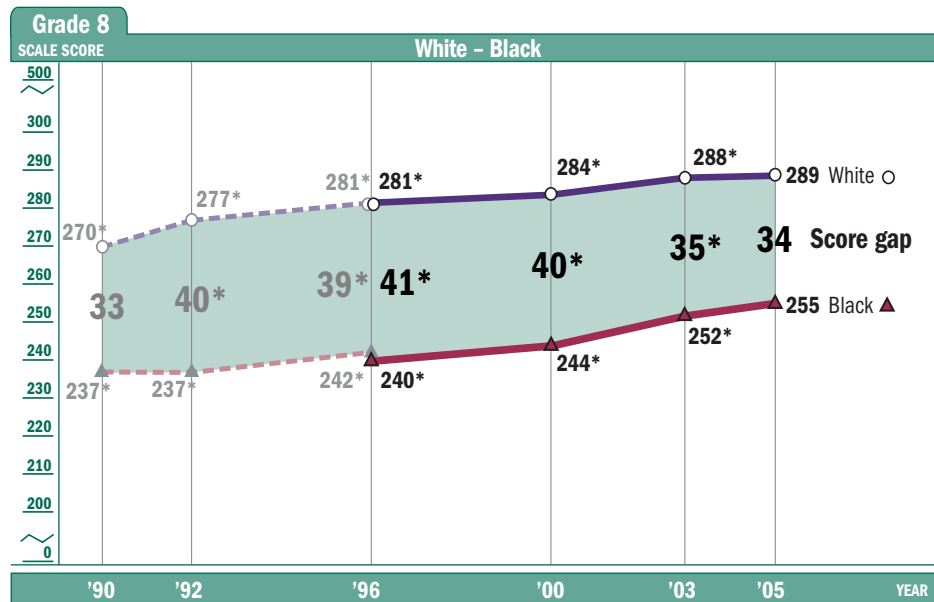
GRADE 8

▶ There was no significant change in the White - Black gap between 1990 and 2005, but the gap narrowed from 35 to 34 between 2003 and 2005.

▶ The White - Hispanic score gap narrowed from 29 to 27 between 2003 and 2005, but was not statistically different between 1990 and 2005.



Figure 5. Average mathematics scale scores and score gaps for White - Black and White - Hispanic students, grade 8: Various years, 1990-2005



* Significantly different from 2005.
 NOTE: Score gaps, displayed in the shaded area, are calculated based on differences between unrounded average scale scores.
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990-2005 Mathematics Assessments.

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 — Accommodations permitted

STUDENT GROUP RESULTS

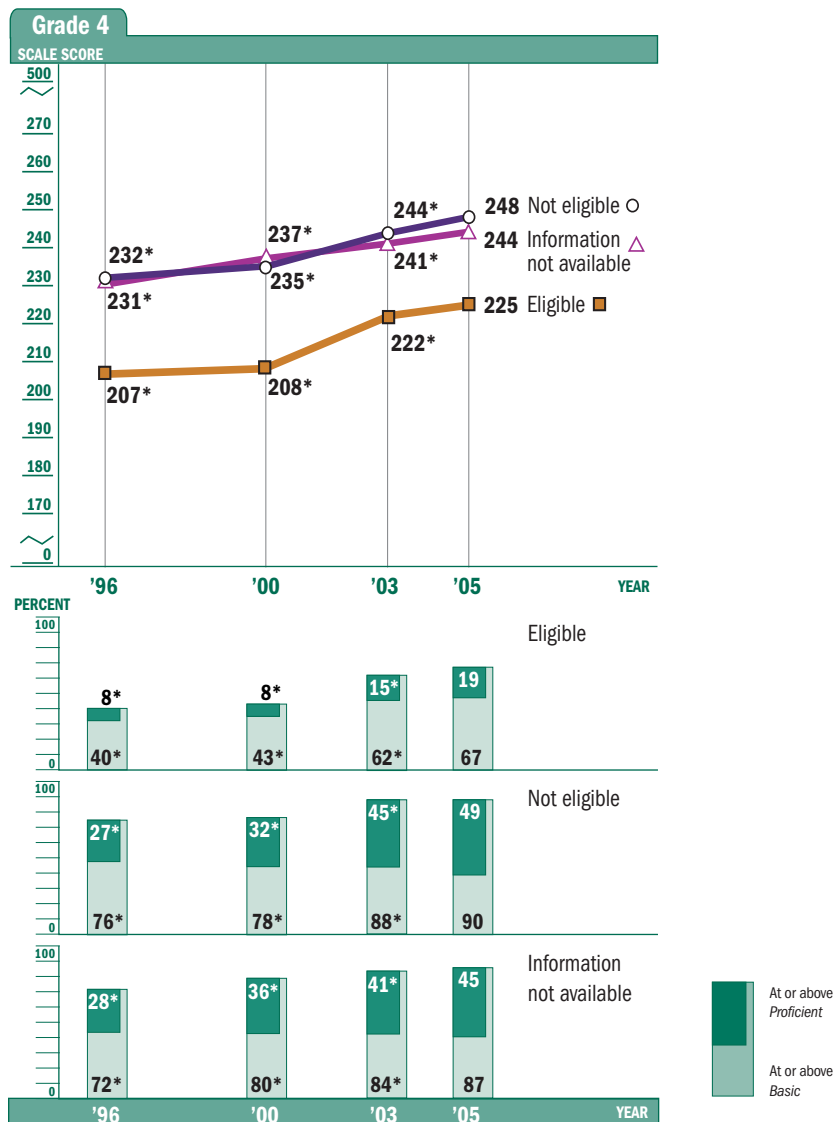
Results by Eligibility for Free/Reduced-Price School Lunch

An indicator of a student's socioeconomic status is whether or not that student is eligible for free or reduced-price lunch under the National School Lunch Program (NSLP). Children from families with incomes at or below 130 percent of the poverty level are eligible for free meals. Those with incomes between 130 percent and 185 percent of the poverty level are eligible for reduced-price meals. (For the period July 1, 2004, through June 30, 2005, for a family of four, 130 percent of the poverty level was \$24,505, and 185 percent was \$34,873. See <http://www.fns.usda.gov/cnd/lunch/> for more information.)

Average mathematics scores and achievement-level results by students' eligibility for free/reduced-price school lunch are shown in figure 6 for grade 4 and figure 7 for grade 8. NAEP first began collecting information on student eligibility for the program in 1996; therefore, results for these student groups are not available for 1990 and 1992.

The percentage of students with available information has changed over time. In addition, the regulations on classifying students as eligible have changed over the years. See Changing Demographics of Students at Grades 4 and 8 on page 22 for more information.

Figure 6. Average scale scores and achievement-level results in mathematics, by students' eligibility for free/reduced-price lunch, grade 4: Various years, 1996–2005



* Significantly different from 2005.
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1996–2005 Mathematics Assessments.



KEY FINDINGS

▶ In 2005, students who were not eligible for free or reduced-price school lunch had higher average mathematics scores than students who were eligible at both grades 4 and 8.

GRADE 4

▶ Average scores were higher in 2005 than in any previous assessment year both for students who were eligible for free or reduced-price lunch and for those who were not eligible.

▶ The percentages of students who were eligible and of those who were not eligible performing at or above *Basic* and at or above *Proficient* were higher in 2005 than in any previous assessment year.

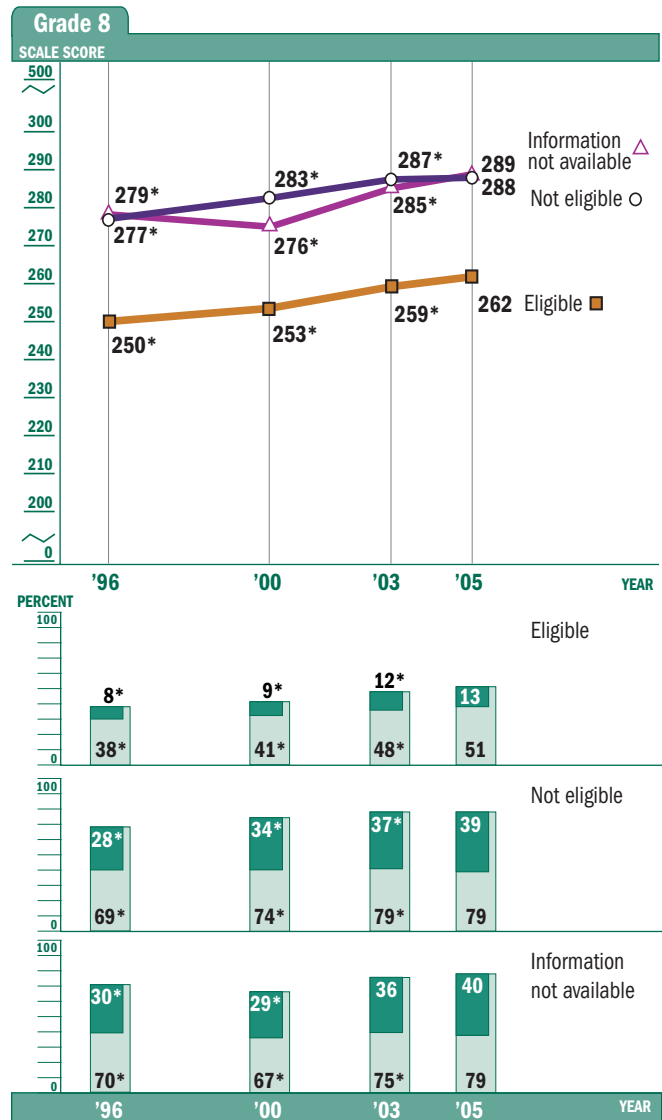
GRADE 8

▶ Average scores were higher in 2005 than in any previous assessment year both for students who were eligible for free or reduced-price lunch and for those who were not eligible.

▶ The percentages of students performing at or above *Basic* and at or above *Proficient* were higher in 2005 than in any previous assessment year both for students who were eligible and for those who were not eligible.



Figure 7. Average scale scores and achievement-level results in mathematics, by students' eligibility for free/reduced-price lunch, grade 8: Various years, 1996–2005



* Significantly different from 2005.
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1996–2005 Mathematics Assessments.

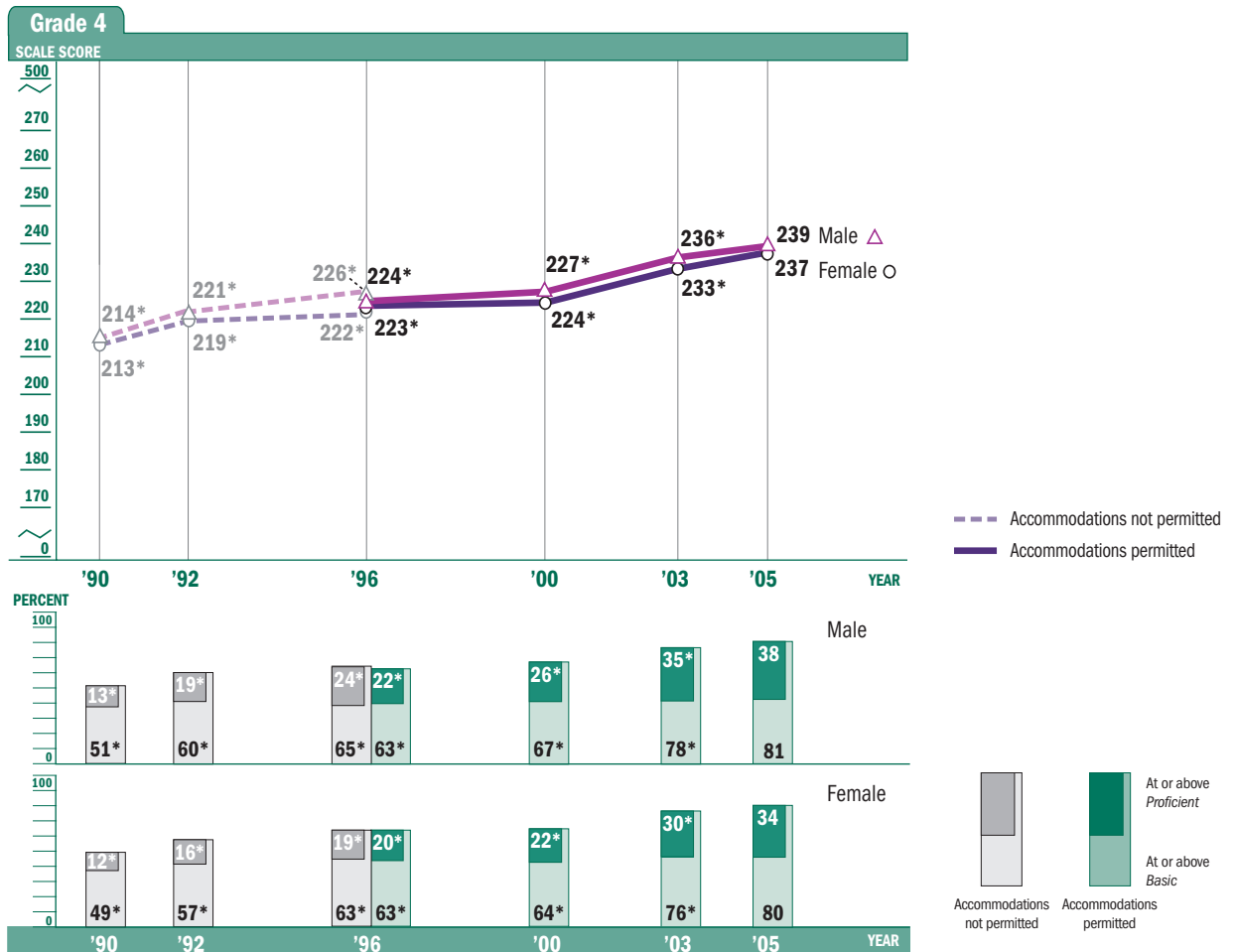
STUDENT GROUP RESULTS

Results by Gender

The average mathematics scores and percentages of students at or above *Basic* and at or above *Proficient* are

shown by gender at grade 4 in figure 8 and at grade 8 in figure 9.

Figure 8. Average scale scores and achievement-level results in mathematics, by gender, grade 4: Various years, 1990–2005



* Significantly different from 2005.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2005 Mathematics Assessments.





KEY FINDINGS

▶ In 2005, male students scored higher on average than female students at both grades 4 and 8.

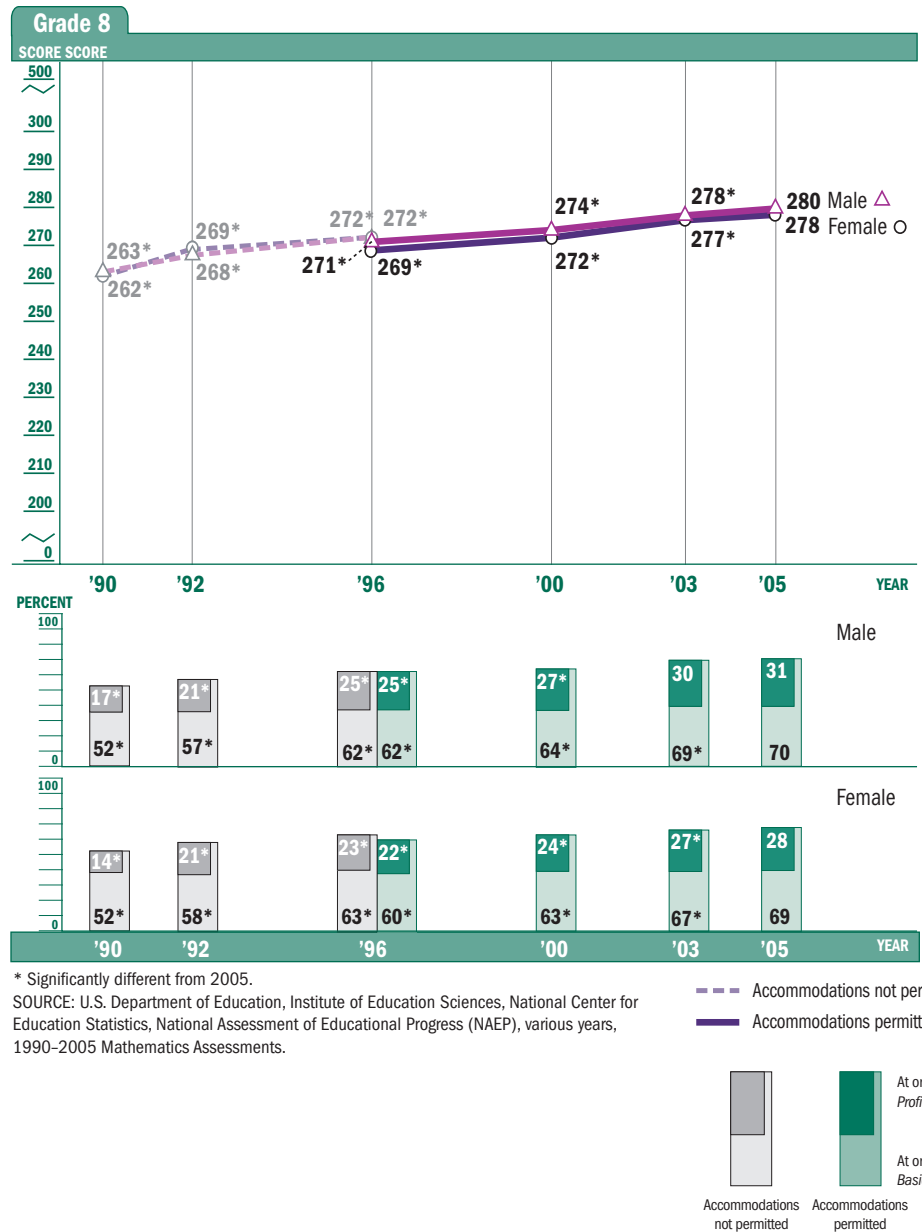
GRADE 4

- ▶ The average scores in 2005 were 239 and 237 for male and female students, respectively—the highest average scores of any assessment year.
- ▶ Greater percentages of both male and female students scored at or above *Basic* and at or above *Proficient* in 2005 than in any previous assessment year.

GRADE 8

- ▶ The average score was higher in 2005 than in 1990 or in 2003 for both male and female students.
- ▶ The percentages of both male and female students performing at or above *Basic* were higher in 2005 than in 1990 or in 2003.
- ▶ The percentages of both male and female students performing at or above *Proficient* were higher in 2005 than in 1990, and the percentage for female students increased from 27 percent in 2003 to 28 percent in 2005.

Figure 9. Average scale scores and achievement-level results in mathematics, by gender, grade 8: Various years, 1990–2005



STUDENT GROUP RESULTS

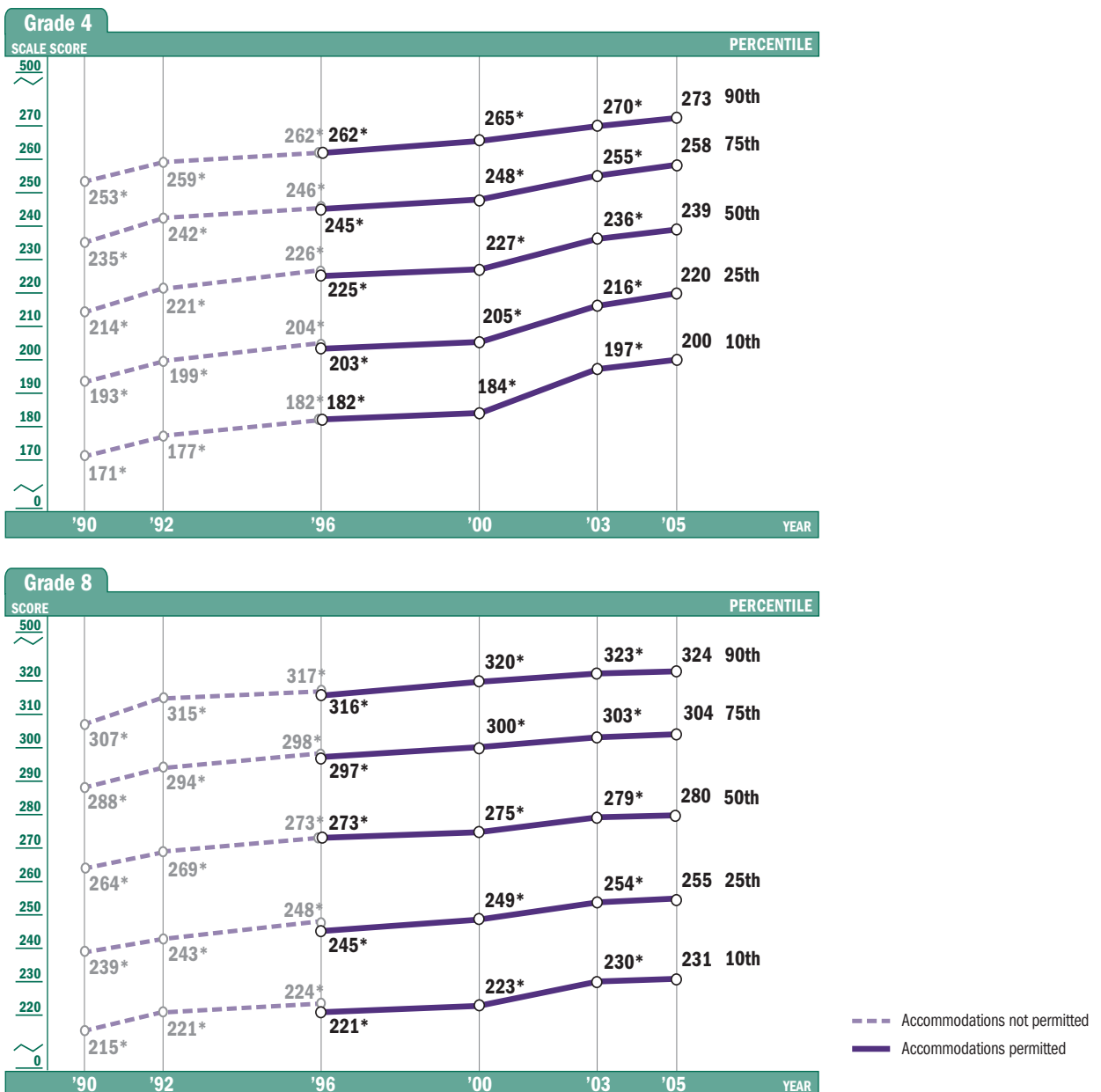


Comparing Scores Among Lower-, Middle-, and Higher-Performing Students

Examining trends in the performance of students at selected percentiles can indicate whether trends for lower-, middle-, or higher-scoring students diverge from the picture for students overall. The 10th and 25th percentiles represent lower-scoring students; the 50th represents middle-scoring, and the 75th and 90th percentiles represent higher-scoring students. A percentile indicates the percentage of students whose

scores fell at or below a particular score. For example, figure 10 shows that 25 percent of students assessed at grade 4 scored at or below 220 in 2005, higher than the 25th percentile score of any previous assessment year. At both grades 4 and 8, the score at each of the selected percentiles was higher in 2005 than in any previous assessment year.

Figure 10. Mathematics scale score percentiles, grades 4 and 8: Various years, 1990–2005



* Significantly different from 2005.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2005 Mathematics Assessments.



KEY FINDINGS

GRADE 4 (pages 14–15, 18)

- ▶ Between 2003 and 2005, 33 states showed increases ranging from 2 to 7 scale score points.
- ▶ Between 2003 and 2005, the percentage performing at or above *Basic* increased for 24 states.
- ▶ Each of the 42 states participating in both 1992 and 2005 showed an increase in average scale scores.
- ▶ Between 1992 and 2005, the percentage of students performing at or above *Basic* increased in all participating states.

GRADE 8 (pages 16–17, 19)

- ▶ Seven states showed average score increases between 2003 and 2005.
- ▶ The percentage performing at or above *Basic* increased between 2003 and 2005 for 5 states.
- ▶ Each of the 38 states that participated in both the 1990 and 2005 assessments had higher average scores in 2005.
- ▶ Between 1990 and 2005, the percentage at or above *Basic* increased in all 38 participating states.

Fourth- and Eighth-Grade Mathematics Results for States and Jurisdictions

The following pages show the results of the 2005 mathematics assessment for students at grades 4 and 8 who attended public schools in the 50 states and 2 other jurisdictions (which are all referred to as “states” in the key findings).

Beginning in 2003, states were required to participate biennially in NAEP reading and mathematics assessments at grades 4 and 8 in order to receive Title I funding. Results do not appear for some states in the early years because they either did not participate or did not meet the minimum participation guidelines for reporting. In 2005, all states met the minimum participation guidelines at both grades 4 and 8. The percentage of students scoring at or above *Basic* is shown in every year for which state data are available, beginning in 1992 at grade 4 (see table 1) and in 1990 at grade 8 (see table 2).

In comparing states to one another, it is important to consider that overall averages do not take into account the different demographics of the states’ student populations. Further information on student groups is provided in tables 5 and 6 as well as in the appendix tables. For instance, the performance of Black students from different states can be

compared for the same grade level. More information on these types of comparisons, including interactive state maps and state ranking tools, can be found at www.nationsreportcard.gov.

When making comparisons across states and within states over time, it is important to consider the different exclusion rates across the states and over time. Although every effort is made to include as many students as possible, different states have different policies, and those policies have changed over time. States that are more inclusive—that is, they assess greater percentages of their students with disabilities and English language learners—may have lower average scores than states that exclude greater percentages of these students. Table A-3 shows the exclusion rates for each state.

Finally, sample sizes and rounding can result in apparent inconsistencies. Small increases between 2003 and 2005 may be marked as significant, while increases of the same size between 1990 and 2005 may not be. See the Technical Notes beginning on page 32 for more information.

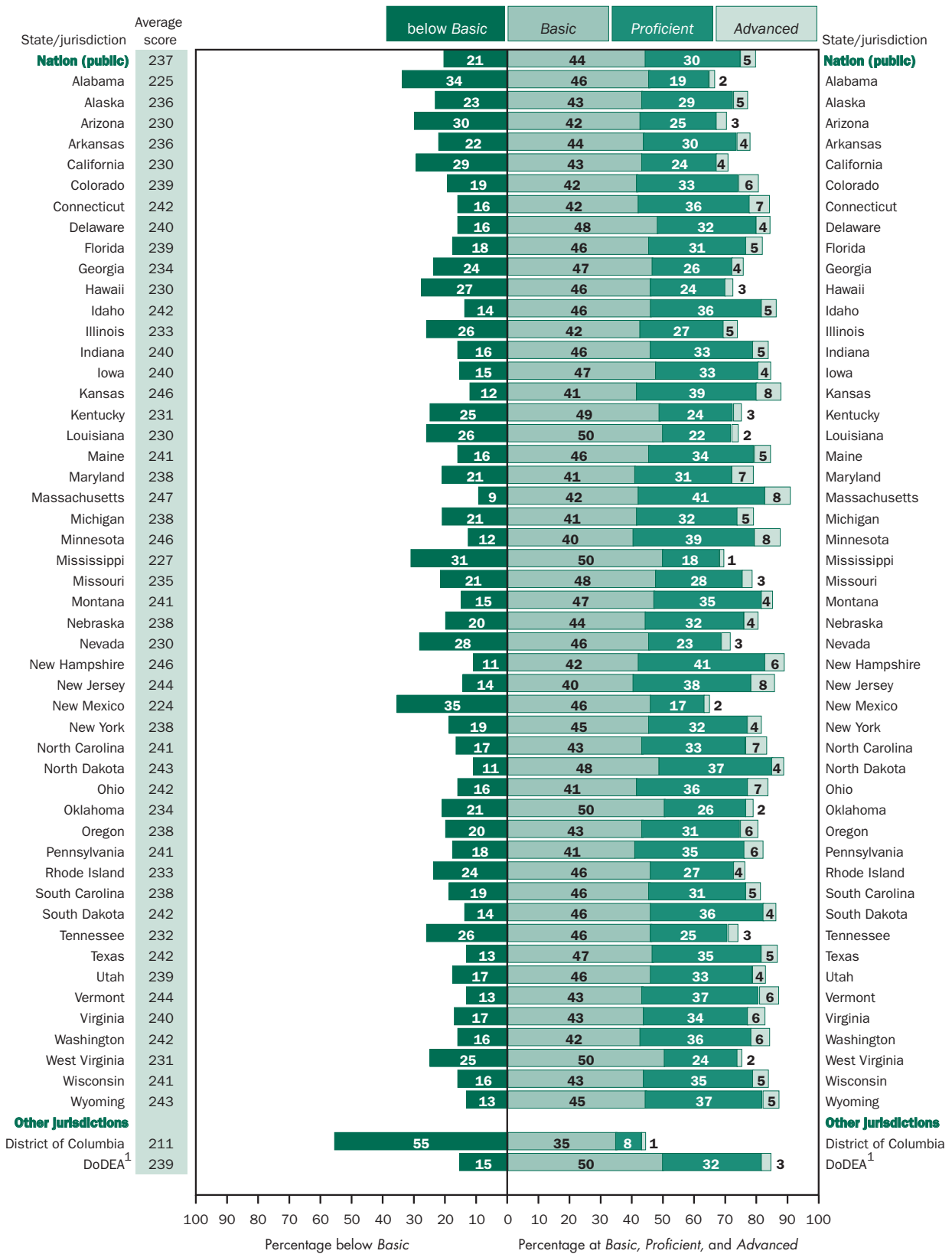
More information on performance for a particular state is available at <http://nces.ed.gov/nationsreportcard/states>.

Student Samples

The national results are based on a representative sample of students in public schools, private schools, Bureau of Indian Affairs schools, and Department of Defense schools. Private schools include Catholic, Conservative Christian, Lutheran, and other private schools. The state results are based on public school students only.

Before 2002, the national sample was separate from the state sample. Beginning in 2002, the NAEP national sample was obtained by aggregating the samples from each state, rather than by obtaining an independent national sample. As a result, the size of the national sample increased, and smaller differences between years or between types of students were found to be statistically significant than would have been detected in assessments before 2002.

Figure 11. Average mathematics scale scores and percentage of students within each achievement level, grade 4 public schools: By state, 2005



¹ Department of Defense Education Activity.

NOTE: The NAEP mathematics scale ranges from 0 to 500. Detail may not sum to totals because of rounding. The shaded bars are graphed using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.

Table 1. Percentage of students at or above *Basic* in mathematics, grade 4 public schools: By state, various years, 1992–2005

| State/jurisdiction | Accommodations not permitted | | | Accommodations permitted | | |
|------------------------------|------------------------------|------|------|--------------------------|------|------|
| | 1992 | 1996 | 2000 | 2000 | 2003 | 2005 |
| Nation (public) ¹ | 57* | 62* | 67* | 64* | 76* | 79 |
| Alabama | 43* | 48* | 57* | 55* | 65 | 66 |
| Alaska | — | 65* | — | — | 75 | 77 |
| Arizona | 53* | 57* | 58* | 57* | 70 | 70 |
| Arkansas | 47* | 54* | 56* | 55* | 71* | 78 |
| California | 46* | 46* | 52* | 50* | 67* | 71 |
| Colorado | 61* | 67* | — | — | 77 | 81 |
| Connecticut | 67* | 75* | 77* | 76* | 82 | 84 |
| Delaware | 55* | 54* | — | — | 81* | 84 |
| Florida | 52* | 55* | — | — | 76* | 82 |
| Georgia | 53* | 53* | 58* | 57* | 72* | 76 |
| Hawaii | 52* | 53* | 55* | 55* | 68* | 73 |
| Idaho | 63* | — | 71* | 68* | 80* | 86 |
| Illinois | — | — | 66* | 63* | 73 | 74 |
| Indiana | 60* | 72* | 78* | 77* | 82 | 84 |
| Iowa | 72* | 74* | 78* | 75* | 83 | 85 |
| Kansas | — | — | 75* | 76* | 85* | 88 |
| Kentucky | 51* | 60* | 60* | 59* | 72 | 75 |
| Louisiana | 39* | 44* | 57* | 57* | 67* | 74 |
| Maine | 75* | 75* | 74* | 73* | 83 | 84 |
| Maryland | 55* | 59* | 61* | 60* | 73* | 79 |
| Massachusetts | 68* | 71* | 79* | 77* | 84* | 91 |
| Michigan | 61* | 68* | 72* | 71* | 77 | 79 |
| Minnesota | 71* | 76* | 78* | 76* | 84* | 88 |
| Mississippi | 36* | 42* | 45* | 45* | 62* | 69 |
| Missouri | 62* | 66* | 72* | 71* | 79 | 79 |
| Montana | — | 71* | 73* | 72* | 81* | 85 |
| Nebraska | 67* | 70* | 67* | 65* | 80 | 80 |
| Nevada | — | 57* | 61* | 60* | 69 | 72 |
| New Hampshire | 72* | — | — | — | 87 | 89 |
| New Jersey | 68* | 68* | — | — | 80* | 86 |
| New Mexico | 50* | 51* | 51* | 50* | 63 | 65 |
| New York | 57* | 64* | 67* | 66* | 79 | 81 |
| North Carolina | 50* | 64* | 76* | 73* | 85 | 83 |
| North Dakota | 72* | 75* | 75* | 73* | 83* | 89 |
| Ohio | 57* | — | 73* | 73* | 81 | 84 |
| Oklahoma | 60* | — | 69* | 67* | 74* | 79 |
| Oregon | — | 65* | 67* | 65* | 79 | 80 |
| Pennsylvania | 65* | 68* | — | — | 78* | 82 |
| Rhode Island | 54* | 61* | 67* | 65* | 72* | 76 |
| South Carolina | 48* | 48* | 60* | 59* | 79 | 81 |
| South Dakota | — | — | — | — | 82* | 86 |
| Tennessee | 47* | 58* | 60* | 59* | 70 | 74 |
| Texas | 56* | 69* | 77* | 76* | 82* | 87 |
| Utah | 66* | 69* | 70* | 69* | 79* | 83 |
| Vermont | — | 67* | 73* | 73* | 85 | 87 |
| Virginia | 59* | 62* | 73* | 71* | 83 | 83 |
| Washington | — | 67* | — | — | 81 | 84 |
| West Virginia | 52* | 63* | 68* | 65* | 75 | 75 |
| Wisconsin | 71* | 74* | — | — | 79* | 84 |
| Wyoming | 69* | 64* | 73* | 71* | 87 | 87 |
| Other jurisdictions | | | | | | |
| District of Columbia | 23* | 20* | 24* | 24* | 36* | 45 |
| DoDEA ² | — | 64* | 70* | 69* | 84 | 85 |

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

* Significantly different from 2005 when only one jurisdiction or the nation is being examined.

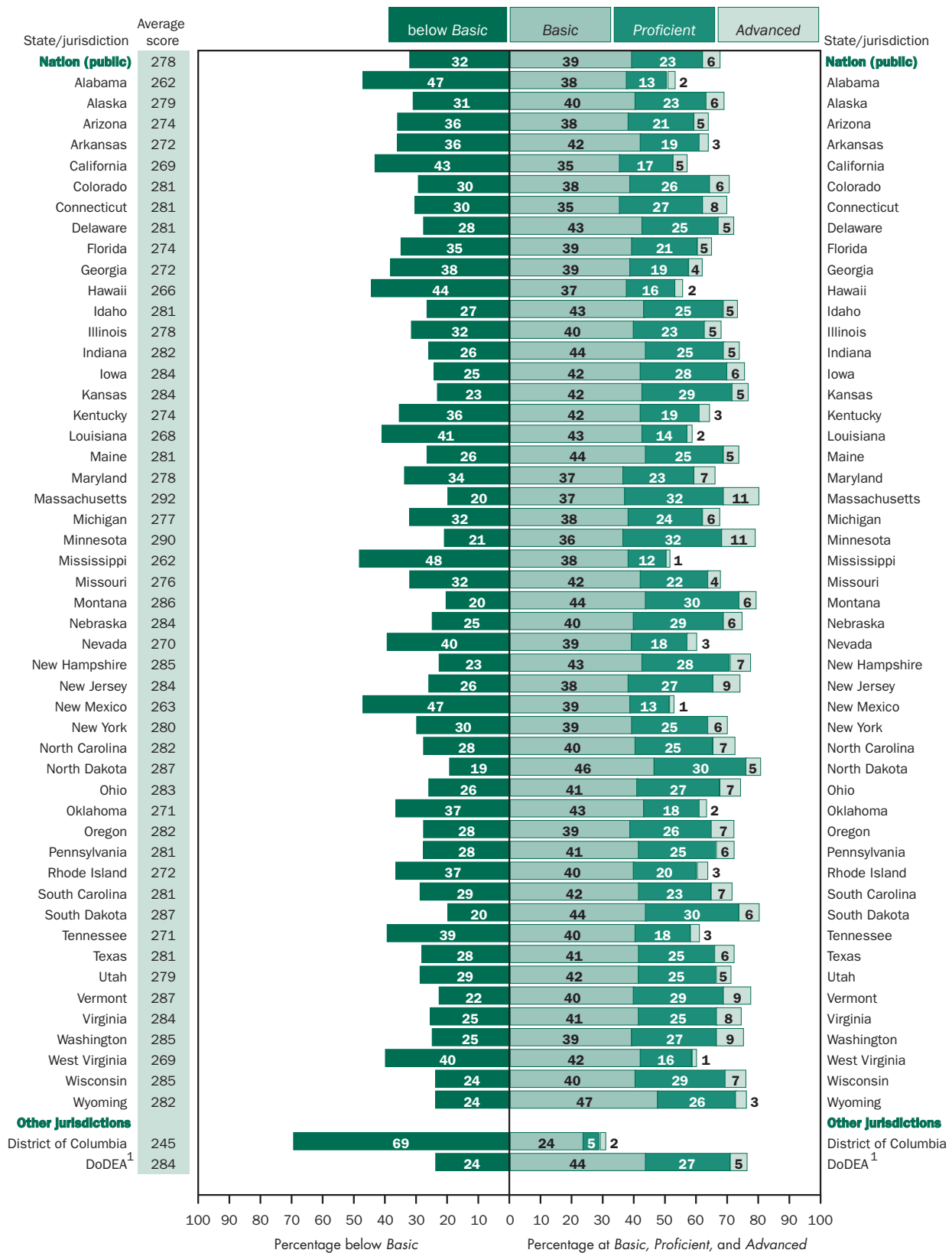
¹ National results for assessments prior to 2003 are based on the national sample, not on aggregated state samples.

² Department of Defense Education Activity (overseas and domestic schools). Before 2005, DoDEA overseas and domestic schools were separate jurisdictions in NAEP. Pre-2005 data presented here were recalculated for comparability.

NOTE: State-level data were not collected in 1990.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992–2005 Mathematics Assessments.

Figure 12. Average mathematics scale scores and percentage of students within each achievement level, grade 8 public schools: By state, 2005



¹ Department of Defense Education Activity.

NOTE: The NAEP mathematics scale ranges from 0 to 500. Detail may not sum to totals because of rounding. The shaded bars are graphed using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.

Table 2. Percentage of students at or above *Basic* in mathematics, grade 8 public schools: By state, various years, 1990–2005

| State/jurisdiction | Accommodations not permitted | | | | Accommodations permitted | | |
|------------------------------|------------------------------|------|------|------|--------------------------|------|------|
| | 1990 | 1992 | 1996 | 2000 | 2000 | 2003 | 2005 |
| Nation (public) ¹ | 51* | 56* | 61* | 65* | 62* | 67* | 68 |
| Alabama | 40* | 39* | 45* | 52 | 53 | 53 | 53 |
| Alaska | — | — | 68 | — | — | 70 | 69 |
| Arizona | 48* | 55* | 57* | 62 | 60 | 61 | 64 |
| Arkansas | 44* | 44* | 52* | 52* | 49* | 58* | 64 |
| California | 45* | 50* | 51* | 52* | 50* | 56 | 57 |
| Colorado | 57* | 64* | 67 | — | — | 74 | 70 |
| Connecticut | 60* | 64* | 70 | 72 | 70 | 73 | 70 |
| Delaware | 48* | 52* | 55* | — | — | 68* | 72 |
| Florida | 43* | 49* | 54* | — | — | 62 | 65 |
| Georgia | 47* | 48* | 51* | 55* | 54* | 59 | 62 |
| Hawaii | 40* | 46* | 51* | 52* | 51* | 56 | 56 |
| Idaho | 63* | 68* | — | 71 | 70 | 73 | 73 |
| Illinois | 50* | — | — | 68 | 67 | 66 | 68 |
| Indiana | 56* | 60* | 68* | 76 | 74 | 74 | 74 |
| Iowa | 70* | 76 | 78 | — | — | 76 | 75 |
| Kansas | — | — | — | 77 | 76 | 76 | 77 |
| Kentucky | 43* | 51* | 56* | 63 | 60 | 65 | 64 |
| Louisiana | 32* | 37* | 38* | 48* | 47* | 57 | 59 |
| Maine | — | 72 | 77 | 76 | 73 | 75 | 74 |
| Maryland | 50* | 54* | 57* | 65 | 62 | 67 | 66 |
| Massachusetts | — | 63* | 68* | 76* | 70* | 76* | 80 |
| Michigan | 53* | 58* | 67 | 70 | 68 | 68 | 68 |
| Minnesota | 67* | 74* | 75* | 80 | 80 | 82 | 79 |
| Mississippi | — | 33* | 36* | 41* | 42* | 47* | 52 |
| Missouri | — | 62* | 64 | 67 | 64 | 71 | 68 |
| Montana | 74* | — | 75* | 80 | 79 | 79 | 80 |
| Nebraska | 68* | 70* | 76 | 74 | 73 | 74 | 75 |
| Nevada | — | — | — | 58 | 55* | 59 | 60 |
| New Hampshire | 65* | 71* | — | — | — | 79 | 77 |
| New Jersey | 58* | 62* | — | — | — | 72 | 74 |
| New Mexico | 43* | 48* | 51 | 50 | 48* | 52 | 53 |
| New York | 50* | 57* | 61* | 68 | 63* | 70 | 70 |
| North Carolina | 38* | 47* | 56* | 70 | 67* | 72 | 72 |
| North Dakota | 75* | 78 | 77* | 77 | 76* | 81 | 81 |
| Ohio | 53* | 59* | — | 75 | 73 | 74 | 74 |
| Oklahoma | 52* | 59* | — | 64 | 62 | 65 | 63 |
| Oregon | 62* | — | 67* | 71 | 71 | 70 | 72 |
| Pennsylvania | 56* | 62* | — | — | — | 69 | 72 |
| Rhode Island | 49* | 56* | 60 | 64 | 59 | 63 | 63 |
| South Carolina | — | 48* | 48* | 55* | 53* | 68 | 71 |
| South Dakota | — | — | — | — | — | 78 | 80 |
| Tennessee | — | 47* | 53* | 53* | 52* | 59 | 61 |
| Texas | 45* | 53* | 59* | 68* | 67* | 69* | 72 |
| Utah | — | 67* | 70 | 68 | 66* | 72 | 71 |
| Vermont | — | — | 72* | 75 | 73* | 77 | 78 |
| Virginia | 52* | 57* | 58* | 67* | 65* | 72 | 75 |
| Washington | — | — | 67* | — | — | 72 | 75 |
| West Virginia | 42* | 47* | 54* | 62 | 58 | 63 | 60 |
| Wisconsin | 66* | 71* | 75 | — | — | 75 | 76 |
| Wyoming | 64* | 67* | 68* | 70* | 69* | 77 | 76 |
| Other jurisdictions | | | | | | | |
| District of Columbia | 17* | 22* | 20* | 23* | 23* | 29 | 31 |
| DoDEA ² | — | — | 64* | 70* | 68* | 79 | 76 |

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

* Significantly different from 2005 when only one jurisdiction or the nation is being examined.

¹ National results for assessments prior to 2003 are based on the national sample, not on aggregated state samples.

² Department of Defense Education Activity (overseas and domestic schools). Before 2005, DoDEA overseas and domestic schools were separate jurisdictions in NAEP Pre-2005 data presented here were recalculated for comparability.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2005 Mathematics Assessments.

Table 3. Average mathematics scale scores, grade 4 public schools: By state, various years, 1992-2005

| State/jurisdiction | Accommodations not permitted | | | Accommodations permitted | | |
|------------------------------|------------------------------|------|------|--------------------------|------|------|
| | 1992 | 1996 | 2000 | 2000 | 2003 | 2005 |
| Nation (public) ¹ | 219* | 222* | 226* | 224* | 234* | 237 |
| Alabama | 208* | 212* | 218* | 217* | 223 | 225 |
| Alaska | — | 224* | — | — | 233 | 236 |
| Arizona | 215* | 218* | 219* | 219* | 229 | 230 |
| Arkansas | 210* | 216* | 217* | 216* | 229* | 236 |
| California | 208* | 209* | 214* | 213* | 227* | 230 |
| Colorado | 221* | 226* | — | — | 235* | 239 |
| Connecticut | 227* | 232* | 234* | 234* | 241 | 242 |
| Delaware | 218* | 215* | — | — | 236* | 240 |
| Florida | 214* | 216* | — | — | 234* | 239 |
| Georgia | 216* | 215* | 220* | 219* | 230* | 234 |
| Hawaii | 214* | 215* | 216* | 216* | 227* | 230 |
| Idaho | 222* | — | 227* | 224* | 235* | 242 |
| Illinois | — | — | 225* | 223* | 233 | 233 |
| Indiana | 221* | 229* | 234* | 233* | 238 | 240 |
| Iowa | 230* | 229* | 233* | 231* | 238 | 240 |
| Kansas | — | — | 232* | 232* | 242* | 246 |
| Kentucky | 215* | 220* | 221* | 219* | 229 | 231 |
| Louisiana | 204* | 209* | 218* | 218* | 226* | 230 |
| Maine | 232* | 232* | 231* | 230* | 238* | 241 |
| Maryland | 217* | 221* | 222* | 222* | 233* | 238 |
| Massachusetts | 227* | 229* | 235* | 233* | 242* | 247 |
| Michigan | 220* | 226* | 231* | 229* | 236 | 238 |
| Minnesota | 228* | 232* | 235* | 234* | 242* | 246 |
| Mississippi | 202* | 208* | 211* | 211* | 223* | 227 |
| Missouri | 222* | 225* | 229* | 228* | 235 | 235 |
| Montana | — | 228* | 230* | 228* | 236* | 241 |
| Nebraska | 225* | 228* | 226* | 225* | 236 | 238 |
| Nevada | — | 218* | 220* | 220* | 228* | 230 |
| New Hampshire | 230* | — | — | — | 243* | 246 |
| New Jersey | 227* | 227* | — | — | 239* | 244 |
| New Mexico | 213* | 214* | 214* | 213* | 223 | 224 |
| New York | 218* | 223* | 227* | 225* | 236 | 238 |
| North Carolina | 213* | 224* | 232* | 230* | 242 | 241 |
| North Dakota | 229* | 231* | 231* | 230* | 238* | 243 |
| Ohio | 219* | — | 231* | 230* | 238* | 242 |
| Oklahoma | 220* | — | 225* | 224* | 229* | 234 |
| Oregon | — | 223* | 227* | 224* | 236 | 238 |
| Pennsylvania | 224* | 226* | — | — | 236* | 241 |
| Rhode Island | 215* | 220* | 225* | 224* | 230* | 233 |
| South Carolina | 212* | 213* | 220* | 220* | 236 | 238 |
| South Dakota | — | — | — | — | 237* | 242 |
| Tennessee | 211* | 219* | 220* | 220* | 228* | 232 |
| Texas | 218* | 229* | 233* | 231* | 237* | 242 |
| Utah | 224* | 227* | 227* | 227* | 235* | 239 |
| Vermont | — | 225* | 232* | 232* | 242 | 244 |
| Virginia | 221* | 223* | 230* | 230* | 239 | 240 |
| Washington | — | 225* | — | — | 238* | 242 |
| West Virginia | 215* | 223* | 225* | 223* | 231 | 231 |
| Wisconsin | 229* | 231* | — | — | 237* | 241 |
| Wyoming | 225* | 223* | 229* | 229* | 241* | 243 |
| Other jurisdictions | | | | | | |
| District of Columbia | 193* | 187* | 193* | 192* | 205* | 211 |
| DoDEA ² | — | 224* | 228* | 227* | 237* | 239 |

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

* Significantly different from 2005 when only one jurisdiction or the nation is being examined.

¹ National results for assessments prior to 2003 are based on the national sample, not on aggregated state samples.

² Department of Defense Education Activity (overseas and domestic schools). Before 2005, DoDEA overseas and domestic schools were separate jurisdictions in NAEP. Pre-2005 data presented here were recalculated for comparability.

NOTE: State-level data were not collected in 1990.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1992-2005 Mathematics Assessments.

Table 4. Average mathematics scale scores, grade 8 public schools: By state, various years, 1990–2005

| State/jurisdiction | Accommodations not permitted | | | | Accommodations permitted | | |
|------------------------------|------------------------------|------|------|------|--------------------------|------|------|
| | 1990 | 1992 | 1996 | 2000 | 2000 | 2003 | 2005 |
| Nation (public) ¹ | 262* | 267* | 271* | 274* | 272* | 276* | 278 |
| Alabama | 253* | 252* | 257* | 262 | 264 | 262 | 262 |
| Alaska | — | — | 278 | — | — | 279 | 279 |
| Arizona | 260* | 265* | 268* | 271 | 269* | 271 | 274 |
| Arkansas | 256* | 256* | 262* | 261* | 257* | 266* | 272 |
| California | 256* | 261* | 263* | 262* | 260* | 267 | 269 |
| Colorado | 267* | 272* | 276* | — | — | 283 | 281 |
| Connecticut | 270* | 274* | 280 | 282 | 281 | 284 | 281 |
| Delaware | 261* | 263* | 267* | — | — | 277* | 281 |
| Florida | 255* | 260* | 264* | — | — | 271 | 274 |
| Georgia | 259* | 259* | 262* | 266* | 265* | 270 | 272 |
| Hawaii | 251* | 257* | 262* | 263 | 262* | 266 | 266 |
| Idaho | 271* | 275* | — | 278 | 277* | 280 | 281 |
| Illinois | 261* | — | — | 277 | 275 | 277 | 278 |
| Indiana | 267* | 270* | 276* | 283 | 281 | 281 | 282 |
| Iowa | 278* | 283 | 284 | — | — | 284 | 284 |
| Kansas | — | — | — | 284 | 283 | 284 | 284 |
| Kentucky | 257* | 262* | 267* | 272 | 270* | 274 | 274 |
| Louisiana | 246* | 250* | 252* | 259* | 259* | 266 | 268 |
| Maine | — | 279 | 284 | 284 | 281 | 282 | 281 |
| Maryland | 261* | 265* | 270* | 276 | 272* | 278 | 278 |
| Massachusetts | — | 273* | 278* | 283* | 279* | 287* | 292 |
| Michigan | 264* | 267* | 277 | 278 | 277 | 276 | 277 |
| Minnesota | 275* | 282* | 284* | 288 | 287 | 291 | 290 |
| Mississippi | — | 246* | 250* | 254* | 254* | 261 | 262 |
| Missouri | — | 271* | 273 | 274 | 271* | 279 | 276 |
| Montana | 280* | — | 283* | 287 | 285 | 286 | 286 |
| Nebraska | 276* | 278* | 283 | 281* | 280* | 282 | 284 |
| Nevada | — | — | — | 268 | 265* | 268 | 270 |
| New Hampshire | 273* | 278* | — | — | — | 286 | 285 |
| New Jersey | 270* | 272* | — | — | — | 281 | 284 |
| New Mexico | 256* | 260* | 262 | 260 | 259* | 263 | 263 |
| New York | 261* | 266* | 270* | 276 | 271* | 280 | 280 |
| North Carolina | 250* | 258* | 268* | 280 | 276* | 281 | 282 |
| North Dakota | 281* | 283* | 284* | 283* | 282* | 287 | 287 |
| Ohio | 264* | 268* | — | 283 | 281 | 282 | 283 |
| Oklahoma | 263* | 268* | — | 272 | 270 | 272 | 271 |
| Oregon | 271* | — | 276* | 281 | 280 | 281 | 282 |
| Pennsylvania | 266* | 271* | — | — | — | 279 | 281 |
| Rhode Island | 260* | 266* | 269* | 273 | 269* | 272 | 272 |
| South Carolina | — | 261* | 261* | 266* | 265* | 277* | 281 |
| South Dakota | — | — | — | — | — | 285* | 287 |
| Tennessee | — | 259* | 263* | 263* | 262* | 268 | 271 |
| Texas | 258* | 265* | 270* | 275* | 273* | 277* | 281 |
| Utah | — | 274* | 277 | 275* | 274* | 281 | 279 |
| Vermont | — | — | 279* | 283* | 281* | 286 | 287 |
| Virginia | 264* | 268* | 270* | 277* | 275* | 282 | 284 |
| Washington | — | — | 276* | — | — | 281* | 285 |
| West Virginia | 256* | 259* | 265* | 271 | 266 | 271 | 269 |
| Wisconsin | 274* | 278* | 283 | — | — | 284 | 285 |
| Wyoming | 272* | 275* | 275* | 277* | 276* | 284 | 282 |
| Other jurisdictions | | | | | | | |
| District of Columbia | 231* | 235* | 233* | 234* | 235* | 243 | 245 |
| DoDEA ² | — | — | 274* | 278* | 277* | 285 | 284 |

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

* Significantly different from 2005 when only one jurisdiction or the nation is being examined.

¹ National results for assessments prior to 2003 are based on the national sample, not on aggregated state samples.

² Department of Defense Education Activity (overseas and domestic schools). Before 2005, DoDEA overseas and domestic schools were separate jurisdictions in NAEP Pre-2005 data presented here were recalculated for comparability.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2005 Mathematics Assessments.

Table 5. Average mathematics scale scores, grade 4 public schools: By state and student group, 2005

| State/jurisdiction | Race/ethnicity | | | | | Eligibility for free/reduced-price school lunch | | Gender | |
|----------------------|----------------|-------|----------|------------------------|-------------------------------|---|--------------|--------|--------|
| | White | Black | Hispanic | Asian/Pacific Islander | American Indian/Alaska Native | Eligible | Not eligible | Male | Female |
| Nation (public) | 246 | 220 | 225 | 251 | 227 | 225 | 248 | 238 | 236 |
| Alabama | 235 | 211 | ‡ | ‡ | ‡ | 214 | 238 | 225 | 225 |
| Alaska | 244 | 226 | 227 | 238 | 220 | 223 | 243 | 236 | 235 |
| Arizona | 243 | 217 | 218 | 241 | ‡ | 220 | 242 | 233 | 227 |
| Arkansas | 242 | 214 | 229 | ‡ | ‡ | 226 | 247 | 236 | 235 |
| California | 245 | 215 | 219 | 249 | 228 | 219 | 244 | 231 | 229 |
| Colorado | 247 | 222 | 223 | 242 | ‡ | 224 | 248 | 241 | 238 |
| Connecticut | 250 | 219 | 223 | 253 | ‡ | 223 | 249 | 244 | 241 |
| Delaware | 249 | 226 | 229 | 260 | ‡ | 229 | 247 | 241 | 238 |
| Florida | 247 | 224 | 233 | 259 | ‡ | 229 | 250 | 240 | 238 |
| Georgia | 243 | 221 | 229 | 255 | ‡ | 224 | 245 | 234 | 233 |
| Hawaii | 241 | 221 | 219 | 229 | ‡ | 220 | 239 | 229 | 231 |
| Idaho | 245 | ‡ | 226 | ‡ | ‡ | 234 | 248 | 242 | 241 |
| Illinois | 245 | 212 | 219 | 258 | ‡ | 218 | 245 | 234 | 232 |
| Indiana | 245 | 221 | 230 | ‡ | ‡ | 231 | 247 | 240 | 240 |
| Iowa | 242 | 224 | 222 | ‡ | ‡ | 231 | 244 | 242 | 238 |
| Kansas | 249 | 228 | 234 | 262 | ‡ | 235 | 254 | 247 | 245 |
| Kentucky | 234 | 217 | ‡ | ‡ | ‡ | 224 | 240 | 233 | 230 |
| Louisiana | 241 | 219 | ‡ | ‡ | ‡ | 224 | 244 | 231 | 229 |
| Maine | 241 | ‡ | ‡ | ‡ | ‡ | 230 | 245 | 243 | 239 |
| Maryland | 250 | 220 | 232 | 256 | ‡ | 221 | 247 | 240 | 237 |
| Massachusetts | 252 | 228 | 225 | 258 | ‡ | 231 | 254 | 248 | 247 |
| Michigan | 245 | 211 | ‡ | ‡ | ‡ | 223 | 246 | 240 | 236 |
| Minnesota | 251 | 219 | 223 | 242 | ‡ | 231 | 252 | 247 | 245 |
| Mississippi | 238 | 216 | ‡ | ‡ | ‡ | 221 | 241 | 227 | 226 |
| Missouri | 240 | 215 | 221 | ‡ | ‡ | 225 | 243 | 237 | 233 |
| Montana | 243 | ‡ | 234 | ‡ | 223 | 231 | 247 | 243 | 239 |
| Nebraska | 244 | 211 | 219 | ‡ | ‡ | 225 | 246 | 239 | 236 |
| Nevada | 240 | 214 | 219 | 243 | ‡ | 219 | 239 | 231 | 229 |
| New Hampshire | 246 | ‡ | 226 | ‡ | ‡ | 232 | 249 | 247 | 244 |
| New Jersey | 251 | 224 | 230 | 264 | ‡ | 227 | 252 | 246 | 242 |
| New Mexico | 238 | 213 | 218 | ‡ | 217 | 217 | 238 | 225 | 223 |
| New York | 247 | 222 | 226 | 254 | ‡ | 228 | 248 | 240 | 237 |
| North Carolina | 250 | 225 | 234 | 256 | ‡ | 229 | 251 | 242 | 241 |
| North Dakota | 245 | ‡ | ‡ | ‡ | 223 | 234 | 247 | 244 | 241 |
| Ohio | 248 | 221 | 231 | ‡ | ‡ | 227 | 252 | 243 | 241 |
| Oklahoma | 240 | 217 | 226 | ‡ | 229 | 227 | 243 | 235 | 233 |
| Oregon | 243 | 222 | 218 | 248 | ‡ | 230 | 244 | 239 | 238 |
| Pennsylvania | 247 | 219 | 220 | ‡ | ‡ | 225 | 250 | 241 | 240 |
| Rhode Island | 241 | 211 | 211 | 240 | ‡ | 218 | 243 | 234 | 233 |
| South Carolina | 250 | 223 | 236 | ‡ | ‡ | 227 | 250 | 238 | 238 |
| South Dakota | 245 | ‡ | ‡ | ‡ | 221 | 232 | 249 | 243 | 240 |
| Tennessee | 238 | 214 | 229 | ‡ | ‡ | 220 | 242 | 233 | 231 |
| Texas | 254 | 228 | 235 | 264 | ‡ | 233 | 253 | 244 | 240 |
| Utah | 242 | ‡ | 220 | 235 | ‡ | 229 | 244 | 240 | 237 |
| Vermont | 244 | ‡ | ‡ | ‡ | ‡ | 230 | 250 | 246 | 241 |
| Virginia | 247 | 224 | 230 | 256 | ‡ | 225 | 249 | 242 | 239 |
| Washington | 246 | 231 | 224 | 245 | ‡ | 231 | 250 | 242 | 241 |
| West Virginia | 231 | 226 | ‡ | ‡ | ‡ | 225 | 238 | 232 | 229 |
| Wisconsin | 247 | 210 | 224 | 236 | ‡ | 225 | 249 | 242 | 239 |
| Wyoming | 245 | ‡ | 234 | ‡ | ‡ | 236 | 247 | 244 | 242 |
| Other jurisdictions | | | | | | | | | |
| District of Columbia | 266 | 207 | 215 | ‡ | ‡ | 206 | 229 | 212 | 211 |
| DoDEA ¹ | 245 | 227 | 235 | 239 | ‡ | ‡ | ‡ | 241 | 237 |

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

¹ Department of Defense Education Activity.

NOTE: Results are not shown for students whose race/ethnicity was "unclassified" and for students whose eligibility status for free/reduced-price lunch was not available.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.

Table 6. Average mathematics scale scores, grade 8 public schools: By state and student group, 2005

| State/jurisdiction | Race/ethnicity | | | | | Eligibility for free/reduced-price school lunch | | Gender | |
|----------------------|----------------|-------|----------|------------------------|-------------------------------|---|--------------|--------|--------|
| | White | Black | Hispanic | Asian/Pacific Islander | American Indian/Alaska Native | Eligible | Not eligible | Male | Female |
| Nation (public) | 288 | 254 | 261 | 294 | 266 | 261 | 288 | 278 | 277 |
| Alabama | 276 | 240 | ‡ | ‡ | ‡ | 248 | 276 | 261 | 264 |
| Alaska | 288 | 266 | 272 | 270 | 264 | 264 | 287 | 280 | 278 |
| Arizona | 288 | 261 | 260 | ‡ | 259 | 260 | 285 | 274 | 274 |
| Arkansas | 281 | 243 | 266 | ‡ | ‡ | 260 | 282 | 270 | 273 |
| California | 284 | 248 | 254 | 293 | ‡ | 254 | 282 | 269 | 268 |
| Colorado | 292 | 256 | 260 | ‡ | ‡ | 261 | 290 | 281 | 281 |
| Connecticut | 293 | 249 | 254 | 292 | ‡ | 255 | 292 | 281 | 281 |
| Delaware | 291 | 264 | 268 | 306 | ‡ | 265 | 288 | 283 | 279 |
| Florida | 286 | 251 | 265 | 299 | ‡ | 260 | 285 | 276 | 272 |
| Georgia | 284 | 255 | 258 | 301 | ‡ | 257 | 285 | 273 | 272 |
| Hawaii | 277 | ‡ | 257 | 264 | ‡ | 251 | 276 | 265 | 266 |
| Idaho | 284 | ‡ | 261 | ‡ | ‡ | 272 | 286 | 280 | 282 |
| Illinois | 289 | 249 | 265 | 300 | ‡ | 258 | 290 | 279 | 276 |
| Indiana | 286 | 257 | 261 | ‡ | ‡ | 268 | 290 | 283 | 280 |
| Iowa | 286 | 256 | 264 | ‡ | ‡ | 269 | 290 | 283 | 284 |
| Kansas | 289 | 256 | 266 | ‡ | ‡ | 270 | 293 | 285 | 283 |
| Kentucky | 276 | 255 | ‡ | ‡ | ‡ | 264 | 283 | 275 | 273 |
| Louisiana | 281 | 252 | ‡ | ‡ | ‡ | 258 | 280 | 267 | 268 |
| Maine | 281 | ‡ | ‡ | ‡ | ‡ | 269 | 286 | 282 | 280 |
| Maryland | 292 | 258 | 262 | 304 | ‡ | 258 | 287 | 278 | 278 |
| Massachusetts | 297 | 263 | 265 | 314 | ‡ | 273 | 299 | 291 | 292 |
| Michigan | 285 | 247 | 265 | ‡ | ‡ | 258 | 285 | 279 | 275 |
| Minnesota | 296 | 251 | 263 | 285 | ‡ | 270 | 297 | 291 | 289 |
| Mississippi | 279 | 247 | ‡ | ‡ | ‡ | 253 | 279 | 263 | 262 |
| Missouri | 284 | 247 | ‡ | ‡ | ‡ | 262 | 286 | 278 | 275 |
| Montana | 290 | ‡ | ‡ | ‡ | 259 | 272 | 293 | 286 | 287 |
| Nebraska | 289 | 243 | 261 | ‡ | ‡ | 268 | 291 | 285 | 283 |
| Nevada | 280 | 247 | 256 | 281 | ‡ | 256 | 277 | 270 | 269 |
| New Hampshire | 286 | ‡ | ‡ | ‡ | ‡ | 271 | 288 | 286 | 285 |
| New Jersey | 295 | 260 | 264 | 309 | ‡ | 262 | 292 | 286 | 282 |
| New Mexico | 279 | 257 | 255 | ‡ | 253 | 254 | 278 | 264 | 262 |
| New York | 290 | 259 | 262 | 298 | ‡ | 267 | 291 | 280 | 280 |
| North Carolina | 292 | 263 | 265 | 303 | ‡ | 266 | 293 | 281 | 282 |
| North Dakota | 290 | ‡ | ‡ | ‡ | 261 | 274 | 292 | 287 | 287 |
| Ohio | 289 | 255 | 259 | ‡ | ‡ | 265 | 290 | 284 | 282 |
| Oklahoma | 278 | 249 | 257 | ‡ | 267 | 260 | 283 | 272 | 271 |
| Oregon | 287 | 258 | 257 | 299 | 274 | 270 | 289 | 284 | 281 |
| Pennsylvania | 287 | 250 | 267 | 297 | ‡ | 262 | 289 | 283 | 279 |
| Rhode Island | 281 | 249 | 244 | 278 | ‡ | 252 | 282 | 272 | 273 |
| South Carolina | 294 | 263 | 269 | ‡ | ‡ | 267 | 294 | 282 | 281 |
| South Dakota | 291 | ‡ | ‡ | ‡ | 260 | 276 | 294 | 287 | 287 |
| Tennessee | 278 | 246 | ‡ | ‡ | ‡ | 256 | 282 | 270 | 271 |
| Texas | 295 | 264 | 271 | 308 | ‡ | 268 | 293 | 283 | 279 |
| Utah | 283 | ‡ | 255 | 273 | ‡ | 268 | 284 | 280 | 278 |
| Vermont | 288 | ‡ | ‡ | ‡ | ‡ | 272 | 293 | 287 | 287 |
| Virginia | 293 | 263 | 270 | 300 | ‡ | 263 | 292 | 285 | 283 |
| Washington | 289 | 265 | 262 | 294 | 273 | 269 | 294 | 285 | 285 |
| West Virginia | 270 | 251 | ‡ | ‡ | ‡ | 259 | 278 | 268 | 270 |
| Wisconsin | 291 | 246 | 265 | 286 | ‡ | 263 | 292 | 285 | 284 |
| Wyoming | 284 | ‡ | 265 | ‡ | 262 | 272 | 287 | 283 | 281 |
| Other jurisdictions | | | | | | | | | |
| District of Columbia | 317 | 241 | 252 | ‡ | ‡ | 241 | 261 | 246 | 245 |
| DoDEA ¹ | 292 | 267 | 280 | 290 | ‡ | ‡ | ‡ | 285 | 283 |

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

¹ Department of Defense Education Activity.

NOTE: Results are not shown for students whose race/ethnicity was "unclassified" and for students whose eligibility status for free/reduced-price lunch was not available.

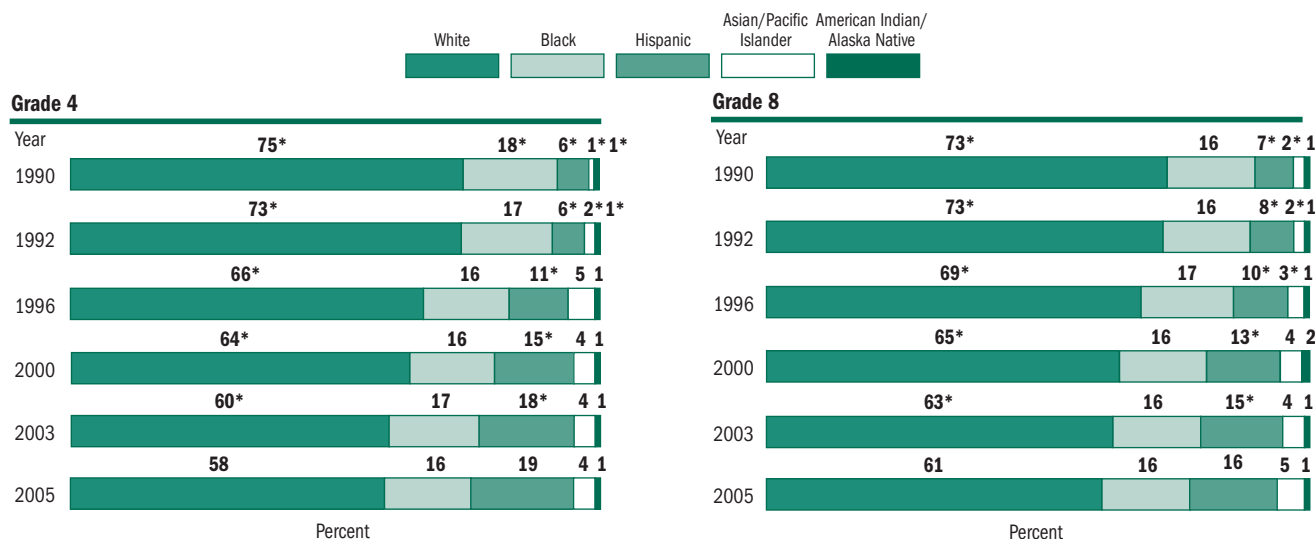
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.

Changing Demographics of Students at Grades 4 and 8

NAEP collects information on student demographics. Two variables—race/ethnicity and eligibility for free/reduced-price lunch—have shown changes over time, potentially affecting overall results. Figures 13 and 14 display the distribution over time of students nationwide taking the mathematics assessment by these two demographic variables. Table 7 provides similar information for national and state-level *public* schools. Figure 13 shows that, for example, at grade 4, White students made up a smaller proportion of the population in 2005 than they did in 1990, decreasing 17 percentage points over those 15 years. At the same time, the percentage of Hispanic students increased by 13 percentage points.

Figure 14 shows the distribution of students by eligibility for free or reduced-price school lunch. Here, differences could reflect a change in reporting practices associated with changing regulations and definitions of free lunch eligibility. Alternatively, the differences could be associated with changing demographics. For instance, at grade 4 the mathematics data show that the percentage of students for whom information on school lunch eligibility was not available decreased from 15 percent in 1996 to 8 percent in 2005. At the same time, the percentage of fourth-graders categorized as eligible for free or reduced-price lunch increased from 34 to 42 percent. The percentage of students not eligible remained around 50 percent.

Figure 13. Percentage distribution of students by race/ethnicity, grades 4 and 8: Various years, 1990–2005

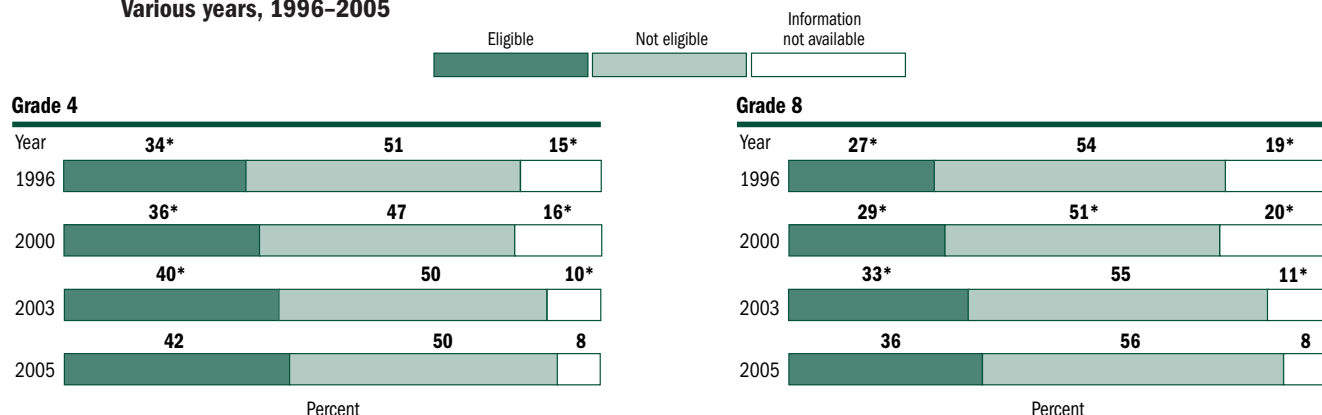


* Significantly different from 2005.

NOTE: The "unclassified" race/ethnicity category is not shown in this figure. Special analyses raised concerns about the accuracy and precision of national grade 4 Asian/Pacific Islander results in 2000 and grade 8 Asian/Pacific Islander results in 1996, so their performance results are omitted from this report.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2005 Mathematics Assessments.

Figure 14. Percentage distribution of students by eligibility for free/reduced-price school lunch, grades 4 and 8: Various years, 1996–2005



* Significantly different from 2005.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1996–2005 Mathematics Assessments.

Table 7. Percentage distribution of students by race/ethnicity, grades 4 and 8: By state, various years, 1990–2005

| State/jurisdiction | Grade 4 | | | | | | Grade 8 | | | | | |
|----------------------|---------|------|-------|------|----------|------|---------|------|-------|------|----------|------|
| | White | | Black | | Hispanic | | White | | Black | | Hispanic | |
| | 1992 | 2005 | 1992 | 2005 | 1992 | 2005 | 1990 | 2005 | 1990 | 2005 | 1990 | 2005 |
| Nation (public) | 72* | 57 | 18 | 17 | 7* | 20 | 73* | 60 | 16 | 17 | 7* | 17 |
| Alabama | 65* | 57 | 34 | 38 | #* | 2 | 68* | 59 | 32 | 37 | #* | 2 |
| Alaska | — | 56 | — | 4 | — | 4 | — | 57 | — | 5 | — | 4 |
| Arizona | 62* | 45 | 4 | 5 | 23* | 41 | 62* | 50 | 3* | 5 | 26* | 38 |
| Arkansas | 75 | 71 | 24 | 22 | #* | 5 | 75 | 71 | 24 | 23 | 1* | 4 |
| California | 50* | 31 | 7 | 7 | 30* | 49 | 49* | 33 | 7 | 8 | 30* | 45 |
| Colorado | 73* | 64 | 6 | 5 | 17* | 27 | 77* | 64 | 5 | 7 | 15* | 25 |
| Connecticut | 77* | 69 | 11 | 14 | 10 | 13 | 79* | 66 | 11* | 15 | 8* | 14 |
| Delaware | 70* | 54 | 25* | 33 | 2* | 9 | 70* | 56 | 26* | 33 | 2* | 7 |
| Florida | 63* | 48 | 24 | 23 | 12* | 24 | 65* | 52 | 22 | 22 | 12* | 22 |
| Georgia | 60* | 48 | 38 | 39 | 1* | 8 | 62* | 51 | 36 | 37 | 1* | 6 |
| Hawaii | 23* | 17 | 3 | 3 | 2 | 3 | 20* | 15 | 2 | 2 | 2 | 3 |
| Idaho | 92* | 82 | #* | 1 | 6* | 13 | 93* | 85 | # | 1 | 4* | 12 |
| Illinois | — | 54 | — | 19 | — | 22 | 70* | 61 | 19 | 21 | 8* | 14 |
| Indiana | 87* | 73 | 11* | 16 | 2* | 6 | 87* | 81 | 9 | 12 | 2* | 4 |
| Iowa | 95* | 85 | 2* | 5 | 1* | 6 | 95* | 88 | 2 | 4 | 1* | 5 |
| Kansas | — | 74 | — | 9 | — | 11 | — | 77 | — | 8 | — | 9 |
| Kentucky | 90* | 84 | 9 | 12 | #* | 2 | 90* | 86 | 9 | 10 | #* | 1 |
| Louisiana | 53 | 48 | 45 | 49 | 1 | 1 | 57 | 53 | 40 | 44 | 1 | 2 |
| Maine | 98* | 97 | #* | 1 | # | # | — | 96 | — | 2 | — | 1 |
| Maryland | 62* | 51 | 32 | 35 | 2* | 8 | 62* | 50 | 31* | 40 | 2 | 4 |
| Massachusetts | 83* | 75 | 8 | 9 | 4* | 11 | — | 76 | — | 8 | — | 10 |
| Michigan | 79* | 72 | 16 | 20 | 3 | 4 | 82* | 73 | 14* | 20 | 2* | 4 |
| Minnesota | 91* | 79 | 3* | 9 | 2* | 6 | 93* | 81 | 2* | 8 | #* | 4 |
| Mississippi | 42 | 47 | 58* | 51 | # | 1 | — | 46 | — | 51 | — | 1 |
| Missouri | 83* | 76 | 15 | 17 | 1* | 4 | — | 77 | — | 19 | — | 2 |
| Montana | — | 85 | — | 1 | — | 2 | 91* | 86 | # | # | 1* | 2 |
| Nebraska | 90* | 75 | 6* | 8 | 3* | 13 | 92* | 83 | 5 | 5 | 2* | 9 |
| Nevada | — | 46 | — | 12 | — | 33 | — | 55 | — | 10 | — | 29 |
| New Hampshire | 96 | 94 | 1* | 2 | 1* | 2 | 98* | 94 | #* | 1 | 1* | 2 |
| New Jersey | 69* | 57 | 16 | 18 | 11 | 15 | 69* | 57 | 17 | 20 | 9* | 15 |
| New Mexico | 45* | 30 | 4* | 2 | 45* | 56 | 42* | 34 | 2 | 2 | 42* | 51 |
| New York | 63* | 53 | 15 | 21 | 17 | 19 | 61 | 55 | 19 | 19 | 13 | 18 |
| North Carolina | 65* | 59 | 31* | 27 | 1* | 8 | 63 | 60 | 32 | 29 | 1* | 6 |
| North Dakota | 95* | 88 | #* | 1 | 1 | 1 | 93 | 88 | # | 1 | 1 | 1 |
| Ohio | 86* | 72 | 12* | 21 | 1* | 2 | 84 | 80 | 12 | 15 | 1 | 1 |
| Oklahoma | 77* | 59 | 9 | 11 | 3* | 9 | 77* | 62 | 11 | 11 | 2* | 7 |
| Oregon | — | 71 | — | 3 | — | 17 | 91* | 76 | 2 | 3 | 3* | 13 |
| Pennsylvania | 81* | 74 | 14 | 17 | 3* | 7 | 82 | 78 | 14 | 15 | 2* | 5 |
| Rhode Island | 82* | 73 | 7 | 8 | 7* | 16 | 86* | 73 | 5* | 8 | 5* | 15 |
| South Carolina | 58 | 55 | 41 | 41 | #* | 3 | — | 57 | — | 39 | — | 3 |
| South Dakota | — | 84 | — | 2 | — | 2 | — | 86 | — | 1 | — | 2 |
| Tennessee | 73 | 69 | 25 | 26 | #* | 3 | — | 75 | — | 22 | — | 2 |
| Texas | 49* | 38 | 14 | 13 | 34* | 46 | 50* | 43 | 14 | 15 | 33 | 39 |
| Utah | 93* | 81 | 1 | 1 | 4* | 13 | — | 84 | — | 1 | — | 10 |
| Vermont | — | 96 | — | 1 | — | 1 | — | 96 | — | 2 | — | 1 |
| Virginia | 71* | 61 | 25 | 24 | 2* | 8 | 70* | 61 | 25 | 26 | 2* | 6 |
| Washington | — | 69 | — | 6 | — | 15 | — | 74 | — | 4 | — | 10 |
| West Virginia | 96 | 95 | 2 | 4 | # | 1 | 96 | 95 | 3 | 4 | # | 1 |
| Wisconsin | 87* | 77 | 6* | 11 | 2* | 7 | 88* | 79 | 9 | 11 | 1* | 6 |
| Wyoming | 90* | 85 | 1 | 1 | 6* | 9 | 86 | 87 | 1 | 1 | 6 | 7 |
| Other jurisdictions | | | | | | | | | | | | |
| District of Columbia | 5 | 4 | 91* | 86 | 3* | 8 | 3 | 4 | 93* | 88 | 3* | 7 |
| DoDEA ¹ | — | 47 | — | 20 | — | 14 | — | 45 | — | 20 | — | 13 |

STUDENT
DEMOGRAPHICS

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.

The estimate rounds to zero.

* Significantly different from 2005 when only one jurisdiction or the nation is being examined.

¹ Department of Defense Education Activity.

NOTE: State-level data were not collected at grade 4 in 1990.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2005 Mathematics Assessments.

Grade 4 Mathematics Framework

The content of the NAEP mathematics assessment is based on a framework, which describes in detail how mathematics should be assessed by NAEP. The current NAEP mathematics framework was first used for the 1990 assessment and has continued to be used through 2005. It was developed through a comprehensive national consultative process and adopted by NAGB. The framework calls for the assessment of mathematics within five content areas and at different levels of complexity.

Mathematics content areas. In order to ensure that NAEP assesses an appropriate balance of content, the framework defines five broad areas of mathematical content. The content areas assessed at grade 4 are number properties and operations, measurement, geometry, data analysis and probability, and algebra. The framework calls for the test questions at grade 4 to be distributed across the five content areas in the following proportions:

| | | |
|---|--------------------|-----------------|
| Number properties and operations | Measurement | Geometry |
| 40% | 20% | 15% |
| Data analysis and probability | Algebra | |
| 10% | 15% | |

Mathematical complexity. The framework also calls for an assessment that measures different levels of mathematical complexity to make sure that NAEP assesses a variety of ways of knowing and doing mathematics. The level of complexity of a test question is determined by the demands that it places on students. For example, test questions with a high level of complexity at grade 4 might ask students to solve a problem in more than one way. According to the framework, the ideal balance for the assessment is that half the score is based on items of moderate complexity, with the remainder of the score based equally on items of low and high complexity.

Revisions were made to the framework for the 1996 assessment and again for the 2005 assessment. The names of some of the content areas changed in 2005, but there remains a consistent focus on the five key areas. The framework reflects current curricular emphases and objectives, while continuing a connection to previous frameworks. This connection allows the trend line at grade 4 that started with the 1990 assessment to be maintained.

The grade 4 mathematics assessment consists of ten 25-minute sections of mathematics questions. Each section contains 14 to 20 questions. The questions are both multiple choice and constructed response. Multiple-choice questions require students to select an answer from four options, while constructed-response questions require students to write either short or extended answers. Each student receives only a portion of the entire assessment, consisting of a booklet containing two 25-minute sections of mathematics questions.

Item Maps

The item maps presented on pages 26 and 30 illustrate the knowledge and skills demonstrated by students performing at different score points on the 2005 NAEP mathematics assessment. In order to provide additional context, the cut scores for the three NAEP achievement levels are marked on the item maps. The map location for each question represents the probability that, for a given score point, 65 percent of the students for a constructed-response question, 74 percent of the students for a four-option multiple-choice question, or 72 percent of the students for a five-option multiple-choice question answered that question successfully. For constructed-response questions, only responses considered to be completely correct are shown on the item maps.

Achievement-Level Descriptions for Grade 4

Mathematics achievement-level descriptions are based on NAGB achievement-level policy descriptions with subject- and grade-specific information added. The following descriptions are abbreviated versions of the full

achievement-level descriptions for grade 4 mathematics. The full descriptions can be found at <http://www.nagb.org/pubs/mathbook.pdf>.

Basic: Fourth-grade students performing at the *Basic* level should be able to estimate and use basic facts to perform simple computations with whole numbers; show some understanding of fractions and decimals; and solve some simple real-world problems in all NAEP content areas. Students at this level should be able to use—though not always accurately—four-function calculators, rulers, and geometric shapes. Their written responses will often be minimal and presented without supporting information.

Proficient: Fourth-grade students performing at the *Proficient* level should be able to use whole numbers to estimate, compute, and determine whether results are reasonable. They should have a conceptual understanding of fractions and decimals; be able to solve real-world problems in all NAEP content areas; and use four-function calculators, rulers, and geometric shapes appropriately. Students performing at the *Proficient* level should employ problem-solving strategies such as identifying and using appropriate information. Their written solutions should be organized and presented both with supporting information and explanations of how they were achieved.

Advanced: Fourth-grade students performing at the *Advanced* level should be able to solve complex and nonroutine real-world problems in all NAEP content areas. They should display mastery in the use of four-function calculators, rulers, and geometric shapes. The students are expected to draw logical conclusions and justify answers and solution processes by explaining why, as well as how, they were achieved. They should go beyond the obvious in their interpretations and be able to communicate their thoughts clearly and concisely.

Cut Scores

Cut scores represent the minimum score required for performance at each NAEP achievement level. NAEP cut scores were determined through a standard-setting process that convened a cross-section of educators and interested citizens from across the nation. The group was asked to determine what students should know and be able to do relative to a body of content reflected in the mathematics framework. NAGB then adopted a set of cut scores on the 0–500 scale that define the lower boundaries of the *Basic*, *Proficient*, and *Advanced* achievement levels. The mathematics cut scores, which appear on the item maps, are as follows:

| | Grade 4 | Grade 8 |
|-------------------|---------|---------|
| Basic | 214 | 262 |
| Proficient | 249 | 299 |
| Advanced | 282 | 333 |

Grade 4 Item Map

This map describes the knowledge or skill associated with answering individual mathematics questions. The map identifies the score point at which students had a high probability of successfully answering the question.¹

Advanced

282

NAEP Mathematics Scale

500

300

290

280

270

260

250

240

230

220

210

200

190

0

294 *Identify equation to describe pattern given in table*

286 *Identify given measurements on a ruler*

284 *Subtract fractions with common denominators*

276 *Approximate fraction of an hour given minutes*

273 *Solve a story problem involving large numbers (calculator available)*

272 *Given a solution, determine the numbers in the problem*

272 *Solve a story problem involving multiplication (calculator available)*

260 *Determine the width of a rectangle after it is folded*

258 *Represent a situation with an algebraic expression—Sample Question 1*

254 *Identify which figure on grid has greatest area*

253 *Complete a bar graph from a description of data*

245 *Determine the value of a point on a number line—Sample Question 2*

232 *Determine next number in given pattern*

228 *Classify numbers as even or odd*

223 *Determine which attribute could be measured with a meter stick*

219 *Subtract two-digit numbers to solve a story problem*

211 *Identify which shapes are cylinders*

211 *Subtract two-digit number from three-digit number*

203 *Identify a number given in expanded notation*

197 *Determine the most likely outcome in a story problem*

Proficient

249

Basic

214

¹ Each grade 4 mathematics question in the 2005 mathematics assessment was mapped onto the NAEP 0–500 mathematics scale. The position of a question on the scale represents the average scale score attained by students who had a 65 percent probability of successfully answering a constructed-response question, or a 74 percent probability of correctly answering a four-option multiple-choice question. Only selected questions are presented. Scale score ranges for mathematics achievement levels are referenced on the map. For constructed-response questions, the question description represents students' performance rated as completely correct.

NOTE: Regular type denotes a constructed-response question. *Italic* type denotes a multiple-choice question.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.

Sample Grade 4 Multiple-Choice Question

Sample Question 1 is a multiple-choice question in the algebra content area. This question asked students to represent a given situation with an algebraic expression.

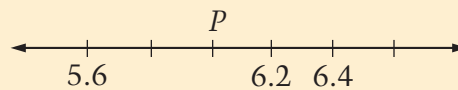
1. N stands for the number of hours of sleep Ken gets each night. Which of the following represents the number of hours of sleep Ken gets in 1 week?

- A $N + 7$
- B $N - 7$
- C $N \times 7$
- D $N \div 7$

61 percent of fourth-graders answered this question correctly.

Sample Grade 4 Short Constructed-Response Question

Sample Question 2 is a short constructed-response question in the number properties and operations content area. This question asked students to identify the point indicated on a number line. The response shown here would have been rated correct.



2. On the number line above, what number would be located at point P ?

Answer: 6.0

56 percent of fourth-graders wrote correct responses.

Grade 8 Mathematics Framework

As at grade 4, the content of the mathematics assessment at grade 8 is based on a framework that describes in detail how mathematics should be assessed by NAEP. The current NAEP mathematics framework was first used for the 1990 assessment and has continued to date to be the basis for the assessment content. It was developed through a comprehensive national consultative process and adopted by NAGB. The framework calls for the assessment of mathematics within five content areas and at different levels of complexity.

Mathematics content areas. In order to ensure that NAEP assesses an appropriate balance of content, the framework defines five broad areas of mathematical content. The content areas assessed at grade 8 are the same as those assessed at grade 4: number properties and operations, measurement, geometry, data analysis and probability, and algebra. At grade 8, however, the emphasis placed on each content area is different from that at grade 4, to reflect differences in curricular emphasis at the two grades. The framework calls for the eighth-grade test questions to be distributed across the five content areas in the following proportions:

| | | |
|---|--------------------|-----------------|
| Number properties and operations | Measurement | Geometry |
| 20% | 15% | 20% |
| Data analysis and probability | Algebra | |
| 15% | 30% | |

Mathematical complexity. As at grade 4, the framework calls for an assessment at grade 8 that measures different levels of mathematical complexity, to make sure that NAEP assesses a variety of ways of knowing and doing mathematics. The level of complexity of a test question is determined by the demands that it places on students. For example, test questions at grade 8 with a high level of complexity might ask students to provide a mathematical justification. According to the framework, the ideal balance for the assessment is that half the score is based on items of moderate complexity, with the remainder of the score based equally on items of low and high complexity.

Revisions were made to the framework for the 1996 assessment and again for the 2005 assessment. For example, the names of some of the content areas changed in 2005, but there remains a consistent focus on the five key areas. The framework reflects current curricular emphases and objectives, while continuing a connection to previous frameworks. This connection allows the trend line at grade 8 that started with the 1990 assessment to be maintained.

The grade 8 mathematics assessment consists of ten 25-minute sections of mathematics questions. Each section contains 16 to 21 questions. The questions are either multiple choice or constructed response. Multiple-choice questions require students to select an answer from four or five options, while constructed-response questions require students to write either short or extended answers. Each student receives only a portion of the entire assessment, consisting of a booklet containing two 25-minute sections of mathematics questions.

For More Information...

The complete mathematics framework is available on the NAGB website (<http://www.nagb.org/pubs/pubs.html>). To view more questions, including sample responses and statistics, visit the NAEP questions tool at <http://nces.ed.gov/nationsreportcard/itmrls/>.

Achievement-Level Descriptions for Grade 8

Mathematics achievement-level descriptions are based on NAGB achievement-level policy descriptions with subject- and grade-specific information added. The following descriptions are abbreviated versions of the full achieve-

ment-level descriptions for grade 8 mathematics. The full descriptions can be found at <http://www.nagb.org/pubs/mathbook.pdf>.

Basic: Eighth-grade students performing at the *Basic* level should complete problems correctly with the help of structural prompts such as diagrams, charts, and graphs. They should be able to solve problems in all NAEP content areas through the appropriate selection and use of strategies and technological tools—including calculators, computers, and geometric shapes. Students at this level also should be able to use fundamental algebraic and informal geometric concepts in problem solving.

Proficient: Eighth-grade students performing at the *Proficient* level should be able to conjecture, defend their ideas, and give supporting examples. They should understand the connections between fractions, percents, decimals, and other mathematical topics such as algebra and functions. Students at this level are expected to have a thorough understanding of *Basic*-level arithmetic operations—an understanding sufficient for problem solving in practical situations.

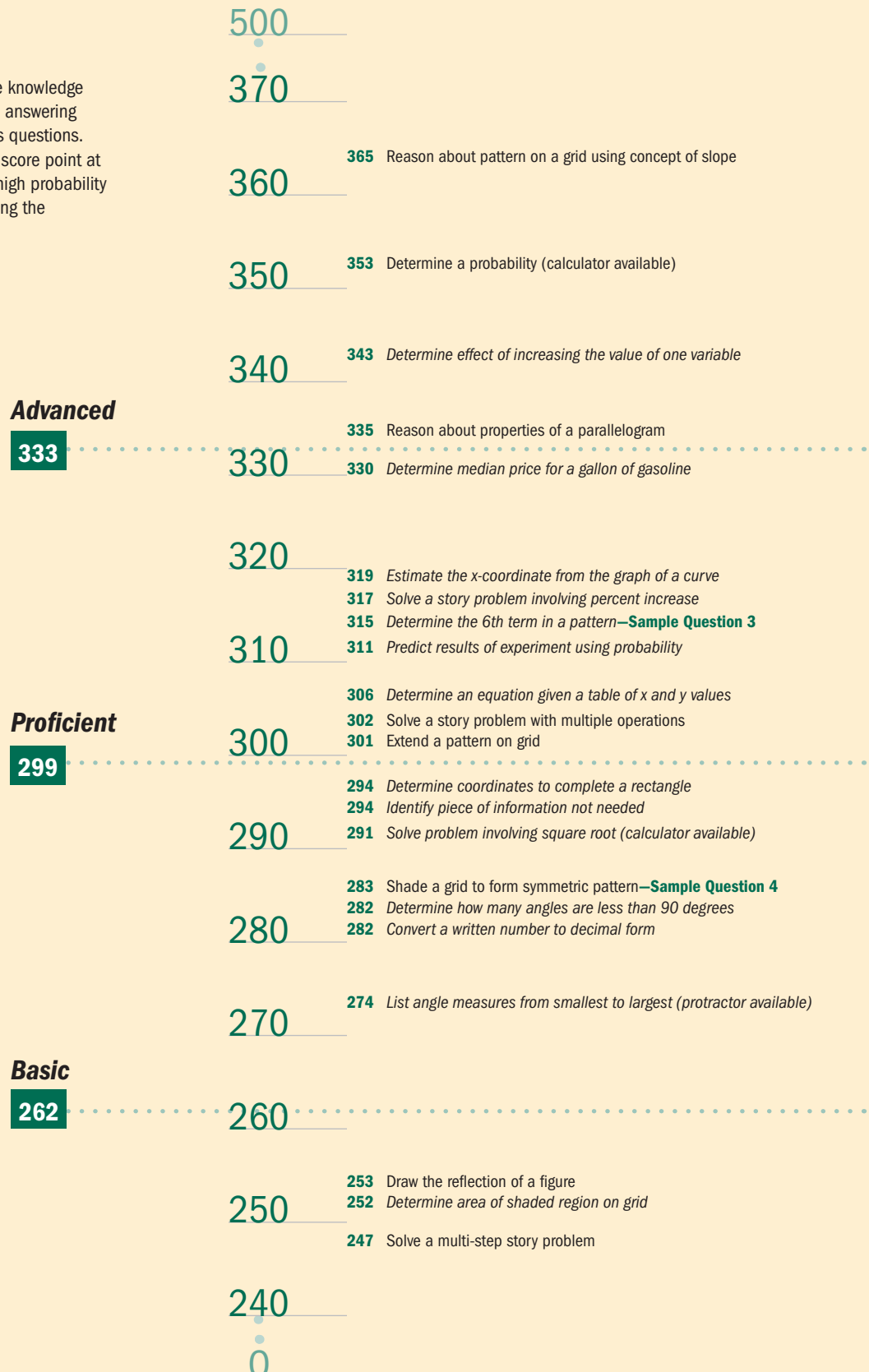
Advanced: Eighth-grade students performing at the *Advanced* level should be able to probe examples and counterexamples in order to shape generalizations from which they can develop models. Eighth-graders performing at the *Advanced* level should use number sense and geometric awareness to consider the reasonableness of an answer. They are expected to use abstract thinking to create unique problem-solving techniques and explain the reasoning processes underlying their conclusions.



Grade 8 Item Map

This map describes the knowledge or skill associated with answering individual mathematics questions. The map identifies the score point at which students had a high probability of successfully answering the question.¹

NAEP Mathematics Scale



¹ Each grade 8 mathematics question in the 2005 mathematics assessment was mapped onto the NAEP 0–500 mathematics scale. The position of a question on the scale represents the average scale score attained by students who had a 65 percent probability of successfully answering a constructed-response question, a 74 percent probability of correctly answering a four-option multiple-choice question, or a 72 percent probability of correctly answering a five-option multiple-choice question. Only selected questions are presented. Scale score ranges for mathematics achievement levels are referenced on the map. For constructed-response questions, the question description represents students' performance rated as completely correct.

NOTE: Regular type denotes a constructed-response question. *Italic* type denotes a multiple-choice question.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.

Sample Grade 8 Multiple-Choice Question

Sample Question 3 is a multiple-choice question in the algebra content area. This question asked students to infer a rule and find the next term in a sequence. The terms in this sequence are the squares of consecutive odd numbers.

1, 9, 25, 49, 81, ...

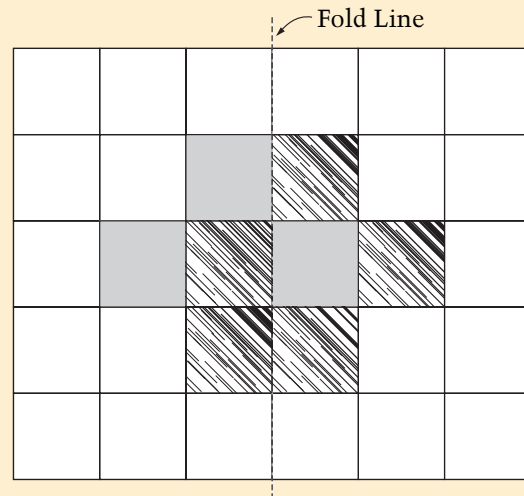
3. The same rule is applied to each number in the pattern above. What is the 6th number in the pattern?
- (A) 40
 - (B) 100
 - (C) 121
 - (D) 144
 - (E) 169

60 percent of eighth-graders answered this question correctly.

Sample Grade 8 Short Constructed-Response Question

Sample Question 4 is a short constructed-response question in the geometry content area. This question asked students to shade 5 additional squares in a grid that has 3 shaded squares to create a symmetric pattern. Students were given paper squares for this question. The response shown here would have been rated correct.

4. Shade five more squares on the grid below so that if your completed figure were folded along the fold line both sides would match.



58 percent of eighth-graders gave correct responses.

Technical Notes

NAEP Sampling Procedures

The schools and students participating in NAEP assessments are chosen to be nationally representative. Samples of schools and students are selected from each state and from the District of Columbia and Department of Defense schools. The results from the assessed students are combined to provide accurate estimates of overall national performance and of the performance of individual states and other jurisdictions (hereafter referred to as states). Results are weighted to take into account the fact that states, and schools within states, represent different proportions of the overall national population. For example, since the number of students assessed in most states is roughly the same (to allow for stable state estimates and administrative efficiencies), the results for students in less populous states are assigned smaller weights than the results for students in more populous states. The definition of the national sample has changed in 2005; it now includes all of the international Department of Defense schools.

Accommodations

It is important to assess all selected students from the target population. Before 1996, however, no testing accommodations were provided in the mathematics assessment to students with disabilities and English language learners. In 1996, administration procedures were introduced that allowed the use of accommodations for students who required them to participate, such as extra testing time or individual rather than group administration. The 1996 and 2000 mathematics assessments used a split-sample design to make it possible to report trends in students' mathematics achievement across all the assessment years and, at the same time, examine how including students assessed with accommodations affected overall assessment results. Separate samples of students were assessed with each of the administration procedures. Based on analysis of the results, it was decided that, beginning with the 2003 mathematics assessment, NAEP would permit the use of accommodations. In this report, the first year with a split sample, 1996, shows results from both samples. For subsequent years, only results from the accommodated sample are shown.

School and Student Participation Rates

In order to ensure unbiased samples, NCES and NAGB established participation rate standards that states and jurisdictions were required to meet in order for their results to be reported. Participation rates for the original sample needed to be at least 85 percent for schools in order to meet reporting requirements. In the 2005 mathematics assessment, all states and jurisdictions met NAEP participation rate standards at both grades 4 and 8.

Private School Results

Results for private school students overall are not presented in this report because the participation rates for this group were too low to produce valid and reliable estimates. Results are, however, available for students who attended certain types of private schools. For example, the table below shows average scale scores and achievement-level results for students in Catholic and Lutheran schools in 2005.

| Type of school | Average scale score | Percentage of students | |
|----------------|---------------------|--------------------------|-------------------------------|
| | | At or above <i>Basic</i> | At or above <i>Proficient</i> |
| Grade 4 | | | |
| Catholic | 244 | 88 | 43 |
| Lutheran | 245 | 89 | 47 |
| Grade 8 | | | |
| Catholic | 290 | 81 | 40 |
| Lutheran | 293 | 84 | 44 |

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.

These data and other private school data are available in the NAEP data tool (<http://nces.ed.gov/nationsreportcard/naepdata>).

Interpreting Statistical Significance

Comparisons over time or between groups are based on statistical tests that consider both the size of the differences and the standard errors of the two statistics being compared. Standard errors are margins of error, and estimates based on smaller groups are likely to have larger margins of error. The size of the standard errors may also be influenced by other factors such as how representative

the students assessed are of the population as a whole. When an estimate—such as an average score—has a large standard error, a numerical difference that seems large may not be statistically significant. Differences of the same magnitude may or may not be statistically significant depending upon the size of the standard errors of the statistics. For example, a 3-point difference between male and female students may be statistically significant, while a 3-point difference between White and Hispanic students may not be. Standard errors for the NAEP scores and percentages presented in this report are available on the NAEP website (<http://nces.ed.gov/nationsreportcard/naepdata/>).

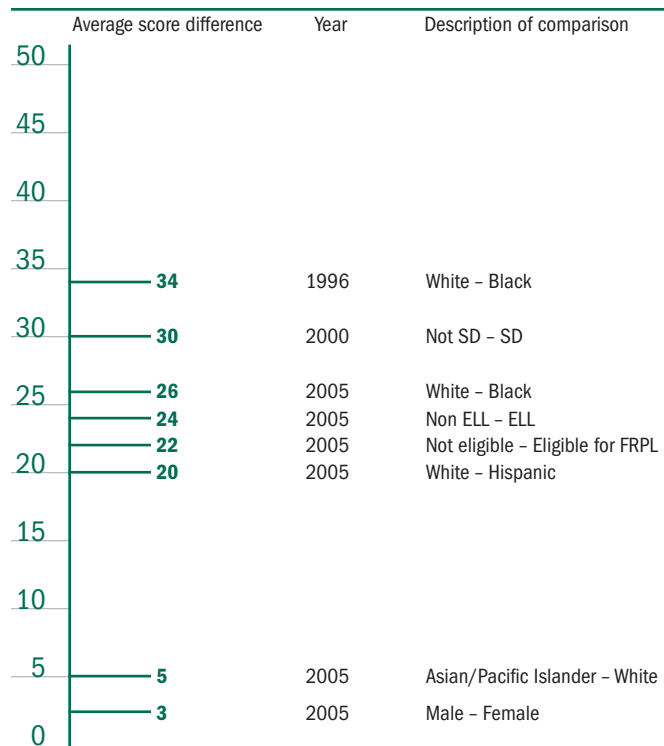
In the tables and charts of this report, the symbol (*) is used to indicate that a score or percentage in a previous assessment year is significantly different from the comparable measure in 2005. Statistically significant differences between groups of students—for example, between White students and Black students—are not identified in the table and charts, but they were tested in the same way. Any difference between scores or percentages that is identified as higher, lower, larger, or smaller in this report meets the requirements for statistical significance. The differences described in this report have been determined to be statistically significant at the .05 level with appropriate adjustments for multiple comparisons.

Interpreting Score Differences

Although this report discusses only changes that have been calculated to be statistically significant, it is important to provide some context about what constitutes a small or large difference in average scale scores. Beginning in 2002, the national samples have been derived from the sum of all of the state samples, instead of from a separate and smaller nationally representative sample. Therefore, national sample sizes have increased dramatically. Standard errors are an estimate of the uncertainty in the data, and larger sample sizes reduce this uncertainty. So while a small—1- or 2-point—difference may not have met the standard for significance before 2002, that same difference may meet that standard in later years because of the smaller standard errors.

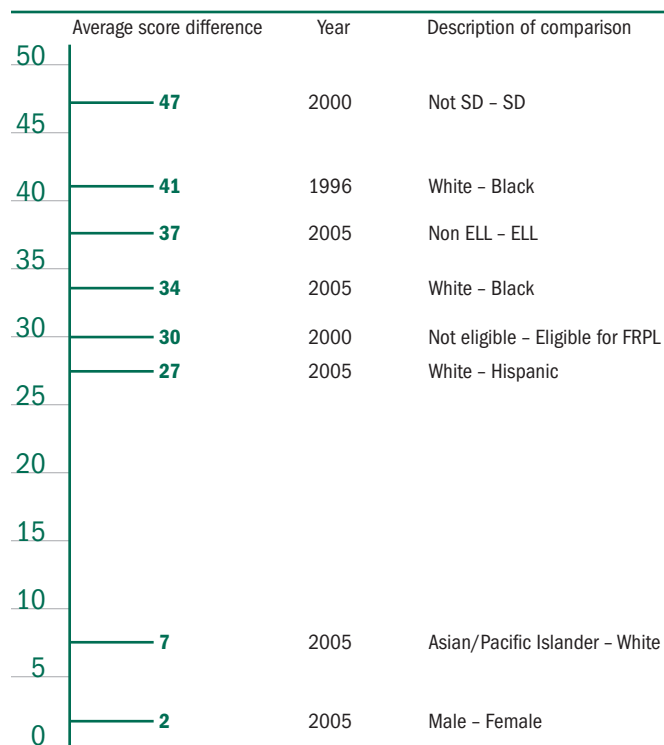
To get a sense of the magnitude of score differences, figures A-1 and A-2 provide examples of score gaps of different sizes. For instance, in figure A-1, the score gaps range in size from 3 points (between male and female grade 4 students in 2005) to 34 points (between White and Black grade 4 students in 1996). In figure A-2, the range at grade 8 is even larger—from 2 points in 2005 between male and female students to 47 points in 2000 between students with disabilities and those without disabilities.

Figure A-1. Selected average mathematics scale score differences, grade 4: Various years, 1996–2005



NOTE: All differences are significant at the .05 level. SD = students with disabilities. ELL = English language learners. FRPL = free or reduced-price lunch.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1996–2005 Mathematics Assessments.

Figure A-2. Selected average mathematics scale score differences, grade 8: Various years, 1996–2005



NOTE: All differences are significant at the .05 level. SD = students with disabilities. ELL = English language learners. FRPL = free or reduced-price lunch.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1996–2005 Mathematics Assessments.

Table A-1. Total number of students assessed and percentage of sampled students identified, excluded, and assessed with and without accommodations, by students with disabilities and English language learners, grades 4 and 8 public and nonpublic schools: Various years, 1990–2005

| Student characteristics | Accommodations not permitted | | | Accommodations permitted | | | |
|-----------------------------------|------------------------------|-------|-------|--------------------------|--------|---------|---------|
| | 1990 | 1992 | 1996 | 1996 | 2000 | 2003 | 2005 |
| Grade 4 | | | | | | | |
| Total number of students assessed | 3,400 | 7,200 | 6,600 | 6,900 | 13,900 | 190,100 | 172,000 |
| SD and/or ELL | | | | | | | |
| Identified | – | 9 | 14 | 15 | 18 | 21 | 21 |
| Excluded | – | 6 | 6 | 4 | 4 | 4 | 3 |
| Assessed | – | 3 | 8 | 11 | 14 | 17 | 18 |
| Without accommodations | – | 3 | 8 | 7 | 9 | 9 | 9 |
| With accommodations | – | † | † | 5 | 5 | 8 | 9 |
| SD only | | | | | | | |
| Identified | – | 7 | 11 | 10 | 12 | 13 | 13 |
| Excluded | – | 4 | 5 | 3 | 3 | 3 | 2 |
| Assessed | – | 3 | 6 | 7 | 9 | 10 | 10 |
| Without accommodations | – | 3 | 6 | 4 | 5 | 4 | 3 |
| With accommodations | – | † | † | 4 | 4 | 6 | 7 |
| ELL only | – | | | | | | |
| Identified | – | 3 | 3 | 6 | 7 | 10 | 10 |
| Excluded | – | 2 | 1 | 1 | 1 | 1 | 1 |
| Assessed | – | 1 | 2 | 5 | 6 | 8 | 8 |
| Without accommodations | – | 1 | 2 | 3 | 4 | 6 | 6 |
| With accommodations | – | † | † | 2 | 1 | 2 | 2 |
| Grade 8 | | | | | | | |
| Total number of students assessed | 3,400 | 7,700 | 7,100 | 7,100 | 15,900 | 153,200 | 161,600 |
| SD and/or ELL | | | | | | | |
| Identified | – | 9 | 11 | 12 | 13 | 17 | 17 |
| Excluded | – | 6 | 4 | 3 | 4 | 3 | 3 |
| Assessed | – | 4 | 6 | 8 | 10 | 14 | 14 |
| Without accommodations | – | 4 | 6 | 6 | 7 | 7 | 6 |
| With accommodations | – | † | † | 3 | 3 | 6 | 8 |
| SD only | | | | | | | |
| Identified | – | 7 | 9 | 9 | 10 | 13 | 12 |
| Excluded | – | 4 | 4 | 3 | 3 | 3 | 3 |
| Assessed | – | 3 | 5 | 6 | 7 | 10 | 10 |
| Without accommodations | – | 3 | 5 | 4 | 5 | 4 | 3 |
| With accommodations | – | † | † | 2 | 2 | 6 | 7 |
| ELL only | | | | | | | |
| Identified | – | 2 | 3 | 3 | 4 | 6 | 6 |
| Excluded | – | 2 | 1 | 1 | 1 | 1 | 1 |
| Assessed | – | 1 | 2 | 2 | 3 | 5 | 5 |
| Without accommodations | – | 1 | 2 | 2 | 2 | 4 | 4 |
| With accommodations | – | † | † | # | 1 | 1 | 1 |

– Not available. Data on participation of SD/ELL are not available for 1990.

† Not applicable. Accommodations were not permitted in this sample.

The estimate rounds to zero.

NOTE: SD = students with disabilities. ELL = English language learners. Students identified as both SD and ELL were counted only once under the combined SD and/or ELL category, but were counted separately under the SD and ELL categories. The numbers of students are rounded to the nearest hundred. The percentages presented in the table are based on the number of students selected to be assessed, which is different from the number of students actually assessed shown in the table. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2005 Mathematics Assessments.

Table A-2. Percentages of sampled students of each race/ethnicity identified as students with disabilities and English language learners, excluded, and assessed, grades 4 and 8 public and nonpublic schools: 2005

| Student characteristics | White | Black | Hispanic |
|-------------------------|-------|-------|----------|
| Grade 4 | | | |
| SD and/or ELL | | | |
| Identified | 14 | 17 | 46 |
| Excluded | 2 | 4 | 6 |
| Assessed | 12 | 13 | 40 |
| Without accommodations | 4 | 3 | 27 |
| With accommodations | 8 | 9 | 14 |
| SD only | | | |
| Identified | 13 | 16 | 12 |
| Excluded | 2 | 4 | 3 |
| Assessed | 11 | 12 | 9 |
| Without accommodations | 4 | 3 | 3 |
| With accommodations | 7 | 9 | 6 |
| ELL only | | | |
| Identified | 1 | 1 | 39 |
| Excluded | # | # | 4 |
| Assessed | 1 | 1 | 35 |
| Without accommodations | 1 | 1 | 25 |
| With accommodations | # | 1 | 10 |
| Grade 8 | | | |
| SD and/or ELL | | | |
| Identified | 13 | 17 | 33 |
| Excluded | 3 | 4 | 5 |
| Assessed | 10 | 12 | 28 |
| Without accommodations | 3 | 4 | 19 |
| With accommodations | 7 | 8 | 9 |
| SD only | | | |
| Identified | 12 | 16 | 12 |
| Excluded | 3 | 4 | 3 |
| Assessed | 10 | 11 | 9 |
| Without accommodations | 3 | 3 | 3 |
| With accommodations | 7 | 8 | 5 |
| ELL only | | | |
| Identified | 1 | 1 | 26 |
| Excluded | # | # | 3 |
| Assessed | 1 | 1 | 22 |
| Without accommodations | # | 1 | 17 |
| With accommodations | # | # | 6 |

The estimate rounds to zero.

NOTE: SD = students with disabilities. ELL = English language learners. Students identified as both SD and ELL were counted only once under the combined SD and/or ELL category, but were counted separately under the SD and ELL categories. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.

Table A-3. Percentages of sampled students identified as students with disabilities and English language learners and excluded, grades 4 and 8 public schools: By state, 2005

| State/jurisdiction | Grade 4 | | | | | Grade 8 | | | | |
|----------------------|------------------|------------|----------|------------|----------|------------------|------------|----------|------------|----------|
| | Overall excluded | SD | | ELL | | Overall excluded | SD | | ELL | |
| | | Identified | Excluded | Identified | Excluded | | Identified | Excluded | Identified | Excluded |
| Nation (public) | 3 | 14 | 3 | 10 | 1 | 4 | 13 | 3 | 6 | 1 |
| Alabama | 1 | 11 | 1 | 2 | # | 1 | 13 | 1 | 1 | # |
| Alaska | 2 | 15 | 1 | 19 | 1 | 2 | 14 | 2 | 15 | # |
| Arizona | 4 | 11 | 3 | 20 | 2 | 5 | 10 | 3 | 14 | 2 |
| Arkansas | 3 | 13 | 2 | 4 | 2 | 3 | 14 | 3 | 1 | 1 |
| California | 4 | 10 | 2 | 33 | 3 | 2 | 9 | 2 | 21 | 1 |
| Colorado | 3 | 12 | 2 | 11 | 1 | 3 | 10 | 2 | 7 | 1 |
| Connecticut | 2 | 13 | 2 | 5 | 1 | 3 | 13 | 2 | 3 | # |
| Delaware | 8 | 16 | 7 | 5 | 1 | 11 | 15 | 10 | 4 | 1 |
| Florida | 3 | 18 | 2 | 8 | 1 | 3 | 16 | 2 | 6 | 1 |
| Georgia | 2 | 14 | 2 | 3 | 1 | 2 | 12 | 2 | 2 | # |
| Hawaii | 3 | 11 | 2 | 8 | 1 | 3 | 14 | 2 | 7 | 1 |
| Idaho | 1 | 11 | 1 | 8 | 1 | 2 | 12 | 2 | 6 | 1 |
| Illinois | 3 | 14 | 2 | 9 | 1 | 3 | 15 | 3 | 3 | 1 |
| Indiana | 2 | 15 | 1 | 4 | 1 | 4 | 15 | 4 | 2 | # |
| Iowa | 2 | 14 | 2 | 4 | # | 3 | 15 | 2 | 2 | # |
| Kansas | 3 | 14 | 2 | 6 | 1 | 4 | 14 | 3 | 4 | 1 |
| Kentucky | 3 | 14 | 2 | 1 | # | 3 | 11 | 3 | 1 | # |
| Louisiana | 4 | 24 | 4 | 1 | # | 4 | 14 | 4 | 1 | # |
| Maine | 4 | 19 | 3 | 1 | # | 5 | 18 | 4 | 1 | # |
| Maryland | 4 | 13 | 3 | 4 | 1 | 4 | 11 | 4 | 2 | # |
| Massachusetts | 4 | 18 | 3 | 7 | 1 | 6 | 17 | 6 | 3 | 1 |
| Michigan | 4 | 14 | 4 | 3 | 1 | 4 | 14 | 4 | 3 | # |
| Minnesota | 2 | 13 | 2 | 7 | 1 | 2 | 12 | 2 | 7 | 1 |
| Mississippi | 2 | 11 | 2 | 1 | # | 3 | 9 | 3 | 1 | # |
| Missouri | 2 | 16 | 2 | 3 | # | 4 | 14 | 4 | 1 | # |
| Montana | 2 | 12 | 2 | 3 | # | 2 | 13 | 2 | 5 | # |
| Nebraska | 2 | 18 | 2 | 7 | 1 | 1 | 13 | 1 | 3 | # |
| Nevada | 3 | 12 | 3 | 17 | 1 | 2 | 11 | 2 | 9 | 1 |
| New Hampshire | 2 | 20 | 2 | 3 | # | 2 | 18 | 2 | 1 | # |
| New Jersey | 3 | 15 | 2 | 3 | 1 | 4 | 16 | 3 | 2 | 1 |
| New Mexico | 3 | 14 | 2 | 25 | 1 | 3 | 16 | 2 | 17 | 2 |
| New York | 4 | 15 | 3 | 6 | 1 | 4 | 15 | 3 | 5 | 1 |
| North Carolina | 2 | 15 | 2 | 6 | 1 | 3 | 14 | 2 | 4 | 1 |
| North Dakota | 3 | 16 | 2 | 2 | # | 4 | 16 | 4 | 1 | # |
| Ohio | 3 | 12 | 3 | 1 | # | 6 | 14 | 5 | 1 | # |
| Oklahoma | 4 | 16 | 4 | 6 | 1 | 4 | 16 | 4 | 4 | 1 |
| Oregon | 4 | 15 | 3 | 14 | 1 | 3 | 13 | 2 | 8 | 1 |
| Pennsylvania | 3 | 16 | 2 | 2 | # | 3 | 15 | 3 | 1 | # |
| Rhode Island | 3 | 20 | 2 | 7 | 1 | 3 | 17 | 3 | 5 | 1 |
| South Carolina | 4 | 14 | 4 | 2 | # | 6 | 14 | 6 | 1 | # |
| South Dakota | 2 | 16 | 1 | 4 | # | 2 | 12 | 2 | 2 | # |
| Tennessee | 3 | 11 | 3 | 2 | 1 | 5 | 14 | 5 | 1 | # |
| Texas | 6 | 14 | 5 | 15 | 2 | 6 | 13 | 5 | 8 | 2 |
| Utah | 2 | 12 | 2 | 12 | 1 | 2 | 11 | 2 | 7 | 1 |
| Vermont | 3 | 16 | 3 | 2 | # | 4 | 18 | 4 | 1 | # |
| Virginia | 5 | 16 | 4 | 8 | 1 | 5 | 15 | 4 | 4 | 1 |
| Washington | 3 | 13 | 2 | 9 | 1 | 2 | 11 | 2 | 5 | 1 |
| West Virginia | 2 | 19 | 2 | # | # | 3 | 17 | 3 | # | # |
| Wisconsin | 2 | 14 | 2 | 6 | 1 | 4 | 14 | 3 | 4 | 1 |
| Wyoming | 2 | 15 | 1 | 5 | # | 2 | 14 | 2 | 4 | # |
| Other jurisdictions | | | | | | | | | | |
| District of Columbia | 6 | 16 | 5 | 5 | 1 | 6 | 17 | 5 | 4 | 1 |
| DoDEA ¹ | 2 | 10 | 1 | 8 | 1 | 2 | 9 | 1 | 4 | 1 |

The estimate rounds to zero.

¹ Department of Defense Education Activity.

NOTE: SD = students with disabilities. ELL = English language learners. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.

Table A-4. Average mathematics scale scores and achievement-level results, by race/ethnicity, grade 4 public schools: By state, 2005

| State/jurisdiction | White | | | | | Black | | | | | Hispanic | | | | |
|----------------------|----------------------------|---------------------|-------------|-------------------|------------------------|----------------------------|---------------------|-------------|-------------------|------------------------|----------------------------|---------------------|-------------|-------------------|------------------------|
| | Percentage of students | | | | | Percentage of students | | | | | Percentage of students | | | | |
| | Percentage of all students | Average scale score | Below Basic | At or above Basic | At or above Proficient | Percentage of all students | Average scale score | Below Basic | At or above Basic | At or above Proficient | Percentage of all students | Average scale score | Below Basic | At or above Basic | At or above Proficient |
| Nation (public) | 57 | 246 | 11 | 89 | 47 | 17 | 220 | 40 | 60 | 13 | 20 | 225 | 33 | 67 | 19 |
| Alabama | 57 | 235 | 20 | 80 | 30 | 38 | 211 | 53 | 47 | 7 | 2 | ‡ | ‡ | ‡ | ‡ |
| Alaska | 56 | 244 | 13 | 87 | 44 | 4 | 226 | 33 | 67 | 20 | 4 | 227 | 35 | 65 | 23 |
| Arizona | 45 | 243 | 14 | 86 | 43 | 5 | 217 | 46 | 54 | 13 | 41 | 218 | 43 | 57 | 14 |
| Arkansas | 71 | 242 | 14 | 86 | 42 | 22 | 214 | 50 | 50 | 10 | 5 | 229 | 28 | 72 | 25 |
| California | 31 | 245 | 12 | 88 | 46 | 7 | 215 | 47 | 53 | 12 | 49 | 219 | 41 | 59 | 14 |
| Colorado | 64 | 247 | 10 | 90 | 49 | 5 | 222 | 39 | 61 | 18 | 27 | 223 | 37 | 63 | 18 |
| Connecticut | 69 | 250 | 7 | 93 | 53 | 14 | 219 | 42 | 58 | 11 | 13 | 223 | 35 | 65 | 15 |
| Delaware | 54 | 249 | 7 | 93 | 50 | 33 | 226 | 29 | 71 | 15 | 9 | 229 | 26 | 74 | 18 |
| Florida | 48 | 247 | 9 | 91 | 49 | 23 | 224 | 33 | 67 | 16 | 24 | 233 | 22 | 78 | 28 |
| Georgia | 48 | 243 | 13 | 87 | 43 | 39 | 221 | 39 | 61 | 12 | 8 | 229 | 27 | 73 | 22 |
| Hawaii | 17 | 241 | 14 | 86 | 42 | 3 | 221 | 39 | 61 | 16 | 3 | 219 | 37 | 63 | 21 |
| Idaho | 82 | 245 | 10 | 90 | 44 | 1 | ‡ | ‡ | ‡ | ‡ | 13 | 226 | 32 | 68 | 17 |
| Illinois | 54 | 245 | 11 | 89 | 44 | 19 | 212 | 54 | 46 | 9 | 22 | 219 | 41 | 59 | 14 |
| Indiana | 73 | 245 | 11 | 89 | 45 | 16 | 221 | 38 | 62 | 13 | 6 | 230 | 25 | 75 | 21 |
| Iowa | 85 | 242 | 13 | 87 | 40 | 5 | 224 | 32 | 68 | 15 | 6 | 222 | 37 | 63 | 17 |
| Kansas | 74 | 249 | 8 | 92 | 52 | 9 | 228 | 30 | 70 | 24 | 11 | 234 | 21 | 79 | 30 |
| Kentucky | 84 | 234 | 22 | 78 | 29 | 12 | 217 | 44 | 56 | 9 | 2 | ‡ | ‡ | ‡ | ‡ |
| Louisiana | 48 | 241 | 12 | 88 | 38 | 49 | 219 | 40 | 60 | 9 | 1 | ‡ | ‡ | ‡ | ‡ |
| Maine | 97 | 241 | 15 | 85 | 39 | 1 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| Maryland | 51 | 250 | 9 | 91 | 53 | 35 | 220 | 40 | 60 | 14 | 8 | 232 | 28 | 72 | 26 |
| Massachusetts | 75 | 252 | 5 | 95 | 57 | 9 | 228 | 27 | 73 | 18 | 11 | 225 | 27 | 73 | 14 |
| Michigan | 72 | 245 | 11 | 89 | 46 | 20 | 211 | 55 | 45 | 8 | 4 | ‡ | ‡ | ‡ | ‡ |
| Minnesota | 79 | 251 | 7 | 93 | 54 | 9 | 219 | 43 | 57 | 15 | 6 | 223 | 37 | 63 | 15 |
| Mississippi | 47 | 238 | 14 | 86 | 32 | 51 | 216 | 46 | 54 | 7 | 1 | ‡ | ‡ | ‡ | ‡ |
| Missouri | 76 | 240 | 15 | 85 | 37 | 17 | 215 | 47 | 53 | 9 | 4 | 221 | 37 | 63 | 10 |
| Montana | 85 | 243 | 11 | 89 | 41 | 1 | ‡ | ‡ | ‡ | ‡ | 2 | 234 | 20 | 80 | 30 |
| Nebraska | 75 | 244 | 12 | 88 | 44 | 8 | 211 | 55 | 45 | 7 | 13 | 219 | 41 | 59 | 10 |
| Nevada | 46 | 240 | 15 | 85 | 38 | 12 | 214 | 48 | 52 | 10 | 33 | 219 | 42 | 58 | 13 |
| New Hampshire | 94 | 246 | 10 | 90 | 48 | 2 | ‡ | ‡ | ‡ | ‡ | 2 | 226 | 36 | 64 | 17 |
| New Jersey | 57 | 251 | 7 | 93 | 55 | 18 | 224 | 33 | 67 | 17 | 15 | 230 | 26 | 74 | 25 |
| New Mexico | 30 | 238 | 17 | 83 | 34 | 2 | 213 | 55 | 45 | 6 | 56 | 218 | 43 | 57 | 13 |
| New York | 53 | 247 | 9 | 91 | 49 | 21 | 222 | 36 | 64 | 13 | 19 | 226 | 30 | 70 | 17 |
| North Carolina | 59 | 250 | 8 | 92 | 52 | 27 | 225 | 34 | 66 | 17 | 8 | 234 | 20 | 80 | 26 |
| North Dakota | 88 | 245 | 9 | 91 | 43 | 1 | ‡ | ‡ | ‡ | ‡ | 1 | ‡ | ‡ | ‡ | ‡ |
| Ohio | 72 | 248 | 9 | 91 | 51 | 21 | 221 | 41 | 59 | 16 | 2 | 231 | 24 | 76 | 21 |
| Oklahoma | 59 | 240 | 15 | 85 | 36 | 11 | 217 | 46 | 54 | 11 | 9 | 226 | 28 | 72 | 16 |
| Oregon | 71 | 243 | 13 | 87 | 42 | 3 | 222 | 34 | 66 | 12 | 17 | 218 | 45 | 55 | 14 |
| Pennsylvania | 74 | 247 | 11 | 89 | 50 | 17 | 219 | 40 | 60 | 13 | 7 | 220 | 40 | 60 | 16 |
| Rhode Island | 73 | 241 | 14 | 86 | 37 | 8 | 211 | 54 | 46 | 9 | 16 | 211 | 52 | 48 | 9 |
| South Carolina | 55 | 250 | 8 | 92 | 53 | 41 | 223 | 34 | 66 | 13 | 3 | 236 | 17 | 83 | 30 |
| South Dakota | 84 | 245 | 10 | 90 | 45 | 2 | ‡ | ‡ | ‡ | ‡ | 2 | ‡ | ‡ | ‡ | ‡ |
| Tennessee | 69 | 238 | 17 | 83 | 35 | 26 | 214 | 50 | 50 | 9 | 3 | 229 | 31 | 69 | 26 |
| Texas | 38 | 254 | 4 | 96 | 60 | 13 | 228 | 25 | 75 | 18 | 46 | 235 | 18 | 82 | 28 |
| Utah | 81 | 242 | 13 | 87 | 41 | 1 | ‡ | ‡ | ‡ | ‡ | 13 | 220 | 40 | 60 | 13 |
| Vermont | 96 | 244 | 13 | 87 | 44 | 1 | ‡ | ‡ | ‡ | ‡ | 1 | ‡ | ‡ | ‡ | ‡ |
| Virginia | 61 | 247 | 11 | 89 | 50 | 24 | 224 | 34 | 66 | 14 | 8 | 230 | 25 | 75 | 22 |
| Washington | 69 | 246 | 11 | 89 | 48 | 6 | 231 | 26 | 74 | 26 | 15 | 224 | 34 | 66 | 17 |
| West Virginia | 95 | 231 | 24 | 76 | 25 | 4 | 226 | 31 | 69 | 17 | 1 | ‡ | ‡ | ‡ | ‡ |
| Wisconsin | 77 | 247 | 9 | 91 | 48 | 11 | 210 | 54 | 46 | 7 | 7 | 224 | 34 | 66 | 16 |
| Wyoming | 85 | 245 | 11 | 89 | 45 | 1 | ‡ | ‡ | ‡ | ‡ | 9 | 234 | 22 | 78 | 31 |
| Other jurisdictions | | | | | | | | | | | | | | | |
| District of Columbia | 4 | 266 | 1 | 99 | 78 | 86 | 207 | 59 | 41 | 5 | 8 | 215 | 49 | 51 | 11 |
| DoDEA ¹ | 47 | 245 | 9 | 91 | 46 | 20 | 227 | 27 | 73 | 15 | 14 | 235 | 18 | 82 | 28 |

See notes at end of table.

Table A-4. Average mathematics scale scores and achievement-level results, by race/ethnicity, grade 4 public schools: By state, 2005—Continued

| State/jurisdiction | Asian/Pacific Islander | | | | | American Indian/Alaska Native | | | | |
|----------------------|----------------------------|---------------------|------------------------|-------------------|------------------------|-------------------------------|---------------------|------------------------|-------------------|------------------------|
| | Percentage of all students | Average scale score | Percentage of students | | | Percentage of all students | Average scale score | Percentage of students | | |
| | | | Below Basic | At or above Basic | At or above Proficient | | | Below Basic | At or above Basic | At or above Proficient |
| Nation (public) | 4 | 251 | 11 | 89 | 54 | 1 | 227 | 31 | 69 | 22 |
| Alabama | 1 | ‡ | ‡ | ‡ | ‡ | 1 | ‡ | ‡ | ‡ | ‡ |
| Alaska | 8 | 238 | 20 | 80 | 36 | 26 | 220 | 43 | 57 | 15 |
| Arizona | 3 | 241 | 15 | 85 | 43 | 6 | ‡ | ‡ | ‡ | ‡ |
| Arkansas | 1 | ‡ | ‡ | ‡ | ‡ | 1 | ‡ | ‡ | ‡ | ‡ |
| California | 10 | 249 | 11 | 89 | 51 | 1 | 228 | 31 | 69 | 27 |
| Colorado | 3 | 242 | 19 | 81 | 42 | 1 | ‡ | ‡ | ‡ | ‡ |
| Connecticut | 3 | 253 | 7 | 93 | 57 | # | ‡ | ‡ | ‡ | ‡ |
| Delaware | 3 | 260 | 6 | 94 | 70 | # | ‡ | ‡ | ‡ | ‡ |
| Florida | 2 | 259 | 4 | 96 | 66 | # | ‡ | ‡ | ‡ | ‡ |
| Georgia | 3 | 255 | 5 | 95 | 57 | # | ‡ | ‡ | ‡ | ‡ |
| Hawaii | 66 | 229 | 29 | 71 | 25 | 1 | ‡ | ‡ | ‡ | ‡ |
| Idaho | 2 | ‡ | ‡ | ‡ | ‡ | 2 | ‡ | ‡ | ‡ | ‡ |
| Illinois | 4 | 258 | 8 | 92 | 66 | # | ‡ | ‡ | ‡ | ‡ |
| Indiana | 1 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| Iowa | 2 | ‡ | ‡ | ‡ | ‡ | 1 | ‡ | ‡ | ‡ | ‡ |
| Kansas | 3 | 262 | 8 | 92 | 71 | 2 | ‡ | ‡ | ‡ | ‡ |
| Kentucky | 1 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| Louisiana | 1 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| Maine | 1 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| Maryland | 6 | 256 | 5 | 95 | 59 | # | ‡ | ‡ | ‡ | ‡ |
| Massachusetts | 5 | 258 | 5 | 95 | 64 | # | ‡ | ‡ | ‡ | ‡ |
| Michigan | 3 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| Minnesota | 5 | 242 | 18 | 82 | 40 | 2 | ‡ | ‡ | ‡ | ‡ |
| Mississippi | 1 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| Missouri | 2 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| Montana | 1 | ‡ | ‡ | ‡ | ‡ | 11 | 223 | 38 | 62 | 17 |
| Nebraska | 2 | ‡ | ‡ | ‡ | ‡ | 2 | ‡ | ‡ | ‡ | ‡ |
| Nevada | 8 | 243 | 12 | 88 | 42 | 1 | ‡ | ‡ | ‡ | ‡ |
| New Hampshire | 2 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| New Jersey | 9 | 264 | 3 | 97 | 74 | # | ‡ | ‡ | ‡ | ‡ |
| New Mexico | 1 | ‡ | ‡ | ‡ | ‡ | 10 | 217 | 44 | 56 | 9 |
| New York | 7 | 254 | 7 | 93 | 61 | 1 | ‡ | ‡ | ‡ | ‡ |
| North Carolina | 2 | 256 | 6 | 94 | 63 | 2 | ‡ | ‡ | ‡ | ‡ |
| North Dakota | 1 | ‡ | ‡ | ‡ | ‡ | 8 | 223 | 34 | 66 | 13 |
| Ohio | 1 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| Oklahoma | 1 | ‡ | ‡ | ‡ | ‡ | 19 | 229 | 24 | 76 | 21 |
| Oregon | 5 | 248 | 16 | 84 | 54 | 2 | ‡ | ‡ | ‡ | ‡ |
| Pennsylvania | 2 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| Rhode Island | 2 | 240 | 17 | 83 | 39 | 1 | ‡ | ‡ | ‡ | ‡ |
| South Carolina | 1 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| South Dakota | 1 | ‡ | ‡ | ‡ | ‡ | 11 | 221 | 38 | 62 | 13 |
| Tennessee | 1 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| Texas | 3 | 264 | 4 | 96 | 72 | # | ‡ | ‡ | ‡ | ‡ |
| Utah | 3 | 235 | 24 | 76 | 33 | 1 | ‡ | ‡ | ‡ | ‡ |
| Vermont | 1 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| Virginia | 5 | 256 | 5 | 95 | 64 | # | ‡ | ‡ | ‡ | ‡ |
| Washington | 8 | 245 | 16 | 84 | 46 | 2 | ‡ | ‡ | ‡ | ‡ |
| West Virginia | 1 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| Wisconsin | 3 | 236 | 20 | 80 | 29 | 1 | ‡ | ‡ | ‡ | ‡ |
| Wyoming | 1 | ‡ | ‡ | ‡ | ‡ | 3 | ‡ | ‡ | ‡ | ‡ |
| Other jurisdictions | | | | | | | | | | |
| District of Columbia | 1 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| DoDEA ¹ | 7 | 239 | 15 | 85 | 32 | 1 | ‡ | ‡ | ‡ | ‡ |

The estimate rounds to zero.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

¹ Department of Defense Education Activity.

NOTE: Results are not shown for students whose race/ethnicity was "unclassified." Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.

Table A-5. Average mathematics scale scores and achievement-level results, by gender, grade 4 public schools: By state, 2005

| State/jurisdiction | Male | | | | | Female | | | | |
|----------------------|----------------------------|---------------------|-------------|-------------------|------------------------|----------------------------|---------------------|-------------|-------------------|------------------------|
| | Percentage of students | | | | | Percentage of students | | | | |
| | Percentage of all students | Average scale score | Below Basic | At or above Basic | At or above Proficient | Percentage of all students | Average scale score | Below Basic | At or above Basic | At or above Proficient |
| Nation (public) | 51 | 238 | 20 | 80 | 37 | 49 | 236 | 21 | 79 | 33 |
| Alabama | 51 | 225 | 34 | 66 | 22 | 49 | 225 | 33 | 67 | 20 |
| Alaska | 50 | 236 | 24 | 76 | 35 | 50 | 235 | 22 | 78 | 32 |
| Arizona | 52 | 233 | 26 | 74 | 32 | 48 | 227 | 33 | 67 | 24 |
| Arkansas | 53 | 236 | 22 | 78 | 36 | 47 | 235 | 22 | 78 | 32 |
| California | 51 | 231 | 28 | 72 | 30 | 49 | 229 | 30 | 70 | 26 |
| Colorado | 52 | 241 | 18 | 82 | 41 | 48 | 238 | 21 | 79 | 36 |
| Connecticut | 51 | 244 | 14 | 86 | 45 | 49 | 241 | 17 | 83 | 40 |
| Delaware | 51 | 241 | 15 | 85 | 38 | 49 | 238 | 16 | 84 | 34 |
| Florida | 50 | 240 | 17 | 83 | 38 | 50 | 238 | 19 | 81 | 35 |
| Georgia | 51 | 234 | 24 | 76 | 30 | 49 | 233 | 24 | 76 | 29 |
| Hawaii | 51 | 229 | 29 | 71 | 26 | 49 | 231 | 26 | 74 | 28 |
| Idaho | 51 | 242 | 14 | 86 | 42 | 49 | 241 | 14 | 86 | 39 |
| Illinois | 51 | 234 | 25 | 75 | 33 | 49 | 232 | 28 | 72 | 30 |
| Indiana | 50 | 240 | 16 | 84 | 38 | 50 | 240 | 16 | 84 | 38 |
| Iowa | 53 | 242 | 14 | 86 | 40 | 47 | 238 | 17 | 83 | 34 |
| Kansas | 52 | 247 | 11 | 89 | 48 | 48 | 245 | 12 | 88 | 45 |
| Kentucky | 51 | 233 | 24 | 76 | 29 | 49 | 230 | 26 | 74 | 24 |
| Louisiana | 52 | 231 | 25 | 75 | 26 | 48 | 229 | 27 | 73 | 21 |
| Maine | 51 | 243 | 14 | 86 | 41 | 49 | 239 | 17 | 83 | 36 |
| Maryland | 51 | 240 | 21 | 79 | 40 | 49 | 237 | 22 | 78 | 36 |
| Massachusetts | 49 | 248 | 9 | 91 | 50 | 51 | 247 | 10 | 90 | 48 |
| Michigan | 51 | 240 | 19 | 81 | 41 | 49 | 236 | 23 | 77 | 34 |
| Minnesota | 50 | 247 | 12 | 88 | 50 | 50 | 245 | 13 | 87 | 45 |
| Mississippi | 51 | 227 | 30 | 70 | 20 | 49 | 226 | 32 | 68 | 18 |
| Missouri | 51 | 237 | 21 | 79 | 34 | 49 | 233 | 22 | 78 | 28 |
| Montana | 50 | 243 | 13 | 87 | 42 | 50 | 239 | 16 | 84 | 34 |
| Nebraska | 50 | 239 | 19 | 81 | 39 | 50 | 236 | 21 | 79 | 33 |
| Nevada | 51 | 231 | 28 | 72 | 28 | 49 | 229 | 29 | 71 | 24 |
| New Hampshire | 51 | 247 | 10 | 90 | 50 | 49 | 244 | 12 | 88 | 44 |
| New Jersey | 52 | 246 | 13 | 87 | 47 | 48 | 242 | 16 | 84 | 43 |
| New Mexico | 51 | 225 | 35 | 65 | 21 | 49 | 223 | 36 | 64 | 17 |
| New York | 50 | 240 | 18 | 82 | 39 | 50 | 237 | 19 | 81 | 33 |
| North Carolina | 51 | 242 | 17 | 83 | 41 | 49 | 241 | 16 | 84 | 38 |
| North Dakota | 50 | 244 | 10 | 90 | 43 | 50 | 241 | 12 | 88 | 38 |
| Ohio | 51 | 243 | 16 | 84 | 45 | 49 | 241 | 16 | 84 | 40 |
| Oklahoma | 51 | 235 | 20 | 80 | 31 | 49 | 233 | 22 | 78 | 26 |
| Oregon | 51 | 239 | 20 | 80 | 37 | 49 | 238 | 19 | 81 | 37 |
| Pennsylvania | 51 | 241 | 18 | 82 | 44 | 49 | 240 | 18 | 82 | 39 |
| Rhode Island | 51 | 234 | 24 | 76 | 32 | 49 | 233 | 23 | 77 | 29 |
| South Carolina | 50 | 238 | 20 | 80 | 37 | 50 | 238 | 18 | 82 | 35 |
| South Dakota | 51 | 243 | 13 | 87 | 43 | 49 | 240 | 14 | 86 | 38 |
| Tennessee | 50 | 233 | 26 | 74 | 30 | 50 | 231 | 26 | 74 | 25 |
| Texas | 50 | 244 | 12 | 88 | 43 | 50 | 240 | 15 | 85 | 37 |
| Utah | 51 | 240 | 16 | 84 | 39 | 49 | 237 | 18 | 82 | 34 |
| Vermont | 53 | 246 | 11 | 89 | 47 | 47 | 241 | 15 | 85 | 39 |
| Virginia | 51 | 242 | 17 | 83 | 42 | 49 | 239 | 18 | 82 | 37 |
| Washington | 50 | 242 | 15 | 85 | 43 | 50 | 241 | 17 | 83 | 41 |
| West Virginia | 52 | 232 | 23 | 77 | 28 | 48 | 229 | 27 | 73 | 22 |
| Wisconsin | 51 | 242 | 15 | 85 | 42 | 49 | 239 | 18 | 82 | 39 |
| Wyoming | 51 | 244 | 12 | 88 | 45 | 49 | 242 | 13 | 87 | 40 |
| Other jurisdictions | | | | | | | | | | |
| District of Columbia | 49 | 212 | 56 | 44 | 11 | 51 | 211 | 55 | 45 | 9 |
| DoDEA ¹ | 49 | 241 | 14 | 86 | 38 | 51 | 237 | 17 | 83 | 31 |

¹ Department of Defense Education Activity.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.

Table A-7. Average mathematics scale scores and achievement-level results, by students with disabilities (SD), grade 4 public schools: By state, 2005

| State/jurisdiction | SD | | | | | Not SD | | | | |
|----------------------|----------------------------|---------------------|------------------------|-------------------|------------------------|----------------------------|---------------------|------------------------|-------------------|------------------------|
| | Percentage of all students | Average scale score | Percentage of students | | | Percentage of all students | Average scale score | Percentage of students | | |
| | | | Below Basic | At or above Basic | At or above Proficient | | | Below Basic | At or above Basic | At or above Proficient |
| Nation (public) | 12 | 218 | 44 | 56 | 16 | 88 | 240 | 17 | 83 | 38 |
| Alabama | 10 | 195 | 73 | 27 | 7 | 90 | 229 | 29 | 71 | 22 |
| Alaska | 14 | 218 | 46 | 54 | 15 | 86 | 238 | 19 | 81 | 37 |
| Arizona | 9 | 207 | 58 | 42 | 9 | 91 | 232 | 27 | 73 | 30 |
| Arkansas | 11 | 208 | 56 | 44 | 8 | 89 | 239 | 18 | 82 | 37 |
| California | 8 | 209 | 56 | 44 | 12 | 92 | 232 | 27 | 73 | 29 |
| Colorado | 10 | 217 | 46 | 54 | 15 | 90 | 242 | 16 | 84 | 42 |
| Connecticut | 11 | 220 | 39 | 61 | 14 | 89 | 245 | 13 | 87 | 46 |
| Delaware | 10 | 222 | 41 | 59 | 19 | 90 | 242 | 13 | 87 | 38 |
| Florida | 16 | 227 | 33 | 67 | 24 | 84 | 241 | 15 | 85 | 39 |
| Georgia | 12 | 218 | 46 | 54 | 15 | 88 | 236 | 21 | 79 | 32 |
| Hawaii | 10 | 198 | 69 | 31 | 5 | 90 | 234 | 23 | 77 | 29 |
| Idaho | 10 | 215 | 47 | 53 | 10 | 90 | 245 | 10 | 90 | 44 |
| Illinois | 12 | 218 | 43 | 57 | 16 | 88 | 235 | 24 | 76 | 34 |
| Indiana | 14 | 220 | 42 | 58 | 14 | 86 | 243 | 12 | 88 | 42 |
| Iowa | 13 | 216 | 45 | 55 | 9 | 87 | 243 | 11 | 89 | 42 |
| Kansas | 12 | 226 | 32 | 68 | 20 | 88 | 248 | 9 | 91 | 50 |
| Kentucky | 12 | 215 | 48 | 52 | 12 | 88 | 234 | 22 | 78 | 28 |
| Louisiana | 21 | 213 | 52 | 48 | 8 | 79 | 235 | 19 | 81 | 28 |
| Maine | 16 | 222 | 41 | 59 | 18 | 84 | 244 | 11 | 89 | 43 |
| Maryland | 11 | 219 | 44 | 56 | 17 | 89 | 241 | 18 | 82 | 41 |
| Massachusetts | 15 | 230 | 26 | 74 | 22 | 85 | 251 | 6 | 94 | 54 |
| Michigan | 11 | 222 | 39 | 61 | 21 | 89 | 240 | 19 | 81 | 40 |
| Minnesota | 11 | 228 | 32 | 68 | 26 | 89 | 248 | 10 | 90 | 50 |
| Mississippi | 9 | 210 | 56 | 44 | 8 | 91 | 228 | 28 | 72 | 21 |
| Missouri | 14 | 222 | 38 | 62 | 18 | 86 | 237 | 19 | 81 | 33 |
| Montana | 10 | 220 | 42 | 58 | 14 | 90 | 243 | 12 | 88 | 41 |
| Nebraska | 16 | 221 | 40 | 60 | 15 | 84 | 241 | 16 | 84 | 40 |
| Nevada | 10 | 212 | 52 | 48 | 13 | 90 | 232 | 26 | 74 | 28 |
| New Hampshire | 18 | 227 | 30 | 70 | 18 | 82 | 250 | 7 | 93 | 53 |
| New Jersey | 13 | 218 | 43 | 57 | 17 | 87 | 248 | 10 | 90 | 50 |
| New Mexico | 13 | 205 | 62 | 38 | 5 | 87 | 227 | 31 | 69 | 21 |
| New York | 13 | 215 | 48 | 52 | 11 | 87 | 242 | 14 | 86 | 40 |
| North Carolina | 13 | 226 | 34 | 66 | 20 | 87 | 244 | 14 | 86 | 43 |
| North Dakota | 14 | 227 | 30 | 70 | 19 | 86 | 245 | 8 | 92 | 44 |
| Ohio | 9 | 223 | 38 | 62 | 20 | 91 | 244 | 14 | 86 | 45 |
| Oklahoma | 13 | 212 | 53 | 47 | 8 | 87 | 237 | 16 | 84 | 32 |
| Oregon | 12 | 222 | 38 | 62 | 16 | 88 | 241 | 17 | 83 | 40 |
| Pennsylvania | 14 | 216 | 48 | 52 | 16 | 86 | 245 | 13 | 87 | 45 |
| Rhode Island | 18 | 215 | 48 | 52 | 11 | 82 | 238 | 18 | 82 | 35 |
| South Carolina | 11 | 220 | 41 | 59 | 16 | 89 | 240 | 16 | 84 | 38 |
| South Dakota | 15 | 225 | 34 | 66 | 19 | 85 | 244 | 10 | 90 | 44 |
| Tennessee | 9 | 207 | 59 | 41 | 6 | 91 | 234 | 23 | 77 | 30 |
| Texas | 9 | 227 | 32 | 68 | 22 | 91 | 243 | 11 | 89 | 42 |
| Utah | 11 | 219 | 41 | 59 | 15 | 89 | 241 | 14 | 86 | 39 |
| Vermont | 13 | 224 | 33 | 67 | 18 | 87 | 246 | 10 | 90 | 47 |
| Virginia | 12 | 224 | 39 | 61 | 21 | 88 | 243 | 14 | 86 | 42 |
| Washington | 11 | 219 | 45 | 55 | 15 | 89 | 245 | 12 | 88 | 45 |
| West Virginia | 18 | 215 | 48 | 52 | 13 | 82 | 234 | 20 | 80 | 28 |
| Wisconsin | 12 | 221 | 39 | 61 | 17 | 88 | 243 | 13 | 87 | 44 |
| Wyoming | 14 | 219 | 44 | 56 | 13 | 86 | 247 | 8 | 92 | 47 |
| Other jurisdictions | | | | | | | | | | |
| District of Columbia | 11 | 188 | 83 | 17 | 4 | 89 | 214 | 52 | 48 | 10 |
| DoDEA ¹ | 9 | 215 | 50 | 50 | 12 | 91 | 241 | 12 | 88 | 37 |

¹ Department of Defense Education Activity.

NOTE: SD = students with disabilities. The results for students with disabilities are based on students who were assessed and cannot be generalized to the total population of such students. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.

Table A-9. Average mathematics scale scores and achievement-level results, by race/ethnicity, grade 8 public schools: By state, 2005—Continued

| State/jurisdiction | Asian/Pacific Islander | | | | | American Indian/Alaska Native | | | | |
|----------------------|----------------------------|---------------------|------------------------|-------------------|------------------------|-------------------------------|---------------------|------------------------|-------------------|------------------------|
| | Percentage of all students | Average scale score | Percentage of students | | | Percentage of all students | Average scale score | Percentage of students | | |
| | | | Below Basic | At or above Basic | At or above Proficient | | | Below Basic | At or above Basic | At or above Proficient |
| Nation (public) | 5 | 294 | 19 | 81 | 46 | 1 | 266 | 45 | 55 | 14 |
| Alabama | 1 | ‡ | ‡ | ‡ | ‡ | 1 | ‡ | ‡ | ‡ | ‡ |
| Alaska | 7 | 270 | 40 | 60 | 19 | 26 | 264 | 47 | 53 | 15 |
| Arizona | 2 | ‡ | ‡ | ‡ | ‡ | 5 | 259 | 53 | 47 | 10 |
| Arkansas | 1 | ‡ | ‡ | ‡ | ‡ | 1 | ‡ | ‡ | ‡ | ‡ |
| California | 12 | 293 | 20 | 80 | 45 | 1 | ‡ | ‡ | ‡ | ‡ |
| Colorado | 2 | ‡ | ‡ | ‡ | ‡ | 1 | ‡ | ‡ | ‡ | ‡ |
| Connecticut | 4 | 292 | 22 | 78 | 46 | # | ‡ | ‡ | ‡ | ‡ |
| Delaware | 3 | 306 | 9 | 91 | 59 | # | ‡ | ‡ | ‡ | ‡ |
| Florida | 2 | 299 | 13 | 87 | 51 | # | ‡ | ‡ | ‡ | ‡ |
| Georgia | 3 | 301 | 16 | 84 | 52 | # | ‡ | ‡ | ‡ | ‡ |
| Hawaii | 68 | 264 | 47 | 53 | 17 | # | ‡ | ‡ | ‡ | ‡ |
| Idaho | 1 | ‡ | ‡ | ‡ | ‡ | 1 | ‡ | ‡ | ‡ | ‡ |
| Illinois | 4 | 300 | 10 | 90 | 50 | # | ‡ | ‡ | ‡ | ‡ |
| Indiana | 1 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| Iowa | 2 | ‡ | ‡ | ‡ | ‡ | 1 | ‡ | ‡ | ‡ | ‡ |
| Kansas | 2 | ‡ | ‡ | ‡ | ‡ | 2 | ‡ | ‡ | ‡ | ‡ |
| Kentucky | 1 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| Louisiana | 1 | ‡ | ‡ | ‡ | ‡ | 1 | ‡ | ‡ | ‡ | ‡ |
| Maine | 1 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| Maryland | 5 | 304 | 13 | 87 | 55 | 1 | ‡ | ‡ | ‡ | ‡ |
| Massachusetts | 5 | 314 | 9 | 91 | 68 | # | ‡ | ‡ | ‡ | ‡ |
| Michigan | 2 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| Minnesota | 5 | 285 | 28 | 72 | 34 | 2 | ‡ | ‡ | ‡ | ‡ |
| Mississippi | 1 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| Missouri | 1 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| Montana | 1 | ‡ | ‡ | ‡ | ‡ | 10 | 259 | 52 | 48 | 11 |
| Nebraska | 1 | ‡ | ‡ | ‡ | ‡ | 1 | ‡ | ‡ | ‡ | ‡ |
| Nevada | 6 | 281 | 27 | 73 | 30 | 1 | ‡ | ‡ | ‡ | ‡ |
| New Hampshire | 2 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| New Jersey | 7 | 309 | 8 | 92 | 63 | # | ‡ | ‡ | ‡ | ‡ |
| New Mexico | 1 | ‡ | ‡ | ‡ | ‡ | 12 | 253 | 61 | 39 | 4 |
| New York | 7 | 298 | 17 | 83 | 50 | # | ‡ | ‡ | ‡ | ‡ |
| North Carolina | 2 | 303 | 13 | 87 | 53 | 1 | ‡ | ‡ | ‡ | ‡ |
| North Dakota | 1 | ‡ | ‡ | ‡ | ‡ | 9 | 261 | 51 | 49 | 9 |
| Ohio | 2 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| Oklahoma | 2 | ‡ | ‡ | ‡ | ‡ | 18 | 267 | 40 | 60 | 15 |
| Oregon | 4 | 299 | 18 | 82 | 50 | 2 | 274 | 37 | 63 | 23 |
| Pennsylvania | 2 | 297 | 18 | 82 | 49 | # | ‡ | ‡ | ‡ | ‡ |
| Rhode Island | 3 | 278 | 26 | 74 | 26 | # | ‡ | ‡ | ‡ | ‡ |
| South Carolina | 1 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| South Dakota | 1 | ‡ | ‡ | ‡ | ‡ | 10 | 260 | 52 | 48 | 11 |
| Tennessee | 1 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| Texas | 3 | 308 | 10 | 90 | 61 | # | ‡ | ‡ | ‡ | ‡ |
| Utah | 3 | 273 | 37 | 63 | 26 | 2 | ‡ | ‡ | ‡ | ‡ |
| Vermont | 1 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| Virginia | 6 | 300 | 14 | 86 | 53 | # | ‡ | ‡ | ‡ | ‡ |
| Washington | 8 | 294 | 19 | 81 | 45 | 2 | 273 | 36 | 64 | 26 |
| West Virginia | # | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| Wisconsin | 3 | 286 | 30 | 70 | 32 | 1 | ‡ | ‡ | ‡ | ‡ |
| Wyoming | 1 | ‡ | ‡ | ‡ | ‡ | 3 | 262 | 46 | 54 | 8 |
| Other jurisdictions | | | | | | | | | | |
| District of Columbia | 1 | ‡ | ‡ | ‡ | ‡ | # | ‡ | ‡ | ‡ | ‡ |
| DoDEA ¹ | 8 | 290 | 20 | 80 | 41 | 1 | ‡ | ‡ | ‡ | ‡ |

The estimate rounds to zero.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

¹ Department of Defense Education Activity.

NOTE: Results are not shown for students whose race/ethnicity was "unclassified." Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.

Table A-10. Average mathematics scale scores and achievement-level results, by gender, grade 8 public schools: By state, 2005

| State/jurisdiction | Male | | | | | Female | | | | |
|----------------------|----------------------------|---------------------|------------------------|-------------------|------------------------|----------------------------|---------------------|------------------------|-------------------|------------------------|
| | Percentage of all students | Average scale score | Percentage of students | | | Percentage of all students | Average scale score | Percentage of students | | |
| | | | Below Basic | At or above Basic | At or above Proficient | | | Below Basic | At or above Basic | At or above Proficient |
| Nation (public) | 51 | 278 | 32 | 68 | 30 | 49 | 277 | 33 | 67 | 27 |
| Alabama | 49 | 261 | 48 | 52 | 15 | 51 | 264 | 46 | 54 | 15 |
| Alaska | 53 | 280 | 30 | 70 | 30 | 47 | 278 | 32 | 68 | 27 |
| Arizona | 52 | 274 | 36 | 64 | 26 | 48 | 274 | 36 | 64 | 25 |
| Arkansas | 51 | 270 | 38 | 62 | 22 | 49 | 273 | 34 | 66 | 22 |
| California | 51 | 269 | 42 | 58 | 23 | 49 | 268 | 44 | 56 | 20 |
| Colorado | 49 | 281 | 30 | 70 | 33 | 51 | 281 | 29 | 71 | 31 |
| Connecticut | 50 | 281 | 31 | 69 | 35 | 50 | 281 | 30 | 70 | 34 |
| Delaware | 50 | 283 | 26 | 74 | 32 | 50 | 279 | 29 | 71 | 27 |
| Florida | 52 | 276 | 33 | 67 | 28 | 48 | 272 | 37 | 63 | 23 |
| Georgia | 51 | 273 | 38 | 62 | 24 | 49 | 272 | 38 | 62 | 23 |
| Hawaii | 54 | 265 | 45 | 55 | 19 | 46 | 266 | 44 | 56 | 18 |
| Idaho | 50 | 280 | 28 | 72 | 30 | 50 | 282 | 25 | 75 | 30 |
| Illinois | 51 | 279 | 30 | 70 | 30 | 49 | 276 | 34 | 66 | 27 |
| Indiana | 51 | 283 | 25 | 75 | 32 | 49 | 280 | 27 | 73 | 28 |
| Iowa | 50 | 283 | 25 | 75 | 34 | 50 | 284 | 24 | 76 | 33 |
| Kansas | 51 | 285 | 23 | 77 | 35 | 49 | 283 | 23 | 77 | 33 |
| Kentucky | 51 | 275 | 34 | 66 | 24 | 49 | 273 | 37 | 63 | 21 |
| Louisiana | 51 | 267 | 42 | 58 | 16 | 49 | 268 | 40 | 60 | 16 |
| Maine | 49 | 282 | 26 | 74 | 31 | 51 | 280 | 26 | 74 | 29 |
| Maryland | 48 | 278 | 35 | 65 | 31 | 52 | 278 | 33 | 67 | 28 |
| Massachusetts | 49 | 291 | 21 | 79 | 43 | 51 | 292 | 19 | 81 | 43 |
| Michigan | 50 | 279 | 30 | 70 | 31 | 50 | 275 | 34 | 66 | 27 |
| Minnesota | 50 | 291 | 22 | 78 | 45 | 50 | 289 | 20 | 80 | 41 |
| Mississippi | 49 | 263 | 48 | 52 | 15 | 51 | 262 | 49 | 51 | 12 |
| Missouri | 52 | 278 | 31 | 69 | 28 | 48 | 275 | 33 | 67 | 24 |
| Montana | 52 | 286 | 22 | 78 | 36 | 48 | 287 | 19 | 81 | 36 |
| Nebraska | 50 | 285 | 24 | 76 | 37 | 50 | 283 | 26 | 74 | 33 |
| Nevada | 51 | 270 | 39 | 61 | 23 | 49 | 269 | 40 | 60 | 20 |
| New Hampshire | 50 | 286 | 23 | 77 | 36 | 50 | 285 | 22 | 78 | 33 |
| New Jersey | 51 | 286 | 25 | 75 | 39 | 49 | 282 | 27 | 73 | 33 |
| New Mexico | 50 | 264 | 47 | 53 | 15 | 50 | 262 | 48 | 52 | 13 |
| New York | 50 | 280 | 30 | 70 | 31 | 50 | 280 | 30 | 70 | 30 |
| North Carolina | 51 | 281 | 29 | 71 | 32 | 49 | 282 | 26 | 74 | 32 |
| North Dakota | 51 | 287 | 20 | 80 | 36 | 49 | 287 | 19 | 81 | 33 |
| Ohio | 50 | 284 | 25 | 75 | 34 | 50 | 282 | 26 | 74 | 32 |
| Oklahoma | 50 | 272 | 37 | 63 | 22 | 50 | 271 | 37 | 63 | 19 |
| Oregon | 52 | 284 | 27 | 73 | 35 | 48 | 281 | 28 | 72 | 32 |
| Pennsylvania | 52 | 283 | 26 | 74 | 33 | 48 | 279 | 30 | 70 | 29 |
| Rhode Island | 51 | 272 | 37 | 63 | 24 | 49 | 273 | 36 | 64 | 23 |
| South Carolina | 50 | 282 | 29 | 71 | 31 | 50 | 281 | 28 | 72 | 29 |
| South Dakota | 51 | 287 | 20 | 80 | 36 | 49 | 287 | 20 | 80 | 37 |
| Tennessee | 49 | 270 | 39 | 61 | 21 | 51 | 271 | 39 | 61 | 20 |
| Texas | 50 | 283 | 26 | 74 | 33 | 50 | 279 | 29 | 71 | 28 |
| Utah | 52 | 280 | 29 | 71 | 32 | 48 | 278 | 29 | 71 | 27 |
| Vermont | 50 | 287 | 23 | 77 | 38 | 50 | 287 | 22 | 78 | 38 |
| Virginia | 50 | 285 | 25 | 75 | 35 | 50 | 283 | 26 | 74 | 32 |
| Washington | 51 | 285 | 26 | 74 | 37 | 49 | 285 | 24 | 76 | 35 |
| West Virginia | 51 | 268 | 40 | 60 | 18 | 49 | 270 | 40 | 60 | 18 |
| Wisconsin | 49 | 285 | 24 | 76 | 36 | 51 | 284 | 24 | 76 | 36 |
| Wyoming | 52 | 283 | 24 | 76 | 31 | 48 | 281 | 23 | 77 | 27 |
| Other jurisdictions | | | | | | | | | | |
| District of Columbia | 47 | 246 | 68 | 32 | 7 | 53 | 245 | 71 | 29 | 6 |
| DoDEA ¹ | 52 | 285 | 23 | 77 | 34 | 48 | 283 | 25 | 75 | 31 |

¹ Department of Defense Education Activity.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.

Table A-12. Average mathematics scale scores and achievement-level results, by students with disabilities (SD), grade 8 public schools: By state, 2005

| State/jurisdiction | SD | | | | | Not SD | | | | |
|----------------------|----------------------------|---------------------|------------------------|-------------------|------------------------|----------------------------|---------------------|------------------------|-------------------|------------------------|
| | Percentage of all students | Average scale score | Percentage of students | | | Percentage of all students | Average scale score | Percentage of students | | |
| | | | Below Basic | At or above Basic | At or above Proficient | | | Below Basic | At or above Basic | At or above Proficient |
| Nation (public) | 11 | 244 | 69 | 31 | 7 | 89 | 281 | 28 | 72 | 31 |
| Alabama | 12 | 221 | 82 | 18 | 6 | 88 | 268 | 42 | 58 | 16 |
| Alaska | 12 | 248 | 67 | 33 | 6 | 88 | 283 | 26 | 74 | 32 |
| Arizona | 7 | 242 | 69 | 31 | 6 | 93 | 277 | 33 | 67 | 27 |
| Arkansas | 12 | 227 | 83 | 17 | 1 | 88 | 277 | 30 | 70 | 25 |
| California | 8 | 228 | 82 | 18 | 5 | 92 | 272 | 40 | 60 | 23 |
| Colorado | 9 | 244 | 70 | 30 | 5 | 91 | 284 | 26 | 74 | 35 |
| Connecticut | 11 | 248 | 63 | 37 | 10 | 89 | 285 | 26 | 74 | 38 |
| Delaware | 6 | 251 | 66 | 34 | 11 | 94 | 283 | 25 | 75 | 31 |
| Florida | 14 | 248 | 63 | 37 | 13 | 86 | 278 | 31 | 69 | 28 |
| Georgia | 10 | 241 | 71 | 29 | 6 | 90 | 276 | 35 | 65 | 25 |
| Hawaii | 12 | 224 | 89 | 11 | 1 | 88 | 271 | 38 | 62 | 21 |
| Idaho | 10 | 242 | 73 | 27 | 3 | 90 | 285 | 21 | 79 | 33 |
| Illinois | 13 | 244 | 69 | 31 | 5 | 87 | 283 | 26 | 74 | 32 |
| Indiana | 12 | 250 | 63 | 37 | 8 | 88 | 286 | 21 | 79 | 33 |
| Iowa | 13 | 245 | 74 | 26 | 4 | 87 | 290 | 17 | 83 | 38 |
| Kansas | 11 | 251 | 62 | 38 | 8 | 89 | 288 | 19 | 81 | 37 |
| Kentucky | 8 | 243 | 75 | 25 | 5 | 92 | 277 | 32 | 68 | 24 |
| Louisiana | 11 | 236 | 77 | 23 | 3 | 89 | 272 | 37 | 63 | 18 |
| Maine | 14 | 247 | 66 | 34 | 4 | 86 | 287 | 20 | 80 | 34 |
| Maryland | 7 | 245 | 68 | 32 | 10 | 93 | 281 | 31 | 69 | 31 |
| Massachusetts | 12 | 264 | 49 | 51 | 17 | 88 | 295 | 16 | 84 | 47 |
| Michigan | 10 | 243 | 69 | 31 | 4 | 90 | 281 | 28 | 72 | 32 |
| Minnesota | 10 | 250 | 66 | 34 | 10 | 90 | 295 | 16 | 84 | 47 |
| Mississippi | 6 | 228 | 84 | 16 | 2 | 94 | 265 | 46 | 54 | 14 |
| Missouri | 11 | 245 | 70 | 30 | 5 | 89 | 280 | 27 | 73 | 29 |
| Montana | 11 | 252 | 64 | 36 | 7 | 89 | 291 | 15 | 85 | 40 |
| Nebraska | 12 | 248 | 67 | 33 | 5 | 88 | 289 | 19 | 81 | 39 |
| Nevada | 9 | 233 | 80 | 20 | 5 | 91 | 274 | 35 | 65 | 23 |
| New Hampshire | 16 | 258 | 56 | 44 | 11 | 84 | 290 | 16 | 84 | 39 |
| New Jersey | 14 | 242 | 68 | 32 | 4 | 86 | 291 | 19 | 81 | 41 |
| New Mexico | 14 | 226 | 87 | 13 | 1 | 86 | 269 | 41 | 59 | 16 |
| New York | 12 | 249 | 63 | 37 | 7 | 88 | 284 | 25 | 75 | 34 |
| North Carolina | 13 | 253 | 60 | 40 | 10 | 87 | 286 | 23 | 77 | 35 |
| North Dakota | 12 | 260 | 54 | 46 | 7 | 88 | 291 | 14 | 86 | 38 |
| Ohio | 9 | 251 | 62 | 38 | 9 | 91 | 286 | 22 | 78 | 35 |
| Oklahoma | 13 | 237 | 76 | 24 | 3 | 87 | 276 | 31 | 69 | 23 |
| Oregon | 11 | 248 | 66 | 34 | 7 | 89 | 286 | 23 | 77 | 37 |
| Pennsylvania | 13 | 245 | 68 | 32 | 6 | 87 | 286 | 22 | 78 | 35 |
| Rhode Island | 15 | 241 | 74 | 26 | 3 | 85 | 278 | 30 | 70 | 27 |
| South Carolina | 8 | 251 | 63 | 37 | 7 | 92 | 284 | 25 | 75 | 32 |
| South Dakota | 10 | 250 | 65 | 35 | 6 | 90 | 291 | 15 | 85 | 40 |
| Tennessee | 10 | 237 | 79 | 21 | 3 | 90 | 274 | 35 | 65 | 23 |
| Texas | 8 | 249 | 64 | 36 | 8 | 92 | 284 | 25 | 75 | 33 |
| Utah | 9 | 237 | 77 | 23 | 3 | 91 | 283 | 24 | 76 | 32 |
| Vermont | 15 | 257 | 57 | 43 | 12 | 85 | 293 | 16 | 84 | 42 |
| Virginia | 11 | 256 | 58 | 42 | 9 | 89 | 288 | 21 | 79 | 36 |
| Washington | 10 | 244 | 71 | 29 | 6 | 90 | 289 | 20 | 80 | 39 |
| West Virginia | 14 | 235 | 83 | 17 | 2 | 86 | 275 | 33 | 67 | 21 |
| Wisconsin | 12 | 250 | 63 | 37 | 9 | 88 | 289 | 19 | 81 | 39 |
| Wyoming | 13 | 251 | 64 | 36 | 5 | 87 | 287 | 18 | 82 | 33 |
| Other jurisdictions | | | | | | | | | | |
| District of Columbia | 12 | 208 | 94 | 6 | # | 88 | 250 | 66 | 34 | 8 |
| DoDEA ¹ | 8 | 247 | 66 | 34 | 4 | 92 | 287 | 20 | 80 | 35 |

The estimate rounds to zero.

¹ Department of Defense Education Activity.

NOTE: SD = students with disabilities. The results for students with disabilities are based on students who were assessed and cannot be generalized to the total population of such students. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.

Table A-13. Average mathematics scale scores and achievement-level results, by English language learners (ELL), grade 8 public schools: By state, 2005

| State/jurisdiction | ELL | | | | | Non-ELL | | | | | Formerly ELL | | | | |
|----------------------|----------------------------|---------------------|-------------|-------------------|------------------------|----------------------------|---------------------|-------------|-------------------|------------------------|----------------------------|---------------------|-------------|-------------------|------------------------|
| | Percentage of students | | | | | Percentage of students | | | | | Percentage of students | | | | |
| | Percentage of all students | Average scale score | Below Basic | At or above Basic | At or above Proficient | Percentage of all students | Average scale score | Below Basic | At or above Basic | At or above Proficient | Percentage of all students | Average scale score | Below Basic | At or above Basic | At or above Proficient |
| Nation (public) | 6 | 244 | 71 | 29 | 6 | 93 | 280 | 30 | 70 | 30 | 1 | 276 | 34 | 66 | 24 |
| Alabama | 1 | ‡ | ‡ | ‡ | ‡ | 99 | 262 | 47 | 53 | 15 | # | ‡ | ‡ | ‡ | ‡ |
| Alaska | 15 | 260 | 52 | 48 | 11 | 85 | 282 | 27 | 73 | 32 | # | ‡ | ‡ | ‡ | ‡ |
| Arizona | 13 | 245 | 72 | 28 | 5 | 87 | 279 | 31 | 69 | 29 | 1 | ‡ | ‡ | ‡ | ‡ |
| Arkansas | 1 | ‡ | ‡ | ‡ | ‡ | 99 | 272 | 36 | 64 | 22 | # | ‡ | ‡ | ‡ | ‡ |
| California | 20 | 241 | 74 | 26 | 5 | 74 | 275 | 35 | 65 | 26 | 5 | 278 | 33 | 67 | 25 |
| Colorado | 6 | 246 | 71 | 29 | 5 | 94 | 283 | 27 | 73 | 34 | # | ‡ | ‡ | ‡ | ‡ |
| Connecticut | 3 | 242 | 74 | 26 | 9 | 97 | 282 | 29 | 71 | 35 | # | ‡ | ‡ | ‡ | ‡ |
| Delaware | 3 | ‡ | ‡ | ‡ | ‡ | 97 | 282 | 27 | 73 | 30 | # | ‡ | ‡ | ‡ | ‡ |
| Florida | 5 | 243 | 70 | 30 | 4 | 93 | 276 | 33 | 67 | 27 | 2 | 257 | 52 | 48 | 7 |
| Georgia | 2 | ‡ | ‡ | ‡ | ‡ | 98 | 273 | 38 | 62 | 23 | # | ‡ | ‡ | ‡ | ‡ |
| Hawaii | 6 | 229 | 83 | 17 | 3 | 94 | 268 | 42 | 58 | 19 | # | ‡ | ‡ | ‡ | ‡ |
| Idaho | 6 | 254 | 58 | 42 | 7 | 94 | 283 | 25 | 75 | 31 | # | ‡ | ‡ | ‡ | ‡ |
| Illinois | 2 | 249 | 70 | 30 | 8 | 98 | 278 | 31 | 69 | 29 | # | ‡ | ‡ | ‡ | ‡ |
| Indiana | 2 | ‡ | ‡ | ‡ | ‡ | 98 | 282 | 25 | 75 | 31 | # | ‡ | ‡ | ‡ | ‡ |
| Iowa | 2 | ‡ | ‡ | ‡ | ‡ | 98 | 285 | 24 | 76 | 34 | # | ‡ | ‡ | ‡ | ‡ |
| Kansas | 3 | 251 | 67 | 33 | 3 | 97 | 285 | 22 | 78 | 35 | # | ‡ | ‡ | ‡ | ‡ |
| Kentucky | 1 | ‡ | ‡ | ‡ | ‡ | 99 | 274 | 35 | 65 | 23 | # | ‡ | ‡ | ‡ | ‡ |
| Louisiana | 1 | ‡ | ‡ | ‡ | ‡ | 99 | 268 | 41 | 59 | 16 | # | ‡ | ‡ | ‡ | ‡ |
| Maine | 1 | ‡ | ‡ | ‡ | ‡ | 99 | 281 | 26 | 74 | 30 | # | ‡ | ‡ | ‡ | ‡ |
| Maryland | 2 | ‡ | ‡ | ‡ | ‡ | 98 | 278 | 33 | 67 | 30 | # | ‡ | ‡ | ‡ | ‡ |
| Massachusetts | 2 | 242 | 73 | 27 | 8 | 97 | 293 | 19 | 81 | 44 | 1 | 255 | 60 | 40 | 11 |
| Michigan | 2 | ‡ | ‡ | ‡ | ‡ | 98 | 278 | 32 | 68 | 30 | # | ‡ | ‡ | ‡ | ‡ |
| Minnesota | 6 | ‡ | ‡ | ‡ | ‡ | 93 | 292 | 19 | 81 | 45 | # | ‡ | ‡ | ‡ | ‡ |
| Mississippi | 1 | ‡ | ‡ | ‡ | ‡ | 99 | 263 | 48 | 52 | 14 | # | ‡ | ‡ | ‡ | ‡ |
| Missouri | 1 | ‡ | ‡ | ‡ | ‡ | 99 | 277 | 32 | 68 | 26 | # | ‡ | ‡ | ‡ | ‡ |
| Montana | 4 | 243 | 73 | 27 | 3 | 96 | 288 | 18 | 82 | 37 | # | ‡ | ‡ | ‡ | ‡ |
| Nebraska | 3 | 242 | 78 | 22 | 2 | 97 | 285 | 23 | 77 | 36 | # | ‡ | ‡ | ‡ | ‡ |
| Nevada | 9 | 236 | 79 | 21 | 4 | 90 | 273 | 36 | 64 | 23 | 1 | ‡ | ‡ | ‡ | ‡ |
| New Hampshire | 1 | ‡ | ‡ | ‡ | ‡ | 99 | 286 | 22 | 78 | 35 | # | ‡ | ‡ | ‡ | ‡ |
| New Jersey | 1 | ‡ | ‡ | ‡ | ‡ | 98 | 284 | 25 | 75 | 36 | 1 | ‡ | ‡ | ‡ | ‡ |
| New Mexico | 16 | 239 | 77 | 23 | 2 | 84 | 268 | 42 | 58 | 16 | # | ‡ | ‡ | ‡ | ‡ |
| New York | 4 | 237 | 77 | 23 | 4 | 87 | 282 | 28 | 72 | 32 | 9 | 278 | 33 | 67 | 27 |
| North Carolina | 3 | 252 | 58 | 42 | 8 | 96 | 283 | 27 | 73 | 33 | 1 | ‡ | ‡ | ‡ | ‡ |
| North Dakota | 1 | ‡ | ‡ | ‡ | ‡ | 99 | 287 | 19 | 81 | 35 | # | ‡ | ‡ | ‡ | ‡ |
| Ohio | 1 | ‡ | ‡ | ‡ | ‡ | 99 | 284 | 25 | 75 | 33 | # | ‡ | ‡ | ‡ | ‡ |
| Oklahoma | 4 | 252 | 60 | 40 | 12 | 96 | 272 | 36 | 64 | 21 | # | ‡ | ‡ | ‡ | ‡ |
| Oregon | 7 | 253 | 60 | 40 | 10 | 93 | 285 | 25 | 75 | 35 | # | ‡ | ‡ | ‡ | ‡ |
| Pennsylvania | 1 | ‡ | ‡ | ‡ | ‡ | 99 | 281 | 27 | 73 | 31 | # | ‡ | ‡ | ‡ | ‡ |
| Rhode Island | 4 | 224 | 89 | 11 | 1 | 96 | 274 | 34 | 66 | 24 | # | ‡ | ‡ | ‡ | ‡ |
| South Carolina | 1 | ‡ | ‡ | ‡ | ‡ | 99 | 282 | 28 | 72 | 30 | # | ‡ | ‡ | ‡ | ‡ |
| South Dakota | 2 | ‡ | ‡ | ‡ | ‡ | 98 | 288 | 19 | 81 | 37 | # | ‡ | ‡ | ‡ | ‡ |
| Tennessee | 1 | ‡ | ‡ | ‡ | ‡ | 99 | 271 | 39 | 61 | 21 | # | ‡ | ‡ | ‡ | ‡ |
| Texas | 6 | 242 | 74 | 26 | 3 | 92 | 284 | 25 | 75 | 33 | 1 | 276 | 29 | 71 | 20 |
| Utah | 6 | 249 | 63 | 37 | 8 | 93 | 281 | 26 | 74 | 31 | 1 | ‡ | ‡ | ‡ | ‡ |
| Vermont | 1 | ‡ | ‡ | ‡ | ‡ | 99 | 288 | 22 | 78 | 38 | # | ‡ | ‡ | ‡ | ‡ |
| Virginia | 4 | 260 | 49 | 51 | 13 | 96 | 285 | 24 | 76 | 34 | # | ‡ | ‡ | ‡ | ‡ |
| Washington | 4 | 249 | 68 | 32 | 11 | 96 | 287 | 23 | 77 | 37 | # | ‡ | ‡ | ‡ | ‡ |
| West Virginia | # | ‡ | ‡ | ‡ | ‡ | 100 | 269 | 40 | 60 | 18 | # | ‡ | ‡ | ‡ | ‡ |
| Wisconsin | 3 | 269 | 44 | 56 | 19 | 97 | 285 | 23 | 77 | 36 | # | ‡ | ‡ | ‡ | ‡ |
| Wyoming | 4 | 251 | 61 | 39 | 3 | 96 | 283 | 22 | 78 | 30 | # | ‡ | ‡ | ‡ | ‡ |
| Other jurisdictions | | | | | | | | | | | | | | | |
| District of Columbia | 3 | ‡ | ‡ | ‡ | ‡ | 97 | 246 | 69 | 31 | 7 | # | ‡ | ‡ | ‡ | ‡ |
| DoDEA ¹ | 4 | 260 | 54 | 46 | 10 | 96 | 285 | 23 | 77 | 33 | # | ‡ | ‡ | ‡ | ‡ |

The estimate rounds to zero.

‡ Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

¹ Department of Defense Education Activity.

NOTE: ELL = English language learners. Formerly ELL = students who passed their state's English-language proficiency examination within the past 2 years. The results for English language learners are based on students who were assessed and cannot be generalized to the total population of such students. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.

National Assessment of Educational Progress

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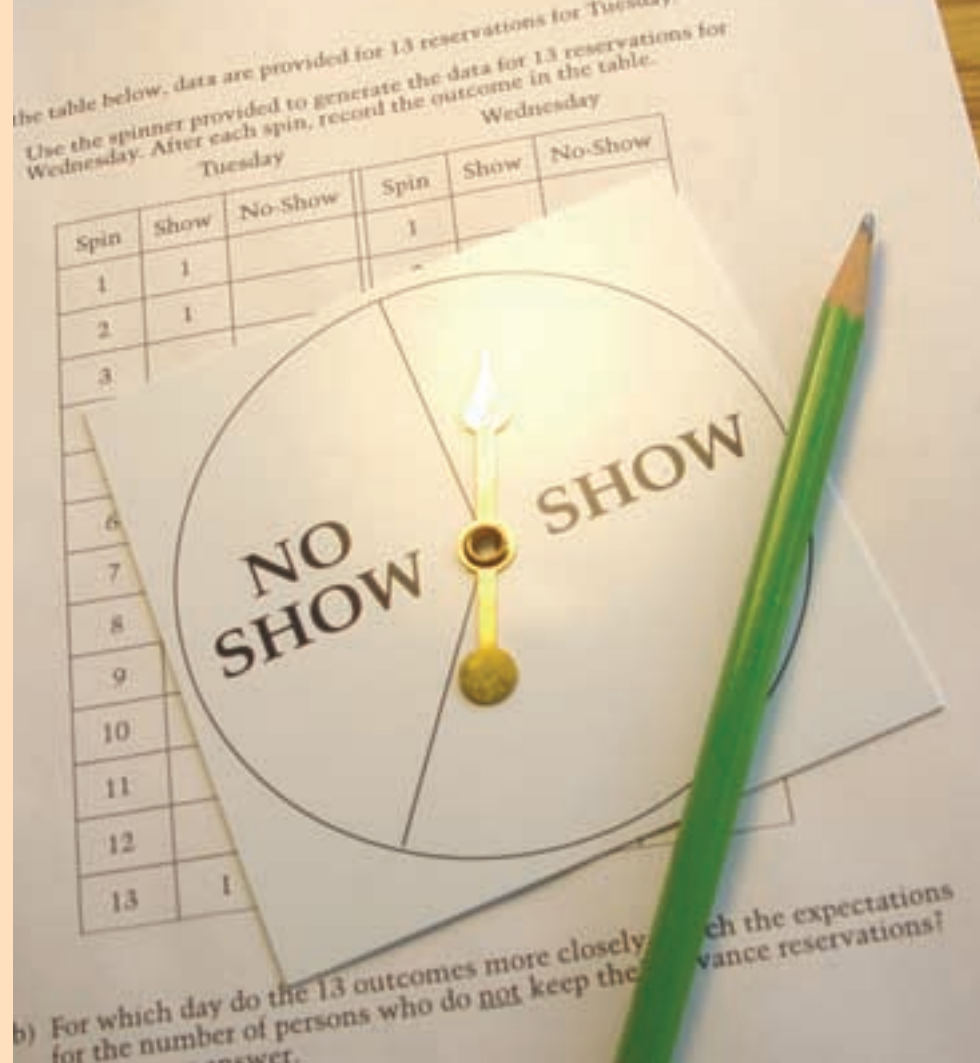
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