

DOCUMENT RESUME

ED 127 331

TM 005 416

AUTHOR Röntz, R. Robert; Bashaw, W. L.
 TITLE Equating Reading Tests With the Rasch Model. Volume II. Technical Reference Tables.
 INSTITUTION Georgia Univ., Athens. Educational Research Lab.
 SPONS AGENCY National Center for Education Statistics (DHEW), Washington, D.C.
 PUB DATE Sep 75
 CONTRACT OEC-0-72-5237
 NOTE 360p.; For related documents, see TM 005 414 and 415

EDRS PRICE MF-\$0.83 HC-\$19.41 plus Postage.
 DESCRIPTORS Comparative Analysis; Elementary Education; *Equated Scores; Goodness of Fit; *Item Analysis; *Mathematical Models; *Probability; Raw Scores; Reading Comprehension; *Reading Tests; Standard Error of Measurement; Standardized Tests; Statistical Analysis; Tables (Data); Test Reliability; Vocabulary
 IDENTIFIERS *Anchor Test Study; *Rasch Model

ABSTRACT

This volume contains tables of item analysis results obtained by following procedures associated with the Rasch Model for those reading tests used in the Anchor Test Study. Appendix I gives the test names and their corresponding analysis code numbers. Section I (Basic Item Analyses) presents data for the item analysis of each test in a two part table. The first part, Item Summary, gives information for each item in the test. The second part, Ability Summary, shows the frequency distribution and the calibrated Rasch scores and their associated errors of measurement. At the top of each table appears the following information: number of questions, the adjusted sample size, the traditional Kuder-Richardson formula 20 reliability estimate, and the equating constant. Section II presents summaries of traditional and Rasch item parameter estimates of each test. This section shows the distribution of various item statistics and the relationship between selected statistics. Relationships are described graphically. Each table gives the test name and analysis code number, the number items, and the sample size on which the page of data is based. The first table gives the usual summary statistics. The second table, Tally by Classification, presents the frequency distributions of the item statistics. (RC)

 * Documents acquired by ERIC include many informal unpublished *
 * materials not available from other sources. ERIC makes every effort *
 * to obtain the best copy available. Nevertheless, items of marginal *
 * reproducibility are often encountered and this affects the quality *
 * of the microfiche and hardcopy reproductions ERIC makes available *
 * via the ERIC Document Reproduction Service (EDRS). EDRS is not *
 * responsible for the quality of the original document. Reproductions *
 * supplied by EDRS are the best that can be made from the original. *

EQUATING READING TESTS WITH THE RASCH MODEL

Volume II, Technical Reference Tables

SCOPE OF INTEREST NOTICE

The ERIC Facility has assigned
this document for processing
to: TM CS

In our judgement, this document
is also of interest to the clearing-
houses noted to the right. Index-
ing should reflect their special
points of view.

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN-
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT
OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY.



EDUCATIONAL RESEARCH LABORATORY

College of Education
University of Georgia
Athens, Georgia 30602

EQUATING READING TESTS WITH THE RASCH MODEL

Technical Reference Tables

R. Robert Rentz

W. L. Bashaw

with the assistance of

Carolyn Cartledge
S. Leellen Brigman

Educational Research Laboratory

College of Education

University of Georgia

Athens, Georgia

September, 1975

This report was prepared under Contract No. OEC-0-72-5237 by the Educational Research Laboratory of the University of Georgia for the National Center for Educational Statistics, Office of Education, U. S. Department of Health, Education, and Welfare. The contractor was encouraged to exercise professional judgment in its contents; therefore, this report does not necessarily reflect positions and policies of the Government.

Technical Reference Tables

INTRODUCTION

This volume contains tables of item analysis results for those reading tests used in the Anchor Test Study (ATS). The analyses presented here follow those procedures associated with the "Rasch Model", the item analysis model of Georg Rasch. Rasch's Model includes two sets of parameters, one for items (easiness) and one for examinees (abilities). "Easiness" is a function of the proportion passing a question. "Ability" is a measure of the student's ability on whatever questions he is asked. It is a function of the number of questions answered correctly out of a given set of questions. In addition to presenting estimates of the two Rasch Model parameters (item easiness and person ability) for each of the tests under study, some of the more traditional item and test statistics are presented. Those item analysis tables comprise section one of this volume; the second section contains a one page summary of the item analysis results giving distributions and descriptive statistics together with some bivariate plots of the item statistics.

It is our intention that this volume be simply a set of reference tables without a detailed explanation of how the various statistics should be interpreted. For the most part the statistics presented are well known and their explanation can be found in any basic tests and measurement text. For those analyses specifically associated with the

Rasch Model; we refer the reader to Volume I of this report. In the following paragraphs we have attempted to describe the contents of the tables according to the types of information contained in them. There is information on how to read the tables, but interpretations of the individual tables are not included.

While the data used to develop the tables came from the ATS, the design here deviated somewhat from the design used in the ATS. For example, when item analyses are presented for a given test, responses from all children to whom the test was administered were used regardless of their grade. This is in contrast to the ATS where results are reported separately by grade.

Tables are identified by the test name and its form and level and an identification code (analysis code). Tables are in the order of the analysis code number. The test names and their corresponding analysis code numbers appear in Appendix I. "Test Unit Title" refers to a specific test, form, and level. There are 84 test units numbered from 0100 to 8400. Both Appendix II and Appendix III of the volume contain 84 tables. Appendix II tables are numbered 1 to 84, corresponding to the identification appearing in Appendix I. Appendix III tables are identified in the upper right hand corner by the four digit analysis code ranging from 0100 to 8400, corresponding to the identification appearing in Appendix I.

Appendix II: BASIC ITEM ANALYSES

Data for the item analysis of each test appear in a two part table. The first part, ITEM SUMMARY, gives information for each item in the test. The second part, ABILITY SUMMARY, shows the

frequency distribution and the calibrated Rasch scores and their associated errors of measurement.

At the top of each table appears one line of information. This includes the number of questions (ITEMS), the adjusted sample size (CASES), the traditional Kuder-Richardson formula 20 reliability estimate (KR-20), and the equating constant, CASES is not the number of children who were administered the test. The sample size is adjusted by the deletion of data from children who scored zero or maximum. (Rasch ability score cannot be estimated by MESAMAX if raw scores are either zero or maximum. Moreover, such scores do not provide measures of a child --they only indicate that a test is grossly too easy or too difficult and indicate that a more appropriate test should be administered).

Item Summary

The first part of each table is the item summary. "ITEM NO." is the item number corresponding to the sequence in which the item is presented in the published test booklet. "RESPONSE PERCENT" is the percentage of students who answered each question correctly. This is the traditional difficulty index p .

"LOG EASINESS" is the estimate of the Rasch item parameter on a natural logarithm scale. "STD ERROR" is the standard error of estimate of the log easiness value. This is standard output of the MESAMAX program.

However, one unique feature of this volume should be pointed out. This feature is the presentation of comparable scale values for all items. Section one tables include comparable item scale values (log easiness) for 1174 vocabulary and 1470 comprehension items. All of these

easiness values can be adjusted to a common scale by subtracting the test's equating constant from the easiness value given. Thus, these data can be used to tailor tests to specific target populations. Moreover, three other indexes are presented for each item which might be used to assist in selecting items for such tailored tests. (See Summary, Volume I).

There are two discrimination indexes printed. Both of these are MESAMAX output. The first, "R(I,AB)", is the point-biserial correlation of each item with estimated ability. This differs from the usual point-biserial index in that one traditionally correlates the item with the total test score. Also, it differs slightly in that the MESAMAX program discards routinely all data from subjects who earn a zero or a maximum raw score. The second discrimination index is "SLOPE". This is a least squares estimate of the slope of the item characteristic curve. It is based on fitting the line of regression of RESPONSE PERCENT on an ability estimate corresponding to each possible raw score. The ordinate is transformed in this procedure to linearize the item characteristic curve. Theoretically, best fitting items should have a slope near unity. Normally, slopes between 0.8 and 1.25 are considered as fitting well; whereas slopes less than .4 or above 2.5 are considered as not fitting.

The last column, "MN SQ FIT" (Mean Square Fit), is the MESAMAX index of fit of the item to the model. This index is a function of sample size; therefore, its interpretation is of questionable value. For a particular table, the values of mean square fit might well indicate the relative fit of the various items. However, MN SQ FIT values probably should not be used to compare items from one table to the next, nor should one attempt to interpret their absolute magnitudes. (See Vol. I,

Sec. 2.6)

Ability Summary

The second part of the table summarizes the scoring table information. Column one (SCORE) gives the various raw scores that is, the number of correct answers. Scores of zero or maximum are not tabulated and such scores have not entered into the analyses. The frequency distribution is presented in the second column (FREQ).

The third column (LOG ABILITY) is the regular MESAMAX output for calibrating raw scores to a natural logarithm scale of ability. That is, no transformations are applied to yield this column other than that done by MESAMAX as ordinarily run. This would normally be the final output of a MESAMAX analysis except for arbitrary convenience scaling that one might employ, for example, to remove negative scale values.

The fourth column (STD ERROR) is the standard error of measurement of log ability. It is calculated by MESAMAX and can be interpreted as one normally interprets standard errors of measurement.

The last two columns give the recommended scoring table and associated standard errors of measurement. The "NATIONAL REFERENCE SCALE SCORE" is a linear transformation of LOG ABILITY. The major part of the transformation is the additive adjustment of the equating constant to put all tests onto a common scale. In addition, adjustments were made to remove fractions and negative values. Each value of LOG ABILITY had added to it the equating constant. This value was multiplied by 10 and the result was rounded to the nearest integer. The result was added to 200 to yield the SCALE SCORE. The addition of 200 was expected to yield values high enough to allow some downward extension of the scale into the primary grades in possible future studies.

The final column, NATIONAL REFERENCE SCALE STD ERROR, is the standard error of measurement of the National Reference Scale Score. It is merely STD ERROR multiplied by ten which is the multiplicative constant in the National Reference Scale linear transformation.

Appendix III: ITEM ANALYSIS SUMMARIES

Section Two presents summaries of traditional and Rasch item parameter estimates of each test. (Appendix III appears after the blue separation page). The purposes of this section are to show the distribution of various item statistics and the relationships between selected statistics. Relationships are described graphically. These scattergrams show the way in which each of four item statistics relates to the fit index, MS FIT. Similar graphs, in which individual items can be identified, are useful in item selection during test construction. The graphical presentation of relationships is appropriate due to the nonlinear nature of the relationships.

Each table gives the test name and analysis code number, the number items, and the sample size on which the page of data is based. The first table gives the usual summary statistics. The abbreviations for these summary statistics are as follows:

MEAN	- arithmetic average;
STD	- standard deviation;
SKEW	- skewness index;
KUR	- kurtosis index;
MED	- median; and
Q	- semi-interquartile range.

The various item statistic abbreviations are as follows:

- DIFF - difficulty (p), i.e., the proportion passing an item;
- MAX - the MESAMAX maximum likelihood estimator of Rasch log easiness for each item;
- RPBIS - the point-biserial correlation of each item with MAX;
- SLOPE - the regression estimate of the slope of the item characteristic curve of each item;
- MSFIT - the MESAMAX mean square fit index for each item;
- MSFT* - an adjusted mean square fit introduced because of sample size differences (MSFIT multiplied by $1500/N$ where N is the sample size); and
- MS - MSFT* (the baseline, or abscissa, for all graphs)..

The second table, TALLY BY CLASSIFICATION, presents the frequency distributions of the five item statistics. All distributions are grouped into ten categories. An explanation of the grouping procedure might be helpful. All pages are constructed with the same definition of the various grouping intervals. The legend for explaining the intervals appears at the bottom of each page. For example, category 1 for DIFF always means difficulty indexes less than .20 without regard to the page which a reader might be studying. Category 2 for DIFF refers to difficulty indexes of .20 up to .28.

Some interpretive comments are appropriate. Models for "good" tests differ. If tests differ in regard to the distributions of DIFF, then these differences reflect the test author's opinions of the definition of a "good" test for their specific purposes. Some authors will try for a flat, wide distribution of DIFF in the neighborhood

of .5 or slightly higher. All tests should have a distribution of RPBS centered at the high end of the distribution (.4 to .5).

None of these tests were constructed according to the Rasch model of a "good" test. This model has as one of its expectations a distribution of SLOPE that is centered on unity and has a reasonably short range. MSFIT's should all be small, but the failure of this index to be meaningful has been explained previously.

The MSFT* index is an attempt to render various pages of Appendix III comparable. It is a crude attempt to standardize the size of MSFIT by removing the effect of sample size. The multiplier 1500 is approximately the size of two cells in the basic ATS design. Thus, we are attempting to set the MSFT* index on a scale of zero to about five. By controlling the maximum size of MSFT*, we have been able to construct graphs that are comparable from page to page.

Appendix I

Table 1

TITLES AND ANALYSIS CODES FOR TEST UNITS

<u>Test Unit Title</u>	<u>Analysis Code</u>
CAT LEVEL 3 FORM A VOCABULARY	0100
CAT LEVEL 3 FORM A COMPREHENSION	0200
CAT LEVEL 3 FORM A TOTAL READING	0300
CAT LEVEL 3 FORM B VOCABULARY	0400
CAT LEVEL 3 FORM B COMPREHENSION	0500
CAT LEVEL 3 FORM B TOTAL READING	0600
CAT LEVEL 4 FORM A VOCABULARY	0700
CAT LEVEL 4 FORM A COMPREHENSION	0800
CAT LEVEL 4 FORM A TOTAL READING	0900
CAT LEVEL 4 FORM B VOCABULARY	1000
CAT LEVEL 4 FORM B COMPREHENSION	1100
CAT LEVEL 4 FORM B TOTAL READING	1200
CTBS LEVEL 2 FORM Q VOCABULARY	1300
CTBS LEVEL 2 FORM Q COMPREHENSION	1400
CTBS LEVEL 2 FORM Q TOTAL READING	1500
CTBS LEVEL 2 FORM R VOCABULARY	1600
CTBS LEVEL 2 FORM R COMPREHENSION	1700
CTBS LEVEL 2 FORM R TOTAL READING	1800
CTBS LEVEL 3 FORM Q VOCABULARY	1900
CTBS LEVEL 3 FORM Q COMPREHENSION	2000
CTBS LEVEL 3 FORM Q TOTAL READING	2100
CTBS LEVEL 3 FORM R VOCABULARY	2200
CTBS LEVEL 3 FORM R COMPREHENSION	2300
CTBS LEVEL 3 FORM R TOTAL READING	2400
ITBS LEVEL 10 FORM 5 VOCABULARY	2500
ITBS LEVEL 10 FORM 5 COMPREHENSION	2600
ITBS LEVEL 10 FORM 5 TOTAL READING	2700
ITBS LEVEL 10 FORM 6 VOCABULARY	2800
ITBS LEVEL 10 FORM 6 COMPREHENSION	2900
ITBS LEVEL 10 FORM 6 TOTAL READING	3000
ITBS LEVEL 11 FORM 5 VOCABULARY	3100
ITBS LEVEL 11 FORM 5 COMPREHENSION	3200
ITBS LEVEL 11 FORM 5 TOTAL READING	3300
ITBS LEVEL 11 FORM 6 VOCABULARY	3400
ITBS LEVEL 11 FORM 6 COMPREHENSION	3500
ITBS LEVEL 11 FORM 6 TOTAL READING	3600
ITBS LEVEL 12 FORM 5 VOCABULARY	3700
ITBS LEVEL 12 FORM 5 COMPREHENSION	3800
ITBS LEVEL 12 FORM 5 TOTAL READING	3900

Table 1 (continued)
 TITLES AND ANALYSIS CODES FOR TEST UNITS

<u>Test Unit Title</u>	<u>Analysis Code</u>
ITBS LEVEL 12 FORM 6 VOCABULARY	4000
ITBS LEVEL 12 FORM 6 COMPREHENSION	4100
ITBS LEVEL 12 FORM 6 TOTAL READING	4200
MAT ELEMENTARY FORM F WORD KNOWLEDGE	4300
MAT ELEMENTARY FORM F READING (COMPR.)	4400
MAT ELEMENTARY FORM F TOTAL READING	4500
MAT ELEMENTARY FORM G WORD KNOWLEDGE	4600
MAT ELEMENTARY FORM G READING (COMPR.)	4700
MAT ELEMENTARY FORM G TOTAL READING	4800
MAT INTERMEDIATE FORM F WORD KNOWLEDGE	4900
MAT INTERMEDIATE FORM F READING (COMPR.)	5000
MAT INTERMEDIATE FORM F TOTAL READING	5100
MAT INTERMEDIATE FORM G WORD KNOWLEDGE	5200
MAT INTERMEDIATE FORM G READING (COMPR.)	5300
MAT INTERMEDIATE FORM G TOTAL READING	5400
STEP II LEVEL 4 FORM A PART 1 (VOCAB.)	5500
STEP II LEVEL 4 FORM A PART 2 (COMPR.)	5600
STEP II LEVEL 4 FORM A TOTAL READING	5700
STEP II LEVEL 4 FORM B PART 1 (VOCAB.)	5800
STEP II LEVEL 4 FORM B PART 2 (COMPR.)	5900
STEP II LEVEL 4 FORM B TOTAL READING	6000
SRA BLUE FORM E VOCABULARY	6100
SRA BLUE FORM E READING (COMPR.)	6200
SRA BLUE FORM E TOTAL READING	6300
SRA BLUE FORM F VOCABULARY	6400
SRA BLUE FORM F READING (COMPR.)	6500
SRA BLUE FORM F TOTAL READING	6600
SRA GREEN FORM E VOCABULARY	6700
SRA GREEN FORM E READING (COMPR.)	6800
SRA GREEN FORM E TOTAL READING	6900
SRA GREEN FORM F VOCABULARY	7000
SRA GREEN FORM F READING (COMPR.)	7100
SRA GREEN FORM F TOTAL READING	7200
SAT INTERMEDIATE I FORM W WORD MEANING	7300
SAT INTERMEDIATE I FORM W PARAGRAPH MEANING	7400
SAT INTERMEDIATE I FORM W TOTAL READING	7500
SAT INTERMEDIATE I FORM X WORD MEANING	7600
SAT INTERMEDIATE I FORM X PARAGRAPH MEANING	7700
SAT INTERMEDIATE I FORM X TOTAL READING	7800
SAT INTERMEDIATE II FORM W WORD MEANING	7900
SAT INTERMEDIATE II FORM W PARAGRAPH MEANING	8000
SAT INTERMEDIATE II FORM W TOTAL READING	8100
SAT INTERMEDIATE II FORM X WORD MEANING	8200
SAT INTERMEDIATE II FORM X PARAGRAPH MEANING	8300
SAT INTERMEDIATE II FORM X TOTAL READING	8400

Appendix II

TABLE 1
CAT LEVEL 3 FORM A VOCABULARY
ITEM SUMMARY

40 ITEMS 23188 CASES KR-20= 0.918 EQUATING CONSTANT= 0.267

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	88.50	2.025	0.022	0.302	0.815	4.63
2	91.31	2.383	0.025	0.408	1.286	18.24
3	85.11	1.674	0.020	0.381	0.936	3.80
4	85.18	1.778	0.021	0.506	1.600	30.18
5	76.83	1.150	0.018	0.378	0.768	22.71
6	71.21	0.629	0.017	0.500	1.060	4.15
7	82.72	1.460	0.019	0.433	0.966	5.38
8	83.69	1.544	0.020	0.510	1.221	25.19
9	82.64	1.453	0.019	0.439	1.151	3.27
10	72.02	0.681	0.017	0.460	0.942	6.14
11	83.06	1.489	0.019	0.501	1.432	18.05
12	68.72	0.475	0.016	0.409	0.721	10.48
13	70.65	0.594	0.017	0.519	1.167	4.63
14	59.76	-0.044	0.016	0.447	0.833	13.25
15	68.50	0.461	0.016	0.476	1.006	2.65
16	62.28	0.097	0.016	0.325	0.615	48.99
17	63.45	0.164	0.016	0.556	1.107	7.93
18	72.53	0.713	0.017	0.583	1.502	28.01
19	58.70	-0.103	0.016	0.517	1.076	3.78
20	46.80	-0.753	0.016	0.571	1.060	7.96
21	59.86	-0.039	0.016	0.548	1.123	4.24
22	66.90	0.365	0.016	0.594	1.291	20.93
23	47.30	-0.725	0.016	0.570	1.066	10.00
24	55.35	-0.287	0.016	0.552	1.086	4.40
25	62.07	0.085	0.016	0.515	0.991	3.59
26	49.54	-0.603	0.015	0.467	0.932	7.57
27	47.57	-0.710	0.015	0.408	0.775	25.09
28	55.56	-0.276	0.016	0.582	1.261	10.11
29	44.65	-0.871	0.016	0.529	0.961	2.23
30	45.45	-0.826	0.016	0.494	0.964	3.41
31	42.41	-0.994	0.016	0.494	0.932	4.88
32	40.68	-1.091	0.016	0.570	1.089	8.12
33	39.49	-1.159	0.016	0.444	0.825	10.11
34	43.28	-0.946	0.016	0.564	1.163	29.61
35	39.16	-1.177	0.016	0.418	0.766	17.84
36	41.22	-1.061	0.016	0.525	1.011	6.73
37	35.94	-1.364	0.016	0.571	1.121	12.00
38	31.05	-1.660	0.017	0.445	0.828	35.09
39	28.17	-1.846	0.017	0.299	0.530	80.81
40	17.09	-2.687	0.020	0.370	0.585	46.36

TABLE 1 (CONT.)
 CAT LEVEL 3 FORM A VOCABULARY
 ABILITY SUMMARY

40 ITEMS 23188 CASES KR-20= 0.918 EQUATING CONSTANT= 0.267

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	4	-4.271	1.031	160	10.31
2	23	-3.515	0.750	168	7.50
3	45	-3.048	0.629	172	6.29
4	70	-2.697	0.559	176	5.59
5	149	-2.411	0.513	179	5.13
6	181	-2.165	0.480	181	4.80
7	249	-1.946	0.455	183	4.55
8	360	-1.748	0.436	185	4.36
9	381	-1.565	0.420	187	4.20
10	500	-1.394	0.408	189	4.08
11	546	-1.232	0.397	190	3.97
12	535	-1.078	0.389	192	3.89
13	600	-0.930	0.382	193	3.82
14	598	-0.786	0.376	195	3.76
15	661	-0.647	0.371	196	3.71
16	698	-0.511	0.367	198	3.67
17	687	-0.378	0.364	199	3.64
18	714	-0.246	0.362	200	3.62
19	740	-0.116	0.360	202	3.60
20	764	0.013	0.359	203	3.59
21	834	0.143	0.359	204	3.59
22	816	0.272	0.360	205	3.60
23	806	0.402	0.361	207	3.61
24	884	0.533	0.364	208	3.64
25	824	0.667	0.367	209	3.67
26	919	0.803	0.371	211	3.71
27	873	0.943	0.377	212	3.77
28	876	1.087	0.383	214	3.83
29	822	1.237	0.392	215	3.92
30	823	1.394	0.402	217	4.02
31	846	1.561	0.415	218	4.15
32	852	1.739	0.430	220	4.30
33	790	1.933	0.450	222	4.50
34	725	2.147	0.476	224	4.76
35	737	2.389	0.510	227	5.10
36	682	2.672	0.557	229	5.57
37	615	3.021	0.629	233	6.29
38	534	3.489	0.751	238	7.51
39	425	4.247	1.033	245	10.33

TABLE 2
CAT LEVEL 3 FORM A COMPREHENSION
ITEM SUMMARY

42 ITEMS 23351 CASLS KR-20= 0.889 EQUATING CONSTANT= 0.437

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(1,AB)	SLOPE	MIN SQ
1	53.02	2.610	0.026	0.347	1.189	16.77
2	92.68	2.464	0.025	0.355	1.178	16.43
3	71.90	0.765	0.016	0.465	1.149	6.49
4	82.52	1.473	0.018	0.302	0.660	18.25
5	68.09	0.544	0.016	0.477	1.030	6.50
6	62.54	0.248	0.015	0.480	1.056	8.00
7	63.99	1.593	0.019	0.430	1.200	13.00
8	66.41	0.453	0.015	0.446	0.975	2.43
9	58.01	0.540	0.016	0.485	1.206	7.80
10	66.07	0.435	0.015	0.478	1.223	6.72
11	55.12	-0.128	0.015	0.474	1.004	7.04
12	57.02	-0.033	0.015	0.469	0.999	5.20
13	35.75	-1.106	0.015	0.287	0.566	39.02
14	72.55	0.798	0.016	0.488	1.212	12.00
15	50.20	-0.367	0.015	0.402	0.868	9.08
16	68.32	0.557	0.016	0.502	1.397	13.91
17	68.18	0.549	0.016	0.509	1.303	15.49
18	55.93	-0.087	0.015	0.499	1.112	8.17
19	47.68	-0.496	0.015	0.429	0.983	4.86
20	25.22	-1.105	0.015	0.443	0.956	14.09
21	30.34	-1.408	0.016	0.281	0.567	49.31
22	23.16	-1.650	0.017	0.176	0.470	80.27
23	37.59	-1.009	0.015	0.348	0.755	21.24
24	77.80	1.130	0.017	0.535	1.605	35.31
25	71.83	0.757	0.016	0.470	1.138	17.55
26	49.44	0.577	0.017	0.502	1.348	10.48
27	46.81	0.641	0.016	0.526	1.482	18.11
28	48.07	0.020	0.015	0.539	1.172	14.70
29	45.15	-0.127	0.015	0.439	1.103	3.91
30	37.41	-1.018	0.015	0.362	0.793	16.42
31	40.14	-1.419	0.016	0.226	0.524	58.16
32	40.21	-1.509	0.015	0.450	0.942	3.09
33	40.29	-0.972	0.015	0.209	0.678	42.09
34	44.37	-0.861	0.015	0.409	0.904	11.93
35	64.67	0.633	0.016	0.462	1.197	4.99
36	66.33	0.448	0.015	0.524	1.341	14.53
37	34.85	-0.141	0.015	0.460	1.068	0.86
38	46.76	-0.040	0.015	0.476	1.022	2.31
39	46.10	-0.572	0.015	0.488	1.058	3.51
40	33.22	-0.719	0.015	0.421	0.967	5.87
41	33.70	-1.025	0.017	0.166	0.472	48.70
42	21.74	-1.951	0.017	0.277	0.607	26.70



TABLE 2 (CONT.)
CAT LEVEL 3 FORM A COMPREHENSION
ABILITY SUMMARY

42 ITEMS 23351 CASES KR-20= 0.889 EQUATING CONSTANT= 0.437

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	3	-4.260	1.035	162	10.35
2	4	-3.497	0.754	169	7.54
3	9	-3.025	0.631	174	6.31
4	24	-2.673	0.559	178	5.59
5	43	-2.389	0.511	180	5.11
6	95	-2.146	0.476	183	4.76
7	152	-1.933	0.449	185	4.49
8	208	-1.741	0.427	187	4.27
9	321	-1.566	0.410	189	4.10
10	422	-1.404	0.396	190	3.96
11	493	-1.251	0.385	192	3.85
12	575	-1.107	0.375	193	3.75
13	612	-0.969	0.367	195	3.67
14	659	-0.836	0.361	196	3.61
15	670	-0.708	0.356	197	3.56
16	735	-0.583	0.351	199	3.51
17	790	-0.461	0.348	200	3.48
18	808	-0.341	0.345	201	3.45
19	856	-0.223	0.343	202	3.43
20	892	-0.105	0.342	203	3.42
21	900	0.012	0.342	204	3.42
22	931	0.129	0.342	206	3.42
23	1007	0.246	0.343	207	3.43
24	988	0.365	0.345	208	3.45
25	1002	0.484	0.347	209	3.47
26	970	0.606	0.351	210	3.51
27	963	0.730	0.355	212	3.55
28	953	0.858	0.360	213	3.60
29	900	0.989	0.366	214	3.66
30	891	1.126	0.373	216	3.73
31	867	1.268	0.382	217	3.82
32	808	1.418	0.393	219	3.93
33	705	1.577	0.406	220	4.06
34	650	1.748	0.422	222	4.22
35	546	1.934	0.442	224	4.42
36	523	2.140	0.467	226	4.67
37	447	2.374	0.501	228	5.01
38	343	2.648	0.548	231	5.48
39	285	2.986	0.619	234	6.19
40	211	3.442	0.742	239	7.42
41	130	4.185	1.024	246	10.24



TABLE 3
CAT LEVEL 3 FORM A TOTAL READING
ITEM SUMMARY

82 ITEMS 23376 CASES KR-20= 0.947 EQUATING CONSTANT= 0.354						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN-SQ FIT
1	88.59	1.988	0.022	0.289	0.884	1.96
2	91.38	2.329	0.024	0.393	1.477	15.61
3	85.22	1.654	0.020	0.366	1.053	4.15
4	86.29	1.753	0.020	0.483	1.751	20.32
5	78.99	1.159	0.017	0.355	0.783	7.23
6	71.44	0.671	0.016	0.488	1.186	5.13
7	82.86	1.452	0.019	0.415	1.078	5.26
8	83.84	1.532	0.019	0.491	1.377	17.67
9	82.78	1.446	0.019	0.430	1.332	5.16
10	72.25	0.720	0.016	0.435	0.969	3.36
11	83.20	1.480	0.019	0.482	1.567	14.50
12	68.50	0.526	0.016	0.389	0.821	2.56
13	70.88	0.638	0.016	0.501	1.342	5.70
14	60.08	0.042	0.015	0.435	0.879	4.23
15	68.75	0.514	0.016	0.459	1.247	2.20
16	62.58	0.174	0.015	0.312	0.727	15.13
17	63.74	0.237	0.015	0.530	1.198	6.84
18	72.75	0.750	0.016	0.563	1.714	20.19
19	59.03	-0.013	0.015	0.507	1.167	4.08
20	47.22	-0.617	0.015	0.554	1.221	6.55
21	60.18	0.047	0.015	0.533	1.247	5.65
22	67.16	0.424	0.016	0.577	1.410	16.10
23	47.72	-0.592	0.015	0.557	1.189	9.57
24	55.70	-0.185	0.015	0.533	1.235	5.40
25	62.37	0.163	0.015	0.499	1.160	3.75
26	49.94	-0.479	0.015	0.449	0.967	2.00
27	47.99	-0.578	0.015	0.400	0.901	7.02
28	55.91	-0.174	0.015	0.563	1.345	8.88
29	45.09	-0.727	0.015	0.518	1.024	2.77
30	45.89	-0.086	0.015	0.471	1.007	1.95
31	42.87	-0.842	0.015	0.474	0.955	1.81
32	41.16	-0.932	0.015	0.553	1.256	7.57
33	39.97	-0.995	0.015	0.416	0.856	2.92
34	43.73	-0.797	0.015	0.538	1.254	15.89
35	39.65	-1.012	0.015	0.387	0.727	6.21
36	41.69	-0.964	0.015	0.500	1.104	3.57
37	36.45	-1.185	0.015	0.542	1.198	7.48
38	31.61	-1.459	0.016	0.421	0.950	14.38
39	28.74	-1.631	0.016	0.284	0.583	27.19
40	17.75	-2.406	0.019	0.356	0.729	21.03
41	93.03	2.578	0.026	0.331	1.242	8.23
42	92.09	2.431	0.025	0.342	1.158	8.76
43	71.99	0.704	0.016	0.462	1.116	2.64
44	82.54	1.426	0.019	0.274	0.643	15.71
45	68.12	0.478	0.016	0.458	0.998	2.52
46	62.58	0.174	0.015	0.465	0.958	5.17
47	84.01	1.548	0.019	0.421	1.274	5.61
48	66.45	0.385	0.015	0.430	0.920	1.49
49	68.04	0.474	0.016	0.469	1.082	2.18
50	66.11	0.366	0.015	0.461	1.063	2.44

TABLE 3 (CONT.)
CAT LEVEL 3 FORM A TCTAL READING
ITEM SUMMARY

82 ITEMS 23376 CASES KR-20= 0.947 EQUATING CONSTANT= 0.354						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
51	55.17	-0.212	0.015	0.468	0.983	3.91
52	57.06	-0.115	0.015	0.445	0.902	2.02
53	35.82	-1.220	0.015	0.268	0.472	31.98
54	72.56	0.738	0.016	0.471	1.241	4.01
55	50.33	-0.459	0.015	0.391	0.835	7.29
56	68.36	0.492	0.016	0.484	1.245	5.15
57	68.21	0.483	0.016	0.493	1.268	5.70
58	55.98	-0.170	0.015	0.475	0.959	3.48
59	47.73	-0.591	0.015	0.413	0.756	4.82
60	35.29	-1.249	0.016	0.435	0.854	9.21
61	30.42	-1.530	0.016	0.250	0.535	37.75
62	23.24	-1.990	0.017	0.148	0.345	61.77
63	37.65	-1.119	0.015	0.330	0.648	18.62
64	77.82	1.078	0.017	0.509	1.352	12.72
65	71.86	0.696	0.016	0.443	1.025	1.89
66	75.47	0.921	0.017	0.458	1.176	3.95
67	69.85	0.577	0.016	0.515	1.338	7.07
68	58.11	-0.060	0.015	0.524	1.063	5.38
69	55.18	-0.212	0.015	0.421	0.986	4.53
70	37.48	-1.129	0.015	0.342	0.715	17.21
71	30.22	-1.541	0.016	0.197	0.408	48.34
72	46.27	-0.667	0.015	0.442	0.831	2.38
73	38.35	-1.081	0.015	0.289	0.623	36.74
74	44.43	-0.761	0.015	0.403	0.933	10.81
75	69.70	0.569	0.016	0.425	1.022	2.14
76	66.37	0.380	0.015	0.499	1.188	3.84
77	54.91	-0.225	0.015	0.430	0.888	2.08
78	56.81	-0.128	0.015	0.437	0.885	1.56
79	46.21	-0.669	0.015	0.453	0.974	1.14
80	43.28	-0.821	0.015	0.406	0.873	5.00
81	23.84	-1.948	0.017	0.149	0.418	66.45
82	21.87	-2.087	0.018	0.257	0.501	29.53

TABLE 3 (CONT.)
 CAT LEVEL 3 FORM A TCTAL READING
 ABILITY SUMMARY

82 ITEMS		23376 CASES		KR-20= 0.947 EQUATING CONSTANT= 0.354	

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR

1	0	-4.972	1.016	154	10.16
2	0	-4.246	0.730	161	7.30
3	0	-3.808	0.605	165	6.05
4	0	-3.488	0.531	169	5.31
5	1	-3.233	0.481	171	4.81
6	0	-3.019	0.445	173	4.45
7	3	-2.834	0.417	175	4.17
8	4	-2.669	0.395	177	3.95
9	12	-2.521	0.377	178	3.77
10	12	-2.385	0.361	180	3.61
11	12	-2.259	0.348	181	3.48
12	28	-2.141	0.337	182	3.37
13	44	-2.031	0.327	183	3.27
14	68	-1.927	0.319	184	3.19
15	96	-1.828	0.311	185	3.11
16	110	-1.733	0.304	186	3.04
17	117	-1.642	0.298	187	2.98
18	185	-1.555	0.293	188	2.93
19	201	-1.471	0.288	189	2.88
20	206	-1.389	0.283	190	2.83
21	241	-1.310	0.279	190	2.79
22	266	-1.233	0.276	191	2.76
23	284	-1.158	0.272	192	2.72
24	335	-1.085	0.269	193	2.69
25	278	-1.013	0.266	193	2.66
26	324	-0.943	0.264	194	2.64
27	336	-0.874	0.261	195	2.61
28	334	-0.806	0.259	195	2.59
29	351	-0.740	0.257	196	2.57
30	349	-0.674	0.256	197	2.56
31	351	-0.609	0.254	197	2.54
32	402	-0.545	0.253	198	2.53
33	357	-0.481	0.251	199	2.51
34	407	-0.418	0.250	199	2.50
35	386	-0.356	0.249	200	2.49
36	386	-0.294	0.249	201	2.49
37	432	-0.232	0.248	201	2.48
38	416	-0.171	0.248	202	2.48
39	396	-0.110	0.247	202	2.47
40	422	-0.048	0.247	203	2.47
41	438	0.012	0.247	204	2.47
42	448	0.073	0.247	204	2.47
43	465	0.134	0.247	205	2.47
44	456	0.195	0.247	205	2.47
45	478	0.256	0.247	206	2.47
46	438	0.318	0.248	207	2.48
47	485	0.379	0.249	207	2.49
48	446	0.441	0.249	208	2.49
49	483	0.504	0.250	209	2.50
50	440	0.567	0.251	209	2.51

CONTINUED

TABLE 3 (CONT.)
CAT LEVEL 3 FORM A TOTAL READING
ABILITY SUMMARY

82 ITEMS 23376 CASES KR-20= 0.947 EQUATING CONSTANT= 0.354

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD. ERR.
51	489	0.630	0.253	210	2.53
52	512	0.694	0.254	210	2.54
53	459	0.759	0.256	211	2.56
54	492	0.825	0.257	212	2.57
55	486	0.892	0.259	212	2.59
56	488	0.960	0.262	213	2.62
57	481	1.029	0.264	214	2.64
58	455	1.099	0.267	215	2.67
59	452	1.171	0.269	215	2.69
60	457	1.244	0.273	216	2.73
61	423	1.320	0.276	217	2.76
62	412	1.397	0.280	218	2.80
63	387	1.477	0.284	218	2.84
64	431	1.559	0.289	219	2.89
65	390	1.644	0.295	220	2.95
66	369	1.733	0.300	221	3.00
67	355	1.825	0.307	222	3.07
68	386	1.921	0.315	223	3.15
69	365	2.023	0.323	224	3.23
70	305	2.130	0.333	225	3.33
71	290	2.245	0.344	226	3.44
72	268	2.367	0.357	227	3.57
73	273	2.500	0.372	229	3.72
74	244	2.645	0.390	230	3.90
75	203	2.806	0.412	232	4.12
76	195	2.987	0.440	233	4.40
77	186	3.197	0.477	236	4.77
78	132	3.447	0.527	238	5.27
79	121	3.762	0.601	241	6.01
80	71	4.195	0.726	245	7.26
81	30	4.915	1.013	253	10.13

TABLE 4
CAT LEVEL 3 FORM B VOCABULARY
ITEM SUMMARY

40 ITEMS 3772 CASES KR-20= 0.924 EQUATING CONSTANT= -0.181						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	88.73	2.379	0.055	0.435	1.559	4.64
2	82.50	1.816	0.047	0.471	1.303	3.58
3	78.37	1.465	0.044	0.488	1.243	2.83
4	75.61	1.273	0.043	0.467	0.945	2.63
5	70.52	0.947	0.041	0.585	1.332	5.79
6	71.34	0.997	0.041	0.460	1.026	1.15
7	70.17	0.926	0.041	0.555	1.132	4.12
8	68.77	0.841	0.040	0.426	0.869	1.27
9	65.16	0.630	0.039	0.520	1.098	1.70
10	63.52	0.536	0.039	0.508	0.998	1.23
11	68.45	0.822	0.040	0.559	1.265	2.83
12	58.64	0.264	0.039	0.488	0.956	0.78
13	55.41	0.087	0.038	0.522	1.023	0.82
14	63.41	0.530	0.039	0.567	1.228	2.55
15	64.13	0.571	0.039	0.551	1.149	2.14
16	58.27	0.244	0.039	0.472	0.868	1.18
17	58.30	0.245	0.039	0.538	1.062	2.49
18	56.42	0.142	0.038	0.528	1.001	1.86
19	57.56	0.204	0.039	0.602	1.233	3.44
20	58.51	0.279	0.039	0.499	0.912	1.59
21	63.41	0.530	0.039	0.519	1.108	2.06
22	48.91	-0.266	0.038	0.584	1.181	2.32
23	51.78	-0.110	0.038	0.493	0.937	1.23
24	45.57	-0.450	0.039	0.521	0.932	1.48
25	60.68	0.377	0.039	0.472	0.972	1.13
26	47.69	-0.333	0.039	0.401	0.762	5.64
27	50.24	-0.194	0.038	0.514	1.058	1.70
28	38.65	-0.841	0.040	0.526	1.018	0.85
29	41.04	-0.704	0.039	0.524	1.000	2.21
30	45.17	-0.472	0.039	0.540	1.091	1.47
31	36.13	-0.989	0.040	0.388	0.596	7.46
32	37.59	-0.903	0.040	0.556	1.071	2.61
33	36.15	-0.870	0.040	0.465	0.841	2.74
34	40.69	-0.723	0.039	0.573	1.081	1.53
35	28.82	-1.448	0.042	0.463	0.875	3.49
36	30.30	-1.350	0.042	0.474	0.783	3.04
37	31.89	-1.249	0.041	0.424	0.744	4.32
38	26.03	-1.638	0.043	0.448	0.870	3.84
39	24.63	-1.739	0.044	0.345	0.593	8.39
40	23.46	-1.825	0.045	0.320	0.562	10.55

TABLE 4 (CONT.)
CAT LEVEL 3 FORM B VOCABULARY
ABILITY SUMMARY

40 ITEMS 3772 CASES KR-20= 0.924 EQUATING CONSTANT= -0.181					
SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	4	-4.107	1.029	157	10.29
2	11	-3.357	0.746	165	7.46
3	13	-2.895	0.624	169	6.24
4	28	-2.553	0.552	173	5.52
5	35	-2.275	0.504	175	5.04
6	47	-2.039	0.470	178	4.70
7	64	-1.830	0.444	180	4.44
8	99	-1.643	0.424	182	4.24
9	112	-1.470	0.407	183	4.07
10	123	-1.310	0.394	185	3.94
11	145	-1.159	0.384	187	3.84
12	125	-1.015	0.375	188	3.75
13	146	-0.877	0.368	189	3.68
14	148	-0.744	0.362	191	3.62
15	118	-0.615	0.357	192	3.57
16	115	-0.489	0.354	193	3.54
17	122	-0.365	0.351	195	3.51
18	116	-0.243	0.349	196	3.49
19	129	-0.121	0.348	197	3.48
20	112	0.0	0.348	198	3.48
21	116	0.121	0.348	199	3.48
22	121	0.243	0.350	201	3.50
23	132	0.365	0.352	202	3.52
24	114	0.490	0.354	203	3.54
25	109	0.617	0.358	204	3.58
26	103	0.747	0.363	206	3.63
27	126	0.880	0.369	207	3.69
28	110	1.019	0.376	208	3.76
29	102	1.163	0.384	210	3.84
30	113	1.315	0.395	211	3.95
31	101	1.476	0.408	213	4.08
32	105	1.648	0.423	215	4.23
33	104	1.835	0.443	217	4.43
34	98	2.043	0.468	219	4.68
35	102	2.277	0.502	221	5.02
36	84	2.552	0.549	224	5.49
37	82	2.891	0.620	227	6.20
38	81	3.347	0.742	232	7.42
39	57	4.090	1.025	239	10.25

TABLE 5-
GAT LEVEL 3 FORM B COMPREHENSION
ITEM SUMMARY

42 ITEMS 3801 CASES. KR-20= 0.892 EQUATING CONSTANT= -0.067

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(T, AB)	SLOPE	MN SQ FIT
1	90.82	2.506	0.057	0.319	1.215	3.11
2	91.27	2.564	0.058	0.365	1.534	5.37
3	66.51	0.724	0.038	0.410	0.906	1.93
4	85.32	1.937	0.048	0.399	1.518	3.90
5	59.48	0.366	0.037	0.525	1.356	3.83
6	59.80	0.382	0.037	0.536	1.228	5.05
7	69.01	0.858	0.038	0.403	1.015	0.73
8	46.54	-0.248	0.036	0.456	0.924	1.79
9	44.15	-0.386	0.037	0.322	0.761	6.01
10	46.59	-0.265	0.036	0.433	0.939	1.47
11	35.20	-0.850	0.038	0.387	0.629	3.20
12	42.33	-0.478	0.037	0.320	0.662	4.40
13	32.65	-0.991	0.039	0.264	0.547	8.19
14	68.46	0.828	0.038	0.391	0.972	1.13
15	62.33	0.508	0.037	0.453	1.102	1.26
16	46.12	-0.289	0.036	0.409	0.924	2.22
17	52.35	0.015	0.036	0.463	1.125	1.98
18	46.72	-0.259	0.036	0.396	0.657	2.53
19	51.70	-0.015	0.036	0.481	1.169	1.39
20	38.52	-0.673	0.037	0.327	0.633	4.21
21	40.25	-0.583	0.037	0.449	1.034	1.50
22	36.41	-0.785	0.038	0.292	0.559	9.77
23	38.12	-0.694	0.038	0.425	0.892	2.24
24	18.18	-1.954	0.047	0.211	0.489	11.75
25	63.98	0.593	0.037	0.520	1.436	4.04
26	52.85	0.041	0.036	0.522	1.127	3.54
27	59.33	0.358	0.037	0.513	1.436	2.95
28	55.30	0.160	0.036	0.415	0.847	1.69
29	44.46	-0.371	0.037	0.469	0.978	1.02
30	47.78	-0.207	0.036	0.484	1.097	2.17
31	53.20	0.058	0.036	0.519	1.358	2.22
32	52.62	0.029	0.036	0.497	1.123	1.78
33	52.28	0.013	0.036	0.486	1.062	1.45
34	35.36	-0.841	0.038	0.349	0.642	5.39
35	76.98	1.324	0.041	0.433	1.330	3.64
36	52.51	0.044	0.036	0.520	1.211	2.25
37	40.09	-0.592	0.037	0.486	1.096	0.95
38	42.91	-0.448	0.037	0.410	0.812	1.58
39	45.88	-0.300	0.036	0.373	0.916	2.68
40	46.46	-0.272	0.036	0.461	1.035	1.14
41	35.81	-0.817	0.038	0.413	0.911	1.48
42	32.68	-0.990	0.039	0.417	0.912	1.47

TABLE - 5 (CONT.)
 CAT LEVEL 3 FORM B COMPREHENSION
 ABILITY SUMMARY

42 ITEMS		3801 CASES	KR-20= 0.892	EQUATING CONSTANT= -0.067	

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR

1	0	-4.190	1.039	157	10.39
2	0	-3.420	0.758	165	7.58
3	5	-2.942	0.636	170	6.36
4	2	-2.586	0.563	173	5.63
5	12	-2.297	0.514	176	5.14
6	16	-2.053	0.477	179	4.77
7	36	-1.839	0.449	181	4.49
8	54	-1.647	0.427	183	4.27
9	68	-1.473	0.409	185	4.09
10	140	-1.313	0.393	186	3.93
11	115	-1.163	0.381	188	3.81
12	132	-1.022	0.370	189	3.70
13	135	-0.888	0.362	190	3.62
14	177	-0.760	0.354	192	3.54
15	173	-0.637	0.348	193	3.48
16	178	-0.518	0.343	194	3.43
17	178	-0.402	0.338	195	3.38
18	158	-0.289	0.335	196	3.35
19	164	-0.177	0.333	198	3.33
20	150	-0.067	0.331	199	3.31
21	141	0.042	0.330	200	3.30
22	137	0.150	0.330	201	3.30
23	136	0.259	0.330	202	3.30
24	152	0.369	0.331	203	3.31
25	138	0.479	0.333	204	3.33
26	115	0.591	0.336	205	3.36
27	111	0.706	0.340	206	3.40
28	114	0.823	0.345	208	3.45
29	94	0.944	0.351	209	3.51
30	80	1.069	0.358	210	3.58
31	97	1.201	0.367	211	3.67
32	81	1.340	0.378	213	3.78
33	74	1.468	0.391	214	3.91
34	74	1.647	0.408	218	4.08
35	77	1.822	0.428	218	4.28
36	57	2.016	0.455	219	4.55
37	60	2.238	0.490	222	4.90
38	53	2.501	0.538	224	5.38
39	42	2.828	0.610	228	6.10
40	39	3.273	0.734	232	7.34
41	36	4.005	1.020	239	10.20

TABLE 6
CAT LEVEL 3 FORM B TCTAL READING
ITEM SUMMARY

82 ITEMS 3809 CASES KR-20= 0.950 EQUATING CONSTANT= -0.123

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	88.84	2.285	0.053	0.415	1.721	4.11
2	83.07	1.750	0.046	0.451	1.510	3.55
3	78.58	1.419	0.043	0.462	1.405	2.48
4	75.85	1.239	0.041	0.446	1.044	2.71
5	70.81	0.933	0.039	0.566	1.550	5.14
6	71.62	0.981	0.039	0.436	1.108	0.99
7	70.46	0.914	0.039	0.534	1.388	3.44
8	69.67	0.835	0.039	0.413	0.921	0.99
9	65.50	0.638	0.038	0.499	1.279	1.81
10	63.88	0.551	0.038	0.484	1.148	1.30
11	68.76	0.817	0.039	0.543	1.604	3.11
12	59.04	0.299	0.037	0.477	1.030	1.15
13	55.84	0.135	0.037	0.513	1.226	1.03
14	63.77	0.545	0.038	0.551	1.392	2.66
15	64.48	0.583	0.038	0.527	1.349	2.19
16	58.68	-0.280	0.037	0.455	0.989	0.99
17	58.70	0.281	0.037	0.514	1.220	1.87
18	56.64	0.186	0.037	0.508	1.232	1.33
19	57.97	0.243	0.037	0.581	1.544	3.09
20	59.31	0.312	0.037	0.485	1.066	1.53
21	63.77	0.545	0.038	0.502	1.367	1.68
22	49.41	-0.191	0.037	0.561	1.266	2.14
23	52.24	-0.048	0.037	0.474	1.026	1.04
24	46.10	-0.360	0.037	0.505	0.979	1.28
25	61.07	0.403	0.037	0.449	1.098	0.93
26	48.20	-0.253	0.037	0.387	0.787	1.87
27	50.72	-0.125	0.037	0.482	1.142	1.14
28	39.25	-0.720	0.038	0.513	1.121	0.97
29	41.61	-0.594	0.037	0.494	1.014	1.40
30	45.71	-0.381	0.037	0.520	1.158	1.06
31	36.76	-0.856	0.038	0.379	0.712	2.38
32	38.20	-0.777	0.038	0.534	1.228	1.98
33	38.75	-0.747	0.038	0.444	0.937	1.50
34	41.27	-0.612	0.037	0.542	1.197	1.58
35	29.51	-1.278	0.040	0.452	0.972	2.05
36	30.98	-1.188	0.040	0.445	0.867	1.02
37	32.55	-1.095	0.039	0.410	0.819	1.75
38	26.75	-1.452	0.042	0.435	0.904	2.11
39	25.36	-1.545	0.042	0.343	0.742	3.05
40	24.21	-1.624	0.043	0.308	0.596	4.54
41	90.64	2.521	0.058	0.312	1.119	1.91
42	91.28	2.579	0.059	0.358	1.477	2.72
43	66.58	0.696	0.038	0.407	0.829	1.38
44	85.35	1.942	0.048	0.393	1.401	1.88
45	59.57	0.326	0.037	0.525	1.235	1.91
46	59.88	0.342	0.037	0.543	1.191	2.96
47	69.07	0.835	0.039	0.385	0.977	1.04
48	47.05	-0.312	0.037	0.435	0.931	2.10
49	44.26	-0.455	0.037	0.313	0.564	5.37
50	46.71	-0.329	0.037	0.414	0.778	1.72

CONTINUED



TABLE 6 (CONT.)
CAT LEVEL 3 FORM B TOTAL READING
ITEM SUMMARY

82 ITEMS 3809 CASES KR-20= 0.950 EQUATING CONSTANT= -0.123

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
51	35.34	-0.935	0.039	0.367	0.657	3.52
52	42.45	-0.550	0.037	0.285	0.554	5.21
53	32.79	-1.081	0.039	0.243	0.465	7.22
54	68.52	0.804	0.038	0.370	0.843	1.25
55	62.40	0.473	0.037	0.431	0.907	0.94
56	46.23	-0.354	0.037	0.399	0.806	2.36
57	52.43	-0.038	0.037	0.438	0.973	2.54
58	46.84	-0.323	0.037	0.386	0.632	2.71
59	51.80	-0.070	0.037	0.457	0.961	1.19
60	38.65	-0.752	0.038	0.310	0.638	4.20
61	40.38	-0.659	0.038	0.426	0.937	1.99
62	36.55	-0.868	0.038	0.272	0.455	8.55
63	38.25	-0.774	0.038	0.411	0.724	2.54
64	18.35	-2.069	0.047	0.200	0.465	12.65
65	64.00	0.561	0.038	0.506	1.227	1.83
66	52.95	-0.012	0.037	0.522	1.128	1.84
67	59.41	0.318	0.037	0.485	1.064	1.09
68	55.40	0.112	0.037	0.393	0.721	1.67
69	44.58	-0.439	0.037	0.439	0.826	1.56
70	47.89	-0.269	0.037	0.480	1.020	1.03
71	53.29	0.006	0.037	0.495	1.127	1.19
72	52.72	-0.024	0.037	0.492	1.093	1.00
73	52.38	-0.041	0.037	0.466	0.916	1.08
74	35.49	-0.926	0.039	0.311	0.591	4.96
75	77.03	1.315	0.042	0.412	1.130	1.33
76	53.01	-0.009	0.037	0.498	1.107	0.83
77	40.22	-0.668	0.038	0.460	0.931	1.17
78	43.03	-0.519	0.037	0.390	0.753	1.84
79	46.00	-0.366	0.037	0.341	0.694	3.30
80	46.57	-0.336	0.037	0.443	0.930	1.37
81	35.94	-0.901	0.038	0.392	0.736	1.83
82	32.82	-1.079	0.039	0.398	0.754	2.99

TABLE 6 (CONT.)
 CAT. LEVEL 3 FORM B TOTAL READING
 ABILITY SUMMARY

82 ITEMS 3809 CASES KR-20= 0.950 EQUATING CONSTANT= -0.123					
SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	0	-4.864	1.018	150	10.18
2	0	-4.136	0.731	157	7.31
3	0	-3.697	0.606	162	6.06
4	0	-3.376	0.532	165	5.32
5	0	-3.121	0.482	168	4.82
6	0	-2.907	0.445	170	4.45
7	2	-2.722	0.417	172	4.17
8	0	-2.558	0.394	173	3.94
9	0	-2.410	0.375	175	3.75
10	9	-2.275	0.359	176	3.59
11	4	-2.151	0.346	177	3.46
12	9	-2.036	0.334	178	3.34
13	12	-1.927	0.324	180	3.24
14	18	-1.825	0.315	181	3.15
15	30	-1.728	0.307	181	3.07
16	31	-1.636	0.300	182	3.00
17	37	-1.548	0.294	183	2.94
18	56	-1.463	0.288	184	2.88
19	54	-1.382	0.283	185	2.83
20	46	-1.303	0.278	186	2.78
21	75	-1.227	0.274	187	2.74
22	83	-1.153	0.270	187	2.70
23	81	-1.082	0.266	188	2.66
24	78	-1.012	0.263	189	2.63
25	78	-0.943	0.260	189	2.60
26	74	-0.876	0.257	190	2.57
27	89	-0.811	0.255	191	2.55
28	82	-0.746	0.253	191	2.53
29	82	-0.683	0.251	192	2.51
30	82	-0.621	0.249	193	2.49
31	74	-0.560	0.247	193	2.47
32	73	-0.499	0.245	194	2.45
33	73	-0.439	0.244	194	2.44
34	68	-0.380	0.243	195	2.43
35	61	-0.321	0.242	196	2.42
36	67	-0.263	0.241	196	2.41
37	66	-0.205	0.240	197	2.40
38	75	-0.147	0.240	197	2.40
39	64	-0.090	0.239	198	2.39
40	82	-0.033	0.239	198	2.39
41	56	0.024	0.239	199	2.39
42	71	0.081	0.239	200	2.39
43	64	0.138	0.239	200	2.39
44	62	0.195	0.239	201	2.39
45	68	0.253	0.239	201	2.39
46	71	0.310	0.240	202	2.40
47	66	0.368	0.240	202	2.40
48	75	0.426	0.241	203	2.41
49	62	0.484	0.242	204	2.42
50	68	0.543	0.243	204	2.43

TABLE 6 (CONT.)
 CAT-LEVEL 3 FORM B TCTAL READING
 ABILITY SUMMARY

82 ITEMS 3809 CASES KR-20= 0.950 EQUATING CONSTANT= -0.123

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	54	0.602	0.244	205	2.44
52	74	0.662	0.246	205	2.46
53	64	0.723	0.247	206	2.47
54	57	0.784	0.249	207	2.49
55	75	0.847	0.251	207	2.51
56	51	0.910	0.253	208	2.53
57	51	0.975	0.256	209	2.56
58	69	1.041	0.258	209	2.58
59	50	1.108	0.261	210	2.61
60	46	1.177	0.264	211	2.64
61	56	1.248	0.268	211	2.68
62	54	1.321	0.272	212	2.72
63	43	1.396	0.276	213	2.76
64	44	1.474	0.281	214	2.81
65	48	1.554	0.287	214	2.87
66	47	1.638	0.293	215	2.93
67	40	1.725	0.299	216	2.99
68	38	1.817	0.307	217	3.07
69	33	1.914	0.315	218	3.15
70	53	2.016	0.325	219	3.25
71	35	2.126	0.336	220	3.36
72	32	2.243	0.349	221	3.49
73	29	2.371	0.365	222	3.65
74	28	2.510	0.383	224	3.83
75	36	2.666	0.406	225	4.06
76	17	2.842	0.434	227	4.34
77	39	3.046	0.471	229	4.71
78	19	3.290	0.521	232	5.21
79	21	3.600	0.596	235	5.96
80	19	4.027	0.722	239	7.22
81	11	4.741	1.011	246	10.11

TABLE 7
CAT LEVEL 4 FORM A VOCABULARY
ITEM SUMMARY

40 ITEMS 11534 CASES KR-20= 0.856 EQUATING CONSTANT= 1.484						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I, AB)	SLOPE	MN SQ FIT
1	79.43	1.490	0.025	0.453	1.137	2.67
2	72.49	1.026	0.023	0.555	1.486	10.83
3	90.81	2.573	0.034	0.407	1.270	6.67
4	79.36	1.485	0.025	0.439	1.107	1.93
5	75.58	1.223	0.024	0.489	1.231	3.35
6	64.96	0.589	0.022	0.581	1.165	13.44
7	66.89	0.697	0.022	0.586	1.550	12.02
8	75.80	1.238	0.024	0.560	1.406	13.28
9	71.99	0.995	0.023	0.524	1.303	5.12
10	72.26	1.012	0.023	0.506	1.151	4.10
11	61.57	0.405	0.022	0.464	0.872	2.22
12	76.32	1.272	0.024	0.441	0.908	1.66
13	70.18	0.887	0.023	0.581	1.495	13.83
14	46.06	-0.392	0.021	0.508	1.105	6.70
15	72.54	1.029	0.023	0.507	1.147	4.68
16	77.42	1.347	0.025	0.413	1.000	1.57
17	60.64	0.356	0.022	0.543	1.218	4.99
18	66.82	0.693	0.022	0.600	1.288	15.85
19	62.03	0.430	0.022	0.573	1.328	7.96
20	64.70	0.575	0.022	0.492	1.082	1.57
21	55.78	0.103	0.021	0.540	1.306	4.63
22	44.10	-0.492	0.021	0.529	1.308	11.51
23	43.23	-0.537	0.021	0.487	1.086	7.85
24	52.93	-0.043	0.021	0.507	1.133	2.86
25	58.29	0.233	0.021	0.511	1.055	3.89
26	53.08	-0.035	0.021	0.614	1.515	14.34
27	44.72	-0.461	0.021	0.598	0.836	8.19
28	41.08	-0.649	0.021	0.317	0.847	16.77
29	32.74	-1.098	0.022	0.415	0.890	15.77
30	34.97	-0.974	0.022	0.332	0.814	14.36
31	32.30	-1.123	0.022	0.427	0.897	5.87
32	39.02	-0.756	0.022	0.326	0.716	12.90
33	20.58	-1.901	0.025	0.173	0.631	48.35
34	29.25	-1.299	0.023	0.328	0.793	9.52
35	25.80	-1.511	0.024	0.331	0.806	13.29
36	25.49	-1.531	0.024	0.153	0.479	46.41
37	27.15	-1.427	0.023	0.229	0.599	26.87
38	21.12	-1.826	0.025	0.232	0.592	23.31
39	26.57	-1.462	0.023	0.323	0.799	20.73
40	17.02	-2.140	0.027	0.162	0.430	35.54

TABLE 7 (CONT.)
 CAT LEVEL 4 FORM A VOCABULARY
 ABILITY SUMMARY

40 ITEMS 11534 CASES KR-20= 0.856 EQUATING CONSTANT= 1.484

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
-1	6	-4.218	1.030	173	10.30
2	18	-3.465	0.747	180	7.47
3	36	-3.001	0.625	185	6.25
4	62	-2.656	0.554	188	5.54
5	76	-2.376	0.507	191	5.07
6	129	-2.137	0.473	193	4.73
7	193	-1.925	0.448	196	4.48
8	194	-1.734	0.428	198	4.28
9	277	-1.557	0.413	199	4.13
10	297	-1.392	0.400	201	4.00
11	334	-1.236	0.390	202	3.90
12	350	-1.087	0.382	204	3.82
13	384	-0.943	0.376	205	3.76
14	377	-0.804	0.371	207	3.71
15	382	-0.668	0.367	208	3.67
16	390	-0.534	0.364	209	3.64
17	414	-0.403	0.362	211	3.62
18	373	-0.272	0.360	212	3.60
19	393	-0.143	0.360	213	3.60
20	471	-0.013	0.360	215	3.60
21	424	0.117	0.361	216	3.61
22	471	0.247	0.362	217	3.62
23	493	0.379	0.364	219	3.64
24	491	0.513	0.367	220	3.67
25	505	0.649	0.371	221	3.71
26	521	0.788	0.375	223	3.75
27	496	0.931	0.381	224	3.81
28	494	1.079	0.388	226	3.88
29	433	1.232	0.396	227	3.96
30	379	1.393	0.406	229	4.06
31	398	1.562	0.418	230	4.18
32	331	1.743	0.433	232	4.33
33	284	1.939	0.452	234	4.52
34	237	2.155	0.477	236	4.77
35	153	2.397	0.510	239	5.10
36	132	2.680	0.556	242	5.56
37	69	3.026	0.626	245	6.26
38	43	3.489	0.746	250	7.46
39	24	4.238	1.028	257	10.28

TABLE 8
CAT LEVEL 4 FORM A COMPREHENSION
ITEM SUMMARY

45 ITEMS 11543 CASES KR-20= 0.865 EQUATING CONSTANT= 1.732						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	94.26	3.135	0.040	0.259	1.402	5.37
2	90.87	2.618	0.033	0.316	1.384	6.48
3	75.52	1.362	0.023	0.412	1.081	5.16
4	72.81	1.205	0.022	0.399	1.316	2.56
5	43.71	-0.221	0.021	0.345	0.831	2.65
6	78.37	1.540	0.024	0.445	1.530	10.37
7	29.97	-0.920	0.022	0.280	0.601	7.09
8	57.97	0.449	0.020	0.455	1.167	3.60
9	32.71	-0.771	0.022	0.359	0.910	2.08
10	58.70	0.484	0.021	0.387	0.851	1.59
11	60.40	0.565	0.021	0.453	1.250	3.35
12	38.06	-0.497	0.021	0.437	1.050	4.04
13	66.06	0.844	0.021	0.422	1.016	2.87
14	58.22	0.461	0.020	0.443	1.144	2.59
15	48.63	0.010	0.020	0.376	0.967	1.39
16	29.40	-0.952	0.022	0.364	0.760	1.98
17	53.51	0.239	0.020	0.448	1.034	2.93
18	55.02	0.210	0.020	0.485	1.314	5.34
19	27.25	-1.075	0.023	0.351	0.838	8.03
20	52.11	0.173	0.020	0.471	1.173	5.21
21	57.16	0.410	0.020	0.441	1.117	2.46
22	65.50	0.836	0.021	0.533	1.833	16.35
23	81.89	1.781	0.025	0.465	2.030	16.90
24	41.93	-0.307	0.021	0.407	1.010	1.14
25	69.65	1.031	0.022	0.389	1.020	3.26
26	36.89	-0.555	0.021	0.288	0.693	7.66
27	46.23	-0.102	0.020	0.415	1.061	1.29
28	39.14	-0.443	0.021	0.237	0.600	13.80
29	37.55	-0.522	0.021	0.252	0.630	11.89
30	24.83	-1.221	0.023	0.196	0.645	19.38
31	46.96	-0.068	0.020	0.570	1.754	15.51
32	34.20	-0.688	0.021	0.238	0.691	18.35
33	40.90	-0.357	0.021	0.357	0.903	3.07
34	46.17	-0.105	0.020	0.502	1.483	6.53
35	60.79	0.584	0.021	0.543	1.587	15.63
36	22.63	-1.362	0.024	0.309	0.890	8.93
37	36.68	-0.566	0.021	0.375	0.931	2.63
38	63.31	0.707	0.021	0.393	1.166	1.39
39	27.51	-1.037	0.023	0.456	1.198	3.97
40	40.54	-0.374	0.021	0.442	1.084	2.08
41	31.38	-0.843	0.022	0.202	0.508	17.92
42	20.97	-1.474	0.025	0.364	0.963	3.94
43	21.30	-1.451	0.024	0.233	0.758	9.60
44	24.79	-1.224	0.023	0.269	0.735	7.64
45	19.06	-1.610	0.025	0.179	0.582	14.90

TABLE 8 (CONT.)
CAT LEVEL 4 FORM A COMPREHENSION
ABILITY SUMMARY

45 ITEMS 11543 CASES KR-20= 0.865 EQUATING CONSTANT= 1.732

SCORE	FREQ	NATIONAL REFERENCE SCALE			
		LOG ABILITY	STD ERROR	SCALE SCORE	STD ERR
1	0	-4.421	1.045	173	10.45
2	0	-3.640	0.765	181	7.65
3	1	-3.153	0.642	186	6.42
4	5	-2.790	0.568	189	5.68
5	13	-2.496	0.518	192	5.18
6	28	-2.247	0.481	195	4.81
7	66	-2.029	0.453	197	4.53
8	90	-1.834	0.431	199	4.31
9	158	-1.657	0.412	201	4.12
10	269	-1.493	0.397	202	3.97
11	320	-1.340	0.385	204	3.85
12	416	-1.196	0.374	205	3.74
13	487	-1.060	0.365	207	3.65
14	513	-0.929	0.358	208	3.58
15	567	-0.803	0.351	209	3.51
16	563	-0.682	0.346	210	3.46
17	587	-0.564	0.341	212	3.41
18	586	-0.449	0.337	213	3.37
19	528	-0.336	0.334	214	3.34
20	533	-0.225	0.332	215	3.32
21	470	-0.116	0.330	216	3.30
22	459	-0.007	0.329	217	3.29
23	484	0.101	0.329	218	3.29
24	428	0.209	0.329	219	3.29
25	396	0.317	0.329	220	3.29
26	373	0.426	0.330	222	3.30
27	368	0.536	0.332	223	3.32
28	379	0.647	0.335	224	3.35
29	347	0.760	0.338	225	3.38
30	294	0.876	0.342	226	3.42
31	301	0.994	0.347	227	3.47
32	271	1.117	0.353	228	3.53
33	223	1.245	0.361	230	3.61
34	196	1.378	0.370	231	3.70
35	186	1.519	0.381	233	3.81
36	161	1.668	0.394	234	3.94
37	122	1.829	0.410	236	4.10
38	101	2.006	0.430	237	4.30
39	96	2.201	0.456	239	4.56
40	70	2.425	0.491	242	4.91
41	45	2.688	0.538	244	5.38
42	26	3.015	0.610	247	6.10
43	13	3.460	0.734	252	7.34
44	4	4.191	1.019	259	10.19

TABLE 9
CAT LEVEL 4 FORM A TCTAL READING
ITEM SUMMARY

85 ITEMS 11544 CASES KR-20= 0.932 EQUATING CONSTANT= 1.615						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	79.42	1.533	0.024	0.423	1.300	2.78
2	72.49	1.099	0.022	0.532	1.676	8.21
3	90.79	2.556	0.033	0.381	1.369	7.26
4	75.35	1.528	0.024	0.421	1.387	2.62
5	75.57	1.282	0.023	0.468	1.446	4.32
6	64.96	0.690	0.021	0.560	1.542	8.68
7	66.89	0.790	0.021	0.558	1.649	8.72
8	75.80	1.296	0.023	0.536	1.665	10.48
9	71.99	1.070	0.022	0.493	1.432	4.93
10	72.26	1.086	0.022	0.480	1.251	4.52
11	61.57	0.518	0.021	0.447	0.957	2.47
12	76.32	1.329	0.023	0.418	1.181	2.28
13	70.18	0.968	0.022	0.558	1.825	10.08
14	46.08	-0.232	0.021	0.496	1.200	3.91
15	72.54	1.102	0.022	0.482	1.293	4.83
16	77.42	1.399	0.024	0.401	1.225	1.58
17	60.65	0.472	0.021	0.533	1.436	5.16
18	66.82	0.787	0.021	0.574	1.523	11.16
19	62.64	0.541	0.021	0.558	1.724	7.43
20	64.71	0.677	0.021	0.469	1.217	2.61
21	55.80	0.234	0.021	0.526	1.436	4.16
22	44.13	-0.327	0.021	0.514	1.481	5.14
23	43.25	-0.369	0.021	0.474	1.206	2.77
24	52.95	0.097	0.020	0.500	1.266	3.06
25	58.30	0.356	0.021	0.485	1.060	3.24
26	53.09	0.104	0.020	0.601	1.768	10.27
27	44.74	-0.297	0.021	0.373	0.932	2.17
28	41.10	-0.475	0.021	0.280	0.772	6.00
29	32.77	-0.903	0.022	0.405	0.926	5.19
30	35.00	-0.785	0.021	0.300	0.835	5.45
31	32.34	-0.927	0.022	0.413	1.063	1.87
32	39.65	-0.577	0.021	0.290	0.720	4.77
33	20.12	-1.676	0.025	0.138	0.539	18.11
34	29.29	-1.096	0.022	0.299	0.812	3.41
35	25.84	-1.500	0.023	0.295	0.763	4.80
36	25.53	-1.319	0.023	0.107	0.354	18.94
37	27.18	-1.219	0.023	0.187	0.546	10.54
38	21.16	-1.603	0.025	0.202	0.519	8.77
39	26.61	-1.253	0.023	0.297	0.794	7.14
40	17.07	-1.908	0.026	0.128	0.394	14.59
41	94.27	3.092	0.040	0.266	1.299	2.88
42	90.87	2.566	0.033	0.326	1.363	3.29
43	75.52	1.279	0.023	0.406	0.979	1.54
44	72.82	1.118	0.023	0.375	1.026	1.89
45	43.72	-0.347	0.021	0.317	0.727	4.08
46	78.37	1.462	0.024	-0.445	1.338	3.83
47	29.98	-1.057	0.022	0.252	0.502	6.88
48	57.98	0.340	0.021	0.439	0.965	2.59
49	32.72	-0.906	0.022	0.342	0.779	3.51
50	58.71	0.376	0.021	0.358	0.739	1.53

TABLE 9 (CONT.)
CAT LEVEL 4 FORM A TCTAL READING
ITEM SUMMARY

85 ITEMS 11544 CASES KR=20= 0.932 EQUATING CONSTANT= 1.615

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
51	60.40	0.460	0.021	0.420	0.955	0.87
52	38.60	-0.627	0.021	0.408	0.878	4.26
53	66.66	0.747	0.021	0.393	0.947	1.03
54	58.22	0.352	0.021	0.416	0.931	1.71
55	48.63	-0.109	0.020	0.341	0.808	4.27
56	29.41	-1.089	0.022	0.351	0.722	2.75
57	53.52	0.125	0.021	0.460	1.057	2.51
58	55.02	0.197	0.021	0.476	1.189	3.14
59	27.26	-1.214	0.023	0.330	0.689	6.41
60	52.11	0.057	0.020	0.460	0.954	2.60
61	57.16	0.301	0.021	0.420	1.009	1.74
62	65.90	0.739	0.021	0.529	1.465	6.82
63	81.89	1.710	0.026	0.466	1.828	6.35
64	41.94	-0.434	0.021	0.383	0.873	1.69
65	69.66	0.939	0.022	0.378	0.952	1.25
66	36.89	-0.687	0.021	0.254	0.560	7.33
67	46.25	-0.225	0.021	0.387	0.946	2.35
68	39.15	-0.572	0.021	0.206	0.462	12.47
69	37.55	-0.653	0.021	0.209	0.524	12.61
70	24.84	-1.362	0.023	0.161	0.533	16.83
71	46.57	-0.189	0.021	0.563	1.551	7.78
72	34.30	-0.821	0.021	0.213	0.566	16.09
73	40.90	-0.485	0.021	0.348	0.806	3.94
74	46.17	-0.228	0.021	0.481	1.233	3.88
75	60.79	0.479	0.021	0.534	1.400	6.57
76	22.64	-1.503	0.024	0.281	0.795	8.74
77	36.69	-0.697	0.021	0.334	0.769	3.81
78	63.31	0.605	0.021	0.364	0.947	1.50
79	27.92	-1.175	0.023	0.420	1.109	1.93
80	40.55	-0.502	0.021	0.411	1.038	1.30
81	31.36	-0.979	0.022	0.175	0.424	13.53
82	20.97	-1.016	0.025	0.329	0.872	3.21
83	21.31	-1.593	0.024	0.205	0.583	7.39
84	24.79	-1.364	0.023	0.237	0.612	7.76
85	19.07	-1.754	0.025	0.149	0.423	12.90

TABLE 9 (CONT.)
 CAT LEVEL 4 FORM A TOTAL READING
 ABILITY SUMMARY

85 ITEMS		11544 CASES	KR=20= 0.932	EQUATING CONSTANT= 1.615	

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR

1	0	-5.047	1.020	166	10.20
2	0	-4.314	0.734	173	7.34
3	0	-3.871	0.609	177	6.09
4	0	-3.547	0.535	181	5.35
5	0	-3.289	0.484	183	4.84
6	0	-3.072	0.448	185	4.48
7	3	-2.885	0.419	187	4.19
8	4	-2.719	0.396	189	3.96
9	5	-2.569	0.378	190	3.78
10	4	-2.432	0.362	192	3.62
11	15	-2.306	0.349	193	3.49
12	14	-2.189	0.337	194	3.37
13	20	-2.078	0.327	195	3.27
14	40	-1.974	0.318	196	3.18
15	57	-1.876	0.310	197	3.10
16	60	-1.782	0.303	198	3.03
17	72	-1.691	0.297	199	2.97
18	121	-1.605	0.292	200	2.92
19	118	-1.521	0.286	201	2.86
20	153	-1.441	0.282	202	2.82
21	150	-1.362	0.278	203	2.78
22	175	-1.280	0.274	203	2.74
23	241	-1.212	0.270	204	2.70
24	219	-1.140	0.267	205	2.67
25	211	-1.069	0.264	205	2.64
26	238	-1.000	0.262	206	2.62
27	225	-0.932	0.259	207	2.59
28	216	-0.866	0.257	207	2.57
29	232	-0.800	0.255	208	2.55
30	254	-0.735	0.253	209	2.53
31	242	-0.672	0.252	209	2.52
32	237	-0.609	0.250	210	2.50
33	221	-0.546	0.249	211	2.49
34	235	-0.485	0.248	211	2.48
35	237	-0.424	0.247	212	2.47
36	272	-0.363	0.246	213	2.46
37	265	-0.303	0.245	213	2.45
38	253	-0.243	0.244	214	2.44
39	235	-0.184	0.244	214	2.44
40	268	-0.124	0.243	215	2.43
41	235	-0.065	0.243	215	2.43
42	259	-0.006	0.243	216	2.43
43	255	0.053	0.243	217	2.43
44	273	0.112	0.243	217	2.43
45	246	0.171	0.243	218	2.43
46	246	0.230	0.243	218	2.43
47	251	0.289	0.243	219	2.43
48	228	0.348	0.244	220	2.44
49	223	0.408	0.244	220	2.44
50	264	0.468	0.245	221	2.45

CONTINUED

TABLE 9 (CONT.)
CAT LEVEL 4 FORM A TOTAL READING
ABILITY SUMMARY

85 ITEMS 11544 CASES KR-20= 0.932 EQUATING CONSTANT= 1.615

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	248	0.528	0.246	221	2.46
52	240	0.589	0.247	222	2.47
53	222	0.650	0.248	223	2.48
54	226	0.712	0.249	223	2.49
55	212	0.774	0.251	224	2.51
56	207	0.837	0.252	225	2.52
57	174	0.901	0.254	225	2.54
58	197	0.966	0.256	226	2.56
59	185	1.032	0.258	226	2.58
60	151	1.100	0.260	227	2.60
61	160	1.168	0.263	228	2.63
62	185	1.238	0.266	229	2.66
63	173	1.309	0.269	229	2.69
64	143	1.383	0.272	230	2.72
65	127	1.458	0.276	231	2.76
66	131	1.535	0.281	231	2.81
67	111	1.615	0.285	232	2.85
68	93	1.698	0.290	233	2.90
69	100	1.784	0.296	234	2.96
70	86	1.874	0.303	235	3.03
71	79	1.968	0.310	236	3.10
72	73	2.067	0.319	237	3.19
73	62	2.171	0.328	238	3.28
74	39	2.283	0.339	239	3.39
75	41	2.402	0.352	240	3.52
76	28	2.531	0.367	241	3.67
77	21	2.673	0.385	243	3.85
78	18	2.830	0.408	244	4.08
79	17	3.007	0.436	246	4.36
80	13	3.212	0.472	248	4.72
81	4	3.458	0.522	251	5.22
82	1	3.769	0.597	254	5.97
83	2	4.196	0.723	258	7.23
84	1	4.912	1.011	265	10.11

TABLE 10
CAT LEVEL 4 FORM B VOCABULARY
ITEM SUMMARY

40 ITEMS 1924 CASES KR-20= 0.868 EQUATING CONSTANT= 1.139						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MIN SQ FIT
1	67.98	1.070	0.053	0.491	1.323	2.03
2	67.72	1.057	0.053	0.479	1.127	1.92
3	73.91	1.401	0.056	0.494	1.591	2.78
4	68.92	1.120	0.053	0.551	1.728	3.51
5	61.23	0.726	0.051	0.433	0.982	0.87
6	53.79	0.368	0.050	0.438	0.950	1.77
7	64.76	0.903	0.052	0.420	0.980	1.01
8	68.14	1.079	0.053	0.408	0.811	1.38
9	64.52	0.911	0.052	0.578	1.647	4.15
10	57.38	0.539	0.051	0.401	0.977	1.13
11	57.43	0.542	0.051	0.557	1.495	3.10
12	55.67	0.457	0.050	0.453	0.932	1.79
13	53.43	0.351	0.050	0.531	1.187	2.67
14	63.41	0.835	0.052	0.396	0.879	0.86
15	60.86	0.708	0.051	0.445	0.972	1.06
16	56.60	0.502	0.050	0.476	1.049	1.35
17	40.59	-0.262	0.051	0.379	0.804	0.91
18	42.20	-0.181	0.051	0.423	0.945	0.79
19	40.54	-0.265	0.051	0.395	0.889	2.12
20	53.59	0.358	0.050	0.294	0.711	2.73
21	41.53	-0.217	0.051	0.371	0.776	2.06
22	41.37	-0.224	0.051	0.424	1.034	0.94
23	53.64	0.361	0.050	0.369	0.863	1.18
24	52.03	0.285	0.050	0.427	1.014	0.95
25	35.14	-0.538	0.052	0.373	0.798	1.15
26	37.47	-0.418	0.052	0.399	0.712	2.97
27	45.55	-0.004	0.050	0.357	0.882	1.31
28	45.17	-0.041	0.050	0.323	0.712	1.75
29	39.97	-0.293	0.051	0.316	0.773	1.81
30	29.31	-0.853	0.055	0.376	0.926	1.92
31	33.89	-0.603	0.053	0.370	0.761	1.44
32	34.77	-0.557	0.053	0.426	1.024	0.84
33	27.80	-0.937	0.050	0.350	0.827	1.99
34	39.55	-0.324	0.051	0.376	0.986	1.47
35	22.92	-1.242	0.059	0.289	0.664	2.04
36	29.00	-0.871	0.055	0.342	0.826	1.62
37	21.10	-1.366	0.060	0.254	0.486	3.50
38	28.55	-0.874	0.055	0.292	0.641	1.74
39	14.81	-1.861	0.068	0.229	0.561	1.65
40	17.50	-1.645	0.065	0.211	0.493	3.50

40

TABLE 10 (CONT.)
 CAT LEVEL 4 FORM B VOCABULARY
 ABILITY SUMMARY

40 ITEMS		1924 CASES		KR-20= 0.868 EQUATING CONSTANT= 1.139	
SCORE	FREQ	LDG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCALE SCORE	STD ERR
1	2	-3.937	1.019	172	10.19
2	5	-3.205	0.734	179	7.34
3	6	-2.760	0.611	184	6.11
4	17	-2.432	0.539	187	5.39
5	17	-2.108	0.492	190	4.92
6	25	-1.943	0.458	192	4.58
7	42	-1.746	0.432	194	4.32
8	48	-1.568	0.412	196	4.12
9	70	-1.405	0.396	197	3.96
10	78	-1.254	0.383	199	3.83
11	61	-1.111	0.373	200	3.73
12	78	-0.975	0.365	202	3.65
13	81	-0.844	0.358	203	3.58
14	84	-0.719	0.352	204	3.52
15	97	-0.596	0.348	205	3.48
16	105	-0.477	0.344	207	3.44
17	91	-0.359	0.342	208	3.42
18	95	-0.243	0.340	209	3.40
19	91	-0.127	0.339	210	3.39
20	81	-0.012	0.339	211	3.39
21	86	0.103	0.340	212	3.40
22	79	0.218	0.341	214	3.41
23	62	0.335	0.343	215	3.43
24	80	0.454	0.346	216	3.46
25	77	0.575	0.350	217	3.50
26	51	0.700	0.355	218	3.55
27	48	0.828	0.361	220	3.61
28	50	0.961	0.369	221	3.69
29	45	1.100	0.377	222	3.77
30	24	1.246	0.388	224	3.88
31	31	1.402	0.401	225	4.01
32	26	1.509	0.418	227	4.18
33	22	1.751	0.438	229	4.38
34	19	1.954	0.464	231	4.64
35	19	2.184	0.498	233	4.98
36	13	2.455	0.546	236	5.46
37	11	2.790	0.617	239	6.17
38	7	3.243	0.740	244	7.40
39	2	3.983	1.023	251	10.23

TABLE 11
CAT LEVEL 4 FORM B COMPREHENSION
ITEM SUMMARY

45 ITEMS 1926 CASES KR-20= 0.865 EQUATING CONSTANT= 0.814						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(1,AB)	SLOPE	MN SQ FIT
1	95.22	3.129	0.106	0.260	1.446	1.10
2	85.36	1.845	0.067	0.396	1.329	1.77
3	77.78	1.287	0.058	0.336	0.683	2.54
4	49.07	-0.189	0.050	0.464	1.071	2.01
5	84.58	1.779	0.066	0.447	1.821	2.66
6	71.39	0.908	0.054	0.475	1.307	2.05
7	73.68	1.037	0.055	0.459	1.252	1.74
8	73.36	1.019	0.055	0.525	1.741	3.20
9	50.16	-0.138	0.050	0.392	1.028	1.65
10	53.06	-0.002	0.050	0.427	1.006	2.03
11	52.39	-0.034	0.050	0.472	0.946	1.89
12	54.53	0.085	0.050	0.369	0.935	1.22
13	38.11	-0.710	0.051	0.319	0.695	1.96
14	46.45	-0.596	0.051	0.298	0.729	1.74
15	41.38	-0.551	0.050	0.409	1.014	2.11
16	38.68	-0.682	0.051	0.386	0.906	2.54
17	61.37	0.392	0.051	0.475	1.313	1.35
18	62.41	0.443	0.051	0.386	0.877	1.06
19	71.55	0.917	0.054	0.520	1.662	3.20
20	60.54	0.352	0.051	0.569	1.671	3.69
21	63.14	0.479	0.051	0.443	1.142	1.08
22	46.83	-0.293	0.050	0.463	1.109	1.57
23	57.22	0.193	0.050	0.491	1.136	2.21
24	50.26	-0.133	0.050	0.401	0.945	0.87
25	39.53	-0.621	0.051	0.392	1.038	1.05
26	47.25	-0.273	0.050	0.230	0.596	3.56
27	51.14	-0.092	0.050	0.392	0.876	1.19
28	49.84	-0.152	0.050	0.349	0.863	1.52
29	58.88	0.272	0.050	0.409	1.000	1.36
30	52.91	-0.009	0.050	0.446	1.025	1.22
31	46.16	-0.324	0.050	0.357	0.870	0.99
32	46.65	-0.329	0.050	0.418	0.932	0.81
33	32.45	-0.998	0.053	0.133	0.351	7.03
34	37.18	-0.756	0.051	0.359	0.910	0.57
35	46.16	-0.324	0.050	0.425	0.963	1.39
36	32.04	-1.020	0.053	0.249	0.602	2.45
37	85.72	1.877	0.067	0.379	1.087	2.08
38	43.77	-0.437	0.050	0.438	0.955	1.38
39	38.21	-0.705	0.051	0.400	1.072	1.24
40	31.36	-1.056	0.053	0.248	0.414	3.39
41	32.45	-0.998	0.053	0.176	0.507	6.07
42	36.79	-1.087	0.053	0.301	0.841	2.41
43	31.72	-1.037	0.053	0.239	0.527	2.97
44	26.74	-1.314	0.055	0.283	0.661	1.99
45	29.60	-1.152	0.054	0.211	0.547	3.26

TABLE 11 (CONT.)
 CAT LEVEL 4 FORM B COMPREHENSION
 ABILITY SUMMARY

45 ITEMS 1926 CASES KR-20= 0.865 EQUATING CONSTANT= 0.814

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	0	-4.329	1.044	165	10.44
2	0	-3.552	0.762	173	7.62
3	0	-3.070	0.637	177	6.37
4	0	-2.713	0.563	181	5.63
5	1	-2.425	0.513	184	5.13
6	6	-2.180	0.477	186	4.77
7	11	-1.967	0.448	188	4.48
8	9	-1.776	0.426	190	4.26
9	25	-1.603	0.408	192	4.08
10	46	-1.442	0.393	194	3.93
11	27	-1.293	0.380	195	3.80
12	58	-1.153	0.370	197	3.70
13	54	-1.020	0.360	198	3.60
14	65	-0.893	0.353	199	3.53
15	45	-0.771	0.346	200	3.46
16	70	-0.653	0.341	202	3.41
17	80	-0.539	0.336	203	3.36
18	91	-0.427	0.332	204	3.32
19	81	-0.318	0.329	205	3.29
20	81	-0.211	0.326	206	3.26
21	87	-0.106	0.324	207	3.24
22	83	-0.001	0.323	208	3.23
23	88	0.103	0.322	209	3.22
24	72	0.206	0.322	210	3.22
25	71	0.310	0.323	211	3.23
26	81	0.415	0.324	212	3.24
27	86	0.520	0.326	213	3.26
28	69	0.627	0.328	214	3.28
29	54	0.735	0.331	215	3.31
30	72	0.846	0.336	217	3.36
31	65	0.961	0.341	218	3.41
32	72	1.079	0.347	219	3.47
33	51	1.201	0.354	220	3.54
34	50	1.300	0.363	221	3.63
35	36	1.466	0.374	223	3.74
36	41	1.611	0.388	224	3.88
37	18	1.767	0.404	226	4.04
38	23	1.938	0.424	228	4.24
39	20	2.129	0.451	229	4.51
40	16	2.347	0.485	232	4.85
41	12	2.606	0.534	234	5.34
42	10	2.928	0.606	237	6.06
43	3	3.367	0.730	242	7.30
44	0	4.093	1.016	249	10.16

TABLE 12
CAT LEVEL 4 FORM B TOTAL READING
ITEM SUMMARY

85 ITEMS 1926 CASES KR-20= 0.923 EQUATING CONSTANT= 0.967

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	68.62	0.875	0.052	0.467	1.264	1.36
2	67.76	0.862	0.052	0.467	1.309	1.54
3	73.94	1.199	0.055	0.485	1.671	1.94
4	68.95	0.924	0.053	0.557	1.922	2.70
5	61.27	0.538	0.050	0.416	1.108	1.15
6	53.84	0.188	0.049	0.402	0.856	1.04
7	64.80	0.712	0.051	0.420	1.174	1.04
8	68.17	0.884	0.052	0.393	0.965	1.00
9	64.95	0.719	0.051	0.567	2.004	2.60
10	57.42	0.355	0.050	0.377	0.945	1.03
11	57.48	0.358	0.050	0.516	1.414	1.57
12	55.71	0.275	0.050	0.417	1.054	0.72
13	53.48	0.171	0.049	0.518	1.543	1.77
14	63.45	0.645	0.051	0.400	0.933	1.53
15	60.90	0.521	0.050	0.435	1.135	1.15
16	56.65	0.319	0.050	0.453	1.096	1.04
17	40.65	-0.430	0.050	0.353	0.896	0.79
18	42.32	-0.350	0.050	0.391	0.911	0.92
19	40.60	-0.432	0.050	0.357	0.812	2.06
20	53.63	0.178	0.049	0.286	0.766	1.21
21	41.59	-0.385	0.050	0.329	0.824	1.34
22	41.43	-0.393	0.050	0.380	0.913	1.05
23	53.69	0.180	0.049	0.375	0.897	0.97
24	52.08	0.106	0.049	0.404	1.025	1.03
25	35.20	-0.699	0.052	0.342	0.789	1.40
26	37.54	-0.582	0.051	0.381	0.965	1.59
27	46.00	-0.177	0.050	0.324	0.759	1.06
28	45.22	-0.213	0.050	0.296	0.658	1.41
29	40.03	-0.460	0.050	0.302	0.734	1.29
30	29.39	-1.006	0.054	0.351	0.860	1.41
31	33.96	-0.763	0.052	0.328	0.823	1.12
32	34.84	-0.717	0.052	0.415	1.081	1.01
33	27.93	-1.083	0.055	0.308	0.702	2.02
34	35.41	-0.490	0.050	0.328	0.717	1.54
35	23.00	-1.306	0.058	0.273	0.722	1.09
36	29.08	-1.024	0.054	0.293	0.740	1.86
37	21.18	-1.506	0.059	0.212	0.576	2.68
38	29.02	-1.027	0.054	0.265	0.642	1.35
39	14.90	-1.987	0.067	0.210	0.491	2.06
40	17.45	-1.777	0.064	0.163	0.384	2.59
41	95.22	3.273	0.107	0.236	1.144	1.03
42	85.26	1.988	0.067	0.389	1.423	1.60
43	77.70	1.433	0.058	0.299	0.657	3.78
44	49.07	-0.034	0.049	0.463	1.111	1.80
45	84.58	1.922	0.065	0.419	1.767	1.44
46	71.39	1.056	0.054	0.455	1.152	1.48
47	73.68	1.184	0.055	0.442	1.251	1.24
48	73.30	1.167	0.055	0.500	1.795	2.20
49	50.16	0.016	0.049	0.381	0.881	1.27
50	53.06	0.151	0.049	0.404	0.914	1.51

CONTINUED

TABLE 12 (CONT.)
 CAT LEVEL 4 FORM B TOTAL READING
 ITEM SUMMARY

85 ITEMS 1926 CASES KR-20= 0.923 EQUATING CONSTANT= 0.967

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
51	52.39	0.120	0.049	0.473	1.238	2.45
52	54.93	0.238	0.049	0.326	0.715	1.50
53	38.11	-0.554	0.051	0.319	0.734	1.30
54	40.45	-0.440	0.050	0.252	0.562	1.69
55	41.38	-0.395	0.050	0.395	0.802	1.51
56	38.68	-0.526	0.051	0.361	0.714	1.59
57	61.37	0.543	0.050	0.448	1.056	0.92
58	62.41	0.594	0.051	0.344	0.808	1.36
59	71.55	1.064	0.054	0.488	1.563	1.64
60	60.54	0.563	0.050	0.551	1.656	2.16
61	63.14	0.629	0.051	0.433	1.128	0.99
62	46.83	-0.138	0.049	0.447	0.966	1.24
63	57.22	0.345	0.050	0.477	1.218	1.40
64	50.26	0.021	0.049	0.386	0.913	0.86
65	39.93	-0.465	0.050	0.369	0.815	0.90
66	47.25	-0.119	0.049	0.186	0.419	3.29
67	51.14	0.062	0.049	0.270	0.875	0.91
68	49.84	0.002	0.049	0.315	0.684	1.37
69	58.88	0.424	0.050	0.388	0.814	1.18
70	52.91	0.144	0.049	0.415	1.096	0.83
71	46.16	-0.169	0.050	0.320	0.742	1.13
72	46.05	-0.174	0.050	0.381	0.878	1.15
73	32.45	-0.841	0.053	0.126	0.401	3.73
74	37.18	-0.600	0.051	0.307	0.718	1.32
75	46.16	-0.169	0.050	0.390	0.881	1.01
76	32.04	-0.863	0.053	0.212	0.544	2.11
77	85.72	2.020	0.067	0.349	0.989	1.64
78	43.77	-0.282	0.050	0.417	1.119	1.23
79	38.21	-0.548	0.051	0.372	0.939	0.87
80	31.36	-0.699	0.053	0.228	0.482	2.65
81	32.45	-0.841	0.053	0.149	0.402	3.40
82	30.79	-0.930	0.053	0.270	0.697	1.86
83	31.72	-0.880	0.053	0.206	0.526	2.48
84	26.74	-1.157	0.055	0.275	0.636	1.43
85	29.60	-0.995	0.054	0.184	0.464	2.61

TABLE 12 (CONT.)
 CAT. LEVEL 4 FORM B TOTAL READING
 ABILITY SUMMARY

85 ITEMS 1926 CASES KR-20= 0.923 EQUATING CONSTANT= .0.967

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	0	-4.901	1.023	161	10.23
2	0	-4.165	0.736	168	7.36
3	0	-3.720	0.609	172	6.09
4	0	-3.396	0.534	176	5.34
5	0	-3.139	0.483	178	4.83
6	0	-2.924	0.445	180	4.45
7	0	-2.739	0.416	182	4.16
8	1	-2.576	0.393	184	3.93
9	1	-2.429	0.374	185	3.74
10	0	-2.296	0.357	187	3.57
11	3	-2.173	0.344	188	3.44
12	0	-2.059	0.332	189	3.32
13	6	-1.953	0.321	190	3.21
14	5	-1.853	0.312	191	3.12
15	5	-1.758	0.304	192	3.04
16	16	-1.667	0.297	193	2.97
17	16	-1.581	0.290	194	2.90
18	19	-1.499	0.285	195	2.85
19	20	-1.419	0.279	195	2.79
20	26	-1.343	0.274	196	2.74
21	27	-1.268	0.270	197	2.70
22	25	-1.197	0.266	198	2.66
23	30	-1.127	0.263	198	2.63
24	24	-1.059	0.259	199	2.59
25	43	-0.992	0.256	200	2.56
26	41	-0.928	0.253	200	2.53
27	38	-0.864	0.251	201	2.51
28	37	-0.802	0.249	202	2.49
29	49	-0.741	0.246	202	2.46
30	38	-0.680	0.245	203	2.45
31	49	-0.621	0.243	203	2.43
32	37	-0.562	0.241	204	2.41
33	51	-0.505	0.240	205	2.40
34	44	-0.447	0.239	205	2.39
35	49	-0.391	0.237	206	2.37
36	53	-0.335	0.236	206	2.36
37	45	-0.279	0.236	207	2.36
38	47	-0.224	0.235	207	2.35
39	45	-0.169	0.234	208	2.34
40	45	-0.114	0.234	209	2.34
41	37	-0.059	0.234	209	2.34
42	50	0.005	0.233	210	2.33
43	37	0.050	0.233	210	2.33
44	53	0.104	0.233	211	2.33
45	49	0.158	0.233	211	2.33
46	44	0.213	0.234	212	2.34
47	37	0.268	0.234	212	2.34
48	40	0.322	0.235	213	2.35
49	38	0.378	0.235	213	2.35
50	40	0.433	0.236	214	2.36

CONTINUED



TABLE 12 (CONT.)
 CAT LEVEL 4 FORM B TCTAL READING
 ABILITY SUMMARY

85 ITEMS 1926 CASES KR-20= 0.923 EQUATING CONSTANT= 0.967					
SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	2	0.489	0.237	215	2.37
52	36	0.545	0.238	215	2.38
53	36	0.602	0.239	216	2.39
54	43	0.659	0.240	216	2.40
55	42	0.718	0.242	217	2.42
56	34	0.777	0.244	217	2.44
57	18	0.836	0.246	218	2.46
58	33	0.897	0.248	219	2.48
59	36	0.959	0.250	219	2.50
60	19	1.022	0.252	220	2.52
61	23	1.086	0.255	221	2.55
62	24	1.152	0.258	221	2.58
63	23	1.220	0.262	222	2.62
64	18	1.289	0.265	223	2.65
65	15	1.360	0.269	223	2.69
66	18	1.434	0.274	224	2.74
67	21	1.510	0.279	225	2.79
68	14	1.589	0.284	226	2.84
69	10	1.672	0.290	226	2.90
70	11	1.758	0.297	227	2.97
71	10	1.849	0.305	228	3.05
72	7	1.944	0.313	229	3.13
73	10	2.045	0.323	230	3.23
74	6	2.153	0.335	231	3.35
75	7	2.270	0.348	232	3.48
76	8	2.396	0.363	234	3.63
77	4	2.534	0.382	235	3.82
78	1	2.688	0.404	237	4.04
79	1	2.863	0.433	238	4.33
80	4	3.066	0.470	240	4.70
81	0	3.310	0.520	243	5.20
82	1	3.618	0.595	246	5.95
83	1	4.044	0.721	250	7.21
84	0	4.757	1.010	257	10.10

47

TABLE 13
CTBS LEVEL 2 FORM Q VOCABULARY
ITEM SUMMARY

40 ITEMS 22198 CASES KR-20= 0.913 EQUATING CONSTANT= 0.016

ITEM NO.	RESPONSE PERCENT	LOG. EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	92.82	2.457	0.027	0.351	1.091	6.98
2	91.13	2.201	0.025	0.397	1.216	12.27
3	81.41	1.204	0.019	0.529	1.314	21.97
4	71.69	0.519	0.017	0.513	1.082	6.44
5	76.45	0.834	0.018	0.541	1.074	16.42
6	74.21	0.682	0.017	0.481	1.111	2.06
7	83.55	1.383	0.020	0.527	1.263	25.80
8	76.07	0.808	0.018	0.564	1.293	22.21
9	75.20	0.748	0.018	0.441	0.912	3.84
10	72.24	0.554	0.017	0.475	1.090	2.04
11	81.51	1.212	0.019	0.542	1.479	24.69
12	67.64	0.272	0.016	0.405	0.855	8.89
13	72.72	0.585	0.017	0.572	1.436	19.46
14	66.01	0.177	0.016	0.494	0.998	3.87
15	71.39	0.501	0.017	0.467	0.977	2.47
16	65.43	0.143	0.016	0.472	0.907	2.17
17	74.75	0.717	0.018	0.606	1.494	35.73
18	69.33	0.373	0.017	0.362	0.752	24.49
19	75.69	0.781	0.018	0.452	1.048	2.16
20	57.65	-0.290	0.016	0.541	1.074	5.54
21	56.70	-0.341	0.016	0.459	0.869	8.89
22	50.10	-0.693	0.016	0.482	0.931	6.74
23	43.77	-1.030	0.016	0.457	0.883	8.75
24	46.05	-0.908	0.016	0.520	1.012	17.16
25	55.64	-0.398	0.016	0.560	1.092	18.20
26	55.42	-0.410	0.016	0.339	0.706	41.03
27	59.94	-0.165	0.016	0.509	0.985	4.57
28	70.36	0.436	0.017	0.551	1.342	12.86
29	49.93	-0.702	0.016	0.501	0.958	3.28
30	41.30	-1.164	0.016	0.373	0.791	35.31
31	34.52	-1.543	0.016	0.404	0.752	28.97
32	58.68	-0.266	0.016	0.598	1.433	18.69
33	41.45	-1.155	0.016	0.528	1.001	14.39
34	67.01	0.235	0.016	0.592	1.636	17.03
35	35.48	-1.488	0.016	0.247	0.532	83.07
36	60.02	-0.161	0.016	0.548	1.250	9.69
37	22.37	-2.315	0.018	0.259	0.534	50.72
38	30.94	-1.753	0.017	0.361	0.641	41.67
39	41.52	-1.152	0.016	0.333	0.659	45.25
40	46.40	-0.890	0.016	0.542	1.080	14.63

TABLE 13 (CONT.)
 CTBS LEVEL 2 FORM Q VOCABULARY
 ABILITY SUMMARY

40 ITEMS 22198 CASES KR-20= 0.913 EQUATING CONSTANT= 0.016

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	4	-4.156	1.032	159	10.32
2	12	-3.399	0.757	166	7.50
3	27	-2.932	0.628	171	6.28
4	47	-2.585	0.556	174	5.56
5	99	-2.303	0.508	177	5.08
6	167	-2.003	0.473	180	4.73
7	210	-1.852	0.447	182	4.47
8	274	-1.661	0.426	184	4.26
9	339	-1.487	0.410	185	4.10
10	400	-1.324	0.397	187	3.97
11	455	-1.171	0.386	188	3.86
12	516	-1.026	0.377	190	3.77
13	525	-0.887	0.370	191	3.70
14	579	-0.752	0.364	193	3.64
15	538	-0.622	0.359	194	3.59
16	563	-0.494	0.355	195	3.55
17	588	-0.369	0.353	196	3.53
18	557	-0.245	0.351	198	3.51
19	609	-0.122	0.350	199	3.50
20	637	0.0	0.350	200	3.50
21	658	0.122	0.350	201	3.50
22	683	0.245	0.351	203	3.51
23	729	0.369	0.353	204	3.53
24	778	0.495	0.356	205	3.56
25	848	0.623	0.360	206	3.60
26	857	0.754	0.365	208	3.65
27	845	0.890	0.371	209	3.71
28	883	1.030	0.378	210	3.78
29	935	1.176	0.387	212	3.87
30	945	1.329	0.397	213	3.97
31	1001	1.492	0.410	215	4.10
32	1024	1.667	0.426	217	4.26
33	913	1.857	0.446	219	4.46
34	882	2.007	0.472	221	4.72
35	845	2.305	0.506	223	5.06
36	796	2.564	0.553	226	5.53
37	667	2.928	0.624	229	6.24
38	455	3.389	0.746	234	7.46
39	308	4.139	1.028	242	10.28

TABLE 14
CTBS LEVEL 2 FORM Q COMPREHENSION
ITEM SUMMARY

45 ITEMS 22304 CASES KR-20= 0.916 EQUATING CONSTANT= 0.262						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	73.49	0.843	0.017	0.435	0.945	3.08
2	80.21	1.295	0.018	0.415	0.980	5.81
3	43.02	-0.795	0.015	0.233	0.462	61.91
4	71.11	0.698	0.016	0.424	0.949	1.59
5	68.30	0.534	0.016	0.524	1.014	8.18
6	65.62	0.383	0.016	0.520	1.208	5.34
7	74.28	0.892	0.017	0.578	1.472	28.88
8	80.41	1.310	0.018	0.357	0.881	4.10
9	67.09	0.465	0.016	0.591	1.291	23.28
10	64.10	0.300	0.016	0.509	1.134	4.43
11	64.43	0.318	0.016	0.347	0.645	25.65
12	57.46	-0.053	0.015	0.444	0.829	3.20
13	70.56	0.689	0.016	0.523	1.184	9.16
14	68.68	0.556	0.016	0.515	1.078	5.94
15	76.31	1.023	0.017	0.537	1.384	19.79
16	59.96	0.078	0.016	0.490	0.981	1.82
17	53.76	-0.243	0.015	0.411	0.834	6.87
18	66.37	0.425	0.016	0.547	1.296	10.86
19	53.48	-0.258	0.015	0.462	1.021	4.52
20	40.55	-0.903	0.015	0.297	0.612	32.47
21	65.65	0.385	0.016	0.509	1.157	4.54
22	58.83	0.019	0.015	0.286	0.680	35.56
23	56.08	-0.124	0.015	0.462	0.967	4.13
24	75.34	0.960	0.017	0.560	1.592	24.61
25	44.11	-0.738	0.015	0.395	0.790	8.33
26	66.05	0.407	0.016	0.646	1.838	42.68
27	64.01	0.295	0.016	0.526	1.134	7.07
28	58.51	0.002	0.015	0.464	1.030	1.31
29	63.85	0.286	0.016	0.607	1.568	27.40
30	58.49	0.001	0.015	0.550	1.244	8.31
31	49.76	-0.448	0.015	0.486	1.060	2.36
32	41.68	-0.864	0.015	0.428	0.929	19.26
33	79.63	1.210	0.018	0.561	1.908	30.92
34	53.60	-0.252	0.015	0.450	1.001	3.36
35	58.01	-0.024	0.015	0.591	1.500	17.16
36	29.94	-1.512	0.016	0.360	0.753	32.08
37	46.31	-0.625	0.015	0.472	1.022	8.11
38	50.61	-0.405	0.015	0.505	1.197	8.78
39	46.40	-0.620	0.015	0.476	1.049	8.17
40	49.41	-0.466	0.015	0.458	1.056	14.39
41	37.17	-1.104	0.016	0.318	0.734	38.19
42	38.78	-1.018	0.016	0.308	0.693	35.34
43	48.11	-0.532	0.015	0.451	0.935	2.19
44	32.39	-1.369	0.016	0.365	0.783	23.89
45	38.72	-1.021	0.016	0.241	0.552	53.32

TABLE 14 (CONT.)
CTBS LEVEL 2 FORM Q COMPREHENSION
ABILITY SUMMARY

45 ITEMS 22304 CASES KR-20= 0.916 EQUATING CONSTANT= 0.262

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	2	-4.017	1.017	162	10.17
2	4	-3.290	0.731	170	7.31
3	17	-2.850	0.607	174	6.07
4	27	-2.527	0.534	177	5.34
5	45	-2.269	0.485	180	4.85
6	76	-2.051	0.451	182	4.51
7	119	-1.860	0.424	184	4.24
8	215	-1.689	0.403	186	4.03
9	331	-1.533	0.387	187	3.87
10	419	-1.389	0.373	189	3.73
11	506	-1.254	0.362	190	3.62
12	608	-1.127	0.352	191	3.52
13	611	-1.005	0.345	193	3.45
14	707	-0.889	0.338	194	3.38
15	673	-0.776	0.333	195	3.33
16	682	-0.667	0.328	196	3.28
17	596	-0.561	0.324	197	3.24
18	588	-0.457	0.321	198	3.21
19	544	-0.354	0.319	199	3.19
20	562	-0.253	0.317	200	3.17
21	525	-0.153	0.316	201	3.16
22	541	-0.053	0.316	202	3.16
23	602	0.047	0.316	203	3.16
24	601	0.147	0.316	204	3.16
25	575	0.247	0.318	205	3.18
26	582	0.349	0.319	206	3.19
27	609	0.451	0.322	207	3.22
28	661	0.556	0.325	208	3.25
29	692	0.663	0.329	209	3.29
30	729	0.772	0.333	210	3.33
31	719	0.885	0.339	211	3.39
32	796	1.002	0.346	213	3.46
33	859	1.125	0.354	214	3.54
34	786	1.253	0.363	215	3.63
35	886	1.388	0.374	216	3.74
36	797	1.534	0.388	218	3.88
37	822	1.690	0.405	220	4.05
38	819	1.862	0.425	221	4.25
39	719	2.054	0.452	223	4.52
40	588	2.274	0.487	225	4.87
41	474	2.533	0.535	228	5.35
42	331	2.857	0.668	231	6.08
43	184	3.298	0.732	236	7.32
44	74	4.027	1.017	243	10.17



TABLE 15
CTBS LEVEL 2 FORM Q TOTAL READING
ITEM SUMMARY

85 ITEMS 22324 CASES KR-20= 0.953 EQUATING CONSTANT= 0.146						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB) SLOPE		MN SQ FIT
1	92.86	2.500	0.027	0.338	1.302	5.47
2	91.18	2.251	0.025	0.378	1.270	8.70
3	81.52	1.288	0.019	0.512	1.444	12.94
4	71.85	0.629	0.017	0.498	1.126	3.85
5	76.58	0.932	0.017	0.524	1.233	9.47
6	74.36	0.786	0.017	0.461	1.087	2.38
7	83.65	1.460	0.019	0.512	1.495	14.95
8	76.21	0.907	0.017	0.559	1.471	14.17
9	75.34	0.850	0.017	0.427	1.001	3.41
10	72.40	0.663	0.017	0.461	1.073	1.78
11	81.62	1.295	0.019	0.530	1.708	14.45
12	67.82	0.392	0.016	0.382	0.873	4.26
13	72.88	0.693	0.017	0.559	1.566	10.71
14	66.20	0.300	0.016	0.484	1.122	2.20
15	71.56	0.612	0.017	0.445	0.987	2.25
16	65.63	0.268	0.016	0.449	0.951	1.00
17	74.89	0.820	0.017	0.598	1.694	20.49
18	69.50	0.489	0.016	0.339	0.776	11.48
19	75.83	0.881	0.017	0.440	1.052	1.71
20	57.89	-0.149	0.015	0.533	1.202	4.19
21	56.94	-0.198	0.015	0.442	0.974	3.30
22	50.29	-0.537	0.015	0.463	1.017	2.87
23	44.69	-0.861	0.015	0.439	0.957	4.02
24	46.36	-0.744	0.015	0.505	1.027	7.98
25	55.89	-0.253	0.015	0.537	1.198	6.74
26	55.68	-0.264	0.015	0.320	0.694	15.47
27	60.16	-0.029	0.016	0.487	1.089	2.09
28	70.52	0.550	0.016	0.535	1.543	6.54
29	50.22	-0.546	0.015	0.482	0.994	1.82
30	41.63	-0.990	0.015	0.348	0.806	13.99
31	34.89	-1.354	0.016	0.388	0.843	10.92
32	58.32	-0.126	0.015	0.576	1.541	7.89
33	41.78	-0.982	0.015	0.501	1.057	6.30
34	67.19	0.356	0.016	0.574	1.581	9.21
35	35.84	-1.301	0.016	0.221	0.575	33.92
36	60.24	-0.024	0.016	0.534	1.333	5.51
37	22.81	-2.092	0.018	0.239	0.568	21.73
38	31.33	-1.556	0.016	0.329	0.698	18.21
39	41.85	-0.978	0.015	0.300	0.638	18.85
40	46.70	-0.726	0.015	0.513	1.085	5.74
41	73.51	0.732	0.017	0.428	0.835	3.64
42	80.22	1.189	0.018	0.414	0.936	3.14
43	43.07	-0.915	0.015	0.219	0.394	39.33
44	71.13	0.586	0.016	0.420	0.846	1.47
45	68.33	0.421	0.016	0.519	1.114	4.48
46	65.64	0.269	0.016	0.528	1.171	4.91
47	74.30	0.782	0.017	0.557	1.429	11.76
48	81.42	1.204	0.018	0.340	0.724	3.38
49	67.12	0.352	0.016	0.585	1.254	12.77
50	64.13	0.185	0.016	0.485	1.009	2.41

CONTINUED

TABLE 15 (CONT.)
CTBS LEVEL 2 FORM Q TOTAL READING
ITEM SUMMARY

85 ITEMS 22324 CASES KR=20= 0.953 EQUATING CONSTANT= 0.146

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
51	64.46	0.203	0.016	0.316	0.561	20.20
52	57.49	-0.170	0.015	0.415	0.791	3.81
53	70.98	0.577	0.016	0.509	1.087	4.50
54	68.70	0.443	0.016	0.509	1.164	3.83
55	76.35	0.914	0.017	0.518	1.329	7.73
56	59.99	-0.038	0.015	0.468	0.872	1.46
57	53.79	-0.361	0.015	0.387	0.769	6.24
58	66.40	0.311	0.016	0.521	1.175	4.76
59	53.52	-0.375	0.015	0.453	0.934	4.01
60	41.00	-1.023	0.015	0.277	0.540	22.14
61	65.68	0.271	0.016	0.486	0.992	2.40
62	58.86	-0.097	0.015	0.258	0.573	24.80
63	56.11	-0.241	0.015	0.449	0.874	2.57
64	75.35	0.850	0.017	0.545	1.503	10.71
65	44.16	-0.858	0.015	0.380	0.701	7.05
66	66.08	0.293	0.016	0.623	1.784	18.67
67	64.03	0.180	0.016	0.499	1.039	2.89
68	58.54	-0.114	0.015	0.451	0.960	2.19
69	63.87	0.171	0.016	0.585	1.489	12.98
70	58.52	-0.115	0.015	0.521	1.172	4.17
71	49.80	-0.567	0.015	0.463	0.941	2.40
72	41.73	-0.985	0.015	0.420	0.903	13.11
73	79.04	1.103	0.018	0.545	1.863	13.55
74	53.64	-0.369	0.015	0.426	0.906	2.89
75	58.04	-0.141	0.015	0.564	1.390	7.08
76	29.99	-1.634	0.016	0.342	0.668	20.96
77	46.35	-0.744	0.015	0.451	0.943	5.00
78	50.65	-0.523	0.015	0.480	1.016	5.06
79	46.44	-0.740	0.015	0.466	0.955	4.85
80	49.45	-0.585	0.015	0.439	0.966	8.27
81	37.22	-1.225	0.016	0.309	0.634	22.73
82	38.83	-1.139	0.016	0.303	0.623	19.84
83	48.15	-0.651	0.015	0.439	0.895	1.83
84	32.45	-1.491	0.016	0.357	0.725	14.50
85	28.77	-1.142	0.016	0.224	0.458	33.06

TABLE 15 (CONT'D)
 CTBS LEVEL 2 FORM Q TOTAL READING
 ABILITY SUMMARY

85 ITEMS 22324 CASES KR-20= 0.953 EQUATING CONSTANT= 0.146					
SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	0	-4.808	1.013	153	10.13
2	0	-4.089	0.725	161	7.25
3	1	-3.657	0.599	165	5.99
4	3	-3.344	0.525	168	5.25
5	0	-3.096	0.474	171	4.74
6	6	-2.889	0.437	179	4.37
7	2	-2.711	0.409	174	4.09
8	8	-2.553	0.386	176	3.86
9	8	-2.412	0.367	177	3.67
10	14	-2.283	0.352	179	3.52
11	11	-2.164	0.338	180	3.38
12	29	-2.053	0.327	181	3.27
13	27	-1.950	0.317	182	3.17
14	43	-1.852	0.308	183	3.08
15	71	-1.760	0.300	184	3.00
16	91	-1.672	0.293	185	2.93
17	127	-1.588	0.287	186	2.87
18	143	-1.507	0.281	186	2.81
19	183	-1.429	0.276	187	2.76
20	237	-1.354	0.272	188	2.72
21	227	-1.281	0.268	189	2.68
22	259	-1.211	0.264	189	2.64
23	271	-1.142	0.260	190	2.60
24	292	-1.075	0.257	191	2.57
25	321	-1.009	0.255	191	2.55
26	296	-0.945	0.252	192	2.52
27	314	-0.882	0.250	193	2.50
28	350	-0.821	0.247	193	2.47
29	322	-0.760	0.245	194	2.45
30	301	-0.700	0.244	194	2.44
31	293	-0.641	0.242	195	2.42
32	286	-0.583	0.241	196	2.41
33	334	-0.525	0.239	196	2.39
34	328	-0.468	0.238	197	2.38
35	291	-0.412	0.237	197	2.37
36	300	-0.355	0.237	198	2.37
37	281	-0.300	0.236	198	2.36
38	319	-0.244	0.235	199	2.35
39	314	-0.189	0.235	200	2.35
40	303	-0.134	0.234	200	2.34
41	281	-0.079	0.234	201	2.34
42	307	-0.024	0.234	201	2.34
43	319	0.030	0.234	202	2.34
44	297	0.085	0.234	202	2.34
45	341	0.140	0.234	203	2.34
46	333	0.195	0.235	203	2.35
47	337	0.250	0.235	204	2.35
48	328	0.306	0.236	205	2.36
49	370	0.362	0.237	205	2.37
50	383	0.418	0.237	206	2.37

CONTINUED

TABLE 15 (CONT.)
 CTBS LEVEL 2 FORM Q TOTAL READING
 ABILITY SUMMARY

85 ITEMS		22324 CASES		KR-20= 0.953	EQUATING CONSTANT= 0.146

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR

51	352	0.474	0.238	206	2.38
52	379	0.531	0.239	207	2.39
53	380	0.589	0.241	207	2.41
54	408	0.647	0.242	208	2.42
55	383	0.706	0.244	209	2.44
56	380	0.766	0.245	209	2.45
57	450	0.827	0.247	210	2.47
58	431	0.888	0.249	210	2.49
59	422	0.951	0.252	211	2.52
60	417	1.015	0.254	212	2.54
61	410	1.081	0.257	212	2.57
62	448	1.147	0.260	213	2.60
63	480	1.216	0.264	214	2.64
64	449	1.286	0.267	214	2.67
65	456	1.359	0.271	215	2.71
66	459	1.434	0.276	216	2.76
67	451	1.511	0.281	217	2.81
68	451	1.591	0.286	217	2.86
69	458	1.675	0.292	218	2.92
70	498	1.762	0.299	219	2.99
71	464	1.854	0.307	220	3.07
72	409	1.950	0.315	221	3.15
73	398	2.053	0.325	222	3.25
74	369	2.162	0.336	223	3.36
75	372	2.280	0.349	224	3.49
76	325	2.407	0.365	226	3.65
77	299	2.547	0.383	227	3.83
78	257	2.702	0.406	228	4.06
79	186	2.878	0.434	230	4.34
80	172	3.082	0.471	232	4.71
81	99	3.327	0.521	235	5.21
82	78	3.637	0.596	238	5.96
83	40	4.064	0.722	242	7.22
84	12	4.778	1.011	249	10.11

TABLE 16
CTBS LEVEL 2 FORM R VOCABULARY
ITEM SUMMARY

40 ITEMS		3280 CASES	KR-20= 0.916	EQUATING CONSTANT= -0.508		

ITEM NO.	RESPONSE PERCENT	LOG. EASINESS	STD. ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN. SQ. FIT

1	92.50	2.992	0.068	0.327	1.140	1.62
2	82.10	1.879	0.049	0.515	1.776	5.31
3	65.00	0.779	0.042	0.593	1.413	5.19
4	53.99	0.190	0.040	0.575	1.361	2.84
5	60.03	0.509	0.041	0.504	0.972	1.45
6	76.25	1.455	0.045	0.498	1.188	2.95
7	61.74	0.600	0.041	0.617	1.721	5.34
8	50.21	-0.008	0.040	0.567	1.140	3.18
9	60.82	0.551	0.041	0.428	0.831	1.93
10	53.84	0.182	0.040	0.537	0.993	2.09
11	69.21	1.018	0.043	0.580	1.524	5.20
12	48.35	-0.105	0.040	0.485	0.971	2.63
13	51.68	0.069	0.040	0.473	0.885	1.51
14	56.77	0.336	0.041	0.430	0.900	1.76
15	39.24	-0.593	0.041	0.462	0.885	2.78
16	39.88	-0.558	0.041	0.370	0.781	8.64
17	60.12	0.513	0.041	0.562	1.089	2.66
18	64.75	0.764	0.042	0.570	1.367	3.42
19	39.48	-0.580	0.041	0.479	0.878	1.43
20	58.23	0.413	0.041	0.406	0.765	2.54
21	48.72	-0.086	0.040	0.551	1.228	1.71
22	34.54	-0.859	0.042	0.439	0.856	2.29
23	47.29	-0.161	0.041	0.452	0.882	2.14
24	58.54	0.429	0.041	0.540	1.277	1.32
25	48.05	-0.121	0.040	0.541	1.218	1.27
26	37.23	-0.706	0.042	0.497	1.038	2.79
27	59.45	0.478	0.041	0.485	0.964	2.20
28	46.46	-0.205	0.041	0.546	1.066	1.92
29	40.55	-0.500	0.041	0.467	0.989	2.09
30	32.13	-1.001	0.043	0.301	0.655	8.37
31	61.77	0.602	0.041	0.677	2.167	10.62
32	43.32	-0.371	0.041	0.556	1.247	1.47
33	33.14	-0.941	0.043	0.448	0.877	1.04
34	38.18	-0.880	0.043	0.429	0.911	3.83
35	28.45	-1.229	0.044	0.348	0.706	4.71
36	35.12	-0.825	0.042	0.370	0.838	4.83
37	45.09	-0.277	0.041	0.526	1.118	1.42
38	34.80	-0.873	0.043	0.283	0.550	10.19
39	24.05	-1.522	0.047	0.357	0.709	4.43
40	26.49	-1.556	0.045	0.297	0.531	7.92

TABLE 16 (CONT.)
 CTBS LEVEL 2 FORM R VOCABULARY
 ABILITY SUMMARY

40 ITEMS 3280 CASES KR-20= 0.916 EQUATING CONSTANT= -0.508

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	4	-4.133	1.046	154	10.46
2	12	-3.353	0.762	161	7.62
3	19	-2.871	0.637	166	6.37
4	20	-2.513	0.563	170	5.63
5	41	-2.226	0.512	173	5.12
6	56	-1.983	0.476	175	4.76
7	81	-1.770	0.448	177	4.48
8	83	-1.580	0.426	179	4.26
9	140	-1.406	0.408	181	4.08
10	130	-1.246	0.394	182	3.94
11	136	-1.095	0.382	184	3.82
12	148	-0.953	0.372	185	3.72
13	130	-0.818	0.364	187	3.64
14	115	-0.687	0.358	188	3.58
15	126	-0.562	0.352	189	3.52
16	105	-0.439	0.348	191	3.48
17	109	-0.319	0.345	192	3.45
18	106	-0.201	0.342	193	3.42
19	98	-0.085	0.341	194	3.41
20	105	0.031	0.340	195	3.40
21	95	0.146	0.340	196	3.40
22	111	0.262	0.341	198	3.41
23	100	0.379	0.342	199	3.42
24	85	0.497	0.345	200	3.45
25	107	0.617	0.348	201	3.48
26	93	0.740	0.353	202	3.53
27	98	0.866	0.358	204	3.58
28	108	0.997	0.365	205	3.65
29	85	1.133	0.374	206	3.74
30	74	1.276	0.384	208	3.84
31	85	1.429	0.397	209	3.97
32	93	1.592	0.413	211	4.13
33	74	1.770	0.433	213	4.33
34	73	1.968	0.458	215	4.58
35	75	2.194	0.493	217	4.93
36	42	2.459	0.540	220	5.40
37	60	2.788	0.612	223	6.12
38	28	3.234	0.735	227	7.35
39	30	3.967	1.020	235	10.20

TABLE 17
CTBS LEVEL 2 FORM R COMPREHENSION
ITEM SUMMARY

45 ITEMS 3289 CASES KR-20= 0.908 EQUATING CONSTANT= -0.598						

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT

1	62.66	0.521	0.040	0.524	1.112	2.25
2	62.57	0.536	0.040	0.400	0.873	1.98
3	58.47	0.306	0.040	0.372	0.753	1.95
4	64.43	0.613	0.040	0.358	0.653	3.12
5	67.07	0.755	0.041	0.384	0.851	1.04
6	43.78	-0.429	0.040	0.327	0.742	4.17
7	64.73	0.629	0.041	0.509	1.207	1.77
8	56.83	0.223	0.039	0.364	0.739	3.43
9	28.64	-1.249	0.043	0.255	0.579	7.87
10	53.97	0.080	0.039	0.439	0.983	0.96
11	42.35	-0.502	0.040	0.290	0.598	5.57
12	52.84	0.024	0.039	0.415	0.815	1.54
13	69.41	0.884	0.042	0.423	0.803	1.20
14	65.49	0.670	0.041	0.535	1.333	2.47
15	77.71	1.387	0.045	0.537	1.521	5.60
16	69.29	0.877	0.042	0.468	1.090	1.94
17	36.30	-0.817	0.041	0.376	0.644	2.03
18	29.80	-1.180	0.042	0.319	0.610	10.34
19	63.12	0.544	0.040	0.594	1.586	4.89
20	59.38	0.352	0.040	0.512	1.257	1.44
21	38.49	-0.701	0.040	0.432	0.916	1.28
22	34.17	-0.933	0.041	0.361	0.788	3.77
23	59.68	0.367	0.040	0.568	1.460	2.90
24	49.59	-0.138	0.039	0.485	1.117	1.96
25	39.19	-0.665	0.040	0.318	0.707	3.65
26	48.25	-0.205	0.039	0.492	1.179	1.69
27	47.43	-0.246	0.039	0.415	0.819	1.46
28	45.76	-0.329	0.039	0.487	1.068	2.40
29	53.18	0.040	0.039	0.497	1.104	1.08
30	52.60	0.019	0.039	0.556	1.337	2.35
31	42.78	-0.480	0.040	0.357	0.764	2.97
32	36.22	-1.156	0.042	0.273	0.564	5.04
33	72.69	1.037	0.043	0.575	1.668	5.52
34	51.25	-0.056	0.039	0.555	1.171	3.01
35	63.97	0.589	0.040	0.578	1.603	3.87
36	52.75	0.019	0.039	0.557	1.150	2.87
37	53.30	0.046	0.039	0.566	1.376	3.04
38	35.27	-0.873	0.041	0.186	0.455	11.03
39	60.90	0.433	0.040	0.502	1.161	1.51
40	58.25	0.295	0.040	0.616	1.777	5.28
41	38.13	-0.720	0.040	0.507	1.112	2.61
42	68.38	0.826	0.041	0.537	1.472	3.15
43	20.71	-1.766	0.047	-0.014	0.076	24.92
44	47.25	-0.255	0.039	0.416	0.886	1.04
45	64.70	0.631	0.041	0.581	1.420	4.69

TABLE 17 (CONT.)
 CTBS LEVEL 2 FORM R COMPREHENSION
 ABILITY SUMMARY

45 ITEMS 3285 CASES KR-20= 0.908 EQUATING CONSTANT= -0.598					
SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCALE SCORE	STD ERR
1	0	-3.989	1.016	154	10.16
2	2	-3.264	0.729	161	7.29
3	1	-2.827	0.605	166	6.05
4	6	-2.506	0.532	169	5.32
5	9	-2.249	0.484	172	4.84
6	15	-2.033	0.449	174	4.49
7	49	-1.844	0.422	176	4.22
8	47	-1.675	0.401	177	4.01
9	67	-1.521	0.384	179	3.84
10	90	-1.378	0.371	180	3.71
11	99	-1.245	0.360	182	3.60
12	118	-1.119	0.350	183	3.50
13	119	-1.000	0.342	184	3.42
14	102	-0.885	0.336	185	3.36
15	129	-0.774	0.330	186	3.30
16	103	-0.666	0.326	187	3.26
17	100	-0.561	0.322	188	3.22
18	99	-0.458	0.319	189	3.19
19	125	-0.357	0.317	190	3.17
20	91	-0.257	0.316	191	3.16
21	106	-0.158	0.315	192	3.15
22	99	-0.059	0.314	193	3.14
23	95	0.040	0.314	194	3.14
24	98	0.139	0.315	195	3.15
25	102	0.239	0.316	196	3.16
26	77	0.339	0.318	197	3.18
27	92	0.441	0.321	198	3.21
28	100	0.545	0.324	199	3.24
29	98	0.652	0.328	201	3.28
30	96	0.761	0.333	202	3.33
31	126	0.873	0.339	203	3.39
32	78	0.990	0.345	204	3.45
33	89	1.112	0.354	205	3.54
34	105	1.241	0.363	206	3.63
35	121	1.376	0.375	208	3.75
36	91	1.522	0.388	209	3.88
37	61	1.679	0.405	211	4.05
38	90	1.852	0.426	213	4.26
39	62	2.044	0.453	214	4.53
40	58	2.265	0.488	217	4.88
41	38	2.526	0.536	219	5.36
42	26	2.851	0.609	223	6.09
43	7	3.294	0.733	227	7.33
44	3	4.024	1.018	234	10.18

TABLE 18
CTBS LEVEL 2 FORM R TOTAL READING
ITEM SUMMARY

85 ITEMS 3289 CASES KR-20= 0.951 EQUATING CONSTANT= -0.556						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	92.52	2.833	0.068	0.327	1.629	1.44
2	82.15	1.757	0.048	0.505	2.015	3.54
3	65.10	0.698	0.041	0.586	1.712	2.87
4	54.12	0.132	0.039	0.554	1.323	1.63
5	60.14	0.438	0.040	0.493	1.164	0.79
6	76.31	1.348	0.044	0.506	1.485	2.61
7	61.84	0.526	0.040	0.615	1.835	3.33
8	50.35	-0.057	0.039	0.554	1.303	1.81
9	60.93	0.479	0.040	0.421	0.941	0.81
10	53.97	0.125	0.039	0.527	1.176	1.61
11	69.29	0.928	0.042	0.569	1.620	3.22
12	48.49	-0.150	0.039	0.464	0.962	1.85
13	51.81	0.016	0.039	0.461	0.951	1.16
14	56.89	0.272	0.039	0.415	0.960	0.96
15	39.40	-0.617	0.040	0.440	0.921	2.03
16	40.04	-0.584	0.040	0.360	0.762	3.89
17	60.23	0.443	0.040	0.548	1.400	1.85
18	64.82	0.683	0.040	0.559	1.486	2.10
19	35.65	-0.634	0.040	0.467	1.001	1.00
20	58.35	0.346	0.040	0.389	0.832	1.09
21	48.86	-0.132	0.039	0.534	1.281	1.50
22	34.72	-0.870	0.041	0.416	0.866	1.72
23	47.43	-0.204	0.039	0.437	0.869	1.06
24	58.65	0.362	0.040	0.525	1.291	1.38
25	48.19	-0.166	0.039	0.542	1.258	1.54
26	37.40	-0.724	0.041	0.472	0.965	1.84
27	59.56	0.408	0.040	0.475	0.987	1.63
28	46.61	-0.246	0.039	0.529	1.196	1.56
29	41.11	-0.528	0.040	0.438	0.985	1.60
30	32.32	-1.035	0.042	0.262	0.631	3.93
31	61.87	0.528	0.040	0.676	2.240	6.04
32	43.48	-0.435	0.040	0.527	1.263	1.20
33	33.32	-0.948	0.042	0.435	0.945	0.85
34	24.36	-0.893	0.041	0.402	0.912	2.37
35	26.64	-1.222	0.043	0.326	0.642	1.99
36	35.30	-0.838	0.041	0.344	0.805	2.72
37	45.24	-0.315	0.040	0.490	1.108	0.93
38	34.46	-0.884	0.041	0.253	0.528	4.66
39	24.26	-1.500	0.045	0.337	0.767	2.41
40	26.70	-1.343	0.044	0.269	0.527	4.66
41	62.66	0.569	0.040	0.504	1.190	1.61
42	62.97	0.535	0.040	0.374	0.700	2.52
43	58.47	0.352	0.040	0.357	0.651	2.06
44	64.43	0.662	0.040	0.329	0.719	2.52
45	67.07	0.804	0.041	0.358	0.758	1.51
46	43.78	-0.390	0.040	0.288	0.609	3.55
47	64.73	0.678	0.040	0.513	1.276	1.52
48	56.85	0.209	0.039	0.350	0.758	2.23
49	28.64	-1.222	0.043	0.222	0.472	5.81
50	53.97	0.125	0.039	0.430	0.924	0.93

TABLE 18 (CONT.)
 CTBS LEVEL 2 FORM R TOTAL READING
 ITEM SUMMARY

85 ITEMS 3289 CASES KR-20= 0.951 EQUATING CONSTANT= -0.556						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
51	42.35	-0.463	0.040	0.284	0.577	3.90
52	52.84	0.068	0.039	0.399	0.836	1.28
53	69.41	0.934	0.042	0.406	0.840	0.88
54	65.49	0.719	0.041	0.506	1.116	1.32
55	77.71	1.440	0.045	0.503	1.606	2.63
56	69.29	0.928	0.042	0.441	0.939	1.58
57	36.30	-0.783	0.041	0.365	0.661	2.05
58	29.80	-1.153	0.043	0.340	0.685	6.44
59	63.12	0.593	0.040	0.570	1.297	2.31
60	59.38	0.399	0.040	0.481	1.110	0.97
61	38.49	-0.666	0.040	0.405	0.821	1.47
62	34.17	-0.901	0.041	0.360	0.739	2.57
63	59.68	0.414	0.040	0.551	1.386	1.83
64	49.59	-0.095	0.039	0.465	1.124	1.45
65	39.19	-0.629	0.040	0.286	0.635	3.90
66	48.25	-0.163	0.039	0.478	1.005	0.90
67	47.43	-0.204	0.039	0.367	0.660	2.31
68	45.70	-0.289	0.040	0.475	1.033	1.87
69	53.18	0.085	0.039	0.462	0.975	1.08
70	52.66	0.059	0.039	0.526	1.140	1.53
71	42.78	-0.441	0.040	0.326	0.629	2.55
72	30.22	-1.127	0.043	0.247	0.519	4.11
73	72.09	1.089	0.042	0.553	1.692	2.97
74	51.23	-0.013	0.039	0.532	1.161	1.64
75	63.97	0.638	0.040	0.546	1.372	1.75
76	52.75	0.063	0.039	0.559	1.172	2.34
77	53.30	0.091	0.039	0.553	1.272	1.90
78	35.27	-0.840	0.041	0.171	0.340	7.05
79	60.96	0.480	0.040	0.486	1.096	1.01
80	56.25	0.341	0.040	0.587	1.510	2.56
81	38.13	-0.685	0.041	0.510	1.034	1.86
82	68.38	0.877	0.041	0.519	1.392	2.02
83	20.71	-1.749	0.047	-0.026	0.046	16.14
84	47.25	-0.213	0.039	0.405	0.758	1.35
85	64.70	0.680	0.040	0.577	1.451	2.61

TABLE 18 (CONT.)
CTBS LEVEL 2 FORM R TOTAL READING
ABILITY SUMMARY

85 ITEMS 3289 CASES KR-20= 0.951 EQUATING CONSTANT= -0.556

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	0	-4.764	1.015	147	10.15
2	0	-4.041	0.727	154	7.27
3	0	-3.607	0.601	158	6.01
4	0	-3.293	0.526	162	5.26
5	0	-3.044	0.475	164	4.75
6	1	-2.837	0.437	166	4.37
7	2	-2.656	0.408	168	4.08
8	2	-2.501	0.385	169	3.85
9	1	-2.360	0.366	171	3.66
10	10	-2.232	0.350	172	3.50
11	8	-2.114	0.337	173	3.37
12	6	-2.004	0.325	174	3.25
13	12	-1.902	0.315	175	3.15
14	18	-1.806	0.306	176	3.06
15	25	-1.714	0.298	177	2.98
16	35	-1.628	0.291	178	2.91
17	41	-1.545	0.285	179	2.85
18	46	-1.465	0.279	180	2.79
19	59	-1.389	0.274	181	2.74
20	61	-1.315	0.269	181	2.69
21	54	-1.244	0.265	182	2.65
22	56	-1.175	0.261	183	2.61
23	80	-1.107	0.258	183	2.58
24	72	-1.042	0.255	184	2.55
25	68	-0.978	0.252	185	2.52
26	79	-0.915	0.249	185	2.49
27	81	-0.854	0.247	186	2.47
28	68	-0.794	0.244	187	2.44
29	55	-0.734	0.242	187	2.42
30	61	-0.676	0.241	188	2.41
31	45	-0.615	0.239	188	2.39
32	68	-0.562	0.238	189	2.38
33	46	-0.506	0.236	189	2.36
34	57	-0.450	0.235	190	2.35
35	65	-0.395	0.234	190	2.34
36	66	-0.341	0.233	191	2.33
37	48	-0.287	0.232	192	2.32
38	45	-0.233	0.232	192	2.32
39	42	-0.179	0.231	193	2.31
40	48	-0.126	0.231	193	2.31
41	52	-0.072	0.231	194	2.31
42	54	-0.019	0.231	194	2.31
43	50	0.034	0.231	195	2.31
44	50	0.087	0.231	195	2.31
45	41	0.140	0.231	196	2.31
46	67	0.194	0.231	196	2.31
47	53	0.247	0.232	197	2.32
48	39	0.301	0.232	197	2.32
49	57	0.355	0.233	198	2.33
50	46	0.410	0.234	199	2.34

CONTINUED

TABLE 18 (CONT.)
 CTBS LEVEL 2 FORM R TOTAL READING
 ABILITY SUMMARY

85 ITEMS 3289 CASES KR=20= 0.951 EQUATING CONSTANT= -0.556					
SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCALE SCORE	STD ERR
51	55	0.464	0.235	199	2.35
52	55	0.520	0.236	200	2.36
53	55	0.576	0.237	200	2.37
54	49	0.632	0.239	201	2.39
55	53	0.690	0.240	201	2.40
56	61	0.748	0.242	202	2.42
57	54	0.807	0.244	203	2.44
58	51	0.866	0.246	203	2.46
59	56	0.927	0.248	204	2.48
60	36	0.990	0.251	204	2.51
61	53	1.053	0.254	205	2.54
62	43	1.118	0.257	206	2.57
63	48	1.185	0.260	206	2.60
64	37	1.253	0.264	207	2.64
65	41	1.324	0.268	208	2.68
66	53	1.397	0.272	208	2.72
67	34	1.472	0.277	209	2.77
68	50	1.551	0.283	210	2.83
69	43	1.632	0.289	211	2.89
70	46	1.718	0.296	212	2.96
71	42	1.807	0.303	213	3.03
72	32	1.902	0.312	213	3.12
73	34	2.002	0.322	214	3.22
74	29	2.109	0.333	216	3.33
75	38	2.225	0.346	217	3.46
76	20	2.350	0.362	218	3.62
77	19	2.487	0.380	219	3.80
78	17	2.641	0.403	221	4.03
79	19	2.814	0.431	223	4.31
80	15	3.016	0.468	225	4.68
81	8	3.258	0.519	227	5.19
82	2	3.565	0.594	230	5.94
83	1	3.990	0.720	234	7.20
84	0	4.701	1.009	241	10.09

TABLE 19
CTBS LEVEL 3 FORM Q VOCABULARY
ITEM SUMMARY

40 ITEMS 11112 CASES KR-20= 0.901 EQUATING CONSTANT= 1.489

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R.(I,AB)	SLOPE	MN SQ FIT
1	85.13	2.064	0.028	0.352	0.923	3.17
2	78.32	1.536	0.025	0.526	1.557	16.67
3	77.08	1.452	0.025	0.409	0.950	2.44
4	80.30	1.676	0.026	0.471	1.295	9.08
5	70.35	1.036	0.023	0.407	0.766	2.13
6	66.50	0.820	0.022	0.515	1.302	6.81
7	58.14	0.377	0.022	0.634	1.370	24.97
8	67.01	0.847	0.023	0.455	0.884	2.47
9	60.98	0.525	0.022	0.530	1.058	6.40
10	56.19	0.278	0.022	0.439	0.947	1.58
11	69.30	0.976	0.023	0.548	1.504	11.99
12	58.45	0.394	0.022	0.546	1.242	9.21
13	74.54	1.288	0.024	0.531	1.463	13.09
14	62.27	0.592	0.022	0.522	1.153	5.44
15	57.40	0.340	0.022	0.539	1.206	4.79
16	47.19	-0.178	0.022	0.452	0.989	2.77
17	46.29	-0.223	0.022	0.514	1.020	4.16
18	49.14	-0.079	0.022	0.462	0.895	3.96
19	35.59	-0.571	0.022	0.410	0.766	3.81
20	51.20	0.025	0.022	0.516	1.244	10.77
21	50.13	-0.029	0.022	0.541	1.356	4.28
22	69.67	0.997	0.023	0.540	1.627	10.60
23	34.11	-0.870	0.023	0.195	0.620	50.81
24	42.78	-0.404	0.022	0.535	1.248	5.36
25	42.17	-0.435	0.022	0.463	1.031	2.68
26	37.28	-0.695	0.022	0.285	0.674	25.42
27	40.53	-0.521	0.022	0.450	0.983	5.51
28	29.59	-1.132	0.023	0.292	0.605	16.10
29	51.44	0.037	0.022	0.478	1.092	3.01
30	45.73	-0.252	0.022	0.526	1.140	4.02
31	36.98	-0.711	0.022	0.475	0.983	5.90
32	25.53	-1.360	0.024	0.305	0.717	17.89
33	37.63	-0.675	0.022	0.322	0.697	14.97
34	32.60	-0.952	0.023	0.421	1.043	10.17
35	36.27	-0.75	0.022	0.489	1.068	4.03
36	25.82	-1.118	0.023	0.190	0.522	43.29
37	48.00	-0.137	0.022	0.424	1.006	3.03
38	23.66	-1.512	0.025	0.383	0.837	3.71
39	27.35	-1.270	0.024	0.442	1.043	2.69
40	23.50	-1.388	0.024	0.422	0.904	8.15



TABLE 19 (CONT.)
 CTBS LEVEL 3 FORM Q VOCABULARY
 ABILITY SUMMARY

40 ITEMS 11112 CASES KR-20= 0.901 EQUATING CONSTANT= 1.489

SCOPE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	6	-4.073	1.026	174	10.26
2	12	-3.327	0.743	182	7.43
3	26	-2.869	0.621	186	6.21
4	66	-2.529	0.550	190	5.50
5	93	-2.253	0.503	192	5.03
6	160	-2.017	0.469	195	4.69
7	219	-1.809	0.444	197	4.44
8	295	-1.622	0.424	199	4.24
9	361	-1.449	0.408	200	4.08
10	392	-1.288	0.395	202	3.95
11	385	-1.137	0.384	204	3.84
12	443	-0.993	0.375	205	3.75
13	472	-0.855	0.368	206	3.68
14	445	-0.723	0.362	208	3.62
15	409	-0.594	0.357	209	3.57
16	436	-0.468	0.353	210	3.53
17	418	-0.344	0.350	211	3.50
18	420	-0.223	0.348	213	3.48
19	387	-0.103	0.346	214	3.46
20	396	0.017	0.345	215	3.45
21	429	0.136	0.345	216	3.45
22	389	0.256	0.346	217	3.46
23	399	0.376	0.348	219	3.48
24	400	0.497	0.350	220	3.50
25	347	0.621	0.353	221	3.53
26	378	0.747	0.358	222	3.58
27	373	0.877	0.363	224	3.63
28	368	1.011	0.370	225	3.70
29	310	1.151	0.378	226	3.78
30	286	1.297	0.388	228	3.88
31	288	1.453	0.401	229	4.01
32	265	1.620	0.416	231	4.16
33	251	1.801	0.436	233	4.36
34	225	2.002	0.461	235	4.61
35	160	2.230	0.495	237	4.95
36	137	2.498	0.543	240	5.43
37	114	2.829	0.614	243	6.14
38	95	3.278	0.737	248	7.37
39	63	4.013	1.021	255	10.21

TABLE 20
CTBS LEVEL 3 FORM Q COMPREHENSION
ITEM SUMMARY

45 ITEMS 11128 CASES KR-20= 0.886 EQUATING CONSTANT= 1.437

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MM-SQ FIT
1	65.86	0.896	0.022	0.337	0.845	1.73
2	75.02	1.192	0.023	0.475	1.379	8.11
3	58.69	0.326	0.021	0.389	0.960	1.36
4	56.03	0.198	0.021	0.470	1.150	2.38
5	28.50	-1.158	0.023	0.166	0.477	32.79
6	49.87	-0.096	0.021	0.420	0.929	1.03
7	70.63	0.939	0.022	0.350	0.745	3.83
8	72.59	1.049	0.023	0.400	1.042	1.95
9	51.22	-0.031	0.021	0.429	0.893	1.10
10	70.14	0.912	0.022	0.418	1.062	2.53
11	69.33	0.868	0.022	0.401	0.912	2.10
12	40.63	-0.541	0.021	0.318	0.628	10.26
13	69.51	0.877	0.022	0.457	1.123	5.57
14	68.28	0.811	0.022	0.471	1.117	7.42
15	60.76	0.427	0.021	0.597	1.783	19.94
16	61.88	0.483	0.021	0.316	0.716	4.36
17	46.97	-0.234	0.021	0.446	0.970	1.68
18	51.94	0.603	0.021	0.368	0.817	3.29
19	59.04	0.343	0.021	0.213	0.530	21.10
20	29.98	-1.097	0.023	0.357	0.845	5.71
21	65.65	0.672	0.022	0.434	0.979	1.87
22	55.69	0.182	0.021	0.515	1.266	5.88
23	47.17	-0.224	0.021	0.427	0.969	1.15
24	60.27	0.404	0.021	0.533	1.533	9.25
25	44.36	-0.359	0.021	0.434	1.084	1.89
26	29.30	-1.135	0.023	0.322	0.704	6.94
27	46.68	-0.248	0.021	0.437	1.136	3.41
28	62.79	0.528	0.021	0.535	1.465	9.62
29	44.64	-0.346	0.021	0.304	0.779	8.35
30	31.60	-1.008	0.022	0.211	0.602	25.37
31	29.22	-1.134	0.023	0.345	0.826	3.83
32	56.62	0.226	0.021	0.576	1.638	14.31
33	40.04	-0.570	0.021	0.258	0.513	14.03
34	47.45	-0.356	0.021	0.437	0.960	1.22
35	56.72	0.201	0.021	0.359	0.775	2.78
36	40.69	-0.538	0.021	0.339	0.730	5.33
37	31.18	-1.030	0.022	0.352	0.854	5.07
38	43.47	-0.403	0.021	0.408	0.970	4.21
39	46.18	-0.272	0.021	0.452	1.124	1.59
40	33.72	-0.694	0.022	0.338	0.879	7.74
41	51.26	-0.034	0.021	0.440	1.006	1.19
42	60.40	0.410	0.021	0.527	1.331	8.09
43	52.32	0.021	0.021	0.454	1.164	1.82
44	63.84	0.581	0.022	0.530	1.562	9.33
45	34.18	-0.869	0.022	0.393	0.955	2.76



TABLE 20 (CONT.)
 CTBS LEVEL 3 FORM Q COMPREHENSION
 ABILITY SUMMARY

 45 ITEMS 1128 CASES KR-20= 0.886 EQUATING CONSTANT= 1.437

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	1	-3.983	1.016	175	10.16
2	3	-3.258	0.729	182	7.29
3	6	-2.820	0.605	186	6.05
4	7	-2.499	0.532	189	5.32
5	17	-2.243	0.484	192	4.84
6	41	-2.026	0.449	194	4.49
7	69	-1.837	0.422	196	4.22
8	130	-1.668	0.401	198	4.01
9	182	-1.514	0.385	199	3.85
10	257	-1.371	0.371	201	3.71
11	308	-1.238	0.360	202	3.60
12	350	-1.112	0.350	203	3.50
13	360	-0.992	0.342	204	3.42
14	421	-0.877	0.336	206	3.36
15	420	-0.766	0.330	207	3.30
16	416	-0.659	0.326	208	3.26
17	405	-0.554	0.322	209	3.22
18	409	-0.451	0.319	210	3.19
19	361	-0.350	0.317	211	3.17
20	399	-0.250	0.315	212	3.15
21	396	-0.151	0.314	213	3.14
22	376	-0.053	0.314	214	3.14
23	411	0.046	0.314	215	3.14
24	338	0.144	0.314	216	3.14
25	377	0.244	0.316	217	3.16
26	383	0.344	0.317	218	3.17
27	417	0.445	0.320	219	3.20
28	390	0.548	0.323	220	3.23
29	427	0.654	0.327	221	3.27
30	354	0.762	0.331	222	3.31
31	368	0.873	0.337	223	3.37
32	351	0.989	0.344	224	3.44
33	280	1.110	0.352	225	3.52
34	200	1.237	0.361	227	3.61
35	300	1.371	0.372	228	3.72
36	242	1.514	0.386	230	3.86
37	230	1.670	0.403	231	4.03
38	187	1.840	0.423	233	4.23
39	138	2.030	0.450	235	4.50
40	130	2.248	0.485	237	4.85
41	78	2.506	0.533	239	5.33
42	46	2.828	0.606	243	6.06
43	30	3.267	0.730	247	7.30
44	16	3.993	1.016	254	10.16

TABLE 21
CTBS LEVEL 3 FORM Q TOTAL READING
ITEM SUMMARY

85 ITEMS 11132 CASES KR-20= 0.941 EQUATING CONSTANT= 0.906

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(1,AB)	SLOPE	MN SQ FIT
1	85.15	1.958	0.028	0.350	1.001	2.77
2	78.35	1.447	0.025	0.516	1.824	10.44
3	77.11	1.366	0.024	0.400	1.098	2.28
4	80.33	1.583	0.025	0.463	1.365	6.75
5	70.39	0.965	0.022	0.391	0.929	1.40
6	66.56	0.757	0.022	0.500	1.494	4.38
7	58.20	0.333	0.021	0.621	1.541	13.14
8	67.06	0.784	0.022	0.441	1.041	1.79
9	61.64	0.474	0.021	0.522	1.256	4.95
10	56.26	0.237	0.021	0.424	0.937	0.96
11	69.35	0.908	0.022	0.542	1.520	7.79
12	58.52	0.348	0.021	0.533	1.487	5.96
13	74.58	1.208	0.023	0.521	1.709	8.21
14	62.32	0.538	0.021	0.511	1.274	4.07
15	57.46	0.296	0.021	0.525	1.328	3.82
16	47.28	-0.199	0.021	0.423	1.076	1.89
17	46.38	-0.243	0.021	0.501	1.143	2.75
18	49.22	-0.105	0.021	0.452	0.974	2.55
19	39.69	-0.575	0.021	0.388	0.795	1.78
20	51.28	-0.005	0.021	0.492	1.278	5.45
21	50.22	-0.056	0.021	0.527	1.362	3.41
22	69.72	0.928	0.022	0.528	1.811	6.91
23	34.22	-0.861	0.022	0.162	0.537	20.01
24	42.88	-0.415	0.021	0.520	1.374	2.78
25	42.27	-0.446	0.021	0.439	1.010	1.89
26	37.38	-0.694	0.022	0.263	0.717	9.73
27	40.63	-0.528	0.021	0.424	1.082	3.04
28	29.71	-1.111	0.023	0.273	0.631	5.75
29	51.52	0.007	0.021	0.465	1.289	1.74
30	45.82	-0.270	0.021	0.513	1.166	3.61
31	37.68	-0.709	0.022	0.452	1.130	3.88
32	26.05	-1.329	0.024	0.274	0.719	6.82
33	37.74	-0.675	0.022	0.296	0.713	5.49
34	32.77	-0.939	0.022	0.394	1.134	5.02
35	36.37	-0.746	0.022	0.471	1.185	3.30
36	29.94	-1.098	0.023	0.168	0.547	15.89
37	48.09	-0.160	0.021	0.405	1.010	0.99
38	23.79	-1.473	0.024	0.363	0.875	1.69
39	27.47	-1.242	0.023	0.413	1.046	1.54
40	25.63	-1.355	0.024	0.401	1.031	4.54
41	69.87	0.936	0.022	0.303	0.753	3.05
42	75.03	1.235	0.023	0.451	1.216	3.77
43	58.70	0.357	0.021	0.357	0.835	2.10
44	56.05	0.227	0.021	0.445	0.978	0.95
45	28.93	-1.156	0.023	0.159	0.454	21.84
46	49.89	-0.072	0.021	0.401	0.843	1.44
47	70.64	0.979	0.023	0.321	0.668	3.29
48	72.60	1.091	0.023	0.370	0.910	6.78
49	51.24	-0.007	0.021	0.426	0.872	1.18
50	70.15	0.952	0.022	0.402	1.019	0.96

CONT INUED



TABLE 21 (CONT.)
 CTBS LEVEL 3 FORM Q TOTAL READING
 ITEM SUMMARY

85 ITEMS 11132 CASES KR-20= 0.941 EQUATING CONSTANT= 0.906						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
51	69.34	0.907	0.022	0.377	0.805	1.54
52	40.65	-0.527	0.021	0.317	0.652	16.30
53	69.52	0.917	0.022	0.444	1.080	3.84
54	68.29	0.850	0.022	0.463	0.961	4.72
55	60.77	0.460	0.021	0.608	1.911	11.81
56	61.89	0.517	0.021	0.295	0.589	4.64
57	46.99	-0.213	0.021	0.440	1.045	1.52
58	51.96	0.028	0.021	0.347	0.679	3.85
59	59.05	0.375	0.021	0.168	0.369	17.84
60	30.00	-1.094	0.023	0.355	0.755	3.46
61	65.64	0.709	0.022	0.403	0.907	1.14
62	55.70	0.210	0.021	0.500	1.085	2.81
63	47.19	-0.203	0.021	0.425	0.922	1.39
64	60.29	0.436	0.021	0.531	1.420	5.04
65	44.38	-0.341	0.021	0.416	0.971	1.24
66	29.33	-1.133	0.023	0.303	0.640	5.87
67	46.69	-0.228	0.021	0.440	1.150	2.53
68	62.80	0.563	0.021	0.513	1.434	3.85
69	44.66	-0.327	0.021	0.276	0.674	8.24
70	31.62	-1.003	0.022	0.202	0.613	16.62
71	29.35	-1.132	0.023	0.340	0.697	3.00
72	56.63	0.255	0.021	0.558	1.528	6.74
73	40.66	-0.556	0.021	0.238	0.490	11.63
74	44.45	-0.338	0.021	0.414	0.897	1.03
75	56.74	0.261	0.021	0.319	0.614	4.18
76	40.71	-0.524	0.021	0.327	0.662	4.46
77	31.21	-1.026	0.023	0.334	0.826	4.19
78	43.49	-0.385	0.021	0.398	0.969	2.52
79	46.20	-0.252	0.021	0.425	1.070	1.08
80	33.74	-0.886	0.022	0.324	0.846	6.11
81	51.18	-0.010	0.021	0.426	0.956	1.00
82	60.41	0.442	0.021	0.509	1.306	3.47
83	52.34	0.046	0.021	0.433	1.009	0.78
84	63.80	0.616	0.022	0.509	1.435	3.69
85	34.20	-0.862	0.022	0.381	0.756	2.43

TABLE 21 (CONT.)
CTBS LEVEL 3 FORM Q TOTAL READING
ABILITY SUMMARY

85 ITEMS 11132 CASES KR-20= 0.941 EQUATING CONSTANT= 0.906

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	0	-4.727	1.010	162	10.10
2	0	-4.014	0.721	169	7.21
3	0	-3.588	0.595	173	5.95
4	1	-3.279	0.520	176	5.20
5	1	-3.036	0.470	179	4.70
6	0	-2.833	0.433	181	4.33
7	1	-2.658	0.404	182	4.04
8	5	-2.504	0.382	184	3.82
9	2	-2.365	0.363	185	3.63
10	5	-2.239	0.348	187	3.48
11	14	-2.122	0.335	188	3.35
12	24	-2.014	0.323	189	3.23
13	19	-1.913	0.314	190	3.14
14	34	-1.817	0.305	191	3.05
15	65	-1.727	0.297	192	2.97
16	89	-1.641	0.290	193	2.90
17	117	-1.558	0.284	193	2.84
18	130	-1.479	0.279	194	2.79
19	160	-1.403	0.274	195	2.74
20	166	-1.329	0.269	196	2.69
21	156	-1.257	0.265	196	2.65
22	208	-1.188	0.262	197	2.62
23	203	-1.120	0.258	198	2.58
24	232	-1.055	0.255	199	2.55
25	220	-0.990	0.252	199	2.52
26	231	-0.927	0.250	200	2.50
27	195	-0.865	0.247	200	2.47
28	253	-0.805	0.245	201	2.45
29	227	-0.745	0.243	202	2.43
30	227	-0.686	0.242	202	2.42
31	221	-0.628	0.240	203	2.40
32	218	-0.571	0.239	203	2.39
33	241	-0.514	0.237	204	2.37
34	227	-0.458	0.236	204	2.36
35	209	-0.403	0.235	205	2.35
36	187	-0.348	0.234	206	2.34
37	230	-0.293	0.234	206	2.34
38	179	-0.238	0.233	207	2.33
39	227	-0.184	0.233	207	2.33
40	194	-0.130	0.232	208	2.32
41	183	-0.076	0.232	208	2.32
42	198	0.023	0.232	209	2.32
43	198	0.031	0.232	209	2.32
44	191	0.085	0.232	210	2.32
45	192	0.139	0.232	210	2.32
46	204	0.193	0.232	211	2.32
47	221	0.247	0.233	212	2.33
48	241	0.301	0.233	212	2.33
49	205	0.356	0.234	213	2.34
50	195	0.411	0.235	213	2.35

TABLE 21 (CONT.)
CTBS LEVEL 3 FORM Q TOTAL READING
ABILITY SUMMARY

85 ITEMS 11132 CASES KR-20= 0.941 EQUATING CONSTANT= 0.906

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	182	0.466	0.236	214	2.36
52	203	0.522	0.237	214	2.37
53	175	0.578	0.238	215	2.38
54	201	0.635	0.239	215	2.39
55	208	0.693	0.241	216	2.41
56	174	0.752	0.243	217	2.43
57	196	0.811	0.245	217	2.45
58	185	0.871	0.247	218	2.47
59	199	0.933	0.249	218	2.49
60	184	0.995	0.251	219	2.51
61	175	1.059	0.254	220	2.54
62	155	1.124	0.257	220	2.57
63	149	1.191	0.261	221	2.61
64	139	1.260	0.264	222	2.64
65	145	1.331	0.269	222	2.68
66	139	1.404	0.273	223	2.73
67	149	1.480	0.278	224	2.78
68	150	1.558	0.283	225	2.83
69	111	1.640	0.289	225	2.89
70	113	1.726	0.296	226	2.96
71	109	1.815	0.303	227	3.03
72	83	1.910	0.312	228	3.12
73	60	2.010	0.322	229	3.22
74	75	2.117	0.333	230	3.33
75	67	2.233	0.346	231	3.46
76	74	2.358	0.362	233	3.62
77	58	2.495	0.380	234	3.80
78	33	2.648	0.403	236	4.03
79	36	2.821	0.431	237	4.31
80	28	3.023	0.468	239	4.68
81	10	3.265	0.518	242	5.18
82	7	3.571	0.593	245	5.93
83	7	3.995	0.720	249	7.20
84	3	4.707	1.009	256	10.09

TABLE 22
CTBS LEVEL 3 FORM R VOCABULARY
ITEM SUMMARY

40 ITEMS		1547 CASES	KR-20= 0.884	EQUATING CONSTANT=		1.294

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB) SLOPE		MN SQ FIT

1	85.52	2.248	0.075	0.307	0.803	2.45
2	76.02	1.561	0.064	0.417	1.176	0.91
3	58.37	0.517	0.057	0.561	1.424	2.54
4	52.29	0.319	0.057	0.501	1.135	1.28
5	70.39	1.234	0.060	0.468	1.073	1.69
6	56.56	0.526	0.057	0.494	1.107	1.59
7	47.45	0.084	0.057	0.430	0.836	1.53
8	61.80	0.784	0.057	0.520	1.394	1.90
9	61.09	0.749	0.057	0.416	0.883	1.66
10	56.37	0.517	0.057	0.482	1.320	0.70
11	63.67	0.879	0.058	0.364	0.783	1.46
12	44.41	-0.065	0.057	0.541	1.246	2.52
13	47.58	0.091	0.057	0.337	0.717	1.37
14	53.52	0.379	0.057	0.467	1.084	0.77
15	52.75	0.341	0.057	0.472	1.024	0.80
16	45.25	-0.023	0.057	0.571	1.469	2.27
17	50.36	0.225	0.057	0.430	0.977	1.21
18	51.84	0.297	0.057	0.456	0.930	0.84
19	66.71	1.005	0.059	0.555	1.606	2.96
20	35.16	-0.537	0.059	0.305	0.598	3.96
21	31.80	-0.721	0.061	0.421	0.863	1.22
22	45.38	-0.017	0.057	0.501	1.018	1.59
23	61.99	0.794	0.058	0.537	1.387	2.38
24	43.24	-0.122	0.057	0.438	0.961	0.42
25	29.41	-0.858	0.062	0.457	0.967	1.11
26	26.76	-1.017	0.064	0.376	0.817	2.12
27	64.32	0.912	0.058	0.391	0.812	1.83
28	35.23	-0.534	0.059	0.297	0.731	2.99
29	35.42	-0.523	0.059	0.509	1.242	1.60
30	32.26	-0.696	0.061	0.430	1.003	1.36
31	37.62	-0.408	0.059	0.407	0.920	0.75
32	36.85	-0.448	0.059	0.373	0.838	2.41
33	23.25	-0.642	0.060	0.314	0.612	2.56
34	25.27	-1.111	0.065	0.413	0.809	0.93
35	47.71	0.097	0.057	0.424	0.946	1.15
36	27.21	-0.990	0.063	0.274	0.588	3.33
37	23.92	-1.199	0.060	0.346	0.791	1.94
38	26.05	-1.062	0.064	0.303	0.703	3.54
39	13.33	-1.523	0.070	0.154	0.411	5.56
40	25.60	-1.090	0.064	0.346	0.805	2.50

TABLE 22 (CONT.)
 CTBS LEVEL 3 FORM R VOCABULARY
 ABILITY SUMMARY

40 ITEMS 1547 CASES KR-20= 0.884 EQUATING CONSTANT= 1.294					
SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	0	-4.008	1.026	173	10.26
2	6	-3.262	0.743	180	7.43
3	1	-2.805	0.620	185	6.20
4	12	-2.467	0.548	188	5.48
5	9	-2.194	0.500	191	5.00
6	24	-1.962	0.465	193	4.65
7	43	-1.758	0.439	195	4.39
8	42	-1.575	0.419	197	4.19
9	74	-1.407	0.402	199	4.02
10	61	-1.250	0.389	200	3.89
11	72	-1.104	0.378	202	3.78
12	81	-0.964	0.369	203	3.69
13	100	-0.831	0.362	205	3.62
14	85	-0.703	0.356	206	3.56
15	71	-0.578	0.351	207	3.51
16	74	-0.457	0.347	208	3.47
17	56	-0.338	0.344	210	3.44
18	57	-0.220	0.342	211	3.42
19	57	-0.104	0.340	212	3.40
20	49	0.011	0.340	213	3.40
21	41	0.127	0.340	214	3.40
22	55	0.243	0.341	215	3.41
23	56	0.359	0.343	217	3.43
24	43	0.478	0.345	218	3.45
25	40	0.598	0.349	219	3.49
26	48	0.721	0.353	220	3.53
27	49	0.848	0.359	221	3.59
28	36	0.979	0.366	223	3.66
29	32	1.116	0.375	224	3.75
30	40	1.260	0.385	226	3.85
31	35	1.413	0.398	227	3.98
32	24	1.577	0.413	229	4.13
33	25	1.756	0.433	230	4.33
34	15	1.955	0.459	232	4.59
35	11	2.180	0.493	235	4.93
36	14	2.446	0.541	237	5.41
37	12	2.776	0.612	241	6.12
38	7	3.222	0.735	245	7.35
39	2	3.956	1.020	252	10.20

TABLE 23
CTBS LEVEL 3 FORM R COMPREHENSION
ITEM SUMMARY

45 ITEMS 1548 CASES KR-20= 0.883 EQUATING CONSTANT= 0.985						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MIN SQ FIT
1	67.65	0.725	0.059	0.481	1.309	2.18
2	67.83	0.765	0.059	0.445	1.176	1.30
3	70.99	0.937	0.060	0.348	0.911	0.96
4	67.70	0.759	0.059	0.494	1.393	1.80
5	77.91	1.350	0.065	0.410	1.167	1.89
6	49.03	-0.157	0.056	0.307	0.639	2.35
7	56.32	-0.095	0.056	0.246	0.589	3.37
8	76.68	1.271	0.064	0.325	0.757	2.73
9	57.24	0.235	0.056	0.458	1.097	0.66
10	51.42	-0.043	0.056	0.421	0.921	0.83
11	38.50	-0.669	0.058	0.169	0.385	5.50
12	22.42	-1.579	0.066	0.250	0.546	4.01
13	88.50	2.200	0.082	0.426	2.126	2.49
14	47.61	-0.224	0.056	0.489	1.134	1.17
15	78.49	1.388	0.066	0.409	1.151	1.69
16	46.12	-0.295	0.056	0.352	0.737	1.61
17	54.97	0.126	0.056	0.470	1.036	1.49
18	36.37	-0.777	0.058	0.454	1.048	2.77
19	44.77	-0.361	0.056	0.489	1.234	1.32
20	73.32	1.069	0.062	0.454	1.326	1.26
21	49.68	-0.126	0.056	0.339	0.716	1.63
22	47.55	-0.227	0.056	0.371	0.875	0.82
23	49.55	-0.132	0.056	0.383	0.944	1.72
24	65.25	0.631	0.058	0.510	1.433	1.93
25	34.82	-0.857	0.059	0.334	0.737	1.80
26	55.43	0.148	0.056	0.466	1.055	1.66
27	61.56	0.446	0.057	0.415	0.994	0.88
28	39.34	-0.626	0.057	0.429	0.966	1.15
29	32.82	-0.963	0.059	0.282	0.641	2.27
30	45.53	-0.305	0.056	0.458	1.095	0.84
31	54.97	0.126	0.056	0.458	1.097	0.82
32	56.52	-0.086	0.056	0.497	1.223	1.12
33	58.20	0.282	0.056	0.395	0.922	0.92
34	43.48	-0.423	0.057	0.432	1.139	1.48
35	66.21	0.681	0.058	0.472	1.159	1.67
36	52.71	0.019	0.056	0.493	1.199	1.42
37	40.25	-0.581	0.057	0.494	1.251	1.28
38	27.00	-1.291	0.062	0.207	0.522	3.85
39	43.19	-0.442	0.057	0.362	0.802	1.27
40	34.88	-0.854	0.059	0.296	0.539	2.67
41	47.09	-0.249	0.056	0.378	0.874	1.33
42	51.10	-0.058	0.056	0.540	1.426	1.75
43	58.66	0.304	0.057	0.481	1.145	1.39
44	46.45	-0.280	0.056	0.376	0.863	1.19
45	19.83	-1.758	0.068	0.275	0.641	1.89

TABLE 23 (CONT.)
 CTBS LEVEL 3 FORM R COMPREHENSION
 ABILITY SUMMARY

45 ITEMS		1548 CASES	KR-20= 0.883	EQUATING CONSTANT=	0.985

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR

1	0	-4.096	1.023	169	10.23
2	0	-3.358	0.738	176	7.38
3	0	-2.909	0.614	181	6.14
4	1	-2.578	0.542	184	5.42
5	0	-2.311	0.493	187	4.93
6	6	-2.086	0.458	189	4.58
7	10	-1.889	0.431	191	4.31
8	19	-1.713	0.410	193	4.10
9	24	-1.553	0.393	194	3.93
10	34	-1.404	0.379	196	3.79
11	34	-1.265	0.367	197	3.67
12	41	-1.134	0.357	199	3.57
13	37	-1.010	0.349	200	3.49
14	53	-0.891	0.342	201	3.42
15	53	-0.776	0.336	202	3.36
16	72	-0.664	0.331	203	3.31
17	70	-0.556	0.327	204	3.27
18	53	-0.450	0.324	205	3.24
19	65	-0.346	0.321	206	3.21
20	61	-0.243	0.319	207	3.19
21	69	-0.142	0.318	208	3.18
22	49	-0.041	0.317	209	3.17
23	53	0.060	0.317	210	3.17
24	62	0.160	0.318	211	3.18
25	53	0.261	0.319	212	3.19
26	57	0.363	0.320	213	3.20
27	55	0.467	0.323	215	3.23
28	51	0.572	0.326	216	3.26
29	52	0.679	0.329	217	3.29
30	51	0.789	0.334	218	3.34
31	36	0.902	0.340	219	3.40
32	37	1.020	0.346	220	3.46
33	44	1.142	0.354	221	3.54
34	42	1.271	0.364	223	3.64
35	36	1.407	0.375	224	3.75
36	42	1.553	0.389	225	3.89
37	33	1.710	0.406	227	4.06
38	33	1.883	0.427	229	4.27
39	21	2.076	0.453	231	4.53
40	20	2.297	0.488	233	4.88
41	10	2.558	0.537	235	5.37
42	9	2.884	0.609	239	6.09
43	0	3.327	0.733	243	7.33
44	0	4.058	1.019	250	10.19

TABLE 24
 OTBS LEVEL 3 FORM R TOTAL READING
 ITEM SUMMARY

85 ITEMS		1548 CASES		KR-20= 0.935		EQUATING CONSTANT= 1.130

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB) SLOPE		MN SQ FIT

1	85.53	2.056	0.075	0.285	0.793	0.80
2	76.03	1.374	0.063	0.424	1.208	1.22
3	56.40	0.342	0.056	0.567	1.369	2.01
4	52.33	0.147	0.056	0.493	1.193	1.02
5	70.41	1.049	0.060	0.471	1.096	1.31
6	56.59	0.351	0.056	0.484	1.107	1.32
7	47.48	-0.083	0.056	0.409	0.865	0.90
8	61.82	0.605	0.057	0.516	1.375	1.46
9	61.11	0.570	0.057	0.417	0.881	1.11
10	56.40	0.342	0.056	0.471	1.228	0.74
11	63.70	0.698	0.057	0.349	0.821	1.06
12	44.44	-0.229	0.056	0.519	1.056	1.97
13	47.61	-0.077	0.056	0.315	0.727	1.63
14	53.55	0.206	0.056	0.423	1.019	0.91
15	52.70	0.169	0.056	0.468	1.053	0.93
16	45.28	-0.169	0.056	0.559	1.355	1.91
17	50.39	0.055	0.056	0.410	0.800	0.88
18	51.87	0.126	0.056	0.442	0.952	1.12
19	66.73	0.853	0.058	0.548	1.560	1.74
20	35.21	-0.592	0.058	0.289	0.651	1.99
21	31.85	-0.872	0.060	0.397	0.951	1.15
22	45.41	-0.133	0.056	0.493	1.114	1.17
23	62.02	0.615	0.057	0.549	1.556	1.74
24	43.28	-0.286	0.056	0.417	0.974	0.96
25	29.40	-1.005	0.061	0.433	0.944	1.27
26	26.81	-1.160	0.063	0.341	0.752	1.79
27	64.34	0.731	0.057	0.370	0.845	1.13
28	35.27	-0.689	0.058	0.258	0.480	1.87
29	35.47	-0.678	0.058	0.471	1.116	1.31
30	32.30	-0.847	0.060	0.409	0.918	1.04
31	37.60	-0.565	0.058	0.374	0.874	0.69
32	36.89	-0.605	0.058	0.353	0.736	1.30
33	34.27	-0.755	0.059	0.285	0.611	2.14
34	25.32	-1.251	0.064	0.378	0.766	1.36
35	47.74	-0.071	0.056	0.386	0.791	1.52
36	27.26	-1.133	0.062	0.247	0.575	1.77
37	25.97	-1.337	0.065	0.320	0.700	1.64
38	26.10	-1.204	0.063	0.266	0.566	2.57
39	19.23	-1.653	0.069	0.125	0.329	3.75
40	25.65	-1.231	0.063	0.297	0.715	2.36
41	67.05	0.870	0.058	0.453	1.156	1.01
42	67.83	0.911	0.059	0.429	1.007	1.01
43	70.99	1.081	0.060	0.340	0.757	0.88
44	61.70	0.904	0.059	0.472	1.159	1.19
45	77.91	1.492	0.065	0.386	0.988	1.49
46	49.03	-0.009	0.056	0.283	0.559	2.01
47	50.32	0.052	0.056	0.219	0.421	2.44
48	76.68	1.414	0.064	0.304	0.657	1.88
49	57.24	0.382	0.056	0.447	1.019	0.57
50	51.42	0.104	0.056	0.391	0.760	0.98

TABLE 24 (CONT.)
 CTBS LEVEL 3 FORM R TOTAL READING
 ITEM SUMMARY

85 ITEMS 1548 CASES KR-20= 0.935 EQUATING CONSTANT= 1.130						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FLT
51	38.50	-0.523	0.057	0.143	0.303	4.31
52	22.42	-1.439	0.066	0.260	0.479	2.57
53	89.50	2.338	0.082	0.388	1.553	1.30
54	47.61	-0.077	0.056	0.481	1.101	1.38
55	78.49	1.529	0.065	0.374	0.793	1.09
56	46.12	-0.148	0.056	0.355	0.703	1.10
57	54.97	0.274	0.056	0.480	1.154	0.99
58	36.37	-0.631	0.058	0.470	0.959	1.21
59	44.77	-0.214	0.056	0.474	1.119	1.02
60	73.32	1.212	0.061	0.405	1.086	1.03
61	49.68	0.021	0.056	0.310	0.632	1.42
62	47.55	-0.080	0.056	0.347	0.722	1.54
63	49.55	0.015	0.056	0.364	0.796	0.76
64	65.25	0.777	0.058	0.494	1.336	1.19
65	34.82	-0.712	0.059	0.322	0.640	1.41
66	55.43	0.295	0.056	0.443	0.961	1.19
67	61.56	0.592	0.057	0.390	0.908	1.36
68	39.34	-0.480	0.057	0.421	0.990	1.08
69	32.82	-0.819	0.059	0.253	0.534	1.98
70	45.93	-0.158	0.056	0.435	0.975	0.75
71	54.57	0.274	0.056	0.437	1.056	0.86
72	50.52	0.061	0.056	0.463	1.166	0.87
73	58.20	0.429	0.056	0.375	0.801	1.12
74	43.48	-0.276	0.056	0.421	0.947	0.72
75	66.21	0.827	0.058	0.437	0.994	1.13
76	52.71	0.166	0.056	0.470	1.044	0.71
77	40.25	-0.435	0.057	0.476	1.081	0.95
78	27.00	-1.149	0.062	0.201	0.437	2.84
79	43.09	-0.295	0.056	0.342	0.666	0.99
80	34.86	-0.709	0.059	0.280	0.523	1.75
81	47.09	-0.102	0.056	0.355	0.686	1.68
82	51.10	0.089	0.056	0.534	1.430	1.13
83	58.66	0.450	0.056	0.468	1.217	0.88
84	46.45	-0.133	0.056	0.354	0.642	1.16
85	19.83	-1.619	0.069	0.274	0.627	1.55

777

TABLE 24 (CONT.)
 CTBS LEVEL 3 FORM R TOTAL READING
 ABILITY SUMMARY

85 ITEMS 1548 CASES KR-20= 0.935 EQUATING CONSTANT= 1.130					
SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	0	-4.774	1.012	164	10.12
2	0	-4.057	0.724	171	7.24
3	0	-3.627	0.598	175	5.98
4	0	-3.315	0.524	178	5.24
5	0	-3.066	0.473	181	4.73
6	0	-2.862	0.436	183	4.36
7	0	-2.684	0.408	184	4.08
8	0	-2.527	0.385	186	3.85
9	0	-2.386	0.367	187	3.67
10	1	-2.258	0.351	189	3.51
11	2	-2.139	0.338	190	3.38
12	4	-2.029	0.326	191	3.26
13	3	-1.926	0.316	192	3.16
14	8	-1.829	0.307	193	3.07
15	4	-1.737	0.300	194	3.00
16	5	-1.650	0.293	195	2.93
17	13	-1.566	0.286	196	2.86
18	12	-1.486	0.281	196	2.81
19	24	-1.408	0.276	197	2.76
20	26	-1.333	0.271	198	2.71
21	22	-1.261	0.267	199	2.67
22	33	-1.191	0.263	199	2.63
23	24	-1.123	0.260	200	2.60
24	29	-1.056	0.256	201	2.56
25	34	-0.991	0.254	201	2.54
26	35	-0.928	0.251	202	2.51
27	59	-0.865	0.249	203	2.49
28	44	-0.804	0.246	203	2.46
29	38	-0.744	0.244	204	2.44
30	39	-0.685	0.243	204	2.43
31	29	-0.626	0.241	205	2.41
32	43	-0.569	0.239	206	2.39
33	37	-0.512	0.238	206	2.38
34	29	-0.456	0.237	207	2.37
35	39	-0.400	0.236	207	2.36
36	42	-0.344	0.235	208	2.35
37	29	-0.289	0.234	208	2.34
38	26	-0.235	0.234	209	2.34
39	37	-0.180	0.233	209	2.33
40	16	-0.126	0.233	210	2.33
41	23	-0.072	0.232	211	2.32
42	33	-0.018	0.232	211	2.32
43	41	0.036	0.232	212	2.32
44	23	0.089	0.232	212	2.32
45	21	0.143	0.232	213	2.32
46	41	0.197	0.233	213	2.33
47	20	0.252	0.233	214	2.33
48	27	0.306	0.234	214	2.34
49	29	0.361	0.234	215	2.34
50	18	0.416	0.235	215	2.35

TABLE 24 (CONT.)
CTBS LEVEL 3 FORM R TOTAL READING
ABILITY SUMMARY

85 ITEMS 1548 CASES KR-20= 0.935 EQUATING CONSTANT= 1.130

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	19	0.471	0.236	216	2.36
52	25	0.527	0.237	217	2.37
53	26	0.584	0.238	217	2.38
54	28	0.641	0.240	218	2.40
55	27	0.699	0.241	218	2.41
56	21	0.758	0.243	219	2.43
57	24	0.817	0.245	219	2.45
58	20	0.878	0.247	220	2.47
59	25	0.939	0.249	221	2.49
60	24	1.002	0.252	221	2.52
61	26	1.066	0.255	222	2.55
62	14	1.132	0.258	223	2.58
63	20	1.199	0.261	223	2.61
64	18	1.268	0.265	224	2.65
65	16	1.339	0.269	225	2.69
66	19	1.413	0.273	225	2.73
67	16	1.489	0.278	226	2.78
68	15	1.568	0.284	227	2.84
69	21	1.650	0.290	228	2.90
70	13	1.736	0.297	229	2.97
71	8	1.826	0.304	230	3.04
72	9	1.921	0.313	231	3.13
73	13	2.022	0.323	232	3.23
74	7	2.130	0.334	233	3.34
75	9	2.246	0.347	234	3.47
76	6	2.372	0.363	235	3.63
77	6	2.510	0.381	236	3.81
78	2	2.663	0.404	238	4.04
79	3	2.838	0.432	240	4.32
80	1	3.040	0.469	242	4.69
81	0	3.283	0.519	244	5.19
82	1	3.590	0.594	247	5.94
83	0	4.015	0.721	251	7.21
84	0	4.727	1.009	259	10.09

TABLE 25
ITBS LEVEL 10 FORM 5 VOCABULARY
ITEM SUMMARY

38 ITEMS 10503 CASES KR=20= 0.904 EQUATING CONSTANT= 0.298

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R (I, AB)	MN SQ SLOPE	FIT
1	71.02	0.923	0.024	0.408	0.915	1.12
2	61.35	0.390	0.023	0.463	1.034	1.05
3	65.04	0.587	0.023	0.352	0.703	7.91
4	60.22	0.331	0.023	0.580	1.232	10.75
5	78.49	1.396	0.026	0.525	1.649	16.21
6	52.99	-0.041	0.022	0.354	0.613	10.92
7	66.10	0.644	0.023	0.490	1.061	2.92
8	7.46	1.069	0.024	0.524	1.542	9.73
9	61.10	0.376	0.023	0.364	0.768	6.67
10	55.24	0.073	0.022	0.606	1.394	13.30
11	57.03	0.165	0.022	0.436	0.859	1.69
12	74.69	1.146	0.025	0.527	1.298	12.35
13	62.59	0.455	0.023	0.576	1.371	11.38
14	55.69	0.096	0.022	0.416	0.893	2.99
15	57.24	0.176	0.022	0.456	0.989	3.00
16	50.43	-0.172	0.022	0.456	1.009	2.48
17	72.85	1.032	0.024	0.500	1.123	8.55
18	57.55	0.192	0.022	0.546	1.234	5.29
19	59.01	0.268	0.023	0.535	1.129	4.51
20	43.04	-0.553	0.023	0.470	1.047	8.75
21	41.09	-0.656	0.023	0.443	0.901	3.85
22	50.83	-0.152	0.022	0.464	1.035	4.01
23	33.17	-1.091	0.024	0.300	0.661	22.03
24	51.11	-0.138	0.022	0.563	1.261	5.50
25	61.54	0.421	0.023	0.538	1.355	5.15
26	54.55	0.038	0.022	0.499	1.105	0.92
27	28.70	-1.358	0.024	0.345	0.730	17.64
28	48.82	-0.254	0.022	0.515	1.047	2.14
29	35.34	-0.968	0.023	0.422	0.930	8.06
30	35.43	-0.963	0.023	0.318	0.642	15.73
31	31.30	-1.196	0.024	0.309	0.619	16.74
32	44.80	-0.407	0.022	0.463	1.058	3.91
33	47.75	-0.309	0.022	0.475	0.991	2.06
34	48.54	-0.269	0.022	0.465	0.973	1.33
35	51.65	-0.110	0.022	0.499	1.084	3.00
36	53.84	0.002	0.022	0.454	0.947	2.14
37	40.00	-0.714	0.023	0.468	1.010	3.90
38	46.37	-0.380	0.022	0.503	1.132	4.82

TABLE 25 (CONT.)
ITBS LEVEL 10 FORM 5 VOCABULARY
ABILITY SUMMARY

38 ITEMS 10503 CASES KR-20= 0.904 EQUATING CONSTANT= 0.298

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	7	-3.809	1.019	165	10.19
2	14	-3.077	0.735	172	7.35
3	26	-2.631	0.611	177	6.11
4	51	-2.303	0.540	180	5.40
5	88	-2.038	0.492	183	4.92
6	149	-1.814	0.457	185	4.57
7	239	-1.617	0.432	187	4.32
8	288	-1.439	0.412	189	4.12
9	313	-1.277	0.396	190	3.96
10	377	-1.125	0.383	192	3.83
11	420	-0.983	0.372	193	3.72
12	444	-0.847	0.364	195	3.64
13	418	-0.717	0.357	196	3.57
14	385	-0.592	0.352	197	3.52
15	368	-0.470	0.347	198	3.47
16	375	-0.350	0.344	199	3.44
17	364	-0.233	0.342	201	3.42
18	337	-0.116	0.341	202	3.41
19	376	0.0	0.340	203	3.40
20	331	0.115	0.341	204	3.41
21	346	0.232	0.342	205	3.42
22	345	0.349	0.344	206	3.44
23	323	0.469	0.348	208	3.48
24	359	0.591	0.352	209	3.52
25	350	0.717	0.357	210	3.57
26	384	0.847	0.364	211	3.64
27	355	0.982	0.373	213	3.73
28	341	1.125	0.383	214	3.83
29	358	1.277	0.396	216	3.96
30	343	1.439	0.412	217	4.12
31	317	1.617	0.432	219	4.32
32	314	1.814	0.458	221	4.58
33	273	2.038	0.492	223	4.92
34	258	2.303	0.540	226	5.40
35	211	2.632	0.611	229	6.11
36	161	3.078	0.735	234	7.35
37	95	3.811	1.019	241	10.19



TABLE 26
ITBS LEVEL 10 FORM 5 COMPREHENSION
ITEM SUMMARY

68 ITEMS 10533 CASES KR-20= 0.926 EQUATING CONSTANT= 0.664

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD. ERROR	DISCRIMINATION R(I, AB)	SLOPE	MN SQ FIT
1	69.34	1.135	0.023	0.473	0.976	4.29
2	64.47	0.879	0.022	0.438	0.897	2.92
3	63.50	0.829	0.022	0.524	1.222	5.76
4	45.73	-0.035	0.022	0.291	0.533	7.32
5	44.79	-0.080	0.022	0.454	0.913	3.10
6	55.53	0.456	0.022	0.551	1.447	6.35
7	69.22	1.128	0.023	0.512	1.149	8.52
8	63.37	0.823	0.022	0.508	0.942	5.62
9	62.96	0.802	0.022	0.413	0.736	2.20
10	64.45	0.877	0.022	0.493	0.959	5.96
11	71.18	1.236	0.023	0.345	0.715	1.64
12	66.49	0.983	0.022	0.479	1.142	4.09
13	71.69	1.265	0.023	0.489	1.195	6.26
14	57.64	0.539	0.022	0.470	1.072	1.98
15	57.47	0.531	0.022	0.412	0.782	2.40
16	51.10	0.224	0.021	0.499	1.033	3.27
17	68.20	1.073	0.023	0.594	1.966	16.22
18	61.53	0.730	0.022	0.528	1.281	6.07
19	59.16	0.613	0.022	0.589	1.415	8.99
20	62.12	0.760	0.022	0.509	1.180	5.05
21	62.25	0.768	0.022	0.545	1.367	7.58
22	59.16	0.613	0.022	0.546	1.383	7.35
23	60.20	0.669	0.022	0.493	0.975	7.27
24	55.57	0.439	0.022	0.556	1.392	6.86
25	65.55	0.934	0.022	0.539	1.280	9.34
26	40.82	-0.275	0.022	0.347	0.800	3.05
27	48.74	0.111	0.022	0.376	0.897	1.63
28	53.94	0.360	0.022	0.552	1.530	6.70
29	54.35	0.380	0.022	0.529	1.295	4.32
30	50.11	0.176	0.022	0.503	1.278	3.02
31	46.00	-0.287	0.022	0.291	0.545	6.97
32	54.26	-0.012	0.023	0.259	0.724	11.18
33	46.42	-0.001	0.022	0.353	0.841	2.23
34	43.40	-0.148	0.022	0.394	0.675	1.60
35	40.41	-0.296	0.022	0.312	0.732	4.29
36	33.72	-0.640	0.023	0.331	0.848	3.93
37	47.06	0.030	0.022	0.436	1.135	1.93
38	38.28	-0.403	0.022	0.360	0.874	2.58
39	51.73	0.254	0.021	0.412	0.945	1.14
40	50.75	0.207	0.021	0.485	1.123	2.46
41	40.14	-0.309	0.022	0.510	1.311	3.73
42	43.29	-0.153	0.022	0.455	1.109	1.36
43	38.12	-0.411	0.022	0.322	0.847	5.28
44	46.83	0.019	0.022	0.468	1.144	1.16
45	42.25	-0.205	0.022	0.417	1.009	2.82
46	46.70	0.012	0.022	0.480	1.276	2.27
47	43.60	-0.135	0.022	0.415	1.030	1.53
48	45.92	-0.025	0.022	0.484	1.218	2.70
49	36.87	-0.476	0.022	0.426	1.108	2.27
50	30.28	-0.624	0.023	0.392	1.118	5.30

CONTINUED



TABLE 26 (CONT.)
ITBS LEVEL 10 FORM 5 COMPREHENSION
ITEM SUMMARY

68 ITEMS 10533 CASES KR-20= 0.926 EQUATING CONSTANT= 0.664						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
51	22.61	-1.296	0.025	0.059	0.369	29.96
52	23.30	-1.250	0.025	0.019	0.387	37.68
53	40.06	-0.313	0.022	0.463	1.119	1.52
54	43.40	-0.148	0.022	0.417	0.987	0.90
55	27.78	-0.973	0.024	0.208	0.700	14.34
56	26.51	-1.049	0.024	0.188	0.448	12.04
57	25.23	-1.127	0.024	0.257	0.769	8.23
58	25.03	-1.140	0.024	0.197	0.558	11.24
59	33.23	-0.667	0.023	0.315	0.769	5.08
60	36.02	-0.519	0.022	0.334	0.781	5.51
61	24.51	-1.172	0.025	0.180	0.679	17.13
62	34.43	-0.602	0.023	0.320	0.869	5.89
63	42.51	-0.192	0.022	0.448	1.104	3.37
64	25.34	-1.089	0.024	0.269	0.699	7.54
65	32.41	-0.711	0.023	0.330	0.961	8.04
66	35.39	-0.552	0.022	0.427	1.050	0.89
67	28.05	-0.957	0.024	0.201	0.494	12.74
68	31.24	-0.776	0.023	0.317	0.800	4.15

TABLE 26 (CONT.)
ITBS LEVEL 10 FORM 5 COMPREHENSION
ABILITY SUMMARY

68 ITEMS		10533 CASES		KR-20= 0.926		EQUATING CONSTANT= 0.664	
SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE			
				SCALE SCORE	STD ERR		
1	3	-4.431	1.011	162	10.11		
2	2	-3.716	0.722	169	7.22		
3	5	-3.288	0.596	174	5.96		
4	8	-2.978	0.522	177	5.22		
5	7	-2.733	0.472	179	4.72		
6	13	-2.527	0.435	181	4.35		
7	15	-2.350	0.408	183	4.08		
8	20	-2.193	0.385	185	3.85		
9	34	-2.052	0.367	186	3.67		
10	47	-1.923	0.352	187	3.52		
11	83	-1.803	0.340	189	3.40		
12	117	-1.692	0.329	190	3.29		
13	169	-1.587	0.319	191	3.19		
14	253	-1.487	0.311	192	3.11		
15	280	-1.393	0.304	193	3.04		
16	286	-1.303	0.298	194	2.98		
17	324	-1.216	0.292	194	2.92		
18	372	-1.132	0.287	195	2.87		
19	354	-1.051	0.283	196	2.83		
20	367	-0.972	0.279	197	2.79		
21	374	-0.895	0.275	198	2.75		
22	292	-0.820	0.272	198	2.72		
23	259	-0.747	0.269	199	2.69		
24	243	-0.675	0.267	200	2.67		
25	234	-0.605	0.265	201	2.65		
26	230	-0.535	0.263	201	2.63		
27	216	-0.466	0.261	202	2.61		
28	228	-0.398	0.260	203	2.60		
29	221	-0.331	0.259	203	2.59		
30	224	-0.264	0.258	204	2.58		
31	208	-0.198	0.257	205	2.57		
32	219	-0.132	0.257	205	2.57		
33	214	-0.066	0.256	206	2.56		
34	204	0.000	0.256	207	2.56		
35	242	0.065	0.256	207	2.56		
36	234	0.131	0.257	208	2.57		
37	195	0.197	0.257	209	2.57		
38	197	0.263	0.258	209	2.58		
39	197	0.330	0.259	210	2.59		
40	230	0.397	0.260	211	2.60		
41	241	0.465	0.261	211	2.61		
42	216	0.534	0.263	212	2.63		
43	204	0.604	0.265	212	2.65		
44	204	0.674	0.267	213	2.67		
45	229	0.746	0.269	214	2.69		
46	189	0.820	0.272	215	2.72		
47	172	0.895	0.275	216	2.75		
48	217	0.971	0.279	216	2.79		
49	183	1.050	0.283	217	2.83		
50	151	1.131	0.287	218	2.87		

CONTINUED

TABLE-26 (CONT.)
ITBS LEVEL 10 FORM 5 COMPREHENSION
ABILITY SUMMARY

68 ITEMS 1053 CASES KR-20= 0.926 EQUATING CONSTANT= 0.664

SCORE	FREQ	NATIONAL REFERENCE SCALE			
		LJG ABILITY	STD ERROR	SCALE SCORE	STD ERR
51	158	1.215	0.292	219	2.92
52	145	1.302	0.298	220	2.98
53	127	1.393	0.304	221	3.04
54	124	1.487	0.311	222	3.11
55	108	1.587	0.319	223	3.19
56	98	1.692	0.329	224	3.29
57	83	1.803	0.340	225	3.40
58	65	1.923	0.352	226	3.52
59	65	2.052	0.367	227	3.67
60	38	2.194	0.386	229	3.86
61	36	2.351	0.408	230	4.08
62	22	2.528	0.436	232	4.36
63	8	2.734	0.472	234	4.72
64	7	2.980	0.522	236	5.22
65	5	3.290	0.596	240	5.96
66	2	3.717	0.723	244	7.23
67	0	4.432	1.011	251	10.11

TABLE 27
ITBS LEVEL 10 FORM 51 TOTAL READING
ITEM SUMMARY

106 ITEMS 10534 CASES KR-20= 0.954 EQUATING CONSTANT= 0.533

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(1,AB)	SLOPE	MSQ FIT
1	71.08	1.114	0.023	0.383	0.903	1.01
2	61.45	0.604	0.022	0.433	1.043	0.91
3	65.12	0.792	0.022	0.327	0.707	2.00
4	60.32	0.548	0.022	0.567	1.450	5.32
5	78.54	1.569	0.025	0.515	1.729	8.55
6	53.11	0.194	0.022	0.328	0.670	3.36
7	56.18	0.847	0.022	0.469	1.016	2.59
8	73.51	1.254	0.024	0.505	1.543	5.06
9	61.19	0.591	0.022	0.347	0.765	2.01
10	55.35	0.303	0.022	0.585	1.360	5.90
11	57.14	0.390	0.022	0.423	0.964	1.22
12	74.75	1.328	0.024	0.515	1.541	6.23
13	62.68	0.667	0.022	0.558	1.586	5.27
14	55.80	0.325	0.022	0.387	0.886	1.37
15	57.35	0.401	0.022	0.436	1.039	1.38
16	50.56	0.070	0.022	0.425	1.019	1.29
17	72.51	1.219	0.024	0.485	1.111	4.55
18	57.65	0.415	0.022	0.521	1.358	2.59
19	39.12	0.466	0.022	0.509	1.196	2.58
20	43.19	-0.291	0.022	0.424	0.996	2.69
21	41.25	-0.363	0.022	0.413	0.950	1.62
22	50.96	0.059	0.022	0.438	0.992	1.49
23	32.35	-0.797	0.023	0.258	0.620	0.26
24	51.23	0.102	0.022	0.539	1.321	2.89
25	62.04	0.634	0.022	0.519	1.372	3.04
26	54.66	0.269	0.022	0.488	1.166	1.47
27	28.87	-1.051	0.024	0.310	0.793	4.82
28	48.96	-0.008	0.022	0.493	1.112	2.09
29	25.51	-0.683	0.023	0.394	0.988	2.49
30	29.60	-0.679	0.022	0.287	0.625	4.00
31	11.55	-0.898	0.023	0.273	0.627	4.49
32	45.03	-0.200	0.022	0.431	1.075	1.69
33	47.83	-0.061	0.022	0.439	1.059	1.03
34	10.67	-0.822	0.022	0.444	1.041	0.78
35	51.78	0.129	0.022	0.481	1.113	1.53
36	36.96	0.235	0.022	0.442	1.013	0.94
37	40.10	-0.445	0.022	0.433	1.022	1.41
38	46.51	-0.128	0.022	0.468	1.225	1.58
39	40.34	0.017	0.023	0.483	1.174	3.35
40	64.47	0.758	0.022	0.431	0.847	1.74
41	66.49	0.708	0.022	0.528	1.296	4.14
42	30.73	-0.166	0.022	0.276	0.456	6.16
43	44.75	-0.212	0.022	0.457	0.966	2.76
44	37.52	0.351	0.022	0.554	1.332	4.11
45	69.21	1.010	0.023	0.516	1.163	5.48
46	63.37	0.702	0.022	0.499	1.012	3.52
47	57.56	0.601	0.022	0.407	0.750	1.45
48	34.44	0.757	0.022	0.476	1.093	4.08
49	71.17	1.119	0.023	0.337	0.750	2.03
50	55.46	0.303	0.022	0.476	1.168	2.41

TABLE 27 (CONT.)
ITBS. LEVEL 10 FORM 5 TOTAL READING
ITEM SUMMARY

106 ITEMS 10534 CASES KR-20= 0.954 EQUATING CONSTANT= 0.533

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
51	71.68	1.148	0.023	0.479	1.200	3.65
52	57.63	0.415	0.022	0.455	0.997	1.15
53	57.46	0.406	0.022	0.394	0.730	1.92
54	51.09	0.096	0.022	0.492	1.019	2.11
55	68.19	0.954	0.023	0.577	1.890	8.39
56	61.52	0.608	0.022	0.509	1.243	3.04
57	59.15	0.490	0.022	0.565	1.443	5.20
58	62.11	0.638	0.022	0.488	1.194	2.36
59	62.23	0.644	0.022	0.530	1.329	3.75
60	59.15	0.490	0.022	0.532	1.334	3.70
61	60.29	0.546	0.022	0.472	0.926	4.01
62	55.56	0.313	0.022	0.548	1.248	3.92
63	65.54	0.814	0.022	0.519	1.164	4.83
64	40.82	-0.410	0.022	0.340	0.739	2.79
65	48.74	-0.019	0.022	0.370	0.790	1.51
66	53.93	0.233	0.022	0.539	1.372	3.67
67	54.35	0.254	0.022	0.526	1.349	2.89
68	50.10	0.048	0.022	0.500	1.276	2.29
69	40.59	-0.421	0.022	0.275	0.512	5.88
70	34.26	-0.750	0.023	0.251	-0.650	8.38
71	46.41	-0.132	0.022	0.341	0.725	2.61
72	43.39	-0.281	0.022	0.380	0.861	1.88
73	40.40	-0.431	0.022	0.296	0.668	3.89
74	33.72	-0.779	0.023	0.320	0.762	3.41
75	47.00	-0.101	0.022	0.424	1.017	1.44
76	38.28	-0.539	0.022	0.338	0.787	2.76
77	51.73	0.126	0.022	0.400	0.907	1.12
78	50.74	0.078	0.022	0.476	1.063	1.42
79	40.14	-0.444	0.022	0.499	1.224	2.38
80	43.29	-0.286	0.022	0.442	1.002	1.06
81	38.11	-0.548	0.022	0.316	0.768	4.36
82	46.83	-0.112	0.022	0.468	1.093	1.13
83	42.24	-0.333	0.022	0.398	0.891	2.28
84	46.70	-0.118	0.022	0.462	1.114	1.30
85	43.66	-0.268	0.022	0.413	0.983	1.46
86	45.92	-0.157	0.022	0.470	1.172	1.73
87	30.86	-0.612	0.022	0.412	1.000	1.72
88	30.27	-0.971	0.023	0.385	0.959	4.22
89	22.60	-1.443	0.025	0.049	0.322	22.24
90	23.30	-1.397	0.025	0.004	0.246	27.53
91	40.00	-0.448	0.022	0.455	1.018	0.99
92	43.39	-0.281	0.022	0.410	0.889	0.92
93	27.78	-1.116	0.024	0.200	0.635	10.76
94	26.50	-1.193	0.024	0.175	0.444	9.22
95	25.22	-1.272	0.025	0.243	0.678	6.85
96	25.02	-1.265	0.025	0.186	0.570	8.71
97	33.23	-0.806	0.023	0.301	0.750	4.45
98	36.02	-0.657	0.022	0.320	0.787	4.38
99	24.51	-1.318	0.025	0.170	0.562	12.40
100	34.43	-0.741	0.023	0.306	0.770	4.91

TABLE 27 (CONT.)
 ITBS LEVEL 10 FORM 5 TOTAL READING
 ITEM SUMMARY

106 ITEMS 10534 CASES KR-20= 0.954 EQUATING CONSTANT= 0.533						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MIN SQ FIT
101	42.51	-0.325	0.022	0.447	-1.090	2.04
102	25.84	-1.234	0.024	0.260	0.677	5.96
103	32.41	-0.851	0.023	0.323	0.876	6.04
104	35.39	-0.690	0.023	0.416	0.930	0.94
105	28.05	-1.100	0.024	0.193	0.499	9.14
106	31.23	-0.916	0.023	0.307	0.694	3.66

TABLE 27. (CONT.)
ITBS LEVEL 10 FORM 5 TOTAL READING
ABILITY SUMMARY

106 ITEMS 10534 CASES. KR-20= 0.954 EQUATING CONSTANT= 0.533

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	0	-4.883	1.007	157	10.07
2	1	-4.175	0.717	164	7.17
3	1	-3.756	0.590	168	5.90
4	2	-3.454	0.514	171	5.14
5	1	-3.216	0.463	173	4.63
6	1	-3.020	0.426	175	4.26
7	3	-2.851	0.397	177	3.97
8	3	-2.703	0.374	178	3.74
9	4	-2.570	0.355	180	3.55
10	5	-2.450	0.339	181	3.39
11	8	-2.340	0.325	182	3.25
12	8	-2.238	0.314	183	3.14
13	9	-2.143	0.303	184	3.03
14	10	-2.054	0.294	185	2.94
15	16	-1.909	0.286	186	2.86
16	16	-1.809	0.279	186	2.79
17	25	-1.813	0.273	187	2.73
18	34	-1.740	0.267	188	2.67
19	66	-1.671	0.262	189	2.62
20	65	-1.603	0.257	189	2.57
21	92	-1.559	0.252	190	2.52
22	106	-1.476	0.248	191	2.48
23	140	-1.415	0.245	191	2.45
24	145	-1.356	0.241	192	2.41
25	194	-1.299	0.238	192	2.38
26	204	-1.243	0.235	193	2.35
27	207	-1.188	0.232	193	2.32
28	212	-1.135	0.230	194	2.30
29	206	-1.082	0.228	195	2.28
30	251	-1.031	0.225	195	2.25
31	209	-0.981	0.223	196	2.23
32	206	-0.931	0.222	196	2.22
33	202	-0.883	0.220	197	2.20
34	187	-0.835	0.218	197	2.18
35	169	-0.788	0.217	197	2.17
36	184	-0.741	0.215	198	2.15
37	185	-0.695	0.214	198	2.14
38	169	-0.649	0.213	199	2.13
39	162	-0.604	0.212	199	2.12
40	163	-0.559	0.211	200	2.11
41	153	-0.515	0.210	200	2.10
42	130	-0.471	0.209	201	2.09
43	140	-0.428	0.208	201	2.08
44	129	-0.384	0.208	201	2.08
45	123	-0.341	0.207	202	2.07
46	132	-0.298	0.207	202	2.07
47	161	-0.256	0.206	203	2.06
48	141	-0.213	0.206	203	2.06
49	137	-0.171	0.206	204	2.06
50	135	-0.129	0.205	204	2.05

ERIC
Full Text Provided by ERIC
CONTINUED

TABLE 27 (CONT.)
 ITEMS LEVEL 10 FORM 5 TOTAL READING
 ABILITY SUMMARY

106 ITEMS 10534 CASES KR-20= 0.954 EQUATING CONSTANT= 0.533

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	124	-0.057	0.205	204	2.05
52	134	-0.044	0.205	205	2.05
53	159	-0.002	0.205	205	2.05
54	131	0.040	0.205	206	2.05
55	160	0.082	0.205	206	2.05
56	132	0.124	0.206	207	2.06
57	135	0.166	0.206	207	2.06
58	151	0.209	0.206	207	2.06
59	123	0.251	0.206	208	2.06
60	129	0.294	0.207	208	2.07
61	166	0.337	0.207	209	2.07
62	122	0.380	0.208	209	2.08
63	144	0.423	0.209	210	2.09
64	142	0.467	0.209	210	2.09
65	123	0.511	0.210	210	2.10
66	144	0.555	0.211	211	2.11
67	134	0.598	0.212	211	2.12
68	157	0.640	0.213	212	2.13
69	158	0.681	0.214	212	2.14
70	137	0.738	0.216	213	2.16
71	131	0.784	0.217	213	2.17
72	135	0.832	0.219	214	2.19
73	134	0.880	0.220	214	2.20
74	137	0.927	0.222	215	2.22
75	141	0.979	0.224	215	2.24
76	130	1.029	0.226	216	2.25
77	132	1.081	0.228	216	2.26
78	134	1.133	0.230	217	2.30
79	111	1.187	0.233	217	2.33
80	113	1.242	0.236	218	2.36
81	98	1.298	0.239	218	2.39
82	119	1.356	0.242	219	2.42
83	97	1.415	0.245	219	2.45
84	91	1.475	0.249	220	2.49
85	94	1.534	0.253	221	2.53
86	96	1.594	0.257	221	2.57
87	86	1.652	0.262	222	2.62
88	72	1.712	0.268	223	2.68
89	74	1.770	0.273	223	2.73
90	64	1.832	0.280	224	2.80
91	60	1.892	0.287	225	2.87
92	54	1.957	0.295	226	2.95
93	44	2.016	0.304	227	3.04
94	48	2.042	0.314	228	3.14
95	27	2.044	0.326	229	3.26
96	24	2.055	0.339	230	3.39
97	22	2.075	0.355	231	3.55
98	18	2.108	0.374	232	3.74
99	10	2.157	0.397	234	3.97
100	8	2.206	0.426	236	4.26

TABLE 27 (CONT.)
 ITBS LEVEL 10 FORM 5 TOTAL READING
 ABILITY SUMMARY

106 ITEMS 10534 CASES KR-20= 0.954 EQUATING CONSTANT= 0.533

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
101	4	3.223	0.463	238	4.63
102	4	3.461	0.514	240	5.14
103	1	3.763	0.590	243	5.90
104	1	4.183	0.717	247	7.17
105	0	4.890	1.007	254	10.07

TABLE 28
ITBS LEVEL 10 FORM 6 VOCABULARY
ITEM SUMMARY

38 ITEMS 2091 CASES KR-20= 0.885 EQUATING CONSTANT= 0.249

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	75.23	1.123	0.055	0.477	1.364	1.97
2	75.71	1.153	0.055	0.532	1.533	4.41
3	78.96	1.367	0.058	0.404	1.045	1.48
4	67.29	0.663	0.052	0.547	1.527	3.12
5	74.99	1.108	0.055	0.448	1.121	1.37
6	72.07	0.932	0.053	0.513	1.553	2.35
7	82.45	1.621	0.061	0.474	1.629	3.01
8	76.30	0.830	0.053	0.483	1.169	1.67
9	64.32	0.505	0.051	0.450	0.936	1.76
10	78.05	1.305	0.057	0.432	1.112	1.20
11	77.43	1.264	0.056	0.445	1.158	1.42
12	65.61	0.573	0.051	0.535	1.271	2.46
13	54.52	0.007	0.049	0.391	0.794	1.55
14	68.82	0.747	0.052	0.334	0.682	2.91
15	51.60	-0.138	0.049	0.504	1.030	1.25
16	52.22	-0.107	0.049	0.465	1.048	0.96
17	47.20	-0.356	0.049	0.431	0.790	0.91
18	54.47	0.005	0.049	0.390	0.742	1.99
19	56.02	-0.216	0.049	0.465	1.136	2.03
20	44.57	-0.488	0.050	0.524	1.178	1.62
21	33.24	-1.083	0.052	0.448	0.892	3.14
22	49.58	-0.218	0.049	0.527	1.111	1.62
23	62.60	0.415	0.050	0.391	0.878	1.79
24	46.87	-0.373	0.049	0.477	0.941	0.84
25	48.30	-0.301	0.049	0.460	0.974	0.87
26	49.59	-0.237	0.049	0.485	1.037	1.46
27	35.05	-0.983	0.052	0.253	0.601	5.82
28	42.32	-0.601	0.050	0.515	1.167	1.21
29	45.91	-0.421	0.050	0.367	0.782	1.83
30	26.83	-1.460	0.055	0.332	0.615	4.79
31	51.32	-0.152	0.049	0.427	0.855	1.35
32	27.95	-1.392	0.054	0.281	0.444	5.49
33	46.44	-0.394	0.049	0.455	0.849	1.47
34	25.01	-1.575	0.056	0.092	0.218	13.49
35	39.12	-0.767	0.051	0.495	1.025	1.96
36	40.51	-0.695	0.050	0.402	0.857	1.91
37	46.82	-0.375	0.049	0.378	0.780	1.57
38	29.70	-1.286	0.054	0.428	0.903	3.18

TABLE 28 (CONT.)
ITBS LEVEL 10 FORM 6 VOCABULARY
ABILITY SUMMARY

38 ITEMS 2091 CASES KR-20= 0.885 EQUATING CONSTANT= 0.249					
SCORE	FREQ.	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	0	-3.948	1.023	163	10.23
2	1	-3.208	0.740	170	7.40
3	5	-2.755	0.618	175	6.18
4	3	-2.419	0.547	178	5.47
5	11	-2.147	0.500	181	5.00
6	15	-1.914	0.466	183	4.66
7	24	-1.709	0.441	185	4.41
8	47	-1.523	0.422	187	4.22
9	49	-1.352	0.406	189	4.06
10	60	-1.192	0.394	191	3.94
11	58	-1.041	0.384	192	3.84
12	82	-0.898	0.375	194	3.75
13	78	-0.759	0.369	195	3.69
14	77	-0.626	0.363	196	3.63
15	78	-0.495	0.359	198	3.59
16	56	-0.368	0.356	199	3.56
17	98	-0.242	0.353	200	3.53
18	84	-0.118	0.352	201	3.52
19	70	0.005	0.351	203	3.51
20	75	0.129	0.352	204	3.52
21	84	0.253	0.353	205	3.53
22	91	0.378	0.355	206	3.55
23	83	0.504	0.358	208	3.58
24	84	0.634	0.362	209	3.62
25	85	0.766	0.367	210	3.67
26	73	0.903	0.373	212	3.73
27	74	1.045	0.381	213	3.81
28	65	1.194	0.391	214	3.91
29	73	1.352	0.404	216	4.04
30	69	1.521	0.419	218	4.19
31	55	1.705	0.439	220	4.39
32	54	1.909	0.464	222	4.64
33	44	2.139	0.498	224	4.98
34	38	2.410	0.545	227	5.45
35	45	2.745	0.616	230	6.16
36	13	3.196	0.739	234	7.39
37	10	3.935	1.022	242	10.22

TABLE 29
ITBS LEVEL 10 FORM 6 COMPREHENSION
ITEM SUMMARY.

68 ITEMS 2095 CASES KR-20= 0.933 EQUATING CONSTANT= 0.369

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	84.10	1.873	0.063	0.391	1.117	1.14
2	64.77	0.641	0.051	0.414	0.825	0.87
3	70.26	0.942	0.052	0.556	1.373	2.07
4	48.93	-0.158	0.049	0.392	0.704	1.27
5	69.64	0.907	0.052	0.420	0.946	0.96
6	74.46	1.191	0.054	0.333	0.739	1.45
7	74.08	1.167	0.054	0.485	1.258	1.26
8	72.55	1.075	0.053	0.479	1.270	1.29
9	75.70	1.268	0.055	0.445	0.920	1.39
10	70.84	0.975	0.053	0.446	0.984	1.03
11	48.07	-0.200	0.049	0.555	1.274	1.60
12	71.50	1.014	0.053	0.496	1.225	1.75
13	58.81	0.333	0.049	0.519	1.091	1.48
14	69.55	0.902	0.052	0.413	0.921	1.05
15	74.08	1.167	0.054	0.557	1.552	2.92
16	50.31	-0.089	0.049	0.288	0.477	2.91
17	42.72	-0.466	0.049	0.382	0.591	1.91
18	55.75	0.180	0.049	0.518	0.942	1.81
19	57.71	0.278	0.049	0.473	1.147	0.79
20	28.69	-1.218	0.053	0.129	0.278	7.59
21	61.72	0.482	0.050	0.482	1.135	0.76
22	47.83	-0.212	0.049	0.421	0.946	0.91
23	20.14	-1.769	0.059	0.170	0.295	6.27
24	73.64	1.153	0.054	0.467	1.047	1.33
25	61.15	0.452	0.050	0.552	1.318	1.43
26	50.55	-0.077	0.049	0.405	0.816	1.08
27	53.99	0.092	0.049	0.357	0.666	1.48
28	56.80	0.233	0.049	0.506	1.058	1.07
29	66.68	0.744	0.051	0.538	1.325	1.42
30	37.42	-0.737	0.050	0.377	0.646	1.97
31	77.80	1.405	0.057	0.573	1.777	3.44
32	65.78	0.695	0.051	0.529	1.237	1.98
33	66.30	0.723	0.051	0.519	1.228	1.35
34	39.00	-0.056	0.050	0.232	0.449	3.78
35	63.01	0.549	0.050	0.494	1.136	0.95
36	60.53	0.421	0.050	0.526	1.055	1.59
37	51.50	-0.030	0.049	0.451	0.979	0.74
38	51.41	-0.035	0.049	0.502	1.109	1.09
39	22.34	-1.616	0.057	0.239	0.531	3.87
40	67.64	0.796	0.051	0.554	1.512	2.00
41	30.64	-1.105	0.052	0.202	0.392	3.93
42	49.21	-0.139	0.049	0.480	1.011	1.30
43	55.23	0.154	0.049	0.524	1.080	1.32
44	49.16	-0.146	0.049	0.469	1.029	0.83
45	56.71	0.228	0.049	0.528	1.174	1.19
46	41.58	-0.524	0.049	0.511	0.964	1.50
47	51.85	-0.023	0.049	0.455	0.894	1.15
48	44.15	-0.394	0.049	0.419	0.967	0.93
49	50.60	-0.075	0.049	0.494	1.061	0.88
50	57.52	0.268	0.049	0.582	1.536	2.01

CONTINUED



TABLE 29 (CONT.)
ITBS LEVEL 10 FORM-6 COMPREHENSION
ITEM SUMMARY

68 ITEMS 2095 CASES KR-20= 0.933 EQUATING CONSTANT= 0.369

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
51	38.47	-0.683	0.050	0.276	0.620	3.05
52	39.95	-0.607	0.050	0.233	0.502	4.41
53	41.24	-0.541	0.050	0.369	0.850	1.55
54	22.10	-1.632	0.057	0.199	0.488	5.47
55	46.54	-0.276	0.049	0.459	1.027	1.03
56	26.73	-1.335	0.054	0.334	0.805	1.67
57	34.42	-0.897	0.051	0.345	0.856	2.09
58	44.92	-0.356	0.049	0.385	0.809	1.13
59	29.36	-1.179	0.053	0.265	0.567	3.67
60	51.03	-0.054	0.049	0.433	0.887	1.30
61	31.93	-1.033	0.052	0.313	0.612	1.98
62	41.43	-0.531	0.049	0.488	1.068	1.12
63	23.48	-1.539	0.056	0.124	0.416	6.54
64	49.74	-0.118	0.049	0.514	1.229	1.07
65	32.51	-1.001	0.052	0.264	0.516	2.85
66	47.59	-0.224	0.049	0.529	1.210	1.47
67	55.75	0.180	0.049	0.561	1.370	1.54
68	35.99	-0.813	0.051	0.373	0.771	1.79

TABLE 29 (CONT.)
ITBS LEVEL 10 FORM 6 COMPREHENSION
ABILITY SUMMARY

68 ITEMS 2095 CASES KR-20= 0.933 EQUATING CONSTANT= 0.369

SCORE	FREQ	NATIONAL REFERENCE SCALE			
		LOG ABILITY	STD ERROR	SCALE SCORE	STD. ERR
1	0	-4.512	1.012	159	10.12
2	0	-3.794	0.725	166	7.25
3	2	-3.364	0.599	170	5.99
4	1	-3.051	0.525	173	5.25
5	0	-2.802	0.475	176	4.75
6	2	-2.594	0.439	178	4.39
7	2	-2.414	0.411	180	4.11
8	4	-2.255	0.389	181	3.89
9	4	-2.111	0.371	182	3.71
10	8	-1.979	0.356	184	3.56
11	8	-1.857	0.343	185	3.43
12	13	-1.743	0.332	186	3.32
13	27	-1.636	0.323	187	3.23
14	28	-1.534	0.315	188	3.15
15	50	-1.438	0.308	189	3.08
16	38	-1.345	0.301	190	3.01
17	33	-1.256	0.296	191	2.96
18	48	-1.170	0.291	192	2.91
19	60	-1.086	0.287	193	2.87
20	60	-1.006	0.283	194	2.83
21	50	-0.927	0.279	194	2.79
22	57	-0.850	0.276	195	2.76
23	52	-0.774	0.273	196	2.73
24	43	-0.700	0.271	197	2.71
25	46	-0.628	0.269	197	2.69
26	37	-0.556	0.267	198	2.67
27	45	-0.485	0.265	199	2.65
28	39	-0.415	0.264	200	2.64
29	40	-0.346	0.263	200	2.63
30	37	-0.277	0.262	201	2.62
31	41	-0.208	0.261	202	2.61
32	37	-0.140	0.261	202	2.61
33	35	-0.072	0.261	203	2.61
34	39	-0.005	0.261	204	2.61
35	43	0.063	0.261	204	2.61
36	38	0.131	0.261	205	2.61
37	53	0.200	0.262	206	2.62
38	48	0.268	0.262	206	2.62
39	50	0.337	0.263	207	2.63
40	54	0.407	0.264	208	2.64
41	48	0.477	0.266	208	2.66
42	37	0.548	0.268	209	2.68
43	51	0.620	0.270	210	2.70
44	43	0.693	0.272	211	2.72
45	42	0.768	0.274	211	2.74
46	38	0.844	0.277	212	2.77
47	55	0.921	0.280	213	2.80
48	42	1.001	0.284	214	2.84
49	54	1.082	0.288	215	2.88
50	53	1.166	0.292	215	2.92

CONTINUED



TABLE 29 (CONT.)
ITBS LEVEL 10 FORM 6 COMPREHENSION
ABILITY SUMMARY

68 ITEMS * 2095 CASES KR-20= 0.933 EQUATING CONSTANT= 0.369					
SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	62	1.253	0.297	216	2.97
52	41	1.343	0.303	217	3.03
53	45	1.437	0.309	218	3.09
54	42	1.534	0.316	219	3.16
55	40	1.637	0.325	220	3.25
56	26	1.745	0.334	221	3.34
57	14	1.860	0.345	222	3.45
58	23	1.983	0.357	224	3.57
59	20	2.116	0.372	225	3.72
60	15	2.262	0.390	226	3.90
61	13	2.423	0.412	228	4.12
62	8	2.604	0.440	230	4.40
63	4	2.813	0.476	232	4.76
64	3	3.063	0.526	234	5.26
65	0	3.378	0.600	237	6.00
66	2	3.810	0.726	242	7.26
67	1	4.529	1.013	249	10.13

TABLE 30
ITBS LEVEL 10 FORM 6 TOTAL READING
ITEM SUMMARY

106 ITEMS 2095 CASES KR-20= 0.954 EQUATING CONSTANT= 0.326

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	75.27	1.187	0.055	0.449	1.229	1.08
2	75.75	1.217	0.055	0.528	1.519	1.90
3	79.00	1.430	0.057	0.374	1.042	1.16
4	67.35	0.731	0.051	0.526	1.431	1.26
5	75.04	1.172	0.054	0.427	1.185	1.26
6	72.12	0.998	0.053	0.491	1.306	1.19
7	82.48	1.683	0.061	0.472	1.567	1.64
8	70.36	0.897	0.052	0.463	0.972	1.27
9	64.39	-0.574	0.050	0.433	0.965	1.21
10	78.09	1.368	0.057	0.418	1.124	0.89
11	77.47	1.327	0.056	0.433	1.053	1.39
12	65.68	0.641	0.050	0.523	1.238	1.41
13	54.61	0.081	0.049	0.377	0.744	1.36
14	68.88	0.814	0.051	0.301	0.520	2.47
15	51.69	-0.062	0.049	0.465	0.978	1.11
16	52.32	-0.032	0.049	0.435	0.977	1.08
17	47.30	-0.277	0.049	0.404	0.899	0.69
18	54.56	0.078	0.049	0.372	0.849	1.44
19	50.12	-0.139	0.049	0.421	0.798	1.66
20	44.68	-0.407	0.049	0.497	1.109	1.02
21	33.37	-0.990	0.051	0.383	0.764	2.15
22	50.07	-0.142	0.049	0.508	1.073	1.08
23	62.67	0.485	0.050	0.377	0.778	1.22
24	46.97	-0.294	0.049	0.454	0.875	1.35
25	48.40	-0.223	0.049	0.438	0.761	0.95
26	49.69	-0.160	0.049	0.457	0.981	0.94
27	35.18	-0.892	0.051	0.233	0.577	2.83
28	42.43	-0.519	0.049	0.480	1.107	0.95
29	46.61	-0.341	0.049	0.352	0.712	1.26
30	26.57	-1.356	0.054	0.267	0.546	3.21
31	51.41	-0.076	0.049	0.404	0.819	1.49
32	28.07	-1.290	0.053	0.254	0.581	2.94
33	46.54	-0.315	0.049	0.432	0.877	1.17
34	25.16	-1.468	0.055	0.038	0.093	6.80
35	39.24	-0.681	0.050	0.457	0.893	1.50
36	40.62	-0.610	0.049	0.375	0.744	1.39
37	46.92	-0.296	0.049	0.363	0.781	1.01
38	29.83	-1.187	0.053	0.378	0.689	1.86
39	84.10	1.813	0.063	0.375	1.154	0.97
40	64.77	0.594	0.050	0.402	0.812	1.08
41	70.26	0.891	0.052	0.553	1.523	2.00
42	48.93	-0.198	0.049	0.395	0.897	1.09
43	69.64	0.856	0.052	0.413	0.982	0.71
44	74.46	1.137	0.054	0.312	0.719	1.23
45	74.08	1.114	0.054	0.467	1.209	1.27
46	72.55	1.023	0.053	0.451	1.181	1.05
47	75.70	1.214	0.055	0.418	0.908	1.37
48	70.84	0.924	0.052	0.432	0.993	1.18
49	48.07	-0.240	0.049	0.559	1.276	1.30
50	71.50	0.962	0.053	0.473	1.069	1.39

CONTINUED

TABLE 30 (CONT.)
ITBS LEVEL 10 FORM 6 TOTAL READING
ITEM SUMMARY

106 ITEMS 2095 CASES KR-20= 0.954 EQUATING CONSTANT= 0.326

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R.(I,AB)	SLOPE	MN. SQ FIT
51	58.81	0.289	0.049	0.518	1.138	1.28
52	69.55	0.851	0.052	0.392	0.865	0.89
53	74.08	1.114	0.054	0.542	1.422	2.38
54	50.31	-0.130	0.049	0.272	0.472	2.44
55	42.72	-0.504	0.049	0.375	0.641	1.71
56	55.75	0.137	0.049	0.523	0.998	1.27
57	57.71	0.234	0.049	0.470	1.060	0.89
58	28.69	-1.254	0.053	0.137	0.243	5.00
59	61.72	0.436	0.050	0.479	1.085	0.98
60	47.83	-0.251	0.049	0.411	0.843	1.07
61	20.14	-1.806	0.059	0.161	0.356	4.46
62	73.84	1.099	0.054	0.454	0.989	1.39
63	61.15	0.407	0.049	0.530	1.197	1.20
64	50.55	-0.118	0.049	0.402	0.735	1.06
65	53.99	0.650	0.049	0.354	0.695	1.08
66	56.80	0.189	0.049	0.492	1.157	0.99
67	66.68	0.695	0.051	0.514	1.333	1.17
68	37.42	-0.774	0.050	0.377	0.723	1.60
69	77.80	1.349	0.056	0.554	1.624	2.55
70	65.76	0.646	0.050	0.519	1.163	1.41
71	66.30	0.674	0.051	0.504	1.104	1.33
72	39.00	-0.693	0.050	0.227	0.469	3.12
73	63.01	0.502	0.050	0.476	1.017	0.97
74	60.53	0.375	0.049	0.508	1.088	1.18
75	51.50	-0.071	0.049	0.437	0.927	1.11
76	51.41	-0.076	0.049	0.492	1.067	0.87
77	22.34	-1.652	0.057	0.250	0.522	2.16
78	67.64	0.746	0.051	0.531	1.417	1.27
79	30.64	-1.141	0.052	0.196	0.389	2.78
80	49.31	-0.179	0.049	0.475	0.920	1.11
81	55.23	0.111	0.049	0.522	1.031	1.25
82	49.16	-0.186	0.049	0.459	0.967	1.05
83	56.71	0.184	0.049	0.518	1.187	0.99
84	41.58	-0.562	0.049	0.514	1.097	1.00
85	51.65	-0.064	0.049	0.447	0.950	0.98
86	44.15	-0.433	0.049	0.401	0.865	0.99
87	50.60	-0.116	0.049	0.484	1.019	0.84
88	57.52	0.225	0.049	0.556	1.390	1.48
89	28.47	-0.720	0.050	0.261	0.524	2.21
90	39.95	-0.644	0.050	0.226	0.412	2.76
91	41.24	-0.579	0.049	0.352	0.758	1.27
92	22.10	-1.668	0.057	0.193	0.448	4.39
93	46.54	-0.315	0.049	0.438	1.020	0.84
94	26.73	-1.371	0.054	0.333	0.832	1.33
95	34.42	-0.933	0.051	0.343	0.823	1.45
96	44.92	-0.395	0.049	0.366	0.746	1.16
97	29.36	-1.215	0.053	0.263	0.516	2.93
98	51.03	-0.095	0.049	0.425	0.802	1.00
99	31.93	-1.069	0.052	0.301	0.584	1.81
100	41.43	-0.569	0.049	0.482	1.048	1.37

TABLE 30 (CONT.)
ITBS LEVEL 10 FORM 6 TOTAL READING
ITEM SUMMARY

106 ITEMS 2095 CASES KR-20= 0.954 EQUATING CONSTANT= 0.326

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
101	23.48	-1.576	0.056	0.125	0.318	4.74
102	49.74	-0.158	0.049	0.500	1.117	0.91
103	32.51	-1.037	0.051	0.252	0.522	2.39
104	47.59	-0.263	0.049	0.521	1.087	1.06
105	55.75	0.137	0.049	0.552	1.268	1.38
106	35.99	-0.849	0.050	0.373	0.766	1.24

TABLE 30 (CONT.)
ITBS LEVEL 10 FORM 6 TOTAL READING
ABILITY SUMMARY

106 ITEMS		2095 CASES		KR-20= 0.954		EQUATING CONSTANT= 0.326	
SCORE	FREQ.	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR		
1	0	-4.976	1.008	154	10.08		
2	0	-4.267	0.719	161	7.19		
3	0	-3.845	0.591	165	5.91		
4	0	-3.541	0.516	168	5.16		
5	0	-3.301	0.465	170	4.65		
6	1	-3.103	0.428	172	4.28		
7	1	-2.932	0.399	174	3.99		
8	1	-2.782	0.376	175	3.76		
9	0	-2.547	0.358	177	3.58		
10	1	-2.525	0.342	178	3.42		
11	1	-2.413	0.328	179	3.28		
12	0	-2.309	0.317	180	3.17		
13	0	-2.212	0.307	181	3.07		
14	2	-2.121	0.298	182	2.98		
15	3	-2.034	0.290	183	2.90		
16	3	-1.952	0.283	184	2.83		
17	2	-1.874	0.276	185	2.76		
18	8	-1.800	0.271	185	2.71		
19	4	-1.728	0.265	186	2.65		
20	5	-1.659	0.261	187	2.61		
21	15	-1.592	0.256	187	2.56		
22	15	-1.528	0.252	188	2.52		
23	15	-1.465	0.248	189	2.48		
24	26	-1.404	0.245	189	2.45		
25	23	-1.345	0.242	190	2.42		
26	19	-1.287	0.239	190	2.39		
27	22	-1.231	0.236	191	2.36		
28	32	-1.175	0.234	192	2.34		
29	27	-1.121	0.232	192	2.32		
30	29	-1.068	0.229	193	2.29		
31	34	-1.016	0.227	193	2.27		
32	35	-0.965	0.226	194	2.26		
33	43	-0.914	0.224	194	2.24		
34	43	-0.865	0.222	195	2.22		
35	42	-0.816	0.221	195	2.21		
36	39	-0.767	0.219	196	2.19		
37	32	-0.719	0.218	196	2.18		
38	31	-0.672	0.217	197	2.17		
39	26	-0.625	0.216	197	2.16		
40	38	-0.579	0.215	197	2.15		
41	27	-0.533	0.214	198	2.14		
42	24	-0.487	0.213	198	2.13		
43	34	-0.442	0.212	199	2.12		
44	37	-0.397	0.212	199	2.12		
45	30	-0.352	0.211	200	2.11		
46	23	-0.308	0.211	200	2.11		
47	31	-0.264	0.210	201	2.10		
48	26	-0.220	0.210	201	2.10		
49	28	-0.176	0.210	201	2.10		
50	21	-0.132	0.209	202	2.09		

TABLE 30 (CONT.)
ITBS LEVEL 10 FORM 6 TOTAL READING
ABILITY SUMMARY

106 ITEMS 2095 CASES KR-20= 0.954 EQUATING CONSTANT= 0.326

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	15	-0.088	0.209	202	2.09
52	26	-0.044	0.209	203	2.09
53	27	-0.001	0.209	203	2.09
54	26	0.043	0.209	204	2.09
55	27	0.087	0.209	204	2.09
56	38	0.131	0.209	205	2.09
57	28	0.174	0.210	205	2.10
58	25	0.218	0.210	205	2.10
59	29	0.262	0.210	206	2.10
60	37	0.307	0.211	206	2.11
61	30	0.351	0.211	207	2.11
62	42	0.396	0.212	207	2.12
63	31	0.441	0.212	208	2.12
64	28	0.486	0.213	208	2.13
65	21	0.532	0.214	209	2.14
66	32	0.578	0.215	209	2.15
67	25	0.624	0.216	209	2.16
68	47	0.671	0.217	210	2.17
69	33	0.718	0.218	210	2.18
70	29	0.766	0.219	211	2.19
71	28	0.814	0.221	211	2.21
72	23	0.863	0.222	212	2.22
73	22	0.913	0.224	212	2.24
74	33	0.963	0.226	213	2.26
75	31	1.015	0.227	213	2.27
76	26	1.067	0.229	214	2.29
77	22	1.120	0.232	214	2.32
78	32	1.174	0.234	215	2.34
79	29	1.229	0.236	216	2.36
80	45	1.286	0.239	216	2.39
81	30	1.344	0.242	217	2.42
82	29	1.403	0.245	217	2.45
83	30	1.464	0.249	218	2.49
84	30	1.527	0.252	219	2.52
85	25	1.591	0.256	219	2.56
86	20	1.658	0.261	220	2.61
87	19	1.728	0.266	221	2.66
88	9	1.799	0.271	221	2.71
89	10	1.874	0.277	222	2.77
90	21	1.953	0.283	223	2.83
91	13	2.035	0.290	224	2.90
92	8	2.121	0.298	224	2.98
93	13	2.213	0.307	225	3.07
94	12	2.310	0.317	226	3.17
95	12	2.414	0.329	227	3.29
96	6	2.527	0.342	229	3.42
97	5	2.649	0.358	230	3.58
98	5	2.784	0.377	231	3.77
99	2	2.934	0.400	233	4.00
100	3	3.105	0.428	234	4.28

CONTINUE

101

TABLE 30 (CONT.)
ITBS LEVEL 10 FORM 6 TOTAL READING
ABILITY SUMMARY

106 ITEMS 2095 CASES KR-20= 0.954 EQUATING CONSTANT= 0.326

SCORE	FREQ	LOG. ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR.
101	0	3.305	0.466	236	4.66
102	2	3.545	0.517	239	5.17
103	1	3.849	0.592	242	5.92
104	0	4.271	0.719	246	7.19
105	0	4.980	1.008	253	10.08

TABLE 31
ITBS LEVEL 11 FORM 5 VOCABULARY
ITEM SUMMARY

43 ITEMS 10893 CASES KR-20= 0.919 EQUATING CONSTANT= 0.782

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	65.32	0.498	0.023	0.413	0.945	3.10
2	73.33	0.966	0.024	0.467	1.164	2.32
3	59.50	0.205	0.022	0.505	0.993	2.82
4	78.81	1.329	0.026	0.444	0.899	6.41
5	70.24	0.779	0.023	0.565	1.278	11.28
6	69.86	0.757	0.023	0.530	1.110	6.62
7	61.13	0.270	0.022	0.558	1.227	8.54
8	55.69	-0.016	0.022	0.522	1.033	2.99
9	66.27	0.551	0.023	0.485	1.077	2.24
10	46.51	-0.493	0.022	0.398	0.707	10.24
11	64.30	0.442	0.023	0.578	1.413	8.45
12	72.71	0.928	0.024	0.506	1.321	3.88
13	64.75	0.467	0.023	0.506	0.996	2.92
14	39.03	-0.889	0.023	0.452	0.878	6.37
15	64.29	0.441	0.023	0.517	1.041	3.90
16	49.33	-0.346	0.022	0.495	1.014	2.29
17	44.58	-0.594	0.022	0.331	0.665	15.32
18	39.64	-0.856	0.022	0.331	0.669	15.43
19	58.49	0.130	0.022	0.488	1.070	2.66
20	59.70	0.194	0.022	0.450	0.845	1.76
21	60.75	0.250	0.022	0.481	1.058	1.39
22	63.55	0.401	0.023	0.502	1.044	3.33
23	67.54	0.623	0.023	0.430	0.921	2.84
24	54.99	-0.053	0.022	0.539	1.198	2.64
25	61.03	0.265	0.022	0.551	1.257	6.31
26	54.52	-0.057	0.022	0.447	0.914	6.39
27	49.51	-0.337	0.022	0.460	0.891	2.03
28	57.20	0.063	0.022	0.514	1.154	1.77
29	52.90	-0.158	0.022	0.413	0.855	5.27
30	54.05	-0.101	0.022	0.399	0.849	5.38
31	58.63	0.138	0.022	0.595	1.452	10.20
32	50.56	-0.283	0.022	0.475	1.106	2.27
33	53.39	-0.136	0.022	0.528	1.172	1.94
34	45.67	-0.536	0.022	0.505	1.209	3.80
35	32.60	-1.249	0.023	0.275	0.731	24.28
36	59.22	0.169	0.022	0.631	1.763	14.70
37	39.78	-0.849	0.022	0.411	0.900	5.56
38	45.43	-0.549	0.022	0.331	0.728	16.57
39	53.61	-0.124	0.022	0.543	1.292	5.20
40	67.66	0.630	0.023	0.471	1.145	1.81
41	20.32	-2.048	0.026	0.120	0.371	51.76
42	47.95	-0.418	0.022	0.581	1.256	5.74
43	48.18	-0.406	0.022	0.483	1.071	1.47

103

TABLE 31 (CONT.)
ITBS LEVEL 11 FORM 5 VOCABULARY
ABILITY SUMMARY

43 ITEMS 10893 CASES KR-20= 0.919 EQUATING CONSTANT= 0.782

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	6	-3.907	1.016	165	10.16
2	11	-3.182	0.730	174	7.30
3	14	-2.744	0.605	180	6.05
4	30	-2.423	0.532	184	5.32
5	50	-2.166	0.484	186	4.84
6	93	-1.949	0.449	188	4.49
7	135	-1.760	0.422	190	4.22
8	190	-1.591	0.402	192	4.02
9	222	-1.456	0.385	193	3.85
10	272	-1.293	0.371	195	3.71
11	346	-1.160	0.360	196	3.60
12	357	-1.033	0.351	197	3.51
13	377	-0.913	0.343	199	3.43
14	356	-0.797	0.337	200	3.37
15	360	-0.685	0.332	201	3.32
16	304	-0.577	0.328	202	3.28
17	320	-0.471	0.324	203	3.24
18	304	-0.367	0.322	204	3.22
19	295	-0.264	0.320	205	3.20
20	269	-0.162	0.319	206	3.19
21	290	-0.061	0.318	207	3.18
22	278	0.040	0.318	208	3.18
23	290	0.142	0.319	209	3.19
24	280	0.244	0.320	210	3.20
25	280	0.347	0.323	211	3.23
26	296	0.452	0.326	212	3.26
27	327	0.559	0.329	213	3.29
28	333	0.669	0.334	215	3.34
29	319	0.782	0.339	216	3.39
30	328	0.900	0.346	217	3.46
31	348	1.022	0.354	218	3.54
32	411	1.151	0.364	219	3.64
33	392	1.287	0.375	221	3.75
34	383	1.433	0.389	222	3.89
35	389	1.591	0.406	224	4.06
36	358	1.765	0.427	225	4.27
37	341	1.958	0.454	227	4.54
38	306	2.160	0.490	230	4.90
39	256	2.443	0.539	232	5.39
40	202	2.771	0.611	236	6.11
41	113	3.218	0.736	240	7.36
42	62	3.953	1.021	247	10.21

TABLE 32
ITBS LEVEL 11 FORM 5 COMPREHENSION
ITEM SUMMARY

74 ITEMS 10914 CASES KR-20= 0.934 EQUATING CONSTANT= 1.126

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD. ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	70.00	1.051	0.023	0.426	1.112	1.98
2	63.55	0.710	0.022	0.323	0.691	4.64
3	59.62	0.512	0.021	0.486	1.207	2.93
4	80.29	1.687	0.025	0.501	1.631	11.70
5	72.36	1.184	0.023	0.449	1.151	4.39
6	73.69	1.263	0.023	0.529	1.436	10.72
7	74.99	1.340	0.024	0.434	1.013	4.33
8	72.30	1.181	0.023	0.503	1.260	7.29
9	69.27	1.011	0.022	0.509	1.293	7.18
10	71.49	1.135	0.023	0.382	0.733	5.92
11	67.61	0.921	0.022	0.528	1.474	7.12
12	77.33	1.487	0.024	0.442	1.095	6.05
13	47.94	-0.056	0.021	0.393	0.705	2.59
14	54.68	0.270	0.021	0.378	0.877	1.71
15	65.51	0.811	0.022	0.540	1.409	7.65
16	68.59	0.974	0.022	0.515	1.329	6.58
17	61.53	0.607	0.022	0.509	1.172	4.74
18	45.14	-0.192	0.021	0.245	0.551	11.38
19	41.61	-0.367	0.022	0.350	0.789	4.07
20	57.52	0.409	0.021	0.365	0.845	2.29
21	51.80	0.131	0.021	0.438	0.946	1.65
22	46.53	-0.125	0.021	0.360	0.749	2.68
23	41.08	-0.393	0.022	0.399	0.913	1.82
24	59.11	0.487	0.021	0.474	1.080	2.17
25	48.52	-0.028	0.021	0.415	0.947	1.27
26	60.05	0.533	0.021	0.395	0.833	1.05
27	66.37	0.856	0.022	0.488	1.132	4.73
28	52.37	0.158	0.021	0.525	1.228	3.68
29	57.25	0.395	0.021	0.440	0.985	1.47
30	48.71	-0.019	0.021	0.403	0.894	1.41
31	52.47	0.163	0.021	0.442	0.942	1.18
32	55.30	0.300	0.021	0.409	1.148	1.90
33	60.14	0.538	0.021	0.486	1.105	2.86
34	50.85	0.085	0.021	0.433	1.079	1.10
35	58.63	0.403	0.021	0.498	1.260	3.02
36	49.27	0.008	0.021	0.484	1.121	1.90
37	41.84	-0.355	0.021	0.508	1.208	3.28
38	26.97	-1.159	0.024	0.182	0.500	17.61
39	25.73	-1.234	0.024	0.177	0.587	21.24
40	51.80	0.131	0.021	0.471	1.198	2.06
41	51.65	0.123	0.021	0.411	0.932	1.05
42	39.31	-0.482	0.022	0.378	0.987	4.50
43	31.14	-0.916	0.023	0.222	0.514	10.57
44	36.14	-0.646	0.022	0.339	0.811	4.67
45	29.37	-1.017	0.023	0.266	0.647	6.72
46	42.54	-0.320	0.021	0.366	0.788	2.15
47	47.18	-0.093	0.021	0.449	1.045	1.45
48	33.71	-0.775	0.022	0.341	0.824	4.61
49	48.22	-0.042	0.021	0.422	0.973	1.51
50	56.29	0.348	0.021	0.529	1.066	5.45

CONTINUED

105

TABLE 32 (CONT.)
ITBS LEVEL 11 FORM 5 COMPREHENSION
ITEM SUMMARY

74 ITEMS 10914 CASES KR-20= 0.934 EQUATING CONSTANT= 1.126

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
51	36.09	-0.648	0.022	0.363	0.786	2.51
52	48.53	-0.008	0.021	0.504	1.245	3.38
53	51.88	0.135	0.021	0.467	1.038	2.22
54	34.51	-0.732	0.022	0.270	0.611	7.16
55	42.94	-0.300	0.021	0.393	0.884	1.35
56	40.50	-0.462	0.022	0.471	0.998	1.85
57	33.20	-0.803	0.022	0.292	0.692	7.26
58	39.12	-0.492	0.022	0.370	0.914	3.36
59	35.32	-0.689	0.022	0.386	0.923	2.62
60	35.17	-0.696	0.022	0.374	0.893	2.93
61	39.04	-0.496	0.022	0.453	1.144	1.71
62	26.25	-1.202	0.024	0.165	0.560	21.46
63	27.15	-1.148	0.024	0.234	0.641	12.48
64	31.40	-0.901	0.023	0.366	0.893	2.20
65	36.92	-0.605	0.022	0.416	1.135	6.02
66	32.39	-0.847	0.023	0.389	0.977	2.32
67	41.36	-0.379	0.022	0.495	1.299	2.94
68	39.77	-0.459	0.022	0.405	0.970	1.67
69	35.09	-0.701	0.022	0.457	1.098	2.26
70	48.92	-0.009	0.021	0.522	1.419	4.49
71	44.88	-0.205	0.021	0.370	0.828	2.00
72	43.12	-0.292	0.021	0.437	1.086	3.13
73	31.30	-0.967	0.023	0.376	0.983	8.13
74	43.60	-0.268	0.021	0.463	1.208	2.85

TABLE 32 (CONT.)
ITBS LEVEL 11 FORM 5 COMPREHENSION
ABILITY SUMMARY

74 ITEMS 10914 CASES KR-20= 0.934 EQUATING CONSTANT= 1.126

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	1	-4.545	1.011	166	10.11
2	2	-3.829	0.723	173	7.23
3	2	-3.402	0.597	177	5.97
4	1	-3.091	0.522	180	5.22
5	7	-2.845	0.472	182	4.72
6	13	-2.640	0.435	185	4.35
7	15	-2.463	0.407	187	4.07
8	17	-2.307	0.385	188	3.85
9	30	-2.166	0.367	190	3.67
10	34	-2.037	0.351	191	3.51
11	42	-1.918	0.338	192	3.38
12	53	-1.807	0.327	193	3.27
13	104	-1.703	0.318	194	3.18
14	116	-1.605	0.309	195	3.09
15	163	-1.512	0.302	196	3.02
16	200	-1.422	0.295	197	2.95
17	216	-1.337	0.289	198	2.89
18	227	-1.255	0.284	199	2.84
19	275	-1.176	0.279	199	2.79
20	257	-1.099	0.275	200	2.75
21	289	-1.024	0.271	201	2.71
22	290	-0.951	0.268	202	2.68
23	275	-0.880	0.265	202	2.65
24	258	-0.811	0.262	203	2.62
25	259	-0.743	0.259	204	2.59
26	248	-0.676	0.257	204	2.57
27	254	-0.611	0.255	205	2.55
28	238	-0.546	0.253	206	2.53
29	242	-0.482	0.252	206	2.52
30	223	-0.419	0.250	207	2.50
31	254	-0.357	0.249	208	2.49
32	224	-0.295	0.248	208	2.48
33	237	-0.234	0.247	209	2.47
34	229	-0.173	0.247	210	2.47
35	242	-0.112	0.246	210	2.46
36	213	-0.051	0.246	211	2.46
37	192	0.009	0.246	211	2.46
38	242	0.069	0.246	212	2.46
39	248	0.130	0.246	212	2.46
40	234	0.190	0.246	213	2.46
41	214	0.251	0.247	214	2.47
42	211	0.312	0.247	214	2.47
43	197	0.374	0.248	215	2.48
44	229	0.436	0.249	216	2.49
45	195	0.498	0.251	216	2.51
46	193	0.561	0.252	217	2.52
47	206	0.625	0.254	218	2.54
48	204	0.690	0.256	218	2.56
49	179	0.756	0.258	219	2.58
50	173	0.823	0.260	219	2.60

CONTINUED



TABLE 32 (CONT.)
ITBS LEVEL 11 FORM 5 COMPREHENSION
ABILITY SUMMARY

74 ITEMS 10914 CASES KR-20= 0.934 EQUATING CONSTANT= 1.126

SCORE	FREQ	LOG ABILITY	STD. ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	191	0.891	0.263	220	2.63
52	183	0.961	0.266	221	2.66
53	170	1.032	0.269	222	2.69
54	172	1.105	0.273	222	2.73
55	177	1.181	0.277	223	2.77
56	152	1.259	0.281	224	2.81
57	159	1.340	0.287	225	2.87
58	147	1.423	0.292	225	2.92
59	122	1.511	0.299	226	2.99
60	107	1.602	0.306	227	3.06
61	122	1.699	0.315	228	3.15
62	102	1.801	0.324	229	3.24
63	83	1.909	0.335	230	3.35
64	80	2.026	0.348	232	3.48
65	66	2.153	0.364	233	3.64
66	68	2.291	0.382	234	3.82
67	45	2.445	0.404	236	4.04
68	39	2.620	0.432	237	4.32
69	32	2.823	0.469	239	4.69
70	20	3.066	0.519	242	5.19
71	8	3.373	0.594	245	5.94
72	2	3.798	0.721	249	7.21
73	0	4.510	1.009	256	10.09

TABLE 33
ITBS LEVEL 11 FORM 5 TOTAL READING
ITEM SUMMARY

117 ITEMS 10915 CASES KR-20= 0.960 EQUATING CONSTANT= 1.000

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	65.39	0.689	0.022	0.385	0.909	1.47
2	73.39	1.135	0.023	0.448	1.145	2.00
3	59.98	0.411	0.022	0.481	1.048	1.98
4	78.85	1.482	0.025	0.425	0.994	4.17
5	70.30	0.956	0.023	0.543	1.458	5.98
6	69.92	0.935	0.023	0.509	1.128	4.39
7	61.21	0.473	0.022	0.516	1.158	3.79
8	55.78	0.202	0.021	0.496	1.180	1.96
9	66.34	0.740	0.022	0.467	1.092	1.89
10	46.61	-0.249	0.021	0.368	0.740	2.76
11	64.37	0.636	0.022	0.552	1.570	4.78
12	72.76	1.098	0.023	0.485	1.450	3.17
13	64.82	0.659	0.022	0.492	1.167	2.37
14	39.16	-0.623	0.022	0.434	0.930	2.77
15	64.36	0.635	0.022	0.495	1.026	2.98
16	49.44	-0.110	0.021	0.476	1.083	1.66
17	44.69	-0.344	0.021	0.302	0.673	4.85
18	39.76	-0.592	0.022	0.305	0.634	4.31
19	58.57	0.340	0.021	0.462	1.112	1.80
20	59.78	0.401	0.022	0.417	0.874	1.33
21	60.82	0.454	0.022	0.460	1.089	1.81
22	63.63	0.597	0.022	0.476	1.086	2.80
23	67.60	0.808	0.022	0.410	0.928	1.82
24	55.08	0.167	0.021	0.515	1.207	2.26
25	61.11	0.468	0.022	0.516	1.320	3.03
26	55.61	0.164	0.021	0.430	0.914	3.58
27	49.61	-0.101	0.021	0.434	0.914	1.57
28	57.29	0.276	0.021	0.486	1.253	1.60
29	53.06	0.068	0.021	0.382	0.899	1.49
30	54.15	0.121	0.021	0.374	0.788	1.58
31	58.72	0.348	0.021	0.566	1.677	4.88
32	50.66	-0.050	0.021	0.436	1.050	1.27
33	53.49	0.089	0.021	0.508	1.299	1.87
34	45.78	-0.290	0.021	0.475	1.229	2.02
35	32.73	-0.965	0.023	0.260	0.702	6.38
36	59.30	0.377	0.022	0.613	1.797	7.75
37	39.90	-0.585	0.022	0.377	0.844	2.11
38	45.54	-0.302	0.021	0.301	0.709	5.12
39	53.71	0.100	0.021	0.522	1.307	3.14
40	67.72	0.814	0.022	0.447	1.180	1.36
41	20.49	-1.727	0.026	0.097	0.355	15.72
42	48.05	-0.178	0.021	0.565	1.344	4.08
43	48.28	-0.166	0.021	0.456	1.093	1.04
44	70.00	0.939	0.023	0.416	1.026	1.29
45	63.55	0.593	0.022	0.307	0.601	3.80
46	59.62	0.393	0.022	0.482	1.147	1.72
47	80.28	1.582	0.026	0.492	1.495	6.55
48	72.35	1.074	0.023	0.438	1.060	1.98
49	73.69	1.153	0.023	0.527	1.396	5.95
50	74.98	1.231	0.024	0.418	1.012	2.18

CONT INUEC

TABLE 33 (CONT.)
 ITBS LEVEL 11 FORM 5 TOTAL READING
 ITEM SUMMARY

117 ITEMS 10915 CASES KR-20= 0.960 EQUATING CONSTANT= 1.000						
ITEM NO.	RESPONSE PERCENT	LGGEASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
51	72.29	1.071	0.023	0.493	1.281	3.80
52	69.26	0.898	0.023	0.502	1.308	4.07
53	71.48	1.023	0.023	0.366	0.696	6.45
54	67.60	0.808	0.022	0.529	1.377	4.14
55	77.32	1.380	0.025	0.426	1.029	3.58
56	47.93	-0.184	0.021	0.393	0.743	2.54
57	54.66	0.147	0.021	0.370	0.798	1.77
58	65.51	0.696	0.022	0.538	1.331	4.51
59	68.58	0.861	0.022	0.518	1.264	3.89
60	61.52	0.489	0.022	0.513	1.181	2.82
61	45.14	-0.322	0.021	0.233	0.470	9.03
62	41.60	-0.499	0.022	0.347	0.755	3.56
63	57.52	0.288	0.021	0.359	0.752	1.86
64	51.79	-0.006	0.021	0.430	0.997	1.03
65	46.52	-0.253	0.021	0.351	0.670	3.07
66	41.07	-0.526	0.022	0.386	0.828	1.99
67	59.10	0.367	0.022	0.470	1.061	1.61
68	48.51	-0.155	0.021	0.401	0.864	1.57
69	60.05	0.414	0.022	0.383	0.827	1.26
70	66.37	0.741	0.022	0.488	1.124	2.70
71	52.37	0.034	0.021	0.519	1.184	2.15
72	57.24	0.274	0.021	0.431	0.955	1.21
73	48.70	-0.146	0.021	0.397	0.835	1.64
74	52.47	0.039	0.021	0.443	1.030	0.82
75	55.29	0.178	0.021	0.457	1.097	1.25
76	60.14	0.419	0.022	0.475	1.097	1.53
77	50.85	-0.041	0.021	0.429	0.969	1.18
78	58.63	0.343	0.021	0.494	1.188	2.04
79	49.26	-0.118	0.021	0.472	1.059	1.23
80	41.85	-0.487	0.022	0.505	1.167	2.13
81	26.96	-1.299	0.024	0.177	0.483	13.53
82	25.73	-1.376	0.024	0.164	0.546	16.96
83	51.79	0.006	0.021	0.469	1.120	1.08
84	51.64	-0.002	0.021	0.406	0.891	1.00
85	39.30	-0.616	0.022	0.374	0.933	4.06
86	31.14	-1.054	0.023	0.212	0.484	8.91
87	36.23	-0.781	0.022	0.224	0.680	4.91
88	29.36	-1.156	0.023	0.254	0.585	5.91
89	42.54	-0.452	0.022	0.354	0.740	2.42
90	47.17	-0.221	0.021	0.440	1.022	1.53
91	33.71	-0.912	0.022	0.336	0.774	3.79
92	48.22	-0.170	0.021	0.411	0.943	1.22
93	56.28	0.227	0.021	0.526	1.203	3.11
94	36.09	-0.784	0.022	0.354	0.761	2.25
95	48.92	-0.135	0.021	0.495	1.216	1.91
96	51.87	0.010	0.021	0.460	1.015	1.19
97	34.50	-0.868	0.022	0.260	0.585	6.23
98	42.94	-0.431	0.022	0.389	0.835	1.41
99	46.90	-0.534	0.022	0.462	0.987	1.20
100	33.19	-0.940	0.023	0.274	0.664	6.59

TABLE 33 (CONT.)
ITBS LEVEL 11 FORM 5 TOTAL READING
ITEM SUMMARY

117 ITEMS 10915 CASES KR-20= 0.960 EQUATING CONSTANT= 1.000

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
101	39.12	-0.625	0.022	0.355	0.796	3.29
102	35.32	-0.825	0.022	0.377	0.862	2.50
103	35.17	-0.832	0.022	0.362	0.834	2.66
104	39.04	-0.630	0.022	0.445	1.080	1.50
105	26.25	-1.343	0.024	0.149	0.472	17.20
106	27.15	-1.288	0.024	0.220	0.627	10.59
107	31.40	-1.040	0.023	0.352	0.828	2.48
108	36.91	-0.740	0.022	0.406	1.104	4.76
109	32.39	-0.984	0.023	0.377	0.911	2.54
110	41.36	-0.511	0.022	0.477	1.222	2.05
111	39.77	-0.592	0.022	0.393	0.868	1.93
112	35.09	-0.837	0.022	0.457	1.087	2.01
113	48.91	-0.135	0.021	0.507	1.399	2.82
114	44.87	-0.335	0.021	0.356	0.786	2.33
115	43.11	-0.423	0.022	0.419	0.976	2.50
116	31.30	-1.045	0.023	0.366	0.963	6.71
117	43.60	-0.398	0.021	0.452	1.177	2.07

TABLE 33 (CONT.)
ITBS LEVEL 11 FORM 5 TOTAL READING
ABILITY SUMMARY

117 ITEMS 10915 CASES KR-20= 0.960 EQUATING CONSTANT= 1.000

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	0	-4.986	1.006	160	10.66
2	0	-4.279	0.716	167	7.16
3	0	-3.861	0.589	171	5.89
4	1	-3.560	0.513	174	5.13
5	0	-3.324	0.462	177	4.62
6	0	-3.128	0.424	179	4.24
7	3	-2.961	0.395	180	3.95
8	4	-2.814	0.372	182	3.72
9	1	-2.682	0.353	183	3.53
10	4	-2.564	0.337	184	3.37
11	7	-2.455	0.323	185	3.23
12	4	-2.354	0.312	186	3.12
13	8	-2.260	0.301	187	3.01
14	12	-2.172	0.292	188	2.92
15	12	-2.089	0.284	189	2.84
16	10	-2.011	0.277	190	2.77
17	20	-1.936	0.270	191	2.70
18	18	-1.865	0.264	191	2.64
19	30	-1.796	0.259	192	2.59
20	41	-1.731	0.254	193	2.54
21	32	-1.668	0.249	193	2.49
22	55	-1.607	0.245	194	2.45
23	66	-1.548	0.241	195	2.41
24	71	-1.490	0.238	195	2.38
25	97	-1.435	0.234	196	2.34
26	111	-1.380	0.231	196	2.31
27	124	-1.328	0.228	197	2.28
28	132	-1.276	0.226	197	2.26
29	156	-1.226	0.223	198	2.23
30	177	-1.176	0.221	198	2.21
31	201	-1.128	0.219	199	2.19
32	164	-1.081	0.217	199	2.17
33	193	-1.034	0.215	200	2.15
34	167	-0.986	0.213	200	2.13
35	160	-0.943	0.211	201	2.11
36	150	-0.899	0.210	201	2.10
37	166	-0.855	0.208	201	2.08
38	181	-0.812	0.207	202	2.07
39	164	-0.769	0.206	202	2.06
40	146	-0.727	0.205	203	2.05
41	147	-0.685	0.204	203	2.04
42	139	-0.644	0.203	204	2.03
43	148	-0.603	0.202	204	2.02
44	130	-0.563	0.201	204	2.01
45	150	-0.523	0.200	205	2.00
46	127	-0.483	0.199	205	1.99
47	129	-0.443	0.199	206	1.99
48	160	-0.404	0.198	206	1.98
49	134	-0.365	0.197	206	1.97
50	127	-0.326	0.197	207	1.97

TABLE 33 (CONT.)
ITBS LEVEL 11 FORM 5 TOTAL READING
ABILITY SUMMARY

117 ITEMS 10915 CASES KR-20= 0.960 EQUATING CONSTANT= 1.000

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	135	-0.287	0.197	207	1.97
52	130	-0.249	0.196	208	1.96
53	133	-0.210	0.196	208	1.96
54	138	-0.172	0.196	208	1.96
55	129	-0.134	0.195	209	1.95
56	132	-0.096	0.195	209	1.95
57	133	-0.057	0.195	209	1.95
58	117	-0.019	0.195	210	1.95
59	124	0.019	0.195	210	1.95
60	128	0.057	0.195	211	1.95
61	117	0.095	0.195	211	1.95
62	124	0.133	0.195	211	1.95
63	140	0.171	0.196	212	1.96
64	119	0.210	0.196	212	1.96
65	136	0.248	0.196	212	1.96
66	120	0.287	0.197	213	1.97
67	138	0.325	0.197	213	1.97
68	137	0.364	0.197	214	1.97
69	141	0.403	0.198	214	1.98
70	143	0.443	0.199	214	1.99
71	133	0.482	0.199	215	1.99
72	152	0.522	0.200	215	2.00
73	153	0.562	0.201	216	2.01
74	139	0.603	0.202	216	2.02
75	151	0.644	0.203	216	2.03
76	145	0.685	0.204	217	2.04
77	131	0.727	0.205	217	2.05
78	132	0.769	0.206	218	2.06
79	105	0.811	0.207	218	2.07
80	114	0.855	0.209	219	2.09
81	126	0.898	0.210	219	2.10
82	138	0.943	0.211	219	2.11
83	140	0.988	0.213	220	2.13
84	128	1.034	0.215	220	2.15
85	125	1.080	0.217	221	2.17
86	125	1.128	0.219	221	2.19
87	111	1.176	0.221	222	2.21
88	123	1.225	0.223	222	2.23
89	131	1.276	0.226	223	2.26
90	128	1.327	0.228	223	2.28
91	132	1.380	0.231	224	2.31
92	120	1.434	0.234	224	2.34
93	95	1.490	0.238	225	2.38
94	98	1.547	0.241	225	2.41
95	87	1.606	0.245	226	2.45
96	98	1.668	0.249	227	2.49
97	97	1.731	0.254	227	2.54
98	84	1.797	0.259	228	2.59
99	75	1.865	0.264	229	2.64
100	62	1.936	0.270	229	2.70

CONT INUED

TABLE 33 (CONT.)
ITBS LEVEL 11 FORM 5 TOTAL READING
ABILITY SUMMARY

117 ITEMS 10915 CASES KR-20= 0.960 EQUATING CONSTANT= 1.000

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
101	61	2.011	0.277	230	2.77
102	66	2.090	0.284	231	2.84
103	50	2.173	0.292	232	2.92
104	43	2.261	0.301	233	3.01
105	41	2.354	0.312	234	3.12
106	50	2.455	0.323	235	3.23
107	38	2.564	0.337	236	3.37
108	26	2.683	0.353	237	3.53
109	29	2.814	0.372	238	3.72
110	24	2.961	0.395	240	3.95
111	10	3.129	0.424	241	4.24
112	6	3.325	0.462	243	4.62
113	4	3.561	0.513	246	5.13
114	1	3.862	0.589	249	5.89
115	0	4.281	0.715	253	7.16
116	0	4.987	1.006	260	10.06

114

TABLE 34
ITBS LEVEL 11 FORM 6 VOCABULARY
ITEM SUMMARY

43 ITEMS		2193 CASES	KR-20= 0.902	EQUATING CONSTANT=		0.530

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT

1	74.92	1.226	0.053	0.261	0.501	3.38
2	66.94	0.771	0.050	0.499	1.170	1.69
3	64.75	0.654	0.049	0.433	1.040	0.92
4	58.82	0.351	0.048	0.452	0.913	0.92
5	66.48	0.746	0.050	0.481	1.237	1.57
6	63.34	0.581	0.049	0.543	1.366	2.67
7	62.33	0.529	0.049	0.536	1.238	2.44
8	45.78	-0.295	0.048	0.556	1.158	2.80
9	64.07	0.619	0.049	0.560	1.524	2.65
10	72.55	1.084	0.052	0.358	0.929	0.96
11	61.10	0.466	0.049	0.465	1.019	0.84
12	58.41	0.331	0.048	0.425	0.808	1.55
13	63.47	0.588	0.049	0.504	1.252	1.53
14	41.31	-0.520	0.049	0.260	0.509	5.73
15	52.12	0.019	0.048	0.479	1.033	0.98
16	56.91	0.255	0.048	0.387	0.831	0.82
17	37.80	-0.702	0.049	0.476	1.096	1.77
18	59.87	0.404	0.048	0.386	0.830	1.19
19	32.57	-0.963	0.051	0.222	0.398	6.96
20	58.28	0.324	0.048	0.483	0.956	1.48
21	30.60	-1.097	0.052	0.180	0.455	8.07
22	52.17	0.021	0.048	0.550	1.303	2.26
23	56.73	0.246	0.048	0.461	1.073	0.74
24	59.37	0.379	0.048	0.407	0.958	1.06
25	48.75	-0.148	0.048	0.544	1.045	2.33
26	53.31	0.077	0.048	0.408	0.729	1.81
27	48.61	-0.154	0.048	0.377	0.803	1.72
28	46.51	-0.258	0.048	0.490	1.009	0.80
29	35.20	-0.840	0.050	0.408	0.793	1.43
30	40.99	-0.536	0.049	0.350	0.729	1.93
31	43.40	-0.411	0.048	0.448	1.055	1.46
32	57.96	0.308	0.048	0.438	0.986	1.10
33	26.68	-1.332	0.054	0.405	0.820	1.65
34	43.96	-0.386	0.048	0.420	0.861	1.20
35	39.26	-0.625	0.049	0.396	0.938	1.68
36	52.94	0.059	0.048	0.360	0.720	2.33
37	50.84	-0.044	0.048	0.479	1.071	0.79
38	30.00	-1.131	0.052	0.334	0.668	2.47
39	57.50	0.285	0.048	0.602	1.623	4.27
40	56.39	-0.067	0.048	0.496	1.138	1.20
41	42.18	-0.476	0.049	0.522	1.304	1.29
42	39.99	-0.588	0.049	0.472	1.021	1.03
43	56.77	0.249	0.048	0.488	1.279	1.25

TABLE 34 (CONT.)
 ITBS LEVEL-11 FORM 6 VOCABULARY
 ABILITY SUMMARY

43 ITEMS		2193 CASES		KR-20= 0.902 EQUATING CONSTANT= 0.530	
SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	0	-3.896	1.016	166	10.16
2	2	-3.171	0.729	174	7.29
3	4	-2.734	0.605	178	6.05
4	7	-2.413	0.532	181	5.32
5	10	-2.157	0.484	184	4.84
6	19	-1.940	0.449	186	4.49
7	27	-1.751	0.422	188	4.22
8	39	-1.582	0.401	189	4.01
9	43	-1.428	0.385	191	3.85
10	55	-1.285	0.371	192	3.71
11	78	-1.152	0.360	194	3.60
12	93	-1.026	0.351	195	3.51
13	85	-0.905	0.343	196	3.43
14	91	-0.790	0.337	197	3.37
15	90	-0.678	0.332	199	3.32
16	73	-0.570	0.327	200	3.27
17	100	-0.464	0.324	201	3.24
18	65	-0.360	0.321	202	3.21
19	64	-0.257	0.319	203	3.19
20	69	-0.156	0.318	204	3.18
21	79	-0.055	0.318	205	3.18
22	72	0.046	0.318	206	3.18
23	66	0.147	0.319	207	3.19
24	62	0.249	0.320	208	3.20
25	55	0.352	0.322	209	3.22
26	63	0.456	0.325	210	3.25
27	63	0.563	0.328	211	3.28
28	79	0.672	0.333	212	3.33
29	62	0.784	0.338	213	3.38
30	66	0.901	0.345	214	3.45
31	56	1.022	0.352	216	3.52
32	68	1.149	0.362	217	3.62
33	72	1.284	0.373	218	3.73
34	59	1.428	0.387	220	3.87
35	44	1.584	0.403	221	4.03
36	61	1.755	0.424	223	4.24
37	48	1.945	0.450	225	4.50
38	32	2.164	0.485	227	4.85
39	35	2.422	0.534	230	5.34
40	22	2.745	0.607	233	6.07
41	8	3.184	0.731	237	7.31
42	7	3.911	1.017	244	10.17

TABLE 35
ITBS-LEVEL 11 FORM 6 COMPREHENSION
ITEM SUMMARY

74 ITEMS 2195 CASES KR-20= 0.931 EQUATING CONSTANT= 0.499

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MIN SQ FIT
1	80.05	1.519	0.057	0.265	0.528	2.00
2	83.64	1.792	0.061	0.405	1.117	1.47
3	52.07	-0.022	0.047	0.243	0.466	3.17
4	50.62	-0.092	0.047	0.378	0.665	1.00
5	65.42	0.645	0.049	0.504	1.055	1.67
6	64.78	0.612	0.049	0.470	1.088	1.28
7	32.98	-0.975	0.050	0.297	0.597	4.15
8	70.48	0.920	0.051	0.450	1.058	1.23
9	56.99	0.218	0.048	0.403	0.792	1.18
10	21.87	-1.636	0.056	0.186	0.376	6.12
11	78.63	1.421	0.056	0.422	1.042	1.38
12	70.80	0.938	0.051	0.475	1.199	1.16
13	58.91	0.313	0.048	0.349	0.695	1.25
14	61.78	0.457	0.048	0.266	0.557	2.75
15	68.75	0.824	0.050	0.488	1.004	1.50
16	76.90	1.307	0.054	0.489	1.262	1.63
17	46.61	-0.287	0.047	0.406	0.806	1.18
18	85.38	1.939	0.063	0.529	2.346	3.73
19	74.12	1.133	0.053	0.477	1.133	1.59
20	76.67	1.292	0.054	0.457	1.127	1.54
21	46.33	-0.300	0.047	0.256	0.442	2.87
22	71.98	1.006	0.052	0.467	1.096	1.06
23	68.93	0.834	0.050	0.518	1.276	1.88
24	62.23	0.480	0.048	0.474	1.104	0.83
25	61.50	0.443	0.048	0.499	1.236	1.10
26	30.43	-1.115	0.051	0.323	0.648	1.99
27	75.35	1.208	0.053	0.565	1.462	2.83
28	34.62	-0.888	0.049	0.240	0.479	2.62
29	58.82	0.308	0.048	0.515	1.076	1.72
30	63.01	0.520	0.049	0.547	1.369	1.61
31	62.00	0.468	0.048	0.521	1.182	1.33
32	68.66	0.819	0.050	0.541	1.503	1.83
33	53.94	0.069	0.047	0.477	1.055	1.07
34	57.59	0.247	0.048	0.477	1.147	0.67
35	54.35	0.089	0.047	0.470	1.221	0.79
36	61.14	0.425	0.048	0.461	1.026	1.41
37	68.75	0.824	0.050	0.545	1.343	2.45
38	47.84	-0.227	0.047	0.313	0.516	2.36
39	43.60	-0.434	0.048	0.213	0.416	3.97
40	45.97	-0.318	0.047	0.361	0.700	1.59
41	28.84	-1.205	0.051	0.260	0.603	3.39
42	53.85	0.064	0.047	0.465	0.974	1.00
43	33.67	-0.938	0.050	0.321	0.732	1.77
44	46.01	-0.316	0.047	0.373	0.877	1.65
45	51.12	-0.068	0.047	0.358	0.800	1.45
46	36.17	-0.807	0.049	0.287	0.633	3.05
47	67.15	0.737	0.050	0.467	1.025	1.24
48	40.27	-0.598	0.048	0.384	0.859	1.07
49	55.08	0.124	0.047	0.516	1.113	1.31
50	31.12	-1.677	0.050	0.211	0.489	4.24

CONTINUED

TABLE 35 (CONT.)
 ITBS LEVEL 11 FORM 6 COMPREHENSION
 ITEM SUMMARY

74 ITEMS 2195 CASES KR-20= 0.931 EQUATING CONSTANT= 0.499						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I;AB)	SLOPE	MN SQ FIT
51	60.59	0.397	0.048	0.536	1.210	1.60
52	42.41	-0.492	0.048	0.350	0.783	1.82
53	58.04	0.270	0.048	0.578	1.509	2.13
54	66.65	0.710	0.050	0.574	1.312	2.58
55	45.51	-0.340	0.047	0.447	0.947	1.11
56	40.09	-0.607	0.048	0.319	0.724	1.68
57	42.96	-0.465	0.048	0.470	0.958	1.09
58	27.06	-1.309	0.052	0.322	0.695	2.18
59	42.37	-0.494	0.048	0.325	0.737	2.74
60	47.11	-0.262	0.047	0.523	1.214	1.89
61	26.88	-1.319	0.052	0.108	0.372	6.25
62	17.40	-1.960	0.060	0.114	0.414	4.58
63	50.39	-0.104	0.047	0.452	1.042	0.81
64	52.26	-0.013	0.047	0.490	1.134	1.38
65	38.91	-0.66	0.048	0.422	0.858	1.79
66	40.64	-0.580	0.048	0.418	0.882	1.29
67	31.75	-1.042	0.050	0.380	0.909	1.42
68	51.85	-0.033	0.047	0.560	1.360	2.01
69	45.88	-0.322	0.047	0.462	0.847	1.94
70	35.76	-0.828	0.049	0.364	0.763	1.54
71	45.57	-0.318	0.047	0.481	1.050	1.07
72	38.31	-0.637	0.048	0.346	0.763	1.26
73	23.92	-1.502	0.054	0.216	0.479	3.60
74	38.00	-0.713	0.048	0.368	0.810	1.16



TABLE 35 (CONT.)
ITBS LEVEL 11 FORM 6 COMPREHENSION
ABILITY SUMMARY

74 ITEMS 2195 CASES KR-20= 0.931 EQUATING CONSTANT= 0.499

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	0	-4.626	1.012	159	10.12
2	0	-3.908	0.725	166	7.25
3	1	-3.478	0.599	170	5.99
4	0	-3.165	0.524	173	5.24
5	2	-2.917	0.474	176	4.74
6	1	-2.710	0.438	178	4.38
7	3	-2.531	0.410	180	4.10
8	0	-2.372	0.388	181	3.88
9	2	-2.229	0.370	183	3.70
10	4	-2.098	0.354	184	3.54
11	5	-1.977	0.342	185	3.42
12	7	-1.864	0.330	186	3.30
13	13	-1.758	0.321	187	3.21
14	19	-1.658	0.313	188	3.13
15	16	-1.563	0.305	189	3.05
16	25	-1.472	0.299	190	2.99
17	36	-1.384	0.293	191	2.93
18	49	-1.300	0.288	192	2.88
19	46	-1.219	0.283	193	2.83
20	44	-1.140	0.279	194	2.79
21	54	-1.063	0.275	194	2.75
22	46	-0.989	0.272	195	2.72
23	57	-0.916	0.268	196	2.68
24	46	-0.845	0.266	197	2.66
25	44	-0.775	0.263	197	2.63
26	44	-0.706	0.261	198	2.61
27	40	-0.638	0.259	199	2.59
28	31	-0.572	0.257	199	2.57
29	48	-0.506	0.256	200	2.56
30	46	-0.441	0.255	201	2.55
31	49	-0.376	0.253	201	2.53
32	43	-0.312	0.252	202	2.52
33	26	-0.249	0.252	203	2.52
34	40	-0.186	0.251	203	2.51
35	35	-0.123	0.251	204	2.51
36	51	-0.060	0.250	204	2.50
37	41	0.003	0.250	205	2.50
38	46	0.065	0.250	206	2.50
39	41	0.128	0.251	206	2.51
40	42	0.191	0.251	207	2.51
41	49	0.254	0.252	208	2.52
42	51	0.317	0.252	208	2.52
43	40	0.381	0.253	209	2.53
44	56	0.445	0.254	209	2.54
45	41	0.510	0.256	210	2.56
46	58	0.576	0.257	211	2.57
47	58	0.642	0.259	211	2.59
48	49	0.710	0.261	212	2.61
49	45	0.778	0.263	213	2.63
50	51	0.848	0.265	213	2.65

CONT INUED

TABLE 35 (CONT.)
ITBS LEVEL 11 FORM 6 COMPREHENSION
ABILITY SUMMARY

74 ITEMS 2195 CASES KR-20 = 0.931 EQUATING CONSTANT = 0.499

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE:	
				SCALE SCORE	STD ERR
51	72	0.919	0.268	214	2.68
52	45	0.991	0.271	215	2.71
53	43	1.066	0.274	216	2.74
54	53	1.142	0.278	216	2.78
55		1.220	0.282	217	2.82
56	48	1.301	0.287	218	2.87
57	38	1.385	0.292	219	2.92
58	33	1.472	0.298	220	2.98
59	35	1.562	0.304	221	3.04
60	29	1.657	0.312	222	3.12
61	26	1.757	0.320	223	3.20
62	17	1.862	0.330	224	3.30
63	14	1.974	0.341	225	3.41
64	12	2.095	0.353	226	3.53
65	8	2.225	0.369	227	3.69
66	12	2.367	0.387	229	3.87
67	8	2.525	0.409	230	4.09
68	6	2.704	0.437	232	4.37
69	4	2.911	0.474	234	4.74
70	4	3.158	0.524	237	5.24
71	1	3.470	0.598	240	5.98
72	0	3.899	0.724	244	7.24
73	0	4.616	1.012	251	10.12

TABLE 36
ITBS LEVEL 11 FORM 6 TOTAL READING
ITEM SUMMARY

117 ITEMS 2195 CASES KR-20= 0.956 EQUATING CONSTANT= 0.510

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(1,AB)	SLOPE	MN. SQ FIT
1	74.54	1.188	0.053	0.239	0.489	2.68
2	66.97	0.736	0.049	0.485	1.327	1.18
3	64.78	0.622	0.049	0.404	0.890	1.05
4	58.86	0.323	0.048	0.431	0.888	1.36
5	66.51	0.712	0.049	0.473	1.171	1.13
6	63.37	0.549	0.048	0.515	1.302	1.38
7	62.37	0.498	0.048	0.517	1.221	1.35
8	45.83	-0.310	0.047	0.528	1.156	1.48
9	64.10	0.586	0.049	0.554	1.476	1.63
10	72.57	1.047	0.052	0.365	0.858	1.17
11	61.14	0.436	0.048	0.456	1.021	1.08
12	58.45	0.302	0.048	0.405	0.828	1.07
13	63.51	0.556	0.048	0.477	1.094	0.86
14	41.37	-0.529	0.048	0.226	0.458	2.54
15	52.16	-0.004	0.047	0.460	0.976	0.90
16	56.55	0.229	0.047	0.376	0.814	1.17
17	37.86	-0.706	0.048	0.429	0.854	1.72
18	59.91	0.375	0.048	0.385	0.822	1.00
19	33.03	-0.959	0.050	0.206	0.469	3.01
20	58.31	0.296	0.048	0.457	1.051	0.97
21	30.66	-1.089	0.051	0.128	0.328	4.44
22	52.21	-0.001	0.047	0.514	1.187	1.26
23	56.77	0.220	0.047	0.431	0.895	0.97
24	59.41	0.350	0.048	0.389	0.720	1.30
25	48.79	-0.166	0.047	0.520	1.196	1.45
26	53.35	0.054	0.047	0.415	0.787	1.57
27	48.66	-0.173	0.047	0.350	0.744	1.20
28	46.56	-0.274	0.047	0.472	1.035	1.08
29	35.26	-0.840	0.049	0.377	0.845	1.55
30	41.05	-0.545	0.048	0.318	0.681	1.42
31	43.51	-0.423	0.047	0.398	0.790	1.40
32	58.00	0.280	0.048	0.423	0.894	1.00
33	26.74	-1.316	0.052	0.367	0.867	1.17
34	44.01	-0.399	0.047	0.376	0.710	1.10
35	39.32	-0.632	0.048	0.357	0.833	1.13
36	52.98	0.036	0.047	0.324	0.537	1.89
37	50.89	-0.065	0.047	0.472	1.181	0.96
38	30.07	-1.122	0.051	0.274	0.596	2.31
39	57.54	0.258	0.047	0.593	1.611	1.87
40	50.43	-0.087	0.047	0.481	1.101	0.87
41	42.23	-0.486	0.048	0.500	1.216	1.07
42	40.05	-0.595	0.048	0.418	0.923	1.13
43	56.81	0.222	0.047	0.448	1.036	1.01
44	80.05	1.521	0.057	0.249	0.618	2.59
45	83.64	1.792	0.061	0.391	1.036	1.37
46	52.07	-0.008	0.047	0.234	0.399	2.51
47	50.62	-0.078	0.047	0.376	0.762	1.02
48	65.42	0.655	0.049	0.502	1.115	1.38
49	64.78	0.622	0.049	0.449	1.092	1.04
50	32.98	-0.961	0.050	0.296	0.645	2.35

CONTINUED



TABLE 36 (CONT.)
 ITBS LEVEL 11 FORM 6 TOTAL READING
 ITEM SUMMARY

117 ITEMS 2195 CASES KR-20= 0.956 EQUATING CONSTANT= 0.510

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
51	70.48	0.928	0.051	0.441	1.115	0.94
52	56.99	0.231	0.047	0.396	0.825	1.46
53	21.87	-1.626	0.056	0.188	0.403	4.22
54	78.63	1.424	0.055	0.403	0.930	1.42
55	70.80	0.946	0.051	0.458	1.235	1.14
56	58.91	0.325	0.048	0.351	0.712	0.87
57	61.78	0.468	0.048	0.261	0.480	2.20
58	68.75	0.832	0.050	0.477	1.045	1.16
59	76.90	1.311	0.054	0.461	1.135	1.54
60	46.61	-0.272	0.047	0.399	0.813	0.95
61	85.38	1.938	0.063	0.494	2.205	2.27
62	74.12	1.139	0.052	0.457	0.970	1.43
63	76.67	1.296	0.054	0.427	1.045	1.25
64	46.33	-0.286	0.047	0.236	0.417	2.62
65	71.98	1.013	0.051	0.443	1.113	1.06
66	68.93	0.842	0.050	0.496	1.173	1.27
67	62.23	0.491	0.048	0.461	1.056	1.18
68	61.50	0.454	0.048	0.480	1.139	1.07
69	30.43	-1.102	0.051	0.334	0.692	1.59
70	75.35	1.213	0.053	0.540	1.722	2.42
71	34.62	-0.874	0.049	0.240	0.486	2.25
72	58.82	0.320	0.048	0.507	1.083	1.46
73	63.01	0.530	0.048	0.537	1.293	1.67
74	62.00	0.480	0.048	0.514	1.120	1.18
75	68.66	0.827	0.050	0.521	1.427	1.68
76	53.94	0.082	0.047	0.474	0.922	0.98
77	57.59	0.260	0.047	0.456	1.032	0.95
78	54.35	0.102	0.047	0.455	1.176	0.86
79	61.14	0.436	0.048	0.444	0.977	1.19
80	68.75	0.832	0.050	0.524	1.348	1.58
81	47.84	-0.213	0.047	0.302	0.507	2.27
82	43.60	-0.419	0.047	0.199	0.396	3.04
83	45.57	-0.303	0.047	0.341	0.680	1.36
84	28.84	-1.192	0.051	0.261	0.555	2.81
85	53.85	0.078	0.047	0.444	0.939	0.88
86	33.67	-0.925	0.050	0.312	0.658	1.48
87	46.01	-0.301	0.047	0.365	0.740	1.24
88	51.12	-0.054	0.047	0.348	0.803	1.24
89	36.17	-0.793	0.049	0.280	0.654	2.09
90	67.15	0.746	0.049	0.454	1.017	1.01
91	40.27	-0.584	0.048	0.373	0.745	1.22
92	55.08	0.138	0.047	0.500	1.185	0.97
93	31.12	-1.064	0.050	0.211	0.458	3.11
94	60.59	0.409	0.048	0.515	1.051	1.29
95	42.41	-0.477	0.048	0.338	0.701	1.31
96	58.04	0.282	0.048	0.559	1.331	1.47
97	66.65	0.720	0.049	0.561	1.460	2.10
98	45.51	-0.325	0.047	0.442	1.021	0.97
99	40.09	-0.593	0.048	0.304	0.641	1.63
00	42.56	-0.450	0.048	0.480	0.986	1.23

TABLE 36 (CONT.)
ITBS LEVEL 11 FORM 6 TOTAL READING
ITEM SUMMARY

117 ITEMS 2195 CASES KR-20= 0.956 EQUATING CONSTANT= 0.510						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
101	27.06	-1.296	0.052	0.321	0.715	1.77
102	42.37	-0.480	0.048	0.312	0.638	1.69
103	47.11	-0.248	0.047	0.515	1.155	1.47
104	26.88	-1.307	0.052	0.103	0.228	4.07
105	17.40	-1.952	0.060	0.112	0.298	3.70
106	50.39	-0.089	0.047	0.436	0.913	1.01
107	52.26	0.001	0.047	0.480	1.085	0.82
108	38.91	-0.653	0.048	0.418	0.987	1.07
109	40.64	-0.566	0.048	0.408	0.834	0.94
110	31.75	-1.028	0.050	0.370	0.816	1.41
111	51.85	-0.019	0.047	0.564	1.328	1.45
112	45.88	-0.308	0.047	0.466	1.000	1.42
113	35.76	-0.814	0.049	0.361	0.871	1.39
114	45.97	-0.303	0.047	0.475	1.083	1.21
115	38.31	-0.683	0.048	0.341	0.695	0.98
116	23.92	-1.491	0.054	0.218	0.542	2.55
117	38.00	-0.699	0.048	0.377	0.853	1.03

TABLE 36 (CONT.)
ITBS LEVEL 11 FORM 6 TOTAL READING
ABILITY SUMMARY

117 ITEMS 2195 CASES KR-20= 0.956 EQUATING CONSTANT= 0.510

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	0	-5.029	1.007	155	10.07
2	0	-4.321	0.717	162	7.17
3	0	-3.901	0.590	166	5.90
4	0	-3.599	0.514	169	5.14
5	1	-3.362	0.463	171	4.63
6	0	-3.165	0.426	173	4.26
7	0	-2.996	0.397	175	3.97
8	0	-2.848	0.374	177	3.74
9	0	-2.715	0.355	178	3.55
10	1	-2.595	0.339	179	3.39
11	0	-2.485	0.325	180	3.25
12	0	-2.384	0.313	181	3.13
13	0	-2.289	0.303	182	3.03
14	3	-2.200	0.294	183	2.94
15	4	-2.116	0.286	184	2.86
16	2	-2.037	0.278	185	2.78
17	1	-1.961	0.272	185	2.72
18	3	-1.889	0.266	186	2.66
19	2	-1.820	0.260	187	2.60
20	9	-1.753	0.255	188	2.55
21	5	-1.689	0.251	188	2.51
22	7	-1.627	0.247	189	2.47
23	12	-1.568	0.243	189	2.43
24	7	-1.509	0.239	190	2.39
25	11	-1.453	0.236	191	2.36
26	26	-1.398	0.233	191	2.33
27	23	-1.345	0.230	192	2.30
28	20	-1.292	0.227	192	2.27
29	29	-1.241	0.225	193	2.25
30	29	-1.191	0.222	193	2.22
31	25	-1.142	0.220	194	2.20
32	35	-1.094	0.218	194	2.18
33	38	-1.047	0.216	195	2.16
34	39	-1.001	0.215	195	2.15
35	39	-0.955	0.213	196	2.13
36	30	-0.910	0.211	196	2.11
37	25	-0.866	0.210	196	2.10
38	29	-0.822	0.209	197	2.09
39	28	-0.779	0.207	197	2.07
40	37	-0.736	0.206	198	2.06
41	36	-0.694	0.205	198	2.05
42	27	-0.652	0.204	199	2.04
43	39	-0.611	0.203	199	2.03
44	30	-0.570	0.202	199	2.02
45	24	-0.529	0.201	200	2.01
46	27	-0.489	0.201	200	2.01
47	34	-0.449	0.200	201	2.00
48	27	-0.409	0.199	201	1.99
49	30	-0.369	0.199	201	1.99
50	20	-0.330	0.198	202	1.98

TABLE 36 (CONT.)
ITBS LEVEL 11 FORM 6 TOTAL READING
ABILITY SUMMARY

117 ITEMS 2195 CASES KR-20= 0.956 EQUATING CONSTANT= 0.510

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	32	-0.290	0.198	202	1.98
52	32	-0.251	0.198	203	1.98
53	38	-0.212	0.197	203	1.97
54	25	-0.174	0.197	203	1.97
55	20	-0.135	0.197	204	1.97
56	29	-0.096	0.197	204	1.97
57	23	-0.058	0.196	205	1.96
58	23	-0.019	0.196	205	1.96
59	26	0.020	0.196	205	1.96
60	31	0.058	0.196	206	1.96
61	20	0.097	0.197	206	1.97
62	24	0.135	0.197	206	1.97
63	28	0.174	0.197	207	1.97
64	19	0.213	0.197	207	1.97
65	35	0.252	0.198	208	1.98
66	26	0.291	0.198	208	1.98
67	27	0.330	0.198	208	1.98
68	32	0.370	0.199	209	1.99
69	34	0.409	0.199	209	1.99
70	31	0.449	0.200	210	2.00
71	26	0.489	0.201	210	2.01
72	39	0.530	0.201	210	2.01
73	31	0.570	0.202	211	2.02
74	28	0.611	0.203	211	2.03
75	32	0.653	0.204	212	2.04
76	23	0.695	0.205	212	2.05
77	21	0.737	0.206	212	2.06
78	34	0.779	0.207	213	2.07
79	30	0.823	0.209	213	2.09
80	23	0.866	0.210	214	2.10
81	35	0.911	0.211	214	2.11
82	27	0.956	0.213	215	2.13
83	36	1.001	0.215	215	2.15
84	31	1.048	0.216	216	2.16
85	32	1.095	0.218	216	2.18
86	39	1.143	0.220	217	2.20
87	28	1.192	0.222	217	2.22
88	20	1.242	0.225	218	2.25
89	25	1.293	0.227	218	2.27
90	30	1.345	0.230	219	2.30
91	33	1.399	0.233	219	2.33
92	24	1.453	0.236	220	2.36
93	20	1.510	0.239	220	2.39
94	20	1.568	0.243	221	2.43
95	10	1.628	0.247	221	2.47
96	9	1.689	0.251	222	2.51
97	14	1.753	0.255	223	2.55
98	17	1.820	0.260	223	2.60
99	10	1.889	0.266	224	2.66
100	13	1.961	0.272	225	2.72

CONTINUED

TABLE 36 (CONT.)
ITBS LEVEL 11 FORM 6 TOTAL READING
ABILITY SUMMARY

117 ITEMS	2195 CASES	KR-20= 0.956		EQUATING CONSTANT= 0.510	

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR

101	10	2.036	0.278	225	2.78
102	11	2.116	0.285	226	2.85
103	8	2.200	0.294	227	2.94
104	10	2.288	0.303	228	3.03
105	5	2.383	0.313	229	3.13
106	9	2.485	0.325	230	3.25
107	3	2.594	0.338	231	3.38
108	3	2.714	0.354	232	3.54
109	1	2.847	0.373	234	3.73
110	2	2.994	0.397	235	3.97
111	3	3.163	0.426	237	4.26
112	1	3.360	0.463	239	4.63
113	0	3.597	0.514	241	5.14
114	0	3.899	0.590	244	5.90
115	0	4.319	0.717	248	7.17
116	0	5.026	1.007	255	10.07

TABLE 37
ITBS LEVEL 12 FORM 5 VOCABULARY
ITEM SUMMARY

46 ITEMS 11104 CASES KR-20 ¹³ 0.897 EQUATING CONSTANT= 1.405						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	60.96	0.333	0.022	0.388	0.901	2.05
2	45.43	-0.432	0.021	0.381	0.811	3.94
3	65.31	0.557	0.022	0.528	1.491	8.20
4	67.54	0.677	0.022	0.436	0.970	2.00
5	71.92	0.921	0.023	0.429	1.082	1.88
6	71.29	0.885	0.023	0.419	0.950	3.46
7	76.48	1.198	0.024	0.353	0.869	2.66
8	66.81	0.637	0.022	0.517	1.336	7.87
9	71.17	0.878	0.023	0.520	1.472	9.26
10	65.35	0.559	0.022	0.342	0.823	8.66
11	57.62	0.166	0.021	0.450	1.073	1.34
12	72.83	0.975	0.023	0.472	1.332	5.13
13	60.10	0.290	0.021	0.394	0.839	1.89
14	65.68	0.577	0.022	0.340	0.744	3.81
15	73.64	1.023	0.023	0.555	1.744	16.91
16	69.51	0.784	0.023	0.457	1.283	2.40
17	66.87	0.640	0.022	0.482	1.309	3.54
18	59.92	0.280	0.021	0.522	1.260	6.60
19	43.95	-0.505	0.021	0.329	0.808	13.63
20	73.67	1.024	0.023	0.572	1.759	20.19
21	52.38	-0.092	0.021	0.479	1.076	1.62
22	54.69	0.021	0.021	0.251	0.595	17.76
23	69.88	0.806	0.023	0.512	1.346	8.11
24	79.78	1.420	0.025	0.364	1.050	1.22
25	27.25	-1.403	0.023	0.261	0.744	19.92
26	60.86	0.328	0.022	0.545	1.008	13.23
27	61.54	0.362	0.022	0.487	1.178	3.52
28	47.53	-0.329	0.021	0.424	0.975	4.87
29	52.66	-0.078	0.021	0.492	1.250	4.87
30	43.44	-0.530	0.021	0.479	1.135	2.23
31	27.01	-1.418	0.024	0.205	0.528	26.74
32	52.62	-0.080	0.021	0.463	1.196	3.00
33	32.30	-1.111	0.023	0.223	0.613	19.79
34	28.43	-1.332	0.023	0.436	0.936	7.60
35	59.06	0.238	0.021	0.558	1.510	5.68
36	44.88	-0.459	0.021	0.422	0.912	2.50
37	39.83	-0.712	0.022	0.375	0.860	8.60
38	63.16	0.445	0.022	0.405	1.025	0.86
39	52.58	-0.062	0.021	0.485	1.231	3.41
40	38.53	-0.779	0.022	0.471	1.196	3.67
41	40.41	-0.683	0.022	0.367	0.822	3.77
42	40.34	-0.686	0.022	0.465	1.046	2.46
43	46.14	-0.397	0.021	0.380	0.819	2.51
44	35.04	-0.962	0.022	0.364	0.861	7.03
45	38.80	-0.765	0.022	0.291	0.731	12.19
46	7.20	-3.213	0.038	-0.037	0.065	54.19

TABLE 37 (CONT.)
ITBS LEVEL 12 FORM 5 VOCABULARY
ABILITY SUMMARY

46 ITEMS 11104 CASES KR-20= 0.897 EQUATING CONSTANT= 1.405					
SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	1	-4.093	1.016	173	10.16
2	1	-3.367	0.730	180	7.30
3	7	-2.928	0.606	185	6.06
4	12	-2.607	0.533	188	5.33
5	29	-2.349	0.485	191	4.85
6	39	-2.131	0.450	193	4.50
7	51	-1.941	0.423	195	4.23
8	94	-1.771	0.403	196	4.03
9	140	-1.615	0.386	198	3.86
10	187	-1.472	0.373	199	3.73
11	249	-1.337	0.362	201	3.62
12	274	-1.210	0.352	202	3.52
13	294	-1.088	0.345	203	3.45
14	340	-0.972	0.338	204	3.38
15	336	-0.860	0.333	205	3.33
16	364	-0.750	0.328	207	3.28
17	343	-0.644	0.325	208	3.25
18	330	-0.540	0.322	209	3.22
19	346	-0.437	0.320	210	3.20
20	329	-0.335	0.318	211	3.18
21	368	-0.234	0.317	212	3.17
22	337	-0.134	0.316	213	3.16
23	376	-0.034	0.317	214	3.17
24	376	0.066	0.317	215	3.17
25	419	0.167	0.318	216	3.18
26	425	0.269	0.320	217	3.20
27	394	0.372	0.323	218	3.23
28	418	0.477	0.326	219	3.26
29	418	0.585	0.329	220	3.29
30	374	0.694	0.334	221	3.34
31	370	0.807	0.339	222	3.39
32	393	0.924	0.345	223	3.45
33	352	1.046	0.353	225	3.53
34	366	1.174	0.361	226	3.61
35	333	1.308	0.372	227	3.72
36	277	1.451	0.384	229	3.84
37	261	1.604	0.399	230	3.99
38	250	1.770	0.417	232	4.17
39	237	1.954	0.440	234	4.40
40	176	2.160	0.468	236	4.68
41	155	2.396	0.506	238	5.06
42	119	2.677	0.557	241	5.57
43	85	3.029	0.633	244	6.33
44	40	3.507	0.760	249	7.60
45	19	4.285	1.045	257	10.45

TABLE 38
ITBS LEVEL 12 FORM 5 COMPREHENSION
ITEM SUMMARY

76 ITEMS 11108 CASES KR-20= 0.923 EQUATING CONSTANT= 1.859						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	56.73	0.566	0.021	0.479	1.129	3.91
2	28.84	-0.801	0.023	0.317	0.674	5.01
3	34.35	-0.504	0.022	0.338	0.737	6.76
4	65.57	0.994	0.021	0.418	0.933	3.27
5	65.72	1.001	0.021	0.376	0.866	1.63
6	46.40	0.084	0.021	0.442	1.029	2.54
7	36.93	-0.373	0.021	0.283	0.574	4.19
8	44.30	-0.015	0.021	0.445	0.926	2.29
9	34.31	-0.506	0.022	0.306	0.732	2.95
10	53.63	0.421	0.021	0.328	0.784	2.49
11	60.06	0.724	0.021	0.392	0.816	1.60
12	43.54	-0.032	0.021	0.403	0.967	0.95
13	63.63	0.868	0.021	0.384	0.917	1.88
14	69.93	1.219	0.022	0.466	1.376	6.42
15	42.19	-0.116	0.021	0.352	0.752	1.97
16	62.82	0.857	0.021	0.490	1.346	5.61
17	64.04	0.918	0.021	0.372	0.839	2.57
18	40.02	-0.220	0.021	0.287	0.654	3.98
19	57.45	0.600	0.021	0.370	0.871	1.41
20	56.07	0.535	0.021	0.458	1.009	4.12
21	42.19	-0.116	0.021	0.334	0.772	1.72
22	50.82	0.290	0.021	0.414	0.903	1.45
23	45.62	0.047	0.021	0.435	1.052	1.70
24	45.65	0.049	0.021	0.413	1.015	1.27
25	54.88	0.479	0.021	0.460	1.172	2.68
26	35.25	-0.458	0.022	0.315	0.717	4.87
27	40.56	-0.194	0.021	0.335	0.763	2.51
28	43.91	-0.033	0.021	0.372	0.908	1.09
29	51.13	0.305	0.021	0.459	1.172	2.63
30	46.92	0.108	0.021	0.423	1.079	1.13
31	57.56	0.605	0.021	0.415	1.048	1.55
32	53.66	0.423	0.021	0.409	1.015	1.72
33	49.22	0.216	0.021	0.497	1.073	4.80
34	70.66	1.259	0.022	0.489	1.533	7.89
35	60.35	0.738	0.021	0.256	0.568	7.18
36	61.66	0.801	0.021	0.454	1.195	3.29
37	48.39	0.177	0.021	0.501	1.257	4.54
38	63.40	0.886	0.021	0.474	1.326	5.04
39	55.68	0.517	0.021	0.472	1.124	4.02
40	36.03	-0.418	0.021	0.385	1.044	1.32
41	59.68	0.706	0.021	0.459	1.242	3.05
42	38.00	-0.320	0.021	0.384	0.946	1.72
43	39.40	-0.250	0.021	0.379	1.160	2.41
44	36.39	-0.400	0.021	0.365	0.940	2.31
45	45.27	0.031	0.021	0.311	0.673	4.88
46	44.89	0.013	0.021	0.244	0.691	6.88
47	38.19	-0.310	0.021	0.356	0.915	1.11
48	40.60	-0.192	0.021	0.373	1.024	2.00
49	44.72	0.005	0.021	0.423	1.126	0.98
50	56.55	0.558	0.021	0.519	1.639	5.99

CONT INUEC

TABLE 38 (CONT.)
ITBS LEVEL 12 FORM 5 COMPREHENSION
ITEM SUMMARY

76 ITEMS 11108 CASES KR-20= 0.923 EQUATING CONSTANT= 1.859

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
51	33.86	-0.530	0.022	0.227	0.629	7.15
52	37.26	-0.356	0.021	0.290	1.058	1.67
53	49.05	0.208	0.021	0.341	0.912	1.78
54	49.70	0.238	0.021	0.557	1.798	8.88
55	46.47	0.087	0.021	0.526	1.309	6.42
56	47.89	0.154	0.021	0.497	1.443	3.71
57	34.35	-0.504	0.022	0.267	0.818	6.97
58	43.21	-0.067	0.021	0.484	1.350	3.91
59	42.58	-0.097	0.021	0.446	1.132	2.72
60	20.46	-1.324	0.025	0.099	0.483	18.67
61	28.29	-0.833	0.023	0.219	0.750	10.54
62	35.71	-0.434	0.022	0.441	1.226	2.75
63	39.57	-0.242	0.021	0.373	1.134	2.83
64	34.52	-0.496	0.022	0.260	0.745	5.48
65	27.27	-0.892	0.023	0.271	0.759	3.51
66	35.82	-0.429	0.022	0.415	1.210	1.81
67	31.07	-0.678	0.022	0.383	0.901	1.00
68	24.26	-1.073	0.024	0.103	0.457	17.28
69	29.11	-0.787	0.023	0.405	1.154	2.85
70	38.56	-0.292	0.021	0.319	0.765	2.39
71	39.12	-0.264	0.021	0.378	1.027	1.32
72	28.20	-0.832	0.023	0.224	0.661	6.81
73	39.63	-0.239	0.021	0.459	1.353	2.07
74	22.70	-1.173	0.024	0.193	0.679	10.55
75	41.69	-0.139	0.021	0.487	1.372	3.18
76	29.79	-0.748	0.022	0.283	0.835	4.57

TABLE 38 (CONT.)
ITBS LEVEL 12 FORM 5 COMPREHENSION
ABILITY SUMMARY

76 ITEMS		11108 CASES	KR-20= 0.923	EQUATING CONSTANT=	1.859

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR

1	0	-4.479	1.009	174	10.09
2	0	-3.768	0.720	181	7.20
3	10	-3.344	0.593	185	5.93
4	4	-3.038	0.518	188	5.18
5	6	-2.796	0.468	191	4.68
6	10	-2.595	0.431	193	4.31
7	13	-2.422	0.403	194	4.03
8	18	-2.269	0.380	196	3.80
9	18	-2.132	0.361	197	3.61
10	23	-2.007	0.346	199	3.46
11	47	-1.892	0.333	200	3.33
12	71	-1.784	0.322	201	3.22
13	95	-1.684	0.312	202	3.12
14	132	-1.590	0.303	203	3.03
15	172	-1.500	0.296	204	2.96
16	186	-1.414	0.289	204	2.89
17	252	-1.332	0.283	205	2.83
18	316	-1.254	0.278	206	2.78
19	331	-1.178	0.273	207	2.73
20	361	-1.104	0.269	208	2.69
21	341	-1.033	0.265	208	2.65
22	382	-0.964	0.261	209	2.61
23	369	-0.897	0.258	210	2.58
24	329	-0.831	0.255	210	2.55
25	318	-0.766	0.253	211	2.53
26	268	-0.703	0.251	212	2.51
27	300	-0.641	0.248	212	2.48
28	269	-0.579	0.247	213	2.47
29	299	-0.519	0.245	213	2.45
30	259	-0.459	0.244	214	2.44
31	265	-0.400	0.242	215	2.42
32	251	-0.342	0.241	215	2.41
33	228	-0.284	0.240	216	2.40
34	213	-0.226	0.240	216	2.40
35	226	-0.169	0.239	217	2.39
36	226	-0.112	0.239	217	2.39
37	250	-0.055	0.238	218	2.38
38	219	0.002	0.238	219	2.38
39	232	0.058	0.238	219	2.38
40	214	0.115	0.239	220	2.39
41	234	0.172	0.239	220	2.39
42	194	0.230	0.239	221	2.39
43	202	0.287	0.240	221	2.40
44	185	0.345	0.241	222	2.41
45	201	0.403	0.242	223	2.42
46	183	0.462	0.243	223	2.43
47	160	0.522	0.245	224	2.45
48	161	0.582	0.246	224	2.46
49	154	0.643	0.248	225	2.48
50	156	0.705	0.250	226	2.50

CONT INUED

TABLE 38 (CONT.)
ITBS LEVEL 12 FORM 5 COMPREHENSION
ABILITY SUMMARY

76 ITEMS		11108 CASES		KR-20= 0.923	EQUATING CONSTANT= 1.859

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR

51	161	0.768	0.252	226	2.52
52	144	0.832	0.255	227	2.55
53	170	0.898	0.258	228	2.58
54	133	0.965	0.261	228	2.61
55	116	1.034	0.264	229	2.64
56	118	1.105	0.268	230	2.68
57	117	1.178	0.273	230	2.73
58	96	1.254	0.277	231	2.77
59	111	1.332	0.283	232	2.83
60	90	1.414	0.289	233	2.89
61	106	1.499	0.295	234	2.95
62	71	1.589	0.303	234	3.03
63	59	1.683	0.311	235	3.11
64	57	1.783	0.321	236	3.21
65	53	1.890	0.332	237	3.32
66	39	2.004	0.346	239	3.46
67	30	2.129	0.361	240	3.61
68	33	2.266	0.379	241	3.79
69	27	2.418	0.402	242	4.02
70	6	2.591	0.430	244	4.30
71	8	2.792	0.467	247	4.67
72	5	3.033	0.518	249	5.18
73	1	3.339	0.593	252	5.93
74	4	3.763	0.720	256	7.20
75	0	4.473	1.009	263	10.09

TABLE 39
ITBS LEVEL 12 FORM 5 TOTAL READING
ITEM SUMMARY

122 ITEMS 11108 CASES KR-20= 0.952 EQUATING CONSTANT= 1.688

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	60.97	0.604	0.021	0.356	0.915	1.12
2	45.44	-0.132	0.021	0.356	0.715	1.68
3	65.32	0.820	0.021	0.503	1.534	4.19
4	67.55	0.935	0.022	0.402	0.934	1.88
5	71.93	1.170	0.022	0.401	1.145	1.82
6	71.30	1.135	0.022	0.388	0.937	3.02
7	76.49	1.437	0.024	0.329	0.843	1.96
8	66.83	0.897	0.022	0.493	1.330	4.38
9	71.18	1.129	0.022	0.489	1.633	4.51
10	65.36	0.822	0.021	0.306	0.711	4.19
11	57.63	0.443	0.021	0.422	0.975	1.75
12	72.84	1.222	0.023	0.447	1.359	2.90
13	60.11	0.562	0.021	0.367	0.883	1.04
14	65.69	0.839	0.021	0.308	0.654	2.31
15	73.65	1.268	0.023	0.530	1.954	8.44
16	69.52	1.038	0.022	0.422	1.218	1.91
17	66.88	0.900	0.022	0.462	1.271	2.70
18	59.93	0.554	0.021	0.498	1.273	3.55
19	43.97	-0.203	0.021	0.315	0.823	4.58
20	73.68	1.270	0.023	0.546	1.861	10.09
21	52.39	0.196	0.021	0.449	1.136	1.77
22	54.70	0.304	0.021	0.219	0.486	6.48
23	69.90	1.059	0.022	0.494	1.525	4.90
24	79.79	1.652	0.025	0.339	1.048	1.29
25	27.28	-1.070	0.023	0.241	0.697	6.30
26	60.88	0.600	0.021	0.524	1.061	7.69
27	61.55	0.632	0.021	0.461	1.256	2.42
28	47.55	-0.032	0.021	0.407	1.082	2.28
29	52.67	0.209	0.021	0.467	1.341	2.11
30	43.46	-0.227	0.021	0.466	1.207	1.63
31	27.03	-1.084	0.023	0.176	0.462	8.24
32	52.64	0.207	0.021	0.440	1.219	1.51
33	32.33	-0.787	0.022	0.189	0.499	7.08
34	28.46	-1.002	0.023	0.409	1.057	2.21
35	59.07	0.512	0.021	0.539	1.658	5.08
36	44.90	-0.158	0.021	0.405	1.006	1.16
37	39.85	-0.402	0.021	0.353	0.996	2.59
38	63.17	0.712	0.021	0.381	0.991	0.91
39	53.00	0.224	0.021	0.467	1.341	1.81
40	38.55	-0.467	0.021	0.460	1.323	2.12
41	40.43	-0.374	0.021	0.347	0.834	2.17
42	40.36	-0.377	0.021	0.453	1.083	1.98
43	46.16	-0.098	0.021	0.357	0.843	1.20
44	35.06	-0.643	0.022	0.344	0.937	2.38
45	38.82	-0.453	0.021	0.271	0.697	3.92
46	7.24	-2.829	0.038	-0.048	-0.020	17.85
47	56.73	0.401	0.021	0.488	1.205	3.00
48	28.84	-0.980	0.023	0.310	0.691	3.50
49	34.35	-0.680	0.022	0.333	0.762	5.97
50	65.57	0.833	0.021	0.426	0.989	2.12

CONTINUED

TABLE 39 (CONT.)
ITBS LEVEL 12 FORM 5 TOTAL READING
ITEM SUMMARY

122 ITEMS 11108 CASES KR-20= 0.952 EQUATING CONSTANT= 1.688

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
51	65.72	0.840	0.021	0.377	0.897	1.13
52	46.40	-0.087	0.021	0.444	1.033	2.14
53	36.93	-0.548	0.021	0.272	0.608	4.24
54	44.30	-0.187	0.021	0.438	0.948	1.35
55	34.31	-0.683	0.022	0.292	0.695	2.67
56	53.63	0.254	0.021	0.322	0.741	2.29
57	60.06	0.560	0.021	0.387	0.826	1.30
58	43.94	-0.204	0.021	0.398	0.928	1.38
59	63.03	0.705	0.021	0.382	0.920	0.83
60	69.93	1.061	0.022	0.474	1.402	4.28
61	42.19	-0.288	0.021	0.345	0.712	1.87
62	62.82	0.695	0.021	0.490	1.345	3.33
63	64.04	0.756	0.021	0.378	0.810	2.30
64	40.02	-0.394	0.021	0.281	0.658	3.01
65	57.45	0.434	0.021	0.371	0.816	1.11
66	56.67	0.369	0.021	0.459	1.036	2.56
67	42.19	-0.288	0.021	0.318	0.664	2.28
68	50.82	0.122	0.021	0.402	0.932	1.05
69	45.62	-0.124	0.021	0.428	0.974	1.11
70	45.65	-0.122	0.021	0.402	0.959	1.07
71	54.88	0.313	0.021	0.456	1.190	1.78
72	35.25	-0.633	0.022	0.304	0.689	4.54
73	40.56	-0.368	0.021	0.326	0.743	2.78
74	43.91	-0.205	0.021	0.365	0.870	1.14
75	51.13	0.136	0.021	0.457	1.104	1.70
76	46.92	-0.062	0.021	0.421	0.976	1.07
77	57.56	0.440	0.021	0.404	1.015	0.96
78	53.66	0.255	0.021	0.406	0.929	1.20
79	49.22	0.046	0.021	0.505	1.114	3.82
80	70.66	1.100	0.022	0.485	1.448	4.57
81	60.35	0.574	0.021	0.247	0.568	5.05
82	61.66	0.638	0.021	0.442	1.137	1.77
83	48.39	0.007	0.021	0.489	1.225	2.96
84	63.40	0.723	0.021	0.470	1.283	2.56
85	55.68	0.351	0.021	0.464	1.090	2.37
86	36.03	-0.594	0.022	0.374	0.887	1.43
87	55.68	0.542	0.021	0.450	1.227	1.43
88	38.00	-0.494	0.021	0.378	0.935	2.17
89	39.40	-0.424	0.021	0.372	1.013	2.77
90	36.39	-0.575	0.021	0.351	0.877	2.69
91	45.27	-0.140	0.021	0.301	0.653	4.18
92	44.89	-0.159	0.021	0.227	0.608	5.66
93	38.19	-0.485	0.021	0.348	0.903	1.31
94	40.60	-0.365	0.021	0.366	0.918	2.14
95	44.72	-0.166	0.021	0.416	1.056	1.13
96	56.55	0.392	0.021	0.507	1.427	3.21
97	33.86	-0.706	0.022	0.214	0.525	5.86
98	37.26	-0.531	0.021	0.375	0.915	1.72
99	49.05	0.038	0.021	0.322	0.866	1.89
100	45.70	0.069	0.021	0.545	1.603	5.19

TABLE 39 (CONT.)
ITBS LEVEL 12 FORM 5 TOTAL READING
ITEM SUMMARY

122 ITEMS 1108 CASES KR-20= 0.952 EQUATING CONSTANT= 1.688						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MM SQ FIT
101	46.47	-0.083	0.021	0.525	1.219	4.51
102	47.89	-0.016	0.021	0.481	1.277	1.83
103	34.35	-0.680	0.022	0.254	0.781	6.07
104	43.21	-0.239	0.021	0.481	1.321	3.16
105	42.58	-0.269	0.021	0.437	1.075	2.45
106	20.46	-1.506	0.025	0.086	0.424	14.12
107	28.29	-1.012	0.023	0.199	0.660	8.83
108	35.71	-0.610	0.022	0.420	1.102	2.22
109	39.57	-0.416	0.021	0.356	1.012	2.91
110	34.52	-0.672	0.022	0.240	0.637	4.87
111	27.27	-1.071	0.023	0.254	0.722	3.36
112	35.82	-0.604	0.022	0.395	1.045	1.95
113	31.07	-0.856	0.022	0.366	0.821	1.19
114	24.26	-1.253	0.024	0.085	0.318	13.44
115	29.11	-0.965	0.023	0.391	0.985	2.71
116	38.56	-0.466	0.021	0.305	0.766	2.38
117	39.12	-0.439	0.021	0.358	0.979	1.52
118	28.30	-1.011	0.023	0.205	0.564	6.05
119	39.63	-0.413	0.021	0.441	1.209	1.66
120	22.70	-1.354	0.024	0.173	0.621	8.99
121	41.69	-0.312	0.021	0.473	1.247	1.76
122	29.79	-0.926	0.023	0.266	0.772	4.21

TABLE 39 (CONT.)
ITBS LEVEL 12 FORM 5 TOTAL READING
ABILITY SUMMARY

122 ITEMS 11108 CASES KR-20= 0.952 EQUATING CONSTANT= 1.688

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	0	-5.040	1.006	166	10.06
2	0	-4.335	0.716	174	7.16
3	0	-3.916	0.588	178	5.88
4	0	-3.616	0.513	181	5.13
5	0	-3.380	0.461	183	4.61
6	1	-3.185	0.424	185	4.24
7	0	-3.018	0.395	187	3.95
8	0	-2.871	0.371	188	3.71
9	2	-2.741	0.352	189	3.52
10	1	-2.622	0.336	191	3.36
11	3	-2.514	0.323	192	3.23
12	2	-2.413	0.311	193	3.11
13	6	-2.320	0.300	194	3.00
14	4	-2.233	0.291	195	2.91
15	10	-2.150	0.283	195	2.83
16	8	-2.072	0.276	196	2.76
17	7	-1.998	0.269	197	2.69
18	12	-1.927	0.263	198	2.63
19	13	-1.859	0.258	198	2.58
20	23	-1.794	0.253	199	2.53
21	31	-1.731	0.248	200	2.48
22	38	-1.671	0.244	200	2.44
23	44	-1.612	0.240	201	2.40
24	72	-1.555	0.236	201	2.36
25	70	-1.500	0.233	202	2.33
26	81	-1.447	0.230	202	2.30
27	108	-1.395	0.227	203	2.27
28	122	-1.344	0.224	203	2.24
29	140	-1.294	0.222	204	2.22
30	143	-1.245	0.220	204	2.20
31	171	-1.197	0.217	205	2.17
32	198	-1.151	0.215	205	2.15
33	196	-1.105	0.213	206	2.13
34	192	-1.060	0.212	206	2.12
35	164	-1.015	0.210	207	2.10
36	204	-0.972	0.208	207	2.08
37	199	-0.929	0.207	208	2.07
38	185	-0.886	0.205	208	2.05
39	178	-0.844	0.204	208	2.04
40	198	-0.803	0.203	209	2.03
41	154	-0.762	0.202	209	2.02
42	157	-0.722	0.201	210	2.01
43	177	-0.682	0.200	210	2.00
44	191	-0.642	0.199	210	1.99
45	181	-0.603	0.198	211	1.98
46	172	-0.564	0.197	211	1.97
47	170	-0.525	0.196	212	1.96
48	159	-0.487	0.196	212	1.96
49	139	-0.449	0.195	212	1.95
50	167	-0.411	0.194	213	1.94

CONTINUED

TABLE 39 (CONT.)
ITBS LEVEL 12 FORM 5 TOTAL READING
ABILITY SUMMARY

122 ITEMS 11108 CASES KR-20= 0.952 EQUATING CONSTANT= 1.688

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
51	170	-0.373	0.194	213	1.94
52	145	-0.336	0.193	214	1.93
53	160	-0.298	0.193	214	1.93
54	171	-0.261	0.193	214	1.93
55	175	-0.224	0.192	215	1.92
56	136	-0.187	0.192	215	1.92
57	160	-0.150	0.192	215	1.92
58	144	-0.114	0.192	216	1.92
59	146	-0.077	0.192	216	1.92
60	172	-0.040	0.191	216	1.91
61	153	-0.004	0.191	217	1.91
62	156	0.033	0.191	217	1.91
63	141	0.070	0.192	218	1.92
64	169	0.106	0.192	218	1.92
65	139	0.143	0.192	218	1.92
66	156	0.180	0.192	219	1.92
67	136	0.217	0.192	219	1.92
68	151	0.254	0.193	219	1.93
69	146	0.291	0.193	220	1.93
70	145	0.328	0.193	220	1.93
71	151	0.366	0.194	221	1.94
72	147	0.403	0.194	221	1.94
73	147	0.441	0.195	221	1.95
74	133	0.479	0.196	222	1.96
75	138	0.518	0.196	222	1.96
76	107	0.556	0.197	222	1.97
77	138	0.595	0.198	223	1.98
78	107	0.635	0.199	223	1.99
79	124	0.674	0.200	224	2.00
80	123	0.714	0.201	224	2.01
81	107	0.755	0.202	224	2.02
82	118	0.796	0.203	225	2.03
83	85	0.837	0.204	225	2.04
84	119	0.879	0.205	226	2.05
85	120	0.922	0.207	226	2.07
86	127	0.965	0.208	227	2.08
87	100	1.008	0.210	227	2.10
88	78	1.053	0.212	227	2.12
89	106	1.098	0.214	228	2.14
90	98	1.144	0.216	228	2.16
91	93	1.191	0.218	229	2.18
92	91	1.239	0.220	229	2.20
93	79	1.288	0.222	230	2.22
94	77	1.338	0.225	230	2.25
95	74	1.389	0.228	231	2.28
96	62	1.442	0.231	231	2.31
97	72	1.496	0.234	232	2.34
98	68	1.551	0.237	232	2.37
99	62	1.608	0.241	233	2.41
100	59	1.667	0.245	234	2.45

CONTINUED

137

TABLE 39 (CONT.)
ITBS LEVEL 12 FORM 5 TOTAL READING
ABILITY SUMMARY

22 ITEMS 11108 CASES KR-20= 0.952 EQUATING CONSTANT= 1.688

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
101	43	1.728	0.249	234	2.49
102	69	1.792	0.254	235	2.54
103	42	1.857	0.259	235	2.59
104	46	1.926	0.265	236	2.65
105	35	1.998	0.271	237	2.71
106	44	2.073	0.278	238	2.78
107	27	2.152	0.285	238	2.85
108	34	2.235	0.293	239	2.93
109	18	2.324	0.303	240	3.03
110	18	2.419	0.313	241	3.13
111	13	2.521	0.325	242	3.25
112	11	2.631	0.339	243	3.39
113	9	2.751	0.355	244	3.55
114	11	2.884	0.375	246	3.75
115	5	3.034	0.398	247	3.98
116	1	3.204	0.427	249	4.27
117	1	3.402	0.465	251	4.65
118	C	3.642	0.517	253	5.17
119	3	3.947	0.592	256	5.92
120	C	4.370	0.720	261	7.20
121	C	5.081	1.009	268	10.09

TABLE 40
ITBS LEVEL 12 FORM 6 VOCABULARY
ITEM SUMMARY

46 ITEMS 2178 CASES KR-20= 0.898 EQUATING CONSTANT= 1.283

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,A'B)	SLOPE	MIN SQ. FIT
1	51.65	0.016	0.048	0.448	0.991	1.29
2	71.17	1.011	0.051	0.393	0.986	1.00
3	34.25	-0.854	0.050	0.275	0.536	2.60
4	70.11	0.951	0.051	0.487	1.125	1.93
5	33.33	-0.904	0.050	0.243	0.552	5.38
6	63.64	0.607	0.049	0.583	1.470	4.07
7	67.49	0.809	0.050	0.434	1.036	1.30
8	71.72	1.042	0.052	0.395	0.981	0.84
9	62.03	0.526	0.049	0.593	1.682	4.44
10	61.07	0.477	0.048	0.472	1.061	1.64
11	55.56	0.206	0.048	0.387	1.050	1.26
12	54.91	0.174	0.048	0.486	1.171	0.74
13	42.88	-0.411	0.048	0.475	1.007	1.32
14	50.32	-0.048	0.048	0.444	1.045	1.27
15	59.09	0.379	0.048	0.476	1.114	0.92
16	67.45	0.807	0.050	0.425	0.989	1.14
17	37.10	-0.704	0.049	0.474	1.142	1.34
18	59.04	0.577	0.048	0.456	0.989	1.03
19	48.44	-0.139	0.048	0.411	0.890	1.06
20	60.70	0.459	0.048	0.344	0.712	1.83
21	53.76	0.119	0.048	0.469	1.120	0.81
22	34.48	-0.842	0.050	0.401	0.949	2.68
23	71.26	1.016	0.051	0.559	1.616	3.80
24	65.75	0.717	0.049	0.503	1.411	1.72
25	49.04	-0.110	0.048	0.501	1.147	1.09
26	50.14	-0.057	0.048	0.504	1.173	1.83
27	71.30	1.018	0.051	0.479	1.435	1.77
28	39.53	-0.579	0.049	0.309	0.722	3.13
29	51.65	0.016	0.048	0.389	0.891	1.11
30	56.06	0.230	0.048	0.477	1.013	1.68
31	57.99	0.325	0.048	0.399	0.931	0.80
32	52.07	0.036	0.048	0.380	0.814	1.24
33	30.44	-1.064	0.051	0.164	0.418	6.63
34	51.93	0.030	0.048	0.509	1.367	1.16
35	50.37	-0.046	0.048	0.245	0.473	5.35
36	64.42	0.648	0.049	0.552	1.505	2.87
37	51.24	-0.004	0.048	0.310	0.548	2.78
38	24.70	-1.408	0.054	0.227	0.405	7.11
39	48.39	-0.142	0.048	0.491	1.113	1.43
40	39.39	-0.586	0.049	0.446	1.115	1.35
41	39.35	-0.589	0.049	0.443	1.001	0.96
42	32.46	-0.951	0.051	0.367	0.873	1.67
43	50.96	-0.017	0.048	0.333	0.728	2.17
44	33.01	-0.921	0.050	0.353	0.677	1.90
45	32.64	-0.941	0.051	0.381	0.873	1.14
46	37.65	-0.676	0.049	0.426	0.985	1.10

TABLE 40 (CONT.)
ITBS LEVEL 12 FORM 6 VOCABULARY
ABILITY SUMMARY

46 ITEMS		2178 CASES	KR-20= 0.898	EQUATING CONSTANT= 1.283	
SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCALE SCORE	STD ERR
1	0	-3.994	1.015	173	10.15
2	1	-3.270	0.729	180	7.29
3	1	-2.833	0.604	185	6.04
4	3	-2.514	0.531	188	5.31
5	8	-2.259	0.482	190	4.82
6	13	-2.043	0.447	192	4.47
7	21	-1.856	0.420	194	4.20
8	28	-1.688	0.399	196	3.99
9	33	-1.535	0.383	197	3.83
10	52	-1.394	0.369	199	3.69
11	54	-1.263	0.358	200	3.58
12	74	-1.138	0.348	201	3.48
13	90	-1.020	0.340	203	3.40
14	67	-0.907	0.333	204	3.33
15	75	-0.798	0.328	205	3.28
16	77	-0.692	0.323	206	3.23
17	70	-0.589	0.319	207	3.19
18	76	-0.488	0.316	208	3.16
19	83	-0.389	0.313	209	3.13
20	77	-0.292	0.312	210	3.12
21	78	-0.195	0.310	211	3.10
22	64	-0.099	0.310	212	3.10
23	70	-0.004	0.309	213	3.09
24	73	0.092	0.310	214	3.10
25	72	0.188	0.311	215	3.11
26	66	0.285	0.312	216	3.12
27	62	0.383	0.314	217	3.14
28	59	0.482	0.317	218	3.17
29	74	0.583	0.320	219	3.20
30	60	0.687	0.324	220	3.24
31	59	0.793	0.329	221	3.29
32	69	0.903	0.334	222	3.34
33	75	1.017	0.341	223	3.41
34	51	1.136	0.349	224	3.49
35	66	1.261	0.359	225	3.59
36	60	1.394	0.370	227	3.70
37	48	1.536	0.384	228	3.84
38	37	1.690	0.401	230	4.01
39	34	1.859	0.422	231	4.22
40	28	2.048	0.449	233	4.49
41	25	2.265	0.484	235	4.84
42	19	2.521	0.532	238	5.32
43	12	2.842	0.605	241	6.05
44	11	3.281	0.730	246	7.30
45	3	4.006	1.016	253	10.16

TABLE 41
ITBS LEVEL 12 FORM 6 COMPREHENSION
ITEM SUMMARY

76 ITEMS 2178 CASES KR-20= 0.925 EQUATING CONSTANT= 1.415

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	64.62	2.004	0.062	0.302	0.695	1.60
2	63.77	0.729	0.048	0.307	0.746	1.89
3	38.89	-0.463	0.048	0.118	0.220	5.59
4	52.57	0.190	0.047	0.321	0.637	1.58
5	38.89	-0.463	0.048	0.353	0.771	1.48
6	65.38	0.810	0.049	0.432	1.072	1.16
7	42.29	-0.297	0.047	0.407	0.892	1.28
8	55.74	0.340	0.047	0.395	0.895	0.97
9	55.74	0.340	0.047	0.344	0.747	1.76
10	35.77	-0.619	0.049	0.255	0.456	1.91
11	77.87	1.514	0.055	0.322	0.855	0.95
12	48.35	-0.009	0.047	0.367	0.871	0.95
13	68.87	0.992	0.050	0.430	1.119	1.39
14	37.05	-0.554	0.048	0.345	0.850	1.25
15	74.20	1.289	0.052	0.404	1.112	1.04
16	56.15	0.359	0.047	0.329	0.659	1.73
17	73.74	1.262	0.052	0.501	1.292	2.18
18	78.79	1.574	0.055	0.458	1.290	2.19
19	57.53	0.425	0.047	0.434	1.002	1.01
20	50.18	0.078	0.047	0.366	0.827	0.88
21	56.15	0.359	0.047	0.459	1.130	0.85
22	40.17	-0.399	0.048	0.398	0.894	1.05
23	48.26	-0.013	0.047	0.333	0.651	1.94
24	60.19	0.553	0.047	0.479	1.184	1.29
25	31.36	-0.850	0.050	0.210	0.479	3.77
26	21.35	-1.448	0.050	0.204	0.554	2.70
27	70.98	1.106	0.051	0.381	0.921	1.09
28	62.90	0.686	0.048	0.471	1.079	1.47
29	51.06	0.119	0.047	0.474	1.129	1.14
30	51.93	0.160	0.047	0.442	1.110	0.97
31	43.43	-0.242	0.047	0.450	0.986	1.48
32	68.18	0.955	0.049	0.508	1.417	1.77
33	57.21	0.410	0.047	0.489	1.356	1.10
34	43.76	-0.226	0.047	0.449	1.097	0.90
35	57.53	0.425	0.047	0.479	1.286	1.17
36	51.79	0.153	0.047	0.246	0.413	3.11
37	30.35	-0.905	0.050	0.296	0.680	1.97
38	52.94	0.207	0.047	0.456	1.134	1.12
39	59.92	0.540	0.047	0.483	1.120	1.59
40	50.55	0.095	0.047	0.387	0.965	0.99
41	52.34	0.179	0.047	0.427	1.014	0.67
42	62.95	0.688	0.048	0.453	1.064	1.29
43	49.22	0.032	0.047	0.455	0.962	0.99
44	47.70	-0.039	0.047	0.352	0.748	0.94
45	56.20	0.361	0.047	0.348	0.750	2.01
46	42.01	-0.310	0.047	0.338	0.695	1.47
47	43.62	-0.233	0.047	0.368	0.869	0.99
48	38.15	-0.499	0.048	0.390	1.018	0.81
49	31.22	-0.858	0.050	0.134	0.396	4.38
50	54.73	0.292	0.047	0.579	1.786	2.43

CONT INUED

TABLE 41 (CONT.)
ITBS LEVEL 12 FORM 6 COMPREHENSION
ITEM SUMMARY

76 ITEMS 2778 CASES KR-20= 0.925 EQUATING CONSTANT= 1.415

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,4B)	SLOPE	MN SQ FIT
51	50.46	0.091	0.047	0.367	0.903	0.75
52	43.99	-0.215	0.047	0.412	0.972	1.20
53	35.81	-0.617	0.049	0.397	0.954	0.82
54	28.83	-0.989	0.051	0.321	0.801	2.34
55	43.39	-0.244	0.047	0.395	0.960	1.00
56	41.78	-0.321	0.047	0.495	1.235	1.43
57	32.69	-0.779	0.050	0.331	0.898	1.34
58	37.97	-0.508	0.048	0.460	1.177	1.84
59	47.15	-0.065	0.047	0.419	1.000	0.86
60	35.31	-0.643	0.049	0.402	0.881	1.16
61	49.77	0.058	0.047	0.383	0.943	1.11
62	48.62	0.004	0.047	0.542	1.429	1.81
63	48.16	-0.017	0.047	0.512	1.397	1.38
64	30.35	-0.905	0.050	0.180	0.559	3.79
65	33.84	-0.465	0.048	0.324	0.769	1.16
66	31.77	-0.828	0.050	0.332	0.839	1.03
67	45.27	-0.154	0.047	0.415	0.970	0.96
68	48.54	0.019	0.047	0.532	1.348	1.97
69	24.29	-1.258	0.054	0.270	0.684	1.76
70	46.19	-0.111	0.047	0.497	1.150	1.45
71	43.99	-0.215	0.047	0.461	1.135	1.16
72	30.17	-0.915	0.051	0.237	0.676	2.25
73	29.16	-0.971	0.051	0.246	0.637	2.30
74	49.59	0.050	0.047	0.447	1.096	1.05
75	37.01	-0.556	0.048	0.381	0.920	1.12
76	43.39	-0.244	0.047	0.434	1.077	0.98

TABLE 41 (CONT.)
ITBS LEVEL 12 FORM 6 COMPREHENSION
ABILITY SUMMARY

76 ITEMS		2178 CASES	KR-20= 0.925	EQUATING CONSTANT= 1.415	

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR

1	0	-4.558	1.012	169	10.12
2	0	-3.842	0.723	176	7.23
3	0	-3.413	0.597	180	5.97
4	0	-3.103	0.523	183	5.23
5	2	-2.856	0.472	186	4.72
6	0	-2.651	0.435	188	4.35
7	2	-2.474	0.407	189	4.07
8	2	-2.318	0.385	191	3.85
9	0	-2.177	0.366	192	3.66
10	6	-2.049	0.351	194	3.51
11	7	-1.931	0.337	195	3.37
12	8	-1.821	0.326	196	3.26
13	15	-1.718	0.316	197	3.16
14	13	-1.621	0.308	198	3.08
15	25	-1.528	0.300	199	3.00
16	29	-1.440	0.293	200	2.93
17	51	-1.356	0.287	201	2.87
18	40	-1.275	0.282	201	2.82
19	66	-1.197	0.277	202	2.77
20	42	-1.122	0.272	203	2.72
21	47	-1.049	0.268	204	2.68
22	54	-0.978	0.265	204	2.65
23	51	-0.908	0.262	205	2.62
24	60	-0.841	0.259	206	2.59
25	59	-0.775	0.256	206	2.56
26	49	-0.710	0.254	207	2.54
27	55	-0.646	0.252	208	2.52
28	56	-0.583	0.250	208	2.50
29	57	-0.521	0.248	209	2.48
30	45	-0.460	0.246	210	2.46
31	62	-0.400	0.245	210	2.45
32	50	-0.340	0.244	211	2.44
33	41	-0.281	0.243	211	2.43
34	37	-0.222	0.242	212	2.42
35	43	-0.164	0.242	213	2.42
36	43	-0.106	0.241	213	2.41
37	44	-0.048	0.241	214	2.41
38	54	0.010	0.241	214	2.41
39	55	0.068	0.241	215	2.41
40	44	0.126	0.241	215	2.41
41	32	0.184	0.241	216	2.41
42	34	0.242	0.242	217	2.42
43	32	0.301	0.242	217	2.42
44	48	0.359	0.243	218	2.43
45	45	0.419	0.244	218	2.44
46	47	0.479	0.245	219	2.45
47	47	0.539	0.247	220	2.47
48	31	0.600	0.248	220	2.48
49	57	0.662	0.250	221	2.50
50	42	0.725	0.252	221	2.52

CONTINUED

TABLE 41 (CONT.)
ITBS LEVEL 12 FORM 6 COMPREHENSION
ABILITY SUMMARY

76 ITEMS 2178 CASES KR-20= 0.925 EQUATING CONSTANT= 1.415

SCORE	FREQ	LOG ABILITY	STD. ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	37	0.789	0.254	222	2.54
52	34	0.854	0.257	223	2.57
53	36	0.921	0.259	223	2.59
54	34	0.989	0.263	224	2.63
55	40	1.059	0.266	225	2.66
56	33	1.130	0.270	225	2.70
57	39	1.204	0.274	226	2.74
58	23	1.281	0.279	227	2.79
59	36	1.360	0.284	228	2.84
60	26	1.442	0.290	229	2.90
61	20	1.528	0.297	229	2.97
62	26	1.618	0.304	230	3.04
63	10	1.713	0.313	231	3.13
64	15	1.814	0.322	232	3.22
65	8	1.922	0.334	233	3.34
66	9	2.037	0.347	235	3.47
67	11	2.162	0.362	236	3.62
68	4	2.300	0.380	237	3.80
69	4	2.453	0.403	239	4.03
70	1	2.627	0.431	240	4.31
71	1	2.828	0.468	242	4.68
72	0	3.071	0.519	245	5.19
73	1	3.377	0.593	248	5.93
74	0	3.801	0.720	252	7.20
75	0	4.513	1.009	259	10.09

TABLE 42
ITBS LEVEL 12 FORM 6 TOTAL READING
ITEM SUMMARY

122 ITEMS 2178 CASES KR-20= 0.953 EQUATING CONSTANT= 1.365						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	51.65	0.098	0.047	0.423	0.861	1.33
2	71.17	1.068	0.051	0.386	1.004	0.92
3	34.25	-0.749	0.049	0.255	0.571	2.22
4	70.11	1.010	0.050	0.465	1.152	1.26
5	33.33	-0.797	0.049	0.193	0.456	3.22
6	63.64	0.674	0.048	0.570	1.671	2.02
7	67.49	0.871	0.049	0.407	0.980	1.06
8	71.72	1.099	0.051	0.377	0.918	0.88
9	62.03	0.594	0.048	0.575	1.691	2.10
10	61.07	0.547	0.048	0.450	1.003	1.35
11	55.56	0.282	0.047	0.365	0.907	1.00
12	54.91	0.252	0.047	0.460	1.111	0.88
13	42.88	-0.319	0.047	0.457	1.079	1.06
14	50.32	0.035	0.047	0.418	0.941	0.92
15	59.09	0.451	0.047	0.446	1.106	1.13
16	67.45	0.869	0.049	0.395	0.848	0.88
17	37.10	-0.603	0.048	0.440	1.109	1.16
18	59.04	0.449	0.047	0.424	0.924	0.94
19	48.44	-0.054	0.047	0.386	0.884	1.04
20	60.70	0.529	0.047	0.323	0.722	1.30
21	53.76	0.197	0.047	0.457	1.234	1.05
22	34.48	-0.737	0.049	0.358	0.829	0.89
23	71.26	1.073	0.051	0.574	1.619	2.45
24	65.75	0.781	0.049	0.495	1.254	1.25
25	49.04	-0.026	0.047	0.483	1.258	1.12
26	50.14	0.026	0.047	0.479	1.110	1.10
27	71.30	1.076	0.051	0.466	1.283	1.18
28	39.53	-0.482	0.048	0.266	0.546	1.76
29	51.65	0.098	0.047	0.386	0.810	0.96
30	56.06	0.306	0.047	0.463	1.050	1.13
31	57.99	0.398	0.047	0.361	0.850	0.95
32	52.07	0.117	0.047	0.357	0.843	0.80
33	30.44	-0.953	0.050	0.121	0.303	3.39
34	51.93	0.111	0.047	0.487	1.282	0.88
35	50.37	0.037	0.047	0.224	0.528	2.32
36	64.42	0.713	0.048	0.547	1.542	1.94
37	51.24	0.078	0.047	0.281	0.682	2.06
38	24.70	-1.287	0.053	0.181	0.441	3.08
39	48.39	-0.056	0.047	0.460	1.135	1.10
40	39.39	-0.489	0.048	0.408	0.979	0.88
41	39.35	-0.491	0.048	0.415	0.943	0.77
42	32.46	-0.843	0.050	0.335	0.824	1.29
43	50.90	0.065	0.047	0.319	0.702	1.48
44	33.01	-0.814	0.049	0.334	0.708	0.83
45	32.64	-0.834	0.050	0.345	0.775	0.91
46	37.65	-0.575	0.048	0.395	0.923	0.80
47	84.62	1.956	0.062	0.305	0.830	2.19
48	63.77	0.681	0.048	0.291	0.614	1.53
49	38.89	-0.514	0.048	0.110	0.221	4.31
50	52.57	0.141	0.047	0.310	0.676	1.45

TABLE 42 (CONT.)
 ITBS LEVEL 12 FORM 6 TOTAL READING
 ITEM SUMMARY

122 ITEMS 2178 CASES KR-20= 0.953 EQUATING CONSTANT= 1.365

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
51	38.89	-0.514	0.048	0.365	0.786	1.18
52	65.38	0.762	0.049	0.419	1.005	1.23
53	42.29	-0.347	0.047	0.409	0.996	1.11
54	55.74	0.291	0.047	0.392	0.833	1.15
55	55.74	0.291	0.047	0.333	0.680	1.32
56	35.77	-0.671	0.049	0.252	0.481	2.00
57	77.87	1.467	0.054	0.315	0.785	0.85
58	48.35	-0.058	0.047	0.362	0.759	1.17
59	68.87	0.944	0.050	0.422	1.001	1.23
60	37.05	-0.605	0.048	0.338	0.711	1.27
61	74.20	1.241	0.052	0.392	1.005	0.96
62	56.15	0.310	0.047	0.327	0.711	1.19
63	73.74	1.214	0.052	0.495	1.486	1.67
64	78.79	1.527	0.055	0.450	1.228	1.48
65	57.53	0.376	0.047	0.426	0.961	0.95
66	50.18	0.028	0.047	0.355	0.792	0.97
67	56.15	0.310	0.047	0.457	1.141	0.98
68	40.17	-0.450	0.048	0.393	0.817	1.32
69	48.26	-0.063	0.047	0.316	0.610	1.52
70	60.19	0.505	0.047	0.469	1.190	1.09
71	31.36	-0.903	0.050	0.203	0.452	2.48
72	21.35	-1.504	0.056	0.199	0.511	2.54
73	70.98	1.058	0.050	0.371	0.892	0.95
74	62.90	0.638	0.048	0.460	1.070	1.35
75	51.06	0.070	0.047	0.467	1.041	1.15
76	51.53	0.111	0.047	0.429	1.038	0.92
77	43.43	-0.292	0.047	0.448	1.052	1.40
78	68.18	0.907	0.049	0.501	1.335	1.57
79	57.21	0.361	0.047	0.489	1.258	1.05
80	43.76	-0.277	0.047	0.442	1.066	0.94
81	57.53	0.376	0.047	0.461	1.128	0.99
82	51.79	0.104	0.047	0.224	0.400	2.48
83	30.35	-0.958	0.050	0.305	0.707	1.67
84	52.54	0.158	0.047	0.445	1.087	1.00
85	59.92	0.491	0.047	0.459	1.056	1.22
86	50.55	0.046	0.047	0.370	0.829	0.88
87	52.34	0.130	0.047	0.411	1.016	0.98
88	62.55	0.640	0.048	0.433	1.128	1.38
89	49.22	-0.017	0.047	0.445	1.104	1.25
90	47.70	-0.089	0.047	0.334	0.726	1.19
91	56.20	0.313	0.047	0.321	0.635	1.61
92	42.01	-0.361	0.047	0.326	0.661	1.45
93	43.62	-0.283	0.047	0.380	0.879	1.17
94	36.15	-0.550	0.048	0.385	0.824	1.00
95	31.22	-0.910	0.050	0.128	0.275	3.47
96	54.73	0.243	0.047	0.565	1.648	1.61
97	50.46	0.041	0.047	0.347	0.773	1.04
98	43.99	-0.266	0.047	0.407	0.879	1.00
99	35.81	-0.668	0.049	0.389	0.986	0.83
100	26.83	-1.043	0.051	0.314	0.759	2.09

CONTINUED

TABLE 42 (CONT.)
 ITBS LEVEL 12 FORM 6 TOTAL READING
 ITEM SUMMARY

122 ITEMS	2178 CASES	KR-20=	0.953	EQUATING CONSTANT=	1.365	

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT

101	43.39	-0.294	0.047	0.380	0.880	1.08
102	41.78	-0.372	0.047	0.470	1.087	1.51
103	32.69	-0.831	0.050	0.315	0.660	1.48
104	37.57	-0.559	0.048	0.458	1.194	1.53
105	47.15	-0.115	0.047	0.399	0.943	0.86
106	35.31	-0.694	0.049	0.391	0.895	0.99
107	49.77	0.009	0.047	0.368	0.836	0.99
108	48.62	-0.045	0.047	0.536	1.292	1.34
109	48.16	-0.067	0.047	0.494	1.312	0.93
110	30.35	-0.958	0.050	0.171	0.461	2.76
111	38.84	-0.516	0.048	0.308	0.679	1.29
112	31.77	-0.880	0.050	0.317	0.805	1.30
113	45.27	-0.204	0.047	0.396	0.818	1.07
114	48.94	-0.030	0.047	0.513	1.487	1.38
115	24.29	-1.312	0.054	0.268	0.670	1.75
116	46.19	-0.160	0.047	0.467	1.063	1.09
117	43.99	-0.266	0.047	0.443	1.091	0.86
118	30.17	-0.968	0.051	0.231	0.562	1.93
119	29.16	-1.024	0.051	0.241	0.540	1.78
120	49.59	0.0	0.047	0.434	0.989	1.10
121	37.01	-0.608	0.048	0.378	0.963	0.90
122	43.39	-0.294	0.047	0.423	1.063	1.05

TABLE 42 (CONT.)
ITBS LEVEL 12 FORM 6 TOTAL READING
ABILITY SUMMARY

122 ITEMS 2178 CASES KR-20= 0.953 EQUATING CONSTANT= 1.365

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	0	-5.018	1.007	163	10.07
2	0	-4.312	0.716	171	7.16
3	0	-3.893	0.589	175	5.89
4	0	-3.592	0.513	178	5.13
5	0	-3.356	0.462	180	4.62
6	0	-3.160	0.424	182	4.24
7	0	-2.993	0.395	184	3.95
8	0	-2.846	0.372	185	3.72
9	0	-2.715	0.353	187	3.53
10	0	-2.597	0.337	188	3.37
11	0	-2.488	0.323	189	3.23
12	0	-2.388	0.311	190	3.11
13	0	-2.294	0.301	191	3.01
14	1	-2.207	0.291	192	2.91
15	4	-2.124	0.283	192	2.83
16	0	-2.046	0.276	193	2.76
17	2	-1.972	0.269	194	2.69
18	2	-1.901	0.263	195	2.63
19	3	-1.834	0.258	195	2.58
20	2	-1.769	0.253	196	2.53
21	3	-1.706	0.248	197	2.48
22	11	-1.646	0.244	197	2.44
23	8	-1.587	0.240	198	2.40
24	11	-1.531	0.236	198	2.36
25	15	-1.476	0.233	199	2.33
26	12	-1.423	0.230	199	2.30
27	20	-1.371	0.227	200	2.27
28	24	-1.320	0.224	200	2.24
29	38	-1.270	0.221	201	2.21
30	28	-1.222	0.219	201	2.19
31	34	-1.175	0.217	202	2.17
32	36	-1.128	0.215	202	2.15
33	38	-1.083	0.213	203	2.13
34	29	-1.038	0.211	203	2.11
35	33	-0.994	0.209	204	2.09
36	32	-0.951	0.207	204	2.07
37	33	-0.908	0.206	205	2.06
38	38	-0.866	0.204	205	2.04
39	25	-0.824	0.203	205	2.03
40	31	-0.783	0.202	206	2.02
41	38	-0.743	0.201	206	2.01
42	28	-0.703	0.199	207	1.99
43	34	-0.663	0.198	207	1.98
44	30	-0.624	0.197	207	1.97
45	29	-0.586	0.197	208	1.97
46	29	-0.547	0.196	208	1.96
47	48	-0.509	0.195	209	1.95
48	32	-0.471	0.194	209	1.94
49	31	-0.433	0.194	209	1.94
50	30	-0.396	0.193	210	1.93

TABLE 42 (CONT.)
 ITBS LEVEL 12 FORM 6 TOTAL READING
 ABILITY SUMMARY

122 ITEMS 2178 CASES KR=20= 0.953 EQUATING CONSTANT= 1.365

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	41	-0.359	0.193	210	1.93
52	26	-0.322	0.192	210	1.92
53	24	-0.285	0.192	211	1.92
54	25	-0.249	0.191	211	1.91
55	38	-0.212	0.191	212	1.91
56	23	-0.176	0.191	212	1.91
57	19	-0.140	0.190	212	1.90
58	37	-0.103	0.190	213	1.90
59	24	-0.067	0.190	213	1.90
60	38	-0.031	0.190	213	1.90
61	21	0.005	0.190	214	1.90
62	22	0.041	0.190	214	1.90
63	39	0.077	0.190	214	1.90
64	28	0.113	0.190	215	1.90
65	32	0.149	0.190	215	1.90
66	34	0.186	0.190	216	1.90
67	23	0.222	0.191	216	1.91
68	26	0.258	0.191	216	1.91
69	24	0.295	0.191	217	1.91
70	24	0.331	0.192	217	1.92
71	31	0.368	0.192	217	1.92
72	30	0.405	0.193	218	1.93
73	25	0.442	0.193	218	1.93
74	16	0.480	0.194	218	1.94
75	20	0.517	0.195	219	1.95
76	35	0.555	0.195	219	1.95
77	24	0.594	0.196	220	1.96
78	18	0.632	0.197	220	1.97
79	23	0.671	0.198	220	1.98
80	34	0.711	0.199	221	1.99
81	33	0.750	0.200	221	2.00
82	25	0.790	0.201	222	2.01
83	24	0.831	0.202	222	2.02
84	26	0.872	0.204	222	2.04
85	22	0.914	0.205	223	2.05
86	27	0.956	0.206	223	2.06
87	16	0.999	0.208	224	2.08
88	21	1.043	0.210	224	2.10
89	26	1.087	0.212	225	2.12
90	31	1.132	0.213	225	2.13
91	22	1.178	0.216	225	2.16
92	24	1.225	0.218	226	2.18
93	14	1.273	0.220	226	2.20
94	21	1.322	0.223	227	2.23
95	15	1.372	0.225	227	2.25
96	20	1.424	0.228	228	2.28
97	15	1.476	0.231	228	2.31
98	15	1.531	0.235	229	2.35
99	19	1.587	0.233	230	2.38
100	19	1.644	0.242	230	2.42

TABLE 42 (CONT.)
ITBS LEVEL 12 FORM 6 TOTAL READING
ABILITY SUMMARY

122 ITEMS 2178 CASES KR-20= 0.953 EQUATING CONSTANT= 1.365

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
101	8	1.704	0.247	231	2.47
102	7	1.766	0.251	231	2.51
103	9	1.830	0.256	232	2.56
104	12	1.897	0.262	233	2.62
105	9	1.967	0.268	233	2.68
106	6	2.040	0.274	234	2.74
107	4	2.118	0.282	235	2.82
108	2	2.199	0.290	236	2.90
109	5	2.286	0.299	237	2.99
110	4	2.378	0.309	237	3.09
111	2	2.478	0.321	238	3.21
112	1	2.585	0.335	239	3.35
113	1	2.703	0.351	241	3.51
114	1	2.833	0.370	242	3.70
115	1	2.978	0.394	243	3.94
116	1	3.144	0.423	245	4.23
117	0	3.339	0.460	247	4.60
118	0	3.573	0.512	249	5.12
119	0	3.873	0.587	252	5.87
120	0	4.290	0.715	257	7.15
121	0	4.994	1.005	264	10.05

181

TABLE 43
MAT ELEMENTARY FORM F WORD KNOWLEDGE
ITEM SUMMARY

50 ITEMS 11,150 CASES KR-20= 0.947 EQUATING CONSTANT= -0.780						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB) SLOPE		MN SQ FIT
1	85.25	1.252	0.031	0.244	0.527	26.23
2	93.61	2.387	0.041	0.349	1.030	1.68
3	92.05	2.113	0.038	0.417	1.179	4.69
4	82.18	0.954	0.029	0.501	1.004	2.24
5	90.05	1.817	0.035	0.425	1.192	2.25
6	90.70	1.907	0.036	0.437	1.097	4.63
7	90.18	1.834	0.035	0.428	1.105	2.80
8	85.68	1.297	0.031	0.559	1.698	8.79
9	86.07	1.339	0.031	0.490	1.185	2.89
10	79.34	0.705	0.028	0.599	1.347	6.86
11	86.48	1.383	0.031	0.493	1.116	4.50
12	81.55	0.897	0.028	0.563	1.230	5.50
13	78.96	0.674	0.027	0.563	1.109	3.65
14	80.21	0.779	0.028	0.576	1.314	5.16
15	74.13	0.296	0.026	0.570	1.071	2.00
16	76.97	0.513	0.027	0.590	1.246	4.83
17	81.02	0.850	0.028	0.517	1.038	3.62
18	77.32	0.541	0.027	0.599	1.205	6.31
19	69.57	-0.029	0.025	0.434	0.761	10.04
20	84.16	1.142	0.030	0.562	1.345	8.03
21	73.98	0.285	0.026	0.563	1.135	2.95
22	70.11	0.008	0.025	0.545	1.004	4.39
23	75.25	0.380	0.026	0.539	0.962	1.27
24	60.42	-0.623	0.024	0.433	0.641	13.48
25	71.13	0.079	0.025	0.542	0.979	4.10
26	64.69	-0.354	0.024	0.389	0.662	19.48
27	71.64	0.115	0.025	0.556	0.990	2.55
28	68.59	-0.096	0.025	0.551	1.012	0.85
29	63.70	-0.417	0.024	0.545	0.933	1.04
30	69.96	-0.002	0.025	0.619	1.215	4.22
31	65.53	-0.273	0.024	0.638	1.202	7.18
32	69.00	-0.069	0.025	0.623	1.244	5.12
33	71.21	0.085	0.025	0.643	1.445	9.35
34	59.22	-0.697	0.024	0.592	1.009	3.23
35	62.81	-0.474	0.024	0.390	0.702	21.73
36	59.49	-0.681	0.024	0.591	1.025	5.34
37	63.14	-0.453	0.024	0.618	1.097	4.59
38	66.36	-0.245	0.024	0.659	1.356	9.81
39	56.45	-0.866	0.023	0.590	0.956	6.56
40	56.51	-0.838	0.023	0.609	1.046	9.21
41	56.29	-0.875	0.023	0.605	1.030	7.15
42	53.54	-1.040	0.023	0.558	0.881	4.14
43	49.85	-1.258	0.023	0.553	0.899	12.89
44	33.45	-2.237	0.024	0.250	0.456	56.48
45	45.86	-1.492	0.023	0.503	0.846	8.49
46	48.13	-1.359	0.023	0.598	0.933	7.81
47	41.25	-1.764	0.023	0.483	0.715	8.32
48	33.21	-2.252	0.024	0.376	0.519	35.81
49	29.67	-2.479	0.024	0.461	0.708	11.93
50	25.48	-2.763	0.025	0.319	0.477	34.43

TABLE 43 (CONT.)
 MAT ELEMENTARY FORM F WORD KNOWLEDGE
 ABILITY SUMMARY

50 ITEMS 11150 CASES KR-20= 0.947 EQUATING CONSTANT= -0.780

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	1	-4.497	1.024	147	10.24
2	0	-3.756	0.741	155	7.41
3	6	-3.302	0.618	159	6.18
4	11	-2.966	0.546	163	5.46
5	19	-2.694	0.499	165	4.99
6	25	-2.463	0.464	168	4.64
7	40	-2.260	0.438	170	4.38
8	64	-2.078	0.417	171	4.17
9	61	-1.911	0.401	173	4.01
10	85	-1.756	0.387	175	3.87
11	98	-1.611	0.375	176	3.75
12	145	-1.474	0.366	177	3.66
13	162	-1.343	0.357	179	3.57
14	193	-1.218	0.350	180	3.50
15	179	-1.097	0.345	181	3.45
16	161	-0.980	0.339	182	3.39
17	177	-0.867	0.335	184	3.35
18	186	-0.756	0.331	185	3.31
19	148	-0.647	0.328	186	3.28
20	168	-0.540	0.326	187	3.26
21	164	-0.434	0.324	188	3.24
22	169	-0.330	0.323	189	3.23
23	189	-0.226	0.322	190	3.22
24	184	-0.123	0.321	191	3.21
25	176	-0.020	0.321	192	3.21
26	165	0.083	0.322	193	3.22
27	184	0.187	0.322	194	3.22
28	180	0.291	0.324	195	3.24
29	212	0.397	0.326	196	3.26
30	199	0.504	0.328	197	3.28
31	189	0.612	0.331	198	3.31
32	242	0.723	0.334	199	3.34
33	257	0.836	0.338	201	3.38
34	300	0.952	0.343	202	3.43
35	264	1.072	0.349	203	3.49
36	278	1.196	0.356	204	3.56
37	347	1.325	0.363	205	3.63
38	340	1.460	0.372	207	3.72
39	409	1.602	0.382	208	3.82
40	421	1.753	0.395	210	3.95
41	457	1.914	0.409	211	4.09
42	499	2.088	0.426	213	4.26
43	526	2.279	0.448	215	4.48
44	542	2.491	0.474	217	4.74
45	624	2.732	0.509	220	5.09
46	592	3.015	0.557	222	5.57
47	496	3.364	0.628	226	6.28
48	363	3.832	0.750	231	7.50
49	253	4.568	1.031	238	10.31

TABLE 44
MAT ELEMENTARY FORM F READING (COMPR.)
ITEM SUMMARY

45 ITEMS 11243 CASES KR-20= 0.925 EQUATING CONSTANT= -0.172

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	90.18	2.201	0.033	0.438	1.574	12.43
2	61.17	0.061	0.022	0.260	0.588	37.01
3	85.56	1.703	0.029	0.460	1.266	9.56
4	84.98	1.649	0.029	0.495	1.597	11.69
5	72.49	0.723	0.024	0.450	0.883	2.51
6	88.43	1.995	0.031	0.467	1.595	13.42
7	62.01	0.107	0.022	0.380	0.713	12.67
8	80.12	1.247	0.026	0.540	1.398	12.88
9	78.23	1.107	0.025	0.454	1.030	3.88
10	61.02	0.053	0.022	0.390	0.721	14.12
11	44.45	-0.839	0.022	0.313	0.607	22.19
12	81.82	1.379	0.027	0.453	1.191	3.20
13	41.79	-0.983	0.022	0.458	0.857	8.85
14	78.31	1.113	0.025	0.551	1.567	12.33
15	53.81	-0.338	0.022	0.393	0.726	11.64
16	76.64	0.996	0.025	0.540	1.407	8.29
17	50.44	-0.518	0.022	0.360	0.641	18.79
18	66.52	0.363	0.023	0.568	1.211	5.80
19	59.53	-0.029	0.022	0.564	1.240	5.81
20	46.09	-0.750	0.022	0.397	0.671	16.31
21	68.83	0.498	0.023	0.602	1.546	11.32
22	54.99	-0.275	0.022	0.561	1.138	3.19
23	55.93	-0.224	0.022	0.590	1.226	11.81
24	75.85	0.942	0.025	0.507	1.313	4.30
25	68.20	0.461	0.023	0.585	1.385	8.95
26	58.82	-0.068	0.022	0.538	1.038	3.40
27	46.62	-0.722	0.022	0.500	0.857	2.74
28	49.85	-0.549	0.022	0.489	0.906	1.88
29	46.10	-0.750	0.022	0.471	0.834	8.51
30	59.90	-0.009	0.022	0.607	1.404	11.99
31	37.60	-1.216	0.023	0.460	0.784	15.30
32	67.57	0.424	0.023	0.593	1.472	10.96
33	52.84	-0.390	0.022	0.593	1.207	6.73
34	55.55	-0.245	0.022	0.513	0.987	1.86
35	45.31	-0.792	0.022	0.549	0.978	3.98
36	36.33	-1.287	0.023	0.495	0.921	2.26
37	43.98	-0.864	0.022	0.200	0.494	55.57
38	55.01	-0.274	0.022	0.546	1.174	5.85
39	49.28	-0.580	0.022	0.485	0.896	4.02
40	43.70	-0.879	0.022	0.563	1.073	9.13
41	46.30	-0.739	0.022	0.444	0.724	4.82
42	52.52	-0.407	0.022	0.550	1.132	5.37
43	53.67	-0.346	0.022	0.600	1.317	9.54
44	32.19	-1.529	0.023	0.287	0.508	26.81
45	33.99	-1.422	0.023	0.384	0.666	11.28

153

TABLE 44 (CONT.)
MAT ELEMENTARY FORM F READING (COMPR.)
ABILITY SUMMARY

45 ITEMS 11243 CASES KR=20= 0.925 EQUATING CONSTANT= -0.172

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	1	-4.236	1.026	156	10.26
2	3	-3.491	0.743	163	7.43
3	10	-3.033	0.621	168	6.21
4	16	-2.693	0.549	171	5.49
5	25	-2.418	0.502	174	5.02
6	56	-2.184	0.467	176	4.67
7	69	-1.979	0.441	178	4.41
8	98	-1.793	0.420	180	4.20
9	152	-1.624	0.404	182	4.04
10	215	-1.467	0.390	184	3.90
11	255	-1.320	0.378	185	3.78
12	263	-1.181	0.368	186	3.68
13	307	-1.048	0.360	188	3.60
14	283	-0.921	0.353	189	3.53
15	301	-0.799	0.347	190	3.47
16	297	-0.680	0.342	191	3.42
17	311	-0.565	0.337	193	3.37
18	273	-0.453	0.334	194	3.34
19	337	-0.342	0.331	195	3.31
20	317	-0.234	0.328	196	3.28
21	321	-0.127	0.327	197	3.27
22	316	-0.020	0.326	198	3.26
23	292	0.085	0.325	199	3.25
24	323	0.191	0.325	200	3.25
25	307	0.297	0.326	201	3.26
26	275	0.403	0.327	202	3.27
27	317	0.510	0.329	203	3.29
28	306	0.619	0.331	204	3.31
29	322	0.730	0.334	206	3.34
30	295	0.843	0.338	207	3.38
31	323	0.959	0.344	208	3.44
32	334	1.079	0.350	209	3.50
33	339	1.204	0.357	210	3.57
34	387	1.334	0.366	212	3.66
35	350	1.472	0.377	213	3.77
36	383	1.619	0.390	214	3.90
37	434	1.778	0.407	216	4.07
38	394	1.951	0.427	218	4.27
39	435	2.144	0.453	220	4.53
40	402	2.365	0.488	222	4.88
41	307	2.626	0.536	225	5.36
42	282	2.950	0.608	228	6.08
43	154	3.392	0.732	232	7.32
44	56	4.121	1.017	239	10.17

TABLE 45
 MAT ELEMENTARY FORM F TOTAL READING
 ITEM SUMMARY

95 ITEMS 11264 CASES KR-20= 0.966 EQUATING CONSTANT= -0.492						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	65.39	1.444	0.029	0.235	0.571	9.76
2	93.67	2.516	0.040	0.336	1.179	2.34
3	92.13	2.255	0.037	0.401	1.347	4.73
4	82.35	1.167	0.028	0.483	1.041	2.47
5	90.15	1.974	0.034	0.416	1.348	3.00
6	90.78	2.059	0.035	0.422	1.184	4.80
7	90.27	1.990	0.034	0.412	1.269	3.20
8	85.81	1.486	0.030	0.538	1.846	7.32
9	86.20	1.525	0.030	0.474	1.295	3.37
10	79.54	0.937	0.026	0.578	1.482	6.09
11	66.61	1.567	0.030	0.474	1.213	4.36
12	61.73	1.115	0.027	0.538	1.353	5.21
13	79.16	0.908	0.026	0.542	1.278	3.76
14	80.40	1.006	0.027	0.552	1.433	4.73
15	74.39	0.561	0.025	0.544	1.176	2.55
16	77.19	0.760	0.026	0.571	1.446	4.53
17	81.21	1.071	0.027	0.493	1.129	3.75
18	77.54	0.785	0.026	0.578	1.374	5.54
19	69.87	0.262	0.024	0.417	0.824	3.64
20	64.31	1.342	0.029	0.541	1.596	7.06
21	74.24	0.550	0.025	0.548	1.281	2.56
22	70.40	0.296	0.024	0.538	1.139	2.58
23	75.49	0.637	0.025	0.518	1.116	2.02
24	60.81	-0.285	0.023	0.423	0.729	4.12
25	71.41	0.361	0.024	0.518	0.987	3.36
26	65.04	-0.036	0.023	0.376	0.767	7.80
27	71.92	0.394	0.024	0.531	1.103	2.25
28	68.90	0.200	0.024	0.534	1.088	1.66
29	64.05	-0.095	0.023	0.529	1.024	1.11
30	70.26	0.287	0.024	0.598	1.336	4.02
31	66.26	0.038	0.023	0.621	1.423	5.49
32	69.30	0.226	0.024	0.607	1.369	4.53
33	71.49	0.366	0.024	0.621	1.569	6.90
34	59.62	-0.353	0.023	0.582	1.080	2.67
35	63.17	-0.147	0.023	0.373	0.672	8.42
36	59.89	-0.338	0.023	0.580	1.100	3.78
37	63.50	-0.128	0.023	0.599	1.264	3.31
38	66.69	0.064	0.023	0.645	1.630	7.42
39	56.88	-0.509	0.022	0.580	1.088	3.50
40	57.33	-0.483	0.023	0.592	1.197	4.52
41	56.72	-0.518	0.022	0.595	1.194	4.16
42	54.00	-0.670	0.022	0.543	0.977	2.14
43	50.35	-0.873	0.022	0.547	0.973	5.27
44	34.12	-1.793	0.023	0.249	0.522	20.99
45	46.40	-1.092	0.022	0.493	0.927	2.89
46	48.65	-0.967	0.022	0.592	1.050	4.17
47	41.83	-1.347	0.022	0.476	0.815	3.17
48	33.88	-1.807	0.023	0.370	0.591	12.24
49	30.37	-2.021	0.024	0.461	0.837	4.18
50	26.23	-2.289	0.024	0.321	0.593	12.68

CONTINUED

TABLE 45 (CONT.)
 MAT ELEMENTARY FORM F TOTAL READING
 ITEM SUMMARY

95 ITEMS 11264 CASES KR-20= 0.966 EQUATING CONSTANT= -0.492

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
51	90.19	1.980	0.034	0.440	1.461	4.31
52	61.23	-0.261	0.023	0.240	0.511	24.63
53	85.57	1.462	0.030	0.457	1.162	3.11
54	85.00	1.406	0.029	0.492	1.329	3.40
55	72.53	0.435	0.024	0.434	0.812	2.20
56	88.44	1.766	0.032	0.466	1.417	4.49
57	62.67	-0.212	0.023	0.365	0.591	9.81
58	80.15	0.986	0.027	0.547	1.365	4.38
59	78.26	0.839	0.026	0.437	0.943	1.25
60	61.09	-0.269	0.023	0.392	0.647	10.19
61	44.54	-1.196	0.022	0.292	0.520	18.03
62	81.84	1.124	0.027	0.439	1.011	0.99
63	41.89	-1.344	0.022	0.452	0.748	6.90
64	78.34	0.845	0.026	0.537	1.291	2.91
65	53.89	-0.677	0.022	0.375	0.510	11.15
66	76.68	0.722	0.025	0.542	1.198	2.83
67	50.52	-0.864	0.022	0.340	0.517	15.22
68	66.57	0.057	0.023	0.561	1.115	1.90
69	59.60	-0.355	0.023	0.549	1.040	3.97
70	46.18	-1.104	0.022	0.380	0.574	14.14
71	68.87	0.199	0.024	0.586	1.293	3.82
72	55.67	-0.611	0.022	0.546	0.942	1.82
73	56.00	-0.558	0.022	0.576	1.091	7.64
74	75.89	0.666	0.025	0.491	1.029	1.39
75	68.25	0.160	0.024	0.576	1.220	2.78
76	58.89	-0.395	0.023	0.524	0.865	2.66
77	46.71	-1.075	0.022	0.491	0.828	2.74
78	49.94	-0.896	0.022	0.468	0.707	3.58
79	46.19	-1.104	0.022	0.451	0.737	8.52
80	59.90	-0.334	0.023	0.595	1.145	6.30
81	37.70	-1.582	0.023	0.439	0.686	13.59
82	67.62	0.121	0.024	0.592	1.286	5.07
83	52.92	-0.731	0.022	0.587	1.002	4.60
84	55.63	-0.579	0.022	0.492	0.886	2.36
85	45.40	-1.148	0.022	0.532	0.871	3.38
86	36.44	-1.656	0.023	0.479	0.807	2.70
87	44.08	-1.221	0.022	0.178	0.391	37.52
88	55.09	-0.610	0.022	0.529	1.011	4.87
89	49.37	-0.928	0.022	0.459	0.745	5.19
90	43.79	-1.237	0.022	0.543	0.898	6.13
91	46.40	-1.092	0.022	0.425	0.674	6.11
92	52.60	-0.748	0.022	0.532	1.001	3.89
93	53.75	-0.685	0.022	0.585	1.169	4.96
94	32.31	-1.902	0.023	0.265	0.402	22.22
95	34.11	-1.793	0.023	0.360	0.572	10.91

TABLE 45 (CONT.)
 MAT ELEMENTARY FORM F TOTAL READING
 ABILITY SUMMARY

95 ITEMS 11264 CASES KR-20= 0.966 EQUATING CONSTANT= -0.492					
SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	0	-5.116	1.013	144	10.13
2	0	-4.397	0.725	151	7.25
3	0	-3.966	0.599	155	5.99
4	0	-3.652	0.525	155	5.25
5	0	-3.403	0.475	161	4.75
6	0	-3.195	0.439	163	4.39
7	2	-3.015	0.411	165	4.11
8	2	-2.855	0.388	167	3.88
9	5	-2.712	0.370	168	3.70
10	4	-2.581	0.355	169	3.55
11	5	-2.460	0.342	170	3.42
12	7	-2.347	0.330	172	3.30
13	13	-2.241	0.320	173	3.20
14	17	-2.141	0.312	174	3.12
15	20	-2.046	0.304	175	3.04
16	22	-1.956	0.297	176	2.97
17	31	-1.870	0.291	176	2.91
18	48	-1.786	0.286	177	2.86
19	61	-1.706	0.280	178	2.80
20	50	-1.629	0.276	179	2.76
21	75	-1.554	0.272	180	2.72
22	82	-1.481	0.268	180	2.68
23	83	-1.411	0.264	181	2.64
24	105	-1.342	0.261	182	2.61
25	83	-1.274	0.258	182	2.58
26	122	-1.208	0.255	183	2.55
27	107	-1.144	0.253	184	2.53
28	117	-1.081	0.250	184	2.50
29	129	-1.019	0.248	185	2.48
30	99	-0.957	0.246	186	2.46
31	116	-0.897	0.244	186	2.44
32	101	-0.838	0.243	187	2.43
33	99	-0.780	0.241	187	2.41
34	106	-0.722	0.240	188	2.40
35	125	-0.665	0.238	188	2.38
36	112	-0.608	0.237	189	2.37
37	129	-0.552	0.236	190	2.36
38	106	-0.497	0.235	190	2.35
39	110	-0.442	0.234	191	2.34
40	122	-0.387	0.233	191	2.33
41	121	-0.333	0.233	192	2.33
42	119	-0.279	0.232	192	2.32
43	116	-0.225	0.232	193	2.32
44	116	-0.172	0.231	193	2.31
45	120	-0.118	0.231	194	2.31
46	85	-0.065	0.231	194	2.31
47	124	-0.012	0.230	195	2.30
48	123	0.041	0.230	195	2.30
49	125	0.094	0.230	196	2.30
50	131	0.147	0.230	197	2.30

TABLE 45 (CONT.)
 MAT ELEMENTARY FORM F TOTAL READING
 ABILITY SUMMARY

95 ITEMS 11264 CASES KR-20= 0.966 EQUATING CONSTANT= -0.492					
SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	137	0.200	0.231	197	2.31
52	128	0.253	0.231	198	2.31
53	146	0.307	0.231	198	2.31
54	151	0.360	0.232	199	2.32
55	131	0.414	0.232	199	2.32
56	135	0.468	0.233	200	2.33
57	153	0.522	0.233	200	2.33
58	160	0.577	0.234	201	2.34
59	160	0.632	0.235	201	2.35
60	146	0.688	0.236	202	2.36
61	148	0.744	0.237	203	2.37
62	150	0.800	0.239	203	2.39
63	159	0.858	0.240	204	2.40
64	157	0.916	0.242	204	2.42
65	138	0.975	0.243	205	2.43
66	199	1.034	0.245	205	2.45
67	158	1.095	0.247	206	2.47
68	169	1.157	0.250	207	2.50
69	202	1.220	0.252	207	2.52
70	193	1.284	0.255	208	2.55
71	164	1.349	0.258	209	2.58
72	202	1.417	0.261	209	2.61
73	197	1.485	0.264	210	2.64
74	215	1.556	0.268	211	2.68
75	194	1.629	0.272	211	2.72
76	204	1.704	0.277	212	2.77
77	213	1.782	0.282	213	2.82
78	226	1.865	0.287	214	2.87
79	226	1.947	0.293	215	2.93
80	238	2.035	0.300	215	3.00
81	248	2.127	0.308	216	3.08
82	246	2.224	0.316	217	3.16
83	257	2.327	0.326	218	3.26
84	244	2.437	0.337	219	3.37
85	275	2.556	0.350	221	3.50
86	234	2.684	0.366	222	3.66
87	222	2.824	0.384	223	3.84
88	205	2.980	0.407	225	4.07
89	159	3.157	0.435	227	4.35
90	143	3.362	0.472	229	4.72
91	117	3.608	0.522	231	5.22
92	64	3.918	0.596	234	5.96
93	36	4.346	0.723	239	7.23
94	20	5.061	1.011	246	10.11

TABLE 46
MAT ELEMENTARY FORM G WORD KNOWLEDGE
ITEM SUMMARY

50 ITEMS 1611 CASES KR-20= 0.943 EQUATING CONSTANT= -0.892

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	56.34	2.900	0.136	0.279	0.993	1.02
2	95.41	2.645	0.123	0.309	0.796	1.92
3	54.72	2.485	0.116	0.363	1.164	1.52
4	91.31	1.876	0.095	0.452	1.274	1.56
5	54.23	2.379	0.112	0.329	0.822	1.61
6	91.25	1.867	0.095	0.353	0.869	1.11
7	66.34	1.263	0.081	0.501	1.161	1.18
8	85.54	1.179	0.080	0.489	1.057	1.09
9	61.25	0.778	0.074	0.566	1.258	1.41
10	88.21	1.470	0.085	0.350	0.791	1.46
11	67.65	-0.218	0.065	0.548	0.959	0.78
12	78.21	0.526	0.071	0.566	1.189	1.27
13	77.65	0.482	0.070	0.472	0.867	1.15
14	80.76	0.735	0.073	0.576	1.284	1.51
15	71.26	0.012	0.066	0.518	0.926	0.82
16	61.69	0.816	0.074	0.533	1.270	0.98
17	71.45	0.025	0.066	0.583	1.093	1.64
18	73.00	0.135	0.067	0.501	0.852	0.94
19	80.76	0.735	0.073	0.430	0.846	2.15
20	72.56	0.104	0.067	0.548	0.978	0.90
21	63.12	0.944	0.076	0.553	1.130	1.71
22	75.70	0.647	0.072	0.536	1.123	1.19
23	72.50	0.099	0.067	0.371	0.643	3.68
24	77.78	0.492	0.070	0.584	1.298	1.29
25	74.43	0.238	0.068	0.574	1.232	1.19
26	63.63	-0.491	0.063	0.424	0.685	2.61
27	70.76	-0.022	0.066	0.487	0.780	1.68
28	65.55	-0.368	0.064	0.609	1.021	1.53
29	75.79	0.339	0.069	0.632	1.377	2.10
30	68.59	-0.169	0.065	0.645	1.286	1.55
31	55.59	-0.741	0.062	0.575	0.948	0.68
32	62.07	-0.588	0.063	0.669	1.166	2.08
33	61.76	-0.607	0.063	0.615	1.028	1.82
34	54.61	-1.029	0.061	0.517	0.787	1.35
35	64.87	-0.412	0.063	0.534	0.897	1.28
36	63.50	-0.499	0.063	0.620	1.018	2.00
37	64.12	-0.459	0.063	0.623	1.160	1.58
38	56.86	-0.907	0.062	0.615	0.978	1.81
39	65.36	-0.380	0.064	0.548	0.945	1.34
40	55.68	-0.977	0.061	0.523	0.707	2.91
41	57.60	-0.862	0.062	0.572	0.906	1.74
42	55.93	-0.962	0.061	0.523	0.780	2.61
43	48.51	-1.376	0.061	0.524	0.825	2.49
44	47.80	-1.442	0.061	0.585	0.959	2.64
45	54.00	-1.077	0.061	0.574	0.928	0.82
46	32.40	-2.361	0.063	0.412	0.624	3.67
47	42.58	-1.747	0.061	0.402	0.580	3.25
48	34.70	-2.219	0.062	0.359	0.445	12.80
49	30.97	-2.451	0.063	0.366	0.483	4.85
50	25.64	-2.805	0.066	0.284	0.356	10.15

TABLE 46 (CONT.)
 MAT ELEMENTARY FORM G WORD KNOWLEDGE
 ABILITY SUMMARY

50 ITEMS		1611 CASES	KR-20= 0.943	EQUATING CONSTANT= -0.892	

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR

1	0	-4.689	1.035	144	10.35
2	0	-3.926	0.755	152	7.55
3	0	-3.451	0.634	157	6.34
4	0	-3.096	0.563	160	5.63
5	2	-2.806	0.516	163	5.16
6	2	-2.559	0.481	165	4.81
7	3	-2.341	0.454	168	4.54
8	1	-2.145	0.433	170	4.33
9	7	-1.965	0.415	171	4.15
10	10	-1.799	0.401	173	4.01
11	10	-1.643	0.388	175	3.88
12	10	-1.497	0.378	176	3.78
13	17	-1.358	0.369	178	3.69
14	28	-1.225	0.361	179	3.61
15	22	-1.098	0.354	180	3.54
16	32	-0.975	0.348	181	3.48
17	24	-0.856	0.343	183	3.43
18	32	-0.740	0.339	184	3.39
19	29	-0.626	0.335	185	3.35
20	34	-0.516	0.332	186	3.32
21	35	-0.406	0.329	187	3.29
22	27	-0.299	0.327	188	3.27
23	27	-0.192	0.326	189	3.26
24	30	-0.087	0.325	190	3.25
25	27	0.018	0.324	191	3.24
26	29	0.124	0.324	192	3.24
27	28	0.229	0.325	193	3.25
28	23	0.334	0.326	194	3.26
29	32	0.441	0.327	195	3.27
30	30	0.548	0.329	197	3.29
31	37	0.658	0.332	198	3.32
32	32	0.769	0.335	199	3.35
33	45	0.882	0.339	200	3.39
34	28	0.998	0.343	201	3.43
35	23	1.118	0.349	202	3.49
36	36	1.242	0.355	203	3.55
37	39	1.371	0.363	205	3.63
38	54	1.505	0.371	206	3.71
39	50	1.647	0.382	208	3.82
40	60	1.797	0.394	209	3.94
41	62	1.957	0.408	211	4.08
42	80	2.130	0.425	212	4.25
43	95	2.320	0.447	214	4.47
44	80	2.531	0.473	216	4.73
45	90	2.771	0.508	219	5.08
46	92	3.053	0.556	222	5.56
47	76	3.400	0.628	225	6.28
48	55	3.866	0.749	230	7.49
49	26	4.622	1.031	237	10.31

TABLE 47
 MAT ELEMENTARY FORM G READING (COMPR.)
 ITEM SUMMARY

45 ITEMS		1618 CASES		KR-20= 0.916 EQUATING CONSTANT= -0.199		
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	84.67	1.612	0.074	0.405	1.157	1.26
2	90.36	2.204	0.088	0.377	0.909	3.14
3	86.84	1.814	0.078	0.487	1.608	3.03
4	85.91	1.725	0.076	0.471	1.372	2.56
5	65.08	0.303	0.059	0.407	0.814	1.11
6	47.96	-0.601	0.057	0.443	0.793	1.46
7	59.77	0.014	0.058	0.512	1.022	1.24
8	57.60	-0.100	0.058	0.394	0.834	2.67
9	62.73	0.174	0.058	0.457	0.984	1.23
10	71.32	0.063	0.062	0.416	0.909	1.02
11	66.69	0.393	0.060	0.414	0.814	1.88
12	60.14	0.034	0.058	0.523	1.066	0.96
13	71.45	0.670	0.062	0.448	0.989	0.75
14	66.93	0.407	0.060	0.433	0.759	2.87
15	35.41	-1.272	0.059	0.316	0.593	3.53
16	70.52	0.614	0.061	0.551	1.200	2.47
17	73.24	0.780	0.063	0.436	0.922	0.90
18	80.16	1.249	0.068	0.567	1.892	4.02
19	61.37	0.100	0.058	0.550	1.343	2.02
20	74.97	0.850	0.064	0.573	1.720	2.73
21	76.21	0.971	0.065	0.523	1.341	2.02
22	61.12	0.087	0.058	0.432	0.832	1.11
23	76.76	1.008	0.065	0.525	1.371	2.03
24	54.33	-0.271	0.057	0.392	0.837	2.19
25	50.68	-0.460	0.057	0.442	0.873	1.53
26	54.70	-0.252	0.057	0.456	0.883	1.31
27	67.68	0.449	0.060	0.598	1.554	2.58
28	62.11	0.140	0.058	0.562	1.077	2.14
29	49.38	-0.527	0.057	0.402	0.763	1.51
30	53.89	-0.293	0.057	0.379	0.779	2.35
31	51.67	-0.409	0.057	0.473	0.899	1.02
32	34.61	-1.317	0.060	0.366	0.639	3.52
33	52.66	-0.357	0.057	0.541	1.085	0.83
34	53.77	-0.300	0.057	0.512	0.984	1.19
35	54.39	-0.268	0.057	0.562	1.200	1.83
36	39.00	-1.074	0.058	0.404	0.780	1.62
37	61.37	0.100	0.058	0.452	0.826	1.80
38	26.33	-1.817	0.064	0.336	0.653	6.54
39	51.55	-0.415	0.057	0.562	1.162	3.31
40	42.21	-0.902	0.058	0.555	1.079	2.55
41	36.16	-1.231	0.059	0.284	0.454	5.45
42	39.99	-1.021	0.058	0.457	0.844	1.73
43	27.63	-1.734	0.063	0.309	0.545	5.47
44	42.40	-0.892	0.058	0.445	0.842	1.78
45	42.40	-0.892	0.058	0.453	0.856	2.67

161

TABLE 47 (CONT.)
 MAT ELEMENTARY FORM G READING (COMPR.)
 ABILITY SUMMARY

45 ITEMS 1618 CASES KR-20= 0.916 EQUATING CONSTANT= -0.199

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	0	-4.202	1.025	156	10.25
2	0	-3.459	0.741	163	7.41
3	0	-3.004	0.618	168	6.18
4	1	-2.668	0.547	171	5.47
5	3	-2.396	0.499	174	4.99
6	8	-2.166	0.464	176	4.64
7	9	-1.963	0.437	178	4.37
8	8	-1.781	0.416	180	4.16
9	21	-1.615	0.400	182	4.00
10	30	-1.461	0.386	183	3.86
11	31	-1.317	0.374	185	3.74
12	42	-1.181	0.364	186	3.64
13	50	-1.051	0.356	188	3.56
14	33	-0.927	0.349	189	3.49
15	44	-0.807	0.344	190	3.44
16	42	-0.691	0.339	191	3.39
17	51	-0.578	0.335	192	3.35
18	42	-0.467	0.331	193	3.31
19	35	-0.358	0.329	194	3.29
20	46	-0.251	0.327	196	3.27
21	49	-0.145	0.325	197	3.25
22	40	-0.040	0.325	198	3.25
23	60	0.066	0.324	199	3.24
24	36	0.171	0.325	200	3.25
25	46	0.276	0.326	201	3.26
26	59	0.383	0.327	202	3.27
27	56	0.491	0.329	203	3.29
28	50	0.600	0.332	204	3.32
29	54	0.712	0.336	205	3.36
30	53	0.826	0.341	206	3.41
31	49	0.943	0.346	207	3.46
32	52	1.065	0.352	209	3.52
33	50	1.192	0.360	210	3.60
34	70	1.325	0.369	211	3.69
35	50	1.465	0.381	213	3.81
36	52	1.615	0.394	214	3.94
37	47	1.771	0.411	216	4.11
38	57	1.954	0.431	218	4.31
39	52	2.150	0.457	220	4.57
40	50	2.375	0.492	222	4.92
41	30	2.640	0.540	224	5.40
42	26	2.909	0.612	228	6.12
43	19	3.416	0.736	232	7.36
44	15	4.150	1.020	240	10.20

TABLE 48
MAT ELEMENTARY FORM G TOTAL READING
ITEM SUMMARY

95 ITEMS	1619 CASES	KR-20= 0.962	EQUATING CONSTANT= -0.564			

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I, AB)	SLOPE	MN SQ FIT

1	96.36	3.053	0.135	0.256	1.000	0.67
2	55.43	2.804	0.122	0.293	0.795	1.30
3	94.75	2.648	0.115	0.344	1.320	1.10
4	91.35	2.064	0.093	0.423	1.133	1.34
5	94.26	2.540	0.110	0.320	0.925	1.18
6	91.29	2.055	0.093	0.336	0.954	0.92
7	86.41	1.484	0.079	0.481	1.288	1.22
8	65.61	1.406	0.077	0.466	1.324	1.06
9	81.35	1.033	0.071	0.547	1.502	1.37
10	88.26	1.679	0.083	0.336	0.841	1.29
11	68.00	0.121	0.061	0.525	1.052	1.02
12	78.32	0.800	0.068	0.537	1.221	1.22
13	77.76	0.760	0.067	0.449	0.974	1.07
14	80.85	0.993	0.070	0.556	1.369	1.50
15	71.40	0.331	0.063	0.500	1.083	0.66
16	81.78	1.068	0.071	0.500	1.298	1.00
17	71.59	0.343	0.063	0.566	1.284	1.37
18	73.13	0.442	0.064	0.491	1.005	1.11
19	80.85	0.993	0.070	0.413	0.858	1.09
20	72.70	0.414	0.064	0.533	1.164	1.02
21	83.20	1.187	0.073	0.532	1.399	1.34
22	79.80	0.912	0.069	0.511	1.072	1.14
23	72.64	0.410	0.063	0.354	0.654	1.94
24	77.89	0.769	0.067	0.564	1.364	1.58
25	74.55	0.536	0.065	0.552	1.266	0.96
26	63.80	-0.126	0.060	0.399	0.684	1.49
27	70.91	0.300	0.063	0.455	0.756	1.36
28	65.72	-0.015	0.060	0.579	1.279	1.08
29	75.91	0.629	0.066	0.603	1.683	1.78
30	68.75	0.166	0.062	0.625	1.502	1.59
31	59.79	-0.353	0.059	0.547	1.040	1.05
32	62.26	-0.214	0.059	0.641	1.388	1.72
33	61.95	-0.231	0.059	0.593	1.180	1.35
34	55.03	-0.614	0.058	0.491	0.842	1.02
35	65.04	-0.054	0.060	0.511	0.981	0.90
36	63.68	-0.133	0.060	0.607	1.284	1.41
37	64.30	-0.097	0.060	0.599	1.279	1.25
38	57.07	-0.503	0.058	0.588	1.036	1.51
39	65.53	-0.025	0.060	0.515	0.995	1.24
40	55.90	-0.567	0.058	0.517	0.914	1.14
41	57.81	-0.462	0.059	0.556	1.082	1.51
42	56.15	-0.554	0.058	0.503	0.919	1.17
43	49.17	-0.931	0.058	0.512	0.899	1.44
44	48.05	-0.991	0.058	0.568	1.034	1.09
45	54.23	-0.658	0.058	0.544	1.010	0.70
46	32.74	-1.843	0.061	0.398	0.662	1.96
47	42.87	-1.272	0.058	0.369	0.584	2.44
48	35.02	-1.710	0.060	0.339	0.439	4.47
49	31.32	-1.928	0.061	0.351	0.560	2.39
50	26.00	-2.262	0.064	0.266	0.411	4.06

CONTINUED

TABLE 48 (CONT.)
 MAT ELEMENTARY FORM G TOTAL READING
 ITEM SUMMARY

95 ITEMS 1619 CASES KR-20= 0.962 EQUATING CONSTANT= -0.564

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
51	84.68	1.319	0.075	0.401	1.119	0.87
52	90.36	1.930	0.089	0.399	1.198	1.22
53	86.64	1.528	0.079	0.485	1.364	1.32
54	85.92	1.435	0.078	0.470	1.216	1.28
55	65.10	-0.051	0.060	0.388	0.724	1.89
56	47.99	-0.994	0.058	0.410	0.719	1.87
57	59.79	-0.353	0.059	0.511	0.963	1.15
58	57.63	-0.472	0.059	0.364	0.619	2.79
59	62.75	-0.186	0.060	0.440	0.770	1.55
60	71.34	0.327	0.063	0.394	0.746	1.56
61	66.71	0.044	0.061	0.406	0.761	1.35
62	60.16	-0.332	0.059	0.505	0.924	0.68
63	71.46	0.335	0.063	0.461	0.869	1.26
64	66.55	0.058	0.061	0.417	0.758	1.72
65	35.45	-1.685	0.060	0.284	0.464	3.59
66	70.54	0.277	0.062	0.568	1.160	1.26
67	73.26	0.450	0.064	0.421	0.821	0.70
68	80.17	0.940	0.069	0.552	1.421	1.40
69	61.40	-0.263	0.059	0.541	1.080	1.12
70	74.98	0.565	0.065	0.562	1.344	1.06
71	76.22	0.650	0.066	0.494	1.087	1.19
72	61.15	-0.277	0.059	0.402	0.693	1.85
73	76.78	0.689	0.066	0.536	1.247	1.16
74	54.35	-0.651	0.058	0.349	0.568	2.48
75	50.71	-0.848	0.058	0.424	0.757	1.21
76	54.73	-0.631	0.058	0.419	0.713	1.79
77	67.70	0.103	0.061	0.614	1.384	1.48
78	62.14	-0.221	0.059	0.578	1.257	1.47
79	49.41	-0.918	0.058	0.369	0.610	2.30
80	53.92	-0.674	0.058	0.343	0.577	2.41
81	51.70	-0.795	0.058	0.454	0.815	1.38
82	34.65	-1.731	0.060	0.337	0.457	3.82
83	52.69	-0.741	0.058	0.517	0.894	0.97
84	53.80	-0.681	0.058	0.489	0.927	1.27
85	54.42	-0.648	0.058	0.561	1.032	1.80
86	39.04	-1.483	0.059	0.300	0.594	2.57
87	61.40	-0.263	0.059	0.472	0.827	1.07
88	26.37	-2.237	0.064	0.294	0.409	4.98
89	51.58	-0.801	0.058	0.546	0.942	1.80
90	42.25	-1.305	0.058	0.539	1.011	1.73
91	36.20	-1.642	0.060	0.257	0.352	4.75
92	40.02	-1.428	0.059	0.437	0.781	1.51
93	27.67	-2.153	0.063	0.270	0.454	5.64
94	42.43	-1.295	0.058	0.430	0.748	1.90
95	42.43	-1.295	0.058	0.423	0.758	2.35

TABLE 48 (CONT.)
 MAT ELEMENTARY FORM G TOTAL READING
 ABILITY SUMMARY

95 ITEMS		1619 CASES		KR-20= 0.962		EQUATING CONSTANT= -0.564	
SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR		
1	0	-5.238	1.019	142	10.19		
2	0	-4.507	0.733	149	7.33		
3	0	-4.065	0.608	154	6.08		
4	0	-3.742	0.535	157	5.35		
5	0	-3.483	0.485	160	4.85		
6	0	-3.267	0.448	162	4.48		
7	0	-3.079	0.420	164	4.20		
8	0	-2.912	0.397	165	3.97		
9	0	-2.762	0.379	167	3.79		
10	1	-2.625	0.363	168	3.63		
11	0	-2.498	0.349	169	3.49		
12	1	-2.381	0.338	171	3.38		
13	0	-2.270	0.327	172	3.27		
14	0	-2.166	0.318	173	3.18		
15	4	-2.067	0.310	174	3.10		
16	0	-1.973	0.303	175	3.03		
17	1	-1.884	0.296	176	2.96		
18	2	-1.798	0.291	176	2.91		
19	4	-1.715	0.285	177	2.85		
20	6	-1.635	0.280	178	2.80		
21	5	-1.558	0.276	179	2.76		
22	6	-1.483	0.271	180	2.71		
23	10	-1.411	0.268	180	2.68		
24	10	-1.340	0.264	181	2.64		
25	14	-1.271	0.261	182	2.61		
26	19	-1.204	0.258	182	2.58		
27	17	-1.138	0.255	183	2.55		
28	17	-1.074	0.252	184	2.52		
29	20	-1.011	0.250	184	2.50		
30	14	-0.949	0.248	185	2.48		
31	20	-0.888	0.246	185	2.46		
32	21	-0.828	0.244	186	2.44		
33	21	-0.769	0.242	187	2.42		
34	20	-0.711	0.241	187	2.41		
35	15	-0.654	0.239	188	2.39		
36	21	-0.597	0.238	188	2.38		
37	20	-0.541	0.237	189	2.37		
38	11	-0.485	0.236	190	2.36		
39	22	-0.430	0.235	190	2.35		
40	20	-0.375	0.234	191	2.34		
41	12	-0.321	0.233	191	2.33		
42	16	-0.267	0.232	192	2.32		
43	17	-0.213	0.232	192	2.32		
44	19	-0.159	0.231	193	2.31		
45	21	-0.106	0.231	193	2.31		
46	21	-0.053	0.230	194	2.30		
47	19	0.0	0.230	194	2.30		
48	20	0.053	0.230	195	2.30		
49	19	0.106	0.230	195	2.30		
50	16	0.159	0.230	196	2.30		

CONTINUED

165

TABLE 48 (CONT.)
MAT ELEMENTARY FORM G TOTAL READING
ABILITY SUMMARY

95 ITEMS 1619 CASES KR-20= 0.962 EQUATING CONSTANT= -0.564

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	15	0.212	0.230	196	2.30
52	20	0.265	0.231	197	2.31
53	12	0.318	0.231	198	2.31
54	21	0.372	0.232	198	2.32
55	20	0.425	0.232	199	2.32
56	21	0.479	0.233	199	2.33
57	19	0.534	0.233	200	2.33
58	21	0.588	0.234	200	2.34
59	20	0.644	0.235	201	2.35
60	23	0.699	0.236	201	2.36
61	19	0.755	0.238	202	2.38
62	26	0.812	0.239	202	2.39
63	27	0.869	0.240	203	2.40
64	28	0.928	0.242	204	2.42
65	34	0.987	0.244	204	2.44
66	22	1.047	0.246	205	2.46
67	24	1.107	0.248	205	2.48
68	29	1.169	0.250	206	2.50
69	26	1.233	0.253	207	2.53
70	30	1.297	0.255	207	2.55
71	22	1.363	0.258	208	2.58
72	32	1.431	0.262	209	2.62
73	36	1.500	0.265	209	2.65
74	35	1.571	0.269	210	2.69
75	32	1.645	0.273	211	2.73
76	38	1.720	0.278	212	2.78
77	28	1.799	0.283	212	2.83
78	40	1.880	0.288	213	2.88
79	41	1.965	0.295	214	2.95
80	27	2.054	0.301	215	3.01
81	33	2.147	0.309	216	3.09
82	31	2.245	0.318	217	3.18
83	40	2.349	0.328	218	3.28
84	32	2.460	0.339	219	3.39
85	36	2.579	0.352	220	3.52
86	27	2.709	0.368	221	3.68
87	30	2.850	0.386	223	3.86
88	22	3.008	0.408	224	4.08
89	18	3.186	0.437	226	4.37
90	12	3.392	0.473	228	4.73
91	10	3.639	0.523	231	5.23
92	14	3.950	0.598	234	5.98
93	4	4.380	0.724	238	7.24
94	0	5.096	1.012	245	10.12

TABLE 49
MAT INTERMEDIATE FORM F WORD KNOWLEDGE
ITEM SUMMARY

50 ITEMS 22367 CASES KR-20= 0.930 EQUATING CONSTANT= 0.606

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MIN SQ FIT
1	87.07	1.757	0.022	0.450	1.147	13.70
2	87.87	1.842	0.022	0.361	0.987	4.11
3	54.22	2.750	0.030	0.318	1.147	5.84
4	87.04	1.755	0.022	0.458	1.383	14.41
5	81.75	1.272	0.019	0.428	0.879	17.45
6	90.42	2.145	0.024	0.417	1.304	14.82
7	77.51	0.950	0.018	0.448	1.047	1.47
8	87.49	1.801	0.022	0.431	1.128	12.19
9	36.76	-1.399	0.016	0.369	0.642	23.60
10	77.50	0.949	0.018	0.472	1.106	4.86
11	79.90	1.126	0.019	0.461	1.124	3.87
12	75.43	0.805	0.018	0.415	0.758	4.45
13	75.86	0.834	0.018	0.540	1.398	12.71
14	70.04	0.457	0.017	0.484	0.954	2.35
15	78.84	1.046	0.018	0.363	0.803	9.72
16	74.46	0.739	0.017	0.518	1.370	7.12
17	67.63	0.311	0.016	0.437	0.966	4.11
18	70.11	0.461	0.017	0.564	1.292	12.74
19	69.92	0.450	0.017	0.595	1.446	21.48
20	52.75	-0.520	0.016	0.387	0.634	21.76
21	63.05	0.046	0.016	0.604	1.299	21.95
22	74.24	0.725	0.017	0.529	1.110	10.01
23	70.27	0.471	0.017	0.394	0.753	7.79
24	70.95	0.513	0.017	0.360	0.768	13.01
25	63.96	0.097	0.016	0.494	1.060	3.06
26	52.71	-0.522	0.016	0.471	0.884	3.52
27	66.59	0.250	0.016	0.528	1.024	6.94
28	68.57	0.367	0.017	0.611	1.672	26.04
29	60.53	-0.096	0.016	0.507	1.001	4.02
30	35.91	-1.447	0.016	0.354	0.632	36.57
31	70.67	0.496	0.017	0.545	1.230	9.21
32	56.55	-0.314	0.016	0.543	1.098	3.55
33	60.10	-0.120	0.016	0.490	0.824	3.81
34	53.94	-0.456	0.016	0.438	0.837	6.97
35	46.14	-0.877	0.016	0.542	1.068	5.01
36	46.33	-0.866	0.016	0.436	0.893	19.99
37	55.26	-0.384	0.016	0.481	0.991	3.80
38	41.19	-1.148	0.016	0.475	0.980	20.40
39	50.36	-0.649	0.016	0.588	1.262	9.87
40	39.75	-1.229	0.016	0.505	0.887	5.02
41	48.00	-0.776	0.016	0.565	1.107	12.76
42	44.61	-0.960	0.016	0.485	0.878	5.59
43	31.26	-1.726	0.017	0.379	0.667	17.31
44	49.23	-0.710	0.016	0.584	1.278	12.57
45	34.80	-1.512	0.016	0.459	0.835	9.30
46	34.39	-1.536	0.016	0.430	0.769	10.91
47	36.46	-1.416	0.016	0.491	0.985	9.51
48	25.63	-2.091	0.018	0.395	0.702	16.34
49	34.85	-1.510	0.016	0.371	0.641	27.03
50	24.76	-2.151	0.018	0.422	0.710	25.24

TABLE 49 (CONT.)
 MAT INTERMEDIATE FORM F WORD KNOWLEDGE
 ABILITY SUMMARY

50 ITEMS 22367 CASES KR-20= 0.930 EQUATING CONSTANT= 0.606

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	5	-4.523	1.028	161	10.28
2	4	-3.774	0.745	168	7.45
3	9	-3.314	0.622	173	6.22
4	20	-2.972	0.551	176	5.51
5	26	-2.696	0.503	179	5.03
6	46	-2.461	0.468	181	4.68
7	82	-2.255	0.441	184	4.41
8	82	-2.070	0.420	185	4.20
9	152	-1.900	0.403	187	4.03
10	208	-1.743	0.389	189	3.89
11	274	-1.596	0.378	190	3.78
12	299	-1.457	0.368	191	3.68
13	367	-1.325	0.360	193	3.60
14	379	-1.198	0.353	194	3.53
15	437	-1.076	0.346	195	3.46
16	512	-0.958	0.341	196	3.41
17	503	-0.843	0.327	198	3.37
18	472	-0.731	0.333	199	3.33
19	496	-0.621	0.330	200	3.30
20	472	-0.515	0.327	201	3.27
21	552	-0.407	0.325	202	3.25
22	528	-0.302	0.324	203	3.24
23	525	-0.197	0.323	204	3.23
24	546	-0.093	0.322	205	3.22
25	552	0.010	0.322	206	3.22
26	619	0.114	0.322	207	3.22
27	573	0.218	0.322	208	3.22
28	581	0.322	0.323	209	3.23
29	710	0.427	0.325	210	3.25
30	644	0.533	0.327	211	3.27
31	637	0.641	0.329	212	3.29
32	662	0.750	0.332	214	3.32
33	705	0.861	0.335	215	3.35
34	700	0.975	0.340	216	3.40
35	737	1.092	0.344	217	3.44
36	704	1.212	0.350	218	3.50
37	717	1.337	0.357	219	3.57
38	763	1.468	0.365	221	3.65
39	739	1.604	0.374	222	3.74
40	587	1.748	0.385	224	3.85
41	655	1.901	0.399	225	3.99
42	615	2.057	0.415	227	4.15
43	600	2.247	0.430	229	4.35
44	583	2.488	0.461	231	4.61
45	582	2.676	0.496	233	4.96
46	495	2.944	0.532	235	5.43
47	429	3.277	0.615	239	6.15
48	367	3.727	0.739	243	7.38
49	230	4.404	1.022	251	10.22

TABLE 50
 MAT INTERMEDIATE FORM F READING (COMPR.)
 ITEM SUMMARY

45 ITEMS 22436 CASES KR-20= 0.916 EQUATING CONSTANT= 0.802						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MA. SQ FIT
1	84.10	1.651	0.020	0.419	1.105	6.45
2	64.58	1.693	0.020	0.447	1.211	11.68
3	55.28	-0.134	0.015	0.346	0.657	22.25
4	41.89	-0.833	0.016	0.414	0.774	14.76
5	66.25	0.455	0.016	0.445	0.888	1.60
6	80.76	1.382	0.018	0.459	1.092	9.78
7	84.31	1.669	0.020	0.468	1.047	19.41
8	72.90	0.847	0.017	0.538	1.283	16.30
9	63.15	0.284	0.016	0.422	0.890	5.42
10	74.18	0.927	0.017	0.485	1.063	7.46
11	71.84	0.782	0.017	0.511	1.241	8.14
12	38.92	-0.992	0.016	0.353	0.550	29.24
13	59.89	0.108	0.016	0.355	0.660	18.93
14	80.26	1.344	0.018	0.538	1.507	30.93
15	63.02	1.560	0.019	0.509	1.557	26.43
16	78.88	1.243	0.018	0.465	1.056	9.86
17	53.57	-0.202	0.015	0.409	0.749	9.53
18	43.09	-0.769	0.015	0.473	0.869	9.68
19	76.19	1.058	0.017	0.591	1.784	40.77
20	65.51	0.436	0.016	0.545	1.265	12.22
21	71.30	0.749	0.017	0.534	1.213	12.60
22	53.37	-0.234	0.015	0.448	0.847	3.55
23	66.71	0.481	0.016	0.515	1.181	5.43
24	60.04	0.116	0.016	0.511	1.277	3.46
25	37.93	-1.046	0.016	0.281	0.614	49.32
26	58.55	0.058	0.016	0.561	1.227	9.36
27	46.13	-0.609	0.015	0.414	0.856	15.85
28	75.35	1.003	0.017	0.530	1.446	15.79
29	60.40	0.136	0.016	0.556	1.220	12.20
30	41.44	-0.857	0.016	0.412	0.872	15.92
31	38.26	-1.028	0.016	0.292	0.563	43.07
32	50.16	-0.400	0.015	0.490	1.038	6.47
33	57.43	-0.021	0.015	0.585	1.348	15.84
34	37.55	-1.067	0.016	0.518	1.040	11.63
35	29.92	-1.506	0.017	0.299	0.649	40.12
36	37.81	-1.053	0.016	0.353	0.647	24.45
37	50.22	-0.397	0.015	0.599	1.361	21.42
38	47.04	-0.562	0.015	0.507	1.034	12.65
39	56.53	-0.069	0.015	0.562	1.265	13.84
40	34.59	-1.232	0.016	0.416	0.839	17.65
41	32.18	-1.371	0.016	0.380	0.764	27.93
42	39.50	-0.960	0.016	0.381	0.777	15.99
43	27.81	-1.636	0.017	0.300	0.619	63.33
44	55.84	-0.105	0.015	0.553	1.263	11.61
45	40.70	-0.896	0.016	0.517	1.071	8.08

150

169

TABLE 50 (CONT.)
MAT INTERMEDIATE FORM F READING (COMPR.)
ABILITY SUMMARY

45 ITEMS 22436 CASES KR-20= 0.916 EQUATING CONSTANT= 0.802

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	2	-4.203	1.021	166	10.21
2	11	-3.467	0.738	173	7.38
3	13	-3.017	0.615	178	6.15
4	30	-2.684	0.543	181	5.43
5	51	-2.416	0.496	184	4.96
6	83	-2.187	0.462	186	4.62
7	140	-1.986	0.436	188	4.36
8	227	-1.806	0.416	190	4.16
9	318	-1.640	0.399	192	3.99
10	413	-1.486	0.386	193	3.86
11	473	-1.341	0.375	195	3.75
12	581	-1.204	0.366	196	3.66
13	636	-1.073	0.358	197	3.58
14	630	-0.947	0.352	199	3.52
15	636	-0.825	0.346	200	3.46
16	634	-0.707	0.342	201	3.42
17	624	-0.592	0.338	202	3.38
18	656	-0.478	0.335	203	3.35
19	638	-0.367	0.332	204	3.32
20	675	-0.258	0.330	205	3.30
21	621	-0.149	0.329	207	3.29
22	673	-0.041	0.328	208	3.28
23	698	0.067	0.328	209	3.28
24	660	0.174	0.328	210	3.28
25	751	0.282	0.329	211	3.29
26	718	0.391	0.330	212	3.30
27	733	0.501	0.333	213	3.33
28	722	0.612	0.335	214	3.35
29	729	0.726	0.339	215	3.39
30	687	0.842	0.343	216	3.43
31	739	0.961	0.348	218	3.48
32	708	1.084	0.354	219	3.54
33	701	1.212	0.361	220	3.61
34	726	1.345	0.370	221	3.70
35	689	1.487	0.381	223	3.81
36	706	1.637	0.394	224	3.94
37	701	1.798	0.410	226	4.10
38	663	1.975	0.431	228	4.31
39	666	2.171	0.457	230	4.57
40	551	2.395	0.491	232	4.91
41	452	2.658	0.539	235	5.39
42	356	2.986	0.611	238	6.11
43	226	3.431	0.734	242	7.34
44	89	4.162	1.019	250	10.19

TABLE 51
 MAT INTERMEDIATE FORM F TOTAL READING
 ITEM SUMMARY

95 ITEMS 22458 CASES KR-20= 0.959 EQUATING CONSTANT= 0.699						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	87.12	1.461	0.019	0.434	1.379	11.35
2	87.91	1.533	0.020	0.350	1.088	7.34
3	94.24	2.335	0.025	0.305	1.276	6.51
4	87.09	1.459	0.019	0.446	1.619	12.02
5	81.81	1.058	0.018	0.414	0.943	11.62
6	90.46	1.795	0.021	0.403	1.564	11.96
7	77.60	0.799	0.017	0.441	1.149	4.57
8	87.53	1.498	0.019	0.421	1.311	11.76
9	37.01	-0.957	0.015	0.365	0.750	10.27
10	77.59	0.798	0.017	0.462	1.275	6.08
11	79.98	0.940	0.017	0.454	1.286	6.80
12	75.53	0.685	0.016	0.402	0.907	4.23
13	75.95	0.707	0.017	0.533	1.618	12.10
14	70.15	0.415	0.016	0.477	1.153	3.95
15	78.92	0.876	0.017	0.352	0.839	5.84
16	74.56	0.633	0.016	0.511	1.523	7.78
17	67.75	0.304	0.016	0.421	1.041	2.56
18	70.22	0.419	0.016	0.555	1.457	11.28
19	70.04	0.410	0.016	0.584	1.693	15.27
20	52.94	-0.314	0.015	0.378	0.732	7.27
21	63.20	0.105	0.015	0.592	1.503	14.17
22	74.34	0.622	0.016	0.518	1.333	9.69
23	70.39	0.426	0.016	0.381	0.827	3.66
24	71.06	0.458	0.016	0.346	0.838	5.18
25	64.10	0.143	0.015	0.484	1.093	2.80
26	52.90	-0.316	0.015	0.459	0.992	1.17
27	66.72	0.258	0.016	0.519	1.180	6.25
28	68.69	0.347	0.016	0.602	1.977	18.00
29	60.68	-0.001	0.015	0.495	1.069	2.84
30	36.17	-0.992	0.015	0.334	0.744	15.46
31	70.79	0.445	0.016	0.533	1.421	8.64
32	56.72	-0.163	0.015	0.528	1.220	3.35
33	60.25	-0.019	0.015	0.475	0.929	2.45
34	54.12	-0.267	0.015	0.422	0.949	1.89
35	46.35	-0.575	0.015	0.532	1.219	4.99
36	46.54	-0.567	0.015	0.420	0.983	6.15
37	55.44	-0.214	0.015	0.466	1.146	1.64
38	41.42	-0.773	0.015	0.458	1.117	12.23
39	50.55	-0.409	0.015	0.577	1.394	7.92
40	39.99	-0.832	0.015	0.488	1.032	4.54
41	48.21	-0.501	0.015	0.555	1.164	8.75
42	44.83	-0.636	0.015	0.476	1.018	3.44
43	21.53	-1.198	0.016	0.370	0.778	9.22
44	49.43	-0.453	0.015	0.571	1.462	8.51
45	35.06	-1.040	0.015	0.445	0.916	6.19
46	34.66	-1.058	0.015	0.415	0.819	6.97
47	36.71	-0.969	0.015	0.476	1.084	7.39
48	25.93	-1.469	0.016	0.377	0.807	11.13
49	35.11	-1.038	0.015	0.351	0.704	12.16
50	25.06	-1.515	0.016	0.418	0.842	13.99

TABLE 51 (CONT.)
 MAT INTERMEDIATE FORM F TOTAL READING
 ITEM SUMMARY

95 ITEMS 22458 CASES KR-20= 0.959 EQUATING CONSTANT= 0.699

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
51	84.11	1.218	0.018	0.405	1.247	6.14
52	84.59	1.255	0.018	0.441	1.306	9.05
53	55.32	-0.219	0.015	0.345	0.667	9.65
54	41.94	-0.752	0.015	0.399	0.699	9.48
55	66.27	0.238	0.016	0.421	0.894	1.69
56	80.78	0.990	0.017	0.445	1.089	7.76
57	84.32	1.234	0.018	0.457	1.253	11.56
58	72.92	0.550	0.016	0.525	1.301	9.85
59	63.18	0.104	0.015	0.404	0.868	3.63
60	74.20	0.615	0.016	0.472	1.183	5.54
61	71.87	0.498	0.016	0.496	1.259	5.29
62	38.97	-0.874	0.015	0.346	0.561	13.99
63	59.93	-0.032	0.015	0.324	0.583	11.07
64	80.28	0.959	0.017	0.515	1.392	14.58
65	83.03	1.141	0.018	0.487	1.600	12.64
66	78.89	0.874	0.017	0.442	1.074	6.42
67	54.01	-0.271	0.015	0.392	0.678	7.04
68	43.14	-0.704	0.015	0.474	0.898	6.79
69	76.21	0.722	0.017	0.578	1.735	20.87
70	65.54	0.223	0.016	0.529	1.280	6.57
71	71.32	0.471	0.016	0.513	1.296	6.86
72	53.41	-0.295	0.015	0.428	0.842	2.08
73	66.73	0.258	0.016	0.495	1.158	3.43
74	60.08	-0.026	0.015	0.488	1.187	1.82
75	37.99	-0.915	0.015	0.257	0.509	25.60
76	58.99	-0.071	0.015	0.547	1.245	5.54
77	46.18	-0.582	0.015	0.412	0.926	8.59
78	75.37	0.676	0.016	0.501	1.388	7.36
79	60.44	-0.011	0.015	0.545	1.216	7.70
80	41.49	-0.771	0.015	0.391	0.792	8.45
81	38.32	-0.901	0.015	0.260	0.438	26.52
82	50.20	-0.422	0.015	0.472	1.084	4.00
83	57.47	-0.132	0.015	0.559	1.279	6.92
84	37.60	-0.931	0.015	0.502	1.036	8.39
85	29.58	-1.270	0.016	0.279	0.581	21.18
86	37.87	-0.920	0.015	0.334	0.677	13.93
87	50.27	-0.420	0.015	0.570	1.330	9.30
88	47.08	-0.546	0.015	0.489	1.039	6.04
89	56.57	-0.169	0.015	0.541	1.126	6.84
90	34.65	-1.058	0.015	0.400	0.714	11.73
91	32.24	-1.165	0.016	0.362	0.745	16.20
92	35.56	-0.850	0.015	0.358	0.703	9.27
93	27.87	-1.371	0.016	0.286	0.559	28.65
94	55.88	-0.197	0.015	0.530	1.413	4.97
95	40.76	-0.801	0.015	0.500	0.973	5.24

TABLE 51 (CONT.)
 MAT INTERMEDIATE FORM F TOTAL READING
 ABILITY SUMMARY

95 ITEMS		22458 CASES	KR-20= 0.959	EQUATING CONSTANT= 0.699	
SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	2	-4.895	1.011	158	10.11
2	0	-4.181	0.722	165	7.22
3	0	-3.754	0.595	169	5.95
4	0	-3.446	0.520	173	5.20
5	2	-3.202	0.470	175	4.70
6	1	-2.999	0.433	177	4.33
7	1	-2.824	0.404	179	4.04
8	5	-2.670	0.381	180	3.81
9	9	-2.532	0.363	182	3.63
10	7	-2.406	0.347	183	3.47
11	12	-2.290	0.334	184	3.34
12	14	-2.183	0.322	185	3.22
13	20	-2.082	0.312	186	3.12
14	18	-1.987	0.303	187	3.03
15	41	-1.898	0.296	188	2.96
16	41	-1.813	0.289	189	2.89
17	69	-1.731	0.282	190	2.82
18	74	-1.653	0.277	190	2.77
19	95	-1.578	0.271	191	2.71
20	113	-1.506	0.267	192	2.67
21	136	-1.436	0.262	193	2.62
22	180	-1.368	0.258	193	2.58
23	197	-1.302	0.255	194	2.55
24	209	-1.238	0.252	195	2.52
25	228	-1.176	0.248	195	2.48
26	269	-1.115	0.246	196	2.46
27	294	-1.055	0.243	196	2.43
28	278	-0.996	0.241	197	2.41
29	284	-0.939	0.239	198	2.39
30	280	-0.883	0.237	198	2.37
31	278	-0.827	0.235	199	2.35
32	294	-0.773	0.233	199	2.33
33	315	-0.719	0.231	200	2.31
34	281	-0.665	0.230	200	2.30
35	312	-0.613	0.229	201	2.29
36	278	-0.561	0.227	201	2.27
37	288	-0.509	0.226	202	2.26
38	278	-0.458	0.225	202	2.25
39	288	-0.408	0.224	203	2.24
40	287	-0.358	0.224	203	2.24
41	301	-0.308	0.223	204	2.23
42	295	-0.258	0.222	204	2.22
43	299	-0.209	0.222	205	2.22
44	290	-0.160	0.222	205	2.22
45	289	-0.111	0.221	206	2.21
46	344	-0.062	0.221	206	2.21
47	311	-0.013	0.221	207	2.21
48	317	0.036	0.221	207	2.21
49	314	0.084	0.221	208	2.21
50	334	0.133	0.221	208	2.21

173

TABLE 51 (CONT.)
 MAT INTERMEDIATE FORM F TOTAL READING
 ABILITY SUMMARY

95 ITEMS 22458 CASES KR=20= 0.959 EQUATING CONSTANT= 0.699

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	381	0.182	0.221	209	2.21
52	330	0.231	0.221	209	2.21
53	338	0.280	0.222	210	2.22
54	356	0.329	0.222	210	2.22
55	346	0.379	0.223	211	2.23
56	357	0.429	0.223	211	2.23
57	346	0.479	0.224	212	2.24
58	374	0.529	0.225	212	2.25
59	344	0.580	0.226	213	2.26
60	371	0.632	0.227	213	2.27
61	374	0.683	0.228	214	2.28
62	366	0.736	0.230	214	2.30
63	376	0.789	0.231	215	2.31
64	362	0.843	0.233	215	2.33
65	362	0.897	0.235	216	2.35
66	408	0.953	0.236	217	2.36
67	366	1.009	0.238	217	2.38
68	370	1.067	0.241	218	2.41
69	366	1.125	0.243	218	2.43
70	375	1.185	0.246	219	2.46
71	400	1.246	0.249	219	2.49
72	353	1.309	0.252	220	2.52
73	332	1.373	0.256	221	2.56
74	347	1.440	0.259	221	2.59
75	362	1.508	0.264	222	2.64
76	354	1.578	0.268	223	2.68
77	345	1.652	0.273	224	2.73
78	342	1.728	0.279	224	2.79
79	339	1.807	0.285	225	2.85
80	333	1.890	0.292	226	2.92
81	316	1.978	0.300	227	3.00
82	309	2.070	0.308	228	3.08
83	322	2.168	0.318	229	3.18
84	292	2.273	0.330	230	3.30
85	257	2.386	0.343	231	3.43
86	270	2.509	0.359	232	3.59
87	247	2.645	0.377	233	3.77
88	212	2.796	0.400	235	4.00
89	186	2.967	0.429	237	4.29
90	150	3.166	0.466	239	4.66
91	107	3.466	0.517	241	5.17
92	88	3.711	0.592	244	5.92
93	45	4.133	0.719	248	7.19
94	10	4.842	1.008	255	10.08

TABLE 52
 MAT INTERMEDIATE FORM G WORD KNOWLEDGE
 ITEM SUMMARY

50 ITEMS 3250 CASES KR-20= 0.923 EQUATING CONSTANT= 0.580						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MIN SQ FIT
1	89.60	2.082	0.061	0.385	0.914	3.31
2	91.20	2.290	0.065	0.366	1.207	1.20
3	87.72	1.868	0.057	0.469	1.406	3.08
4	93.60	2.670	0.074	0.368	1.605	2.61
5	88.68	1.974	0.059	0.463	1.570	3.63
6	87.29	1.823	0.057	0.439	1.220	2.15
7	89.48	2.067	0.061	0.381	1.023	1.84
8	76.25	0.911	0.046	0.410	0.817	1.59
9	70.83	0.560	0.044	0.399	0.710	1.67
10	62.80	0.094	0.042	0.444	0.738	1.36
11	70.52	0.566	0.044	0.541	1.201	2.38
12	41.60	-1.035	0.041	0.483	0.795	3.07
13	73.66	0.739	0.045	0.604	1.540	5.04
14	79.38	1.135	0.048	0.510	1.286	2.59
15	70.58	0.545	0.044	0.450	0.948	1.50
16	72.71	0.678	0.044	0.488	0.987	2.14
17	68.12	0.398	0.043	0.576	1.330	3.14
18	68.86	0.442	0.043	0.483	1.044	0.81
19	66.83	0.322	0.043	0.495	1.030	0.88
20	74.60	0.765	0.045	0.557	1.356	2.82
21	67.57	0.389	0.043	0.564	1.312	2.17
22	54.06	-0.377	0.041	0.510	1.095	1.54
23	70.89	0.564	0.044	0.546	1.237	2.32
24	64.46	0.187	0.042	0.450	0.779	0.96
25	48.57	-0.613	0.041	0.368	0.681	3.72
26	75.28	0.852	0.046	0.470	1.103	1.53
27	57.60	-0.189	0.041	0.374	0.634	3.81
28	63.51	0.134	0.042	0.540	1.188	1.31
29	25.08	-2.009	0.046	0.299	0.542	10.41
30	62.09	0.055	0.042	0.473	1.010	1.09
31	71.29	0.589	0.044	0.485	0.985	0.79
32	60.34	-0.041	0.041	0.536	1.102	1.53
33	59.23	-0.101	0.041	0.435	0.831	2.38
34	58.46	-0.142	0.041	0.534	1.127	1.33
35	41.54	-1.039	0.041	0.294	0.548	7.30
36	54.74	-0.341	0.041	0.452	0.754	1.97
37	53.82	-0.390	0.041	0.456	0.789	1.46
38	57.08	-0.217	0.041	0.578	1.215	2.96
39	49.32	-0.626	0.041	0.467	0.944	1.57
40	26.37	-1.924	0.045	0.303	0.524	6.29
41	46.65	-0.767	0.041	0.475	1.021	2.22
42	39.94	-1.125	0.041	0.435	0.841	1.95
43	42.37	-0.994	0.041	0.443	0.894	2.79
44	37.78	-1.244	0.042	0.470	0.869	1.86
45	34.65	-1.420	0.042	0.502	1.065	1.41
46	42.46	-0.989	0.041	0.408	0.760	2.36
47	19.78	-2.392	0.049	0.401	0.808	2.24
48	28.83	-1.767	0.044	0.435	0.873	2.88
49	26.80	-1.896	0.045	0.435	0.734	3.62
50	12.43	-3.062	0.058	0.145	0.349	13.21

TABLE 52 (CONT.)
 MAT INTERMEDIATE FORM G WORD KNOWLEDGE
 ABILITY SUMMARY

50 ITEMS 3250 CASES KR-20= 0.923 EQUATING CONSTANT= 0.580

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL SCALE SCORE	REFERENCE SCALE STD ERR
1	0	-4.591	1.029	160	10.29
2	1	-3.840	0.747	167	7.47
3	0	-3.378	0.625	172	6.25
4	2	-3.033	0.554	175	5.54
5	6	-2.753	0.506	178	5.06
6	10	-2.515	0.472	181	4.72
7	8	-2.305	0.445	183	4.45
8	11	-2.116	0.425	185	4.25
9	25	-1.944	0.408	186	4.08
10	28	-1.783	0.393	188	3.93
11	46	-1.633	0.382	189	3.82
12	36	-1.492	0.371	191	3.71
13	56	-1.357	0.363	192	3.63
14	60	-1.228	0.355	194	3.55
15	64	-1.104	0.349	195	3.49
16	64	-0.984	0.344	196	3.44
17	64	-0.868	0.339	197	3.39
18	70	-0.755	0.335	198	3.35
19	67	-0.643	0.332	199	3.32
20	82	-0.534	0.329	200	3.29
21	87	-0.427	0.327	202	3.27
22	74	-0.321	0.325	203	3.25
23	87	-0.215	0.324	204	3.24
24	82	-0.110	0.324	205	3.24
25	78	-0.006	0.323	206	3.23
26	89	0.099	0.324	207	3.24
27	103	0.204	0.324	208	3.24
28	103	0.309	0.326	209	3.26
29	98	0.416	0.328	210	3.28
30	95	0.524	0.330	211	3.30
31	114	0.633	0.333	212	3.33
32	94	0.745	0.336	213	3.36
33	100	0.859	0.340	214	3.40
34	136	0.976	0.345	216	3.45
35	105	1.097	0.350	217	3.50
36	130	1.222	0.357	218	3.57
37	93	1.352	0.364	219	3.64
38	106	1.487	0.373	221	3.73
39	122	1.630	0.383	222	3.83
40	125	1.781	0.395	224	3.95
41	100	1.943	0.409	225	4.09
42	82	2.117	0.427	227	4.27
43	74	2.308	0.448	229	4.48
44	78	2.520	0.475	231	4.75
45	59	2.762	0.510	233	5.10
46	46	3.045	0.558	236	5.58
47	48	3.395	0.630	240	6.30
48	29	3.865	0.752	244	7.52
49	13	4.625	1.034	252	10.34

TABLE 53
 MAT-INTERMEDIATE FORM G READING (COMPR.)
 ITEM SUMMARY

45 ITEMS 3237 CASES KR-20= 0.923 EQUATING CONSTANT= 0.762

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	65.77	0.459	0.042	0.383	0.763	2.08
2	73.40	0.904	0.044	0.428	0.883	1.10
3	58.42	0.062	0.041	0.371	0.683	3.69
4	88.64	2.034	0.057	0.368	1.116	2.24
5	63.02	0.308	0.041	0.483	0.950	1.04
6	77.88	1.194	0.046	0.437	1.149	1.45
7	62.06	0.257	0.041	0.442	0.933	1.56
8	60.70	0.184	0.041	0.460	0.873	1.50
9	72.41	0.843	0.044	0.447	1.021	1.45
10	32.44	-1.347	0.043	0.486	0.800	1.99
11	75.10	1.010	0.045	0.503	1.278	3.34
12	59.99	0.146	0.041	0.347	0.547	5.18
13	66.84	1.913	0.055	0.430	1.464	3.89
14	74.92	0.999	0.045	0.471	1.171	1.81
15	53.72	-0.184	0.041	0.494	0.863	1.19
16	58.67	-0.061	0.041	0.352	0.691	5.35
17	58.63	-0.074	0.041	0.358	0.638	4.32
18	61.20	0.210	0.041	0.449	0.943	1.02
19	72.54	0.851	0.044	0.411	0.946	0.85
20	60.92	0.195	0.041	0.483	1.009	0.74
21	64.69	0.399	0.042	0.449	0.947	1.22
22	57.63	-0.011	0.041	0.496	1.064	0.94
23	43.16	-0.741	0.041	0.418	0.748	2.28
24	43.87	-0.703	0.041	0.400	0.713	2.94
25	45.63	-0.609	0.041	0.497	0.910	1.62
26	42.42	-0.781	0.041	0.458	0.917	1.89
27	43.93	-0.700	0.041	0.240	0.380	13.02
28	41.37	-0.838	0.041	0.503	1.022	1.46
29	67.32	0.545	0.042	0.530	1.410	1.81
30	62.34	0.272	0.041	0.506	1.122	1.23
31	45.75	-0.602	0.041	0.302	0.548	7.41
32	60.09	0.151	0.041	0.585	1.496	3.11
33	43.96	-0.698	0.041	0.561	1.110	1.77
34	39.76	-0.926	0.042	0.549	1.005	1.62
35	44.21	-0.685	0.041	0.574	1.061	2.40
36	51.82	-0.294	0.041	0.617	1.466	4.61
37	54.90	-0.123	0.041	0.591	1.391	2.70
38	46.74	-0.550	0.041	0.490	0.924	1.51
39	55.33	-0.100	0.041	0.544	1.183	1.75
40	47.95	-0.486	0.041	0.532	1.057	1.08
41	59.50	0.120	0.041	0.544	1.329	1.90
42	35.34	-1.176	0.043	0.539	1.067	3.88
43	47.61	-0.504	0.041	0.560	1.168	2.26
44	49.80	-0.386	0.041	0.539	1.142	1.45
45	45.35	-0.624	0.041	0.499	1.044	1.62

TABLE 53 (CONT.)
 MAT INTERMEDIATE FORM G READING (COMPR.)
 ABILITY SUMMARY

45 ITEMS		3237 CASES	KR-20= 0.923	EQUATING CONSTANT= 0.762	
SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	0	-4.082	1.023	167	10.23
2	2	-3.343	0.738	174	7.38
3	1	-2.893	0.614	179	6.14
4	2	-2.562	0.542	182	5.42
5	6	-2.295	0.493	185	4.93
6	19	-2.070	0.458	187	4.58
7	20	-1.873	0.431	189	4.31
8	36	-1.697	0.410	191	4.10
9	40	-1.530	0.392	192	3.92
10	58	-1.388	0.378	194	3.78
11	82	-1.249	0.367	195	3.67
12	103	-1.119	0.357	196	3.57
13	77	-0.994	0.348	198	3.48
14	102	-0.876	0.341	199	3.41
15	105	-0.761	0.335	200	3.35
16	127	-0.650	0.330	201	3.30
17	110	-0.543	0.326	202	3.26
18	100	-0.438	0.323	203	3.23
19	110	-0.334	0.320	204	3.20
20	100	-0.233	0.318	205	3.18
21	93	-0.132	0.317	206	3.17
22	100	-0.032	0.316	207	3.16
23	91	0.068	0.315	208	3.15
24	102	0.167	0.316	209	3.16
25	57	0.267	0.317	210	3.17
26	76	0.368	0.318	211	3.18
27	71	0.470	0.320	212	3.20
28	66	0.573	0.323	213	3.23
29	87	0.679	0.327	214	3.27
30	97	0.787	0.331	215	3.31
31	55	0.898	0.337	217	3.37
32	81	1.014	0.343	218	3.43
33	74	1.134	0.351	219	3.51
34	90	1.260	0.360	220	3.60
35	85	1.394	0.371	222	3.71
36	93	1.537	0.385	223	3.85
37	83	1.691	0.402	225	4.02
38	108	1.861	0.422	226	4.22
39	98	2.050	0.449	228	4.49
40	82	2.267	0.484	230	4.84
41	89	2.523	0.532	233	5.32
42	76	2.844	0.605	236	6.05
43	64	3.282	0.730	240	7.30
44	35	4.007	1.016	248	10.16

TABLE 54
 MAT INTERMEDIATE FORM G TOTAL READING
 ITEM SUMMARY

95 ITEMS	3252 CASES	KR-20= 0.958	EQUATING CONSTANT= 0.666			

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT

1	89.61	2.117	0.060	0.362	1.011	1.67
2	91.21	2.319	0.064	0.344	1.222	1.19
3	87.73	1.909	0.056	0.434	1.172	2.41
4	93.60	2.690	0.074	0.339	1.653	1.62
5	88.68	2.011	0.058	0.428	1.489	2.25
6	87.30	1.865	0.056	0.415	1.288	1.76
7	89.48	2.102	0.060	0.346	0.863	1.93
8	76.26	0.981	0.045	0.391	0.815	1.62
9	70.85	0.642	0.043	0.381	0.760	1.57
10	62.82	0.188	0.041	0.424	0.737	1.08
11	70.54	0.647	0.043	0.524	1.204	1.78
12	41.64	-0.928	0.041	0.492	0.935	1.64
13	73.68	0.815	0.044	0.571	1.605	2.87
14	79.40	1.198	0.047	0.484	1.363	1.86
15	70.60	0.627	0.043	0.436	0.981	1.09
16	72.72	0.756	0.044	0.471	0.980	1.26
17	68.14	0.484	0.042	0.553	1.410	1.82
18	68.88	0.526	0.042	0.461	1.046	0.81
19	66.85	0.410	0.042	0.476	1.089	1.19
20	74.08	0.840	0.044	0.529	1.546	1.79
21	67.59	0.475	0.042	0.537	1.233	1.38
22	54.09	-0.275	0.040	0.492	0.975	1.26
23	70.91	0.646	0.043	0.520	1.266	1.63
24	64.48	0.278	0.041	0.426	0.821	1.01
25	49.60	-0.508	0.040	0.352	0.662	2.45
26	75.40	0.925	0.045	0.459	1.137	0.94
27	57.63	-0.090	0.040	0.358	0.637	2.42
28	63.53	0.226	0.041	0.519	1.222	0.89
29	25.12	-1.902	0.046	0.290	0.608	7.10
30	62.12	0.149	0.041	0.456	0.968	0.73
31	71.31	0.670	0.043	0.470	1.054	1.06
32	60.36	0.055	0.041	0.506	1.052	1.12
33	59.26	-0.004	0.041	0.414	0.837	1.16
34	58.49	-0.044	0.040	0.517	1.148	1.24
35	41.57	-0.931	0.041	0.270	0.490	4.79
36	54.77	-0.239	0.040	0.438	0.717	1.73
37	53.84	-0.287	0.040	0.436	0.857	1.27
38	57.10	-0.117	0.040	0.561	1.229	1.34
39	49.35	-0.521	0.040	0.451	0.851	1.25
40	26.41	-1.816	0.045	0.292	0.543	3.66
41	46.68	-0.660	0.040	0.457	0.931	1.58
42	39.58	-1.017	0.041	0.415	0.816	1.58
43	42.40	-0.886	0.041	0.443	0.859	1.47
44	37.82	-1.135	0.041	0.452	0.919	1.27
45	34.69	-1.312	0.042	0.505	0.991	1.12
46	42.50	-0.801	0.041	0.392	0.726	1.87
47	19.83	-2.285	0.049	0.402	0.773	1.66
48	28.87	-1.659	0.044	0.429	0.809	1.58
49	26.85	-1.788	0.045	0.429	0.844	2.14
50	12.48	-2.956	0.058	0.130	0.337	7.65

CONTINUED

TABLE 54 (CONT.)
 MAT INTERMEDIATE FORM G TOTAL READING
 ITEM SUMMARY

95 ITEMS 3252 CASES KR-20= 0.958 EQUATING CONSTANT= 0.656

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION		MN SQ FIT
				R(I,AB)	SLOPE	
51	65.93	0.358	0.042	0.367	0.731	1.54
52	73.52	0.805	0.044	0.428	0.898	1.00
53	58.61	-0.038	0.040	0.367	0.609	2.47
54	88.10	1.948	0.057	0.370	1.000	1.57
55	63.19	0.208	0.041	0.478	0.954	1.13
56	77.98	1.098	0.046	0.449	1.108	1.39
57	62.24	0.156	0.041	0.431	0.887	1.07
58	60.89	0.083	0.041	0.455	0.907	1.52
59	72.54	0.744	0.044	0.441	1.019	1.23
60	32.75	-1.424	0.043	0.474	0.733	1.97
61	75.22	0.913	0.045	0.506	1.258	1.80
62	60.18	0.045	0.041	0.336	0.577	3.03
63	86.90	1.825	0.055	0.425	1.245	1.69
64	75.03	0.901	0.045	0.472	1.188	1.11
65	53.94	-0.283	0.040	0.495	0.965	0.98
66	56.27	-0.161	0.040	0.338	0.588	3.49
67	58.83	-0.026	0.041	0.349	0.653	2.54
68	61.38	0.110	0.041	0.438	0.776	1.39
69	72.66	0.752	0.044	0.384	0.879	1.16
70	61.10	0.095	0.041	0.476	0.948	0.99
71	64.85	0.299	0.041	0.431	0.942	0.97
72	57.23	-0.111	0.040	0.476	1.002	0.82
73	42.42	-0.832	0.041	0.404	0.697	2.05
74	44.13	-0.795	0.041	0.390	0.705	2.19
75	45.88	-0.702	0.040	0.479	0.852	1.32
76	42.68	-0.872	0.041	0.445	0.837	1.68
77	44.19	-0.792	0.041	0.216	0.430	7.30
78	41.64	-0.928	0.041	0.475	0.859	1.37
79	67.47	0.445	0.042	0.517	1.250	1.38
80	62.52	0.171	0.041	0.502	1.046	1.36
81	46.00	-0.696	0.040	0.286	0.471	4.91
82	60.27	0.050	0.041	0.570	1.370	1.91
83	44.22	-0.790	0.041	0.543	1.144	1.50
84	40.04	-1.014	0.041	0.517	1.028	1.96
85	44.46	-0.777	0.040	0.549	1.064	1.80
86	51.85	-0.391	0.040	0.594	1.265	2.58
87	55.10	-0.222	0.040	0.567	1.311	1.51
88	40.99	-0.644	0.040	0.474	0.937	1.30
89	55.54	-0.199	0.040	0.523	1.124	1.30
90	48.19	-0.582	0.040	0.506	1.013	1.28
91	59.69	0.019	0.041	0.521	1.212	1.21
92	35.64	-1.258	0.042	0.519	0.940	3.11
93	47.85	-0.599	0.040	0.551	1.148	1.94
94	50.09	-0.482	0.040	0.526	1.118	1.28
95	45.60	-0.717	0.040	0.490	0.974	1.65

TABLE 54 (CONT.)
MAT INTERMEDIATE FORM G TOTAL READING
ABILITY SUMMARY

95 ITEMS 3252 CASES KR-20= 0.958 EQUATING CONSTANT= 0.666

SCORE	FREQ	LDG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	0	-5.087	1.015	156	10.15
2	0	-4.365	0.727	163	7.27
3	0	-3.930	0.602	167	6.02
4	0	-3.614	0.528	171	5.28
5	0	-3.363	0.478	173	4.78
6	0	-3.153	0.441	175	4.41
7	0	-2.971	0.413	177	4.13
8	1	-2.810	0.390	179	3.90
9	1	-2.665	0.371	180	3.71
10	2	-2.533	0.356	181	3.56
11	1	-2.412	0.343	183	3.43
12	2	-2.298	0.331	184	3.31
13	2	-2.192	0.321	185	3.21
14	5	-2.092	0.312	186	3.12
15	5	-1.997	0.304	187	3.04
16	7	-1.907	0.297	188	2.97
17	4	-1.821	0.290	188	2.90
18	9	-1.739	0.284	189	2.84
19	21	-1.659	0.279	190	2.79
20	24	-1.583	0.274	191	2.74
21	26	-1.509	0.270	192	2.70
22	29	-1.437	0.266	192	2.66
23	31	-1.368	0.262	193	2.62
24	27	-1.300	0.259	194	2.59
25	33	-1.234	0.255	194	2.55
26	23	-1.169	0.252	195	2.52
27	32	-1.106	0.250	196	2.50
28	38	-1.045	0.247	196	2.47
29	36	-0.984	0.245	197	2.45
30	42	-0.925	0.243	197	2.43
31	55	-0.867	0.241	198	2.41
32	41	-0.809	0.239	199	2.39
33	56	-0.753	0.237	199	2.37
34	40	-0.697	0.236	200	2.36
35	52	-0.642	0.234	200	2.34
36	55	-0.587	0.233	201	2.33
37	56	-0.533	0.232	201	2.32
38	52	-0.480	0.231	202	2.31
39	49	-0.427	0.230	202	2.30
40	46	-0.374	0.229	203	2.29
41	46	-0.322	0.228	203	2.28
42	36	-0.270	0.228	204	2.28
43	47	-0.218	0.227	204	2.27
44	48	-0.167	0.227	205	2.27
45	57	-0.116	0.226	205	2.26
46	53	-0.065	0.226	206	2.26
47	49	-0.014	0.226	207	2.26
48	64	0.037	0.226	207	2.26
49	40	0.088	0.226	208	2.26
50	44	0.139	0.226	208	2.26

TABLE 54 (CONT.)
 MAT INTERMEDIATE FORM G TOTAL READING
 ABILITY SUMMARY

95 ITEMS 3252 CASES KR-20= 0.958 EQUATING CONSTANT= 0.666

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	40	0.190	0.226	209	2.26
52	62	0.241	0.226	209	2.26
53	50	0.293	0.227	210	2.27
54	35	0.344	0.227	210	2.27
55	48	0.396	0.228	211	2.28
56	55	0.448	0.229	211	2.29
57	50	0.501	0.229	212	2.29
58	54	0.553	0.230	212	2.30
59	61	0.607	0.231	213	2.31
60	56	0.660	0.233	213	2.33
61	34	0.715	0.234	214	2.34
62	52	0.770	0.235	214	2.35
63	52	0.825	0.237	215	2.37
64	43	0.882	0.239	215	2.39
65	41	0.939	0.240	216	2.40
66	34	0.997	0.242	217	2.42
67	47	1.057	0.245	217	2.45
68	52	1.117	0.247	218	2.47
69	54	1.179	0.250	218	2.50
70	47	1.242	0.252	219	2.52
71	48	1.306	0.255	220	2.55
72	56	1.372	0.259	220	2.59
73	46	1.440	0.262	221	2.62
74	59	1.510	0.266	222	2.66
75	54	1.582	0.271	222	2.71
76	57	1.657	0.276	223	2.76
77	43	1.734	0.281	224	2.81
78	63	1.814	0.287	225	2.87
79	45	1.898	0.293	226	2.93
80	45	1.986	0.300	227	3.00
81	48	2.079	0.308	227	3.08
82	49	2.176	0.317	228	3.17
83	39	2.280	0.327	229	3.27
84	50	2.391	0.339	231	3.39
85	33	2.510	0.352	232	3.52
86	27	2.646	0.368	233	3.68
87	26	2.783	0.387	234	3.87
88	37	2.941	0.410	236	4.10
89	25	3.121	0.439	238	4.39
90	19	3.329	0.476	240	4.76
91	20	3.579	0.526	242	5.26
92	12	3.894	0.601	246	6.01
93	5	4.328	0.727	250	7.27
94	4	5.050	1.015	257	10.15

TABLE 55
STEP II LEVEL 4 FORM A PART 1 (VOCAB.)
ITEM SUMMARY

30 ITEMS 32623 CASES KR-20= 0.885 EQUATING CONSTANT= 0.0						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R (I-VAB)	SLOPE	MN SQ FIT
1	89.65	1.753	0.020	0.378	1.071	1.81
2	93.37	2.315	0.023	0.375	1.279	10.83
3	91.65	2.030	0.021	0.373	1.096	4.24
4	85.00	1.238	0.017	0.501	1.291	19.17
5	87.57	1.505	0.018	0.463	1.216	14.17
6	84.03	1.146	0.017	0.476	1.215	6.98
7	89.35	1.716	0.020	0.494	1.497	39.48
8	85.51	1.288	0.018	0.442	0.957	24.66
9	85.72	1.309	0.018	0.516	1.335	28.84
10	70.60	0.128	0.014	0.510	0.866	3.65
11	69.86	0.087	0.014	0.514	0.960	6.04
12	76.87	0.558	0.015	0.524	1.041	13.14
13	80.61	0.848	0.016	0.496	1.148	7.92
14	76.25	0.513	0.015	0.582	1.423	32.29
15	72.31	0.240	0.014	0.492	0.951	2.11
16	67.91	-0.042	0.014	0.539	1.072	4.47
17	76.54	0.534	0.015	0.570	1.281	26.97
18	66.77	-0.112	0.014	0.549	0.908	12.58
19	67.50	-0.038	0.014	0.522	1.004	6.26
20	40.50	-1.588	0.013	0.463	0.779	40.80
21	43.15	-1.441	0.013	0.474	0.705	28.02
22	52.75	-0.916	0.013	0.519	0.951	14.40
23	59.69	-0.527	0.013	0.575	1.087	23.66
24	41.57	-1.529	0.013	0.411	0.590	58.18
25	40.16	-1.607	0.013	0.467	0.795	38.19
26	53.00	-0.901	0.013	0.532	0.924	11.15
27	34.41	-1.938	0.014	0.306	0.437	140.31
28	35.09	-1.898	0.014	0.510	0.743	37.49
29	26.47	-2.432	0.014	0.325	0.474	155.65
30	29.48	-2.238	0.014	0.420	0.484	88.29

183

TABLE 55 (CONT.)
 STEP II LEVEL 4 FORM A PART 1 (VOCAB.)
 ABILITY SUMMARY

30 ITEMS 32623 CASES KR-20= 0.885 EQUATING CONSTANT= 0.0

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	6	-4.001	1.039	159	10.39
2	23	-3.309	0.762	167	7.62
3	71	-2.822	0.644	172	6.44
4	126	-2.452	0.578	175	5.78
5	262	-2.143	0.535	179	5.35
6	343	-1.874	0.505	181	5.05
7	442	-1.630	0.484	184	4.84
8	557	-1.404	0.468	186	4.68
9	668	-1.191	0.456	188	4.56
10	739	-0.987	0.447	190	4.47
11	854	-0.790	0.441	192	4.41
12	898	-0.597	0.437	194	4.37
13	958	-0.407	0.435	196	4.35
14	1036	-0.219	0.434	198	4.34
15	1139	-0.030	0.434	200	4.34
16	1282	0.159	0.436	202	4.36
17	1386	0.351	0.440	204	4.40
18	1491	0.546	0.444	205	4.44
19	1693	0.746	0.450	207	4.50
20	1745	0.952	0.458	210	4.58
21	1906	1.167	0.468	212	4.68
22	2076	1.391	0.481	214	4.81
23	2132	1.630	0.497	216	4.97
24	2174	1.887	0.518	219	5.18
25	2198	2.170	0.547	222	5.47
26	2065	2.491	0.589	225	5.89
27	1813	2.874	0.654	229	6.54
28	1491	3.372	0.769	234	7.69
29	1049	4.156	1.044	242	10.44

TABLE 56
 STEP II LEVEL 4 FORM A PART 2 (CCMPR.)
 ITEM SUMMARY

30 ITEMS 33002 CASES KR-20= 0.874 EQUATING CONSTANT= 0.799						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	76.17	1.205	0.014	0.476	1.227	28.82
2	76.04	1.197	0.014	0.382	0.999	3.53
3	57.81	0.187	0.013	0.420	0.852	5.47
4	44.04	-0.507	0.013	0.210	0.458	161.67
5	77.85	1.315	0.014	0.402	1.124	4.16
6	50.20	-0.196	0.013	0.349	0.706	41.81
7	49.01	-0.255	0.013	0.499	0.970	5.32
8	48.85	-0.263	0.013	0.426	0.841	6.29
9	56.74	0.133	0.013	0.430	0.879	7.32
10	72.51	0.980	0.014	0.498	1.354	23.26
11	62.78	0.442	0.013	0.523	1.287	18.42
12	54.11	0.0	0.013	0.501	1.198	4.39
13	40.67	-0.681	0.013	0.496	1.030	8.39
14	37.42	-0.853	0.013	0.315	0.663	62.61
15	52.39	-0.086	0.013	0.513	1.177	7.85
16	66.97	0.666	0.013	0.548	1.434	38.16
17	53.69	-0.021	0.013	0.399	0.891	14.21
18	55.65	0.078	0.013	0.435	1.039	4.17
19	50.59	0.125	0.013	0.463	1.032	5.74
20	58.59	0.227	0.013	0.498	1.258	6.96
21	53.51	-0.030	0.013	0.542	1.410	18.20
22	45.11	-0.452	0.013	0.564	1.388	39.80
23	45.75	-0.420	0.013	0.556	1.252	23.16
24	45.64	-0.425	0.013	0.563	1.456	29.60
25	52.20	-0.092	0.013	0.401	0.900	27.08
26	55.28	0.059	0.013	0.573	1.543	34.02
27	47.77	-0.318	0.013	0.475	1.024	2.95
28	43.59	-0.530	0.013	0.479	1.022	2.21
29	50.64	-0.173	0.013	0.490	1.083	2.82
30	29.30	-1.312	0.014	0.313	0.654	53.80

TABLE 56 (CONT.)
 STEP II LEVEL 4 FORM A PART 2 (COMPR.)
 ABILITY SUMMARY

30 ITEMS 33002 CASES KR-20= 0.874 EQUATING CONSTANT= 0.799

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	25	-3.546	1.025	173	10.25
2	78	-2.801	0.743	180	7.43
3	181	-2.343	0.621	185	6.21
4	388	-2.002	0.551	188	5.51
5	669	-1.725	0.505	191	5.05
6	906	-1.488	0.472	193	4.72
7	1181	-1.277	0.447	195	4.47
8	1501	-1.086	0.428	197	4.28
9	1552	-0.909	0.414	199	4.14
10	1694	-0.742	0.403	201	4.03
11	1662	-0.583	0.394	202	3.94
12	1627	-0.430	0.388	204	3.88
13	1626	-0.282	0.383	205	3.83
14	1499	-0.136	0.381	207	3.81
15	1458	0.008	0.380	208	3.80
16	1444	0.153	0.380	210	3.80
17	1328	0.298	0.382	211	3.82
18	1420	0.445	0.386	212	3.86
19	1349	0.597	0.392	214	3.92
20	1268	0.753	0.400	216	4.00
21	1319	0.917	0.411	217	4.11
22	1369	1.092	0.425	219	4.25
23	1369	1.279	0.443	221	4.43
24	1332	1.486	0.467	223	4.67
25	1284	1.719	0.500	225	5.00
26	1298	1.992	0.546	228	5.46
27	1073	2.327	0.617	231	6.17
28	704	2.780	0.739	236	7.39
29	398	3.518	1.022	243	10.22

TABLE 57
STEP II LEVEL 4 FORM A TOTAL READING
ITEM SUMMARY

60 ITEMS 33081 CASES KR-20= 0.933 EQUATING CONSTANT= 0.399

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AE)	SLOPE	MIN SQ FIT
1	89.79	2.022	0.019	0.344	1.126	4.32
2	93.46	2.551	0.023	0.340	1.452	11.54
3	91.76	2.282	0.021	0.340	1.264	6.57
4	85.21	1.544	0.017	0.460	1.429	18.44
5	87.74	1.792	0.018	0.423	1.325	15.07
6	84.24	1.458	0.016	0.437	1.399	8.83
7	89.50	1.988	0.019	0.447	1.586	30.61
8	85.70	1.590	0.017	0.396	0.920	18.44
9	85.91	1.610	0.017	0.473	1.439	24.57
10	71.00	0.521	0.014	0.470	1.034	2.83
11	70.37	0.483	0.014	0.479	1.102	3.58
12	77.18	0.917	0.014	0.491	1.299	10.85
13	80.88	1.184	0.015	0.453	1.333	9.73
14	76.57	0.875	0.014	0.544	1.630	24.10
15	72.69	0.625	0.014	0.460	1.119	2.16
16	68.34	0.365	0.013	0.508	1.221	6.27
17	76.86	0.895	0.014	0.540	1.549	24.09
18	67.23	0.300	0.013	0.528	1.225	9.89
19	68.41	0.369	0.013	0.503	1.178	5.08
20	41.32	-1.073	0.013	0.459	0.988	9.57
21	43.93	-0.935	0.013	0.462	0.889	4.25
22	53.40	-0.443	0.013	0.504	1.104	2.86
23	60.24	-0.083	0.013	0.562	1.348	13.17
24	42.37	-1.017	0.013	0.406	0.731	11.44
25	40.98	-1.091	0.013	0.466	0.959	8.86
26	53.64	-0.430	0.013	0.518	1.104	4.23
27	35.31	-1.402	0.013	0.291	0.529	44.75
28	35.58	-1.364	0.013	0.517	0.934	9.97
29	27.48	-1.867	0.014	0.329	0.605	42.02
30	30.45	-1.684	0.014	0.431	0.784	18.83
31	76.20	0.851	0.014	0.507	1.119	16.97
32	76.07	0.842	0.014	0.380	0.911	2.48
33	57.89	-0.208	0.013	0.416	0.732	5.64
34	44.15	-0.923	0.013	0.184	0.298	110.99
35	77.88	0.965	0.015	0.397	0.970	1.91
36	50.30	-0.603	0.013	0.334	0.645	30.67
37	49.11	-0.665	0.013	0.486	0.764	7.30
38	48.95	-0.673	0.013	0.412	0.696	9.69
39	56.82	-0.264	0.013	0.412	0.759	8.73
40	72.56	0.616	0.014	0.505	1.306	7.69
41	62.85	0.057	0.013	0.512	1.087	7.74
42	54.19	-0.401	0.013	0.490	0.950	3.28
43	40.79	-1.102	0.013	0.474	0.865	9.85
44	37.55	-1.277	0.013	0.294	0.582	47.78
45	52.48	-0.490	0.013	0.486	0.971	9.11
46	67.03	0.289	0.013	0.549	1.315	12.97
47	53.78	-0.423	0.013	0.376	0.802	15.47
48	55.74	-0.321	0.013	0.418	0.839	5.69
49	56.68	-0.272	0.013	0.444	0.841	3.11
50	58.67	-0.167	0.013	0.474	1.052	7.25

CONTINUED

TABLE 57 (CONT.)
 STEP II LEVEL 4 FORM A TOTAL READING
 ITEM SUMMARY

60 ITEMS 33081 CASES KR-20= 0.933 EQUATING CONSTANT= 0.399						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
51	53.60	-0.432	0.013	0.518	1.064	12.66
52	45.22	-0.867	0.013	0.542	1.168	29.15
53	45.85	-0.834	0.013	0.539	1.077	15.66
54	45.75	-0.840	0.013	0.539	1.184	21.43
55	52.35	-0.497	0.013	0.368	0.748	19.95
56	55.36	-0.340	0.013	0.550	1.251	13.86
57	47.87	-0.729	0.013	0.444	0.855	6.80
58	43.70	-0.947	0.013	0.452	0.850	6.92
59	50.74	-0.580	0.013	0.464	0.881	5.95
60	29.45	-1.744	0.014	0.283	0.530	48.06

TABLE 57 (CONT.)
 STEP II LEVEL 4 FORM A TOTAL READING
 ABILITY SUMMARY

60 ITEMS		33081 CASES		KR-20= 0.933		EQUATING CONSTANT= 0.399	
SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR		
1	0	-4.670	1.023	157	10.23		
2	1	-3.931	0.739	165	7.39		
3	1	-3.481	0.615	169	6.15		
4	3	-3.148	0.543	173	5.43		
5	6	-2.880	0.495	175	4.95		
6	11	-2.653	0.459	177	4.59		
7	26	-2.455	0.433	179	4.33		
8	46	-2.277	0.411	181	4.11		
9	63	-2.115	0.394	183	3.94		
10	114	-1.966	0.379	184	3.79		
11	168	-1.827	0.367	186	3.67		
12	216	-1.696	0.356	187	3.56		
13	279	-1.572	0.347	188	3.47		
14	331	-1.455	0.339	189	3.39		
15	395	-1.342	0.332	191	3.32		
16	463	-1.233	0.326	192	3.26		
17	486	-1.129	0.321	193	3.21		
18	572	-1.028	0.316	194	3.16		
19	569	-0.929	0.311	195	3.11		
20	620	-0.833	0.308	196	3.08		
21	629	-0.740	0.304	197	3.04		
22	671	-0.648	0.301	198	3.01		
23	631	-0.558	0.298	198	2.98		
24	684	-0.470	0.296	199	2.96		
25	693	-0.383	0.294	200	2.94		
26	718	-0.297	0.292	201	2.92		
27	727	-0.212	0.291	202	2.91		
28	762	-0.128	0.290	203	2.90		
29	770	-0.044	0.289	204	2.89		
30	803	0.040	0.288	204	2.88		
31	779	0.123	0.288	205	2.88		
32	830	0.206	0.288	206	2.88		
33	829	0.289	0.288	207	2.88		
34	811	0.372	0.289	208	2.89		
35	821	0.455	0.290	209	2.90		
36	868	0.540	0.291	209	2.91		
37	873	0.625	0.292	210	2.92		
38	845	0.711	0.294	211	2.94		
39	875	0.796	0.296	212	2.96		
40	847	0.886	0.299	213	2.99		
41	816	0.977	0.302	214	3.02		
42	861	1.069	0.306	215	3.06		
43	816	1.164	0.310	216	3.10		
44	843	1.261	0.315	217	3.15		
45	858	1.362	0.320	218	3.20		
46	837	1.466	0.327	219	3.27		
47	838	1.576	0.334	220	3.34		
48	885	1.690	0.343	221	3.43		
49	812	1.811	0.353	222	3.53		
50	882	1.940	0.365	223	3.65		

CONT INUED

TABLE 57 (CONT.)
 STEP II LEVEL 4 FORM A TOTAL READING
 ABILITY SUMMARY

60 ITEMS 33081 CASES KR-20= 0.933 EQUATING CONSTANT= 0.399

SCORE	FREQ	LOG ABILITY	STD ERR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	810	2.078	0.379	225	3.79
52	804	2.229	0.397	226	3.97
53	725	2.394	0.418	228	4.18
54	723	2.580	0.445	230	4.45
55	572	2.794	0.481	232	4.81
56	493	3.048	0.530	234	5.30
57	352	3.367	0.603	238	6.03
58	228	3.803	0.728	242	7.28
59	92	4.526	1.015	249	10.15

191

TABLE 58
STEP II LEVEL 4 FORM B PART 1 (VOCAB.)
ITEM SUMMARY

30 ITEMS 4615 CASES KR=20= 0.863 EQUATING CONSTANT= -0.152						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	95.67	2.886	0.074	0.352	1.492	3.13
2	88.58	1.706	0.050	0.415	1.132	1.60
3	91.70	2.117	0.057	0.399	1.282	2.40
4	94.43	2.598	0.066	0.377	1.328	3.49
5	91.61	2.104	0.056	0.347	1.068	0.69
6	88.80	1.732	0.050	0.472	1.179	5.25
7	85.74	1.403	0.046	0.528	1.614	6.94
8	79.89	0.895	0.041	0.547	1.252	6.25
9	81.57	1.062	0.043	0.526	1.407	4.28
10	72.46	0.375	0.038	0.326	0.667	9.98
11	74.56	0.513	0.038	0.448	0.918	1.81
12	68.08	0.106	0.036	0.548	-1.220	4.12
13	81.06	0.988	0.042	0.584	1.654	10.14
14	71.98	0.343	0.037	0.513	1.153	2.05
15	70.31	0.241	0.037	0.604	1.283	10.02
16	64.25	-0.116	0.035	0.524	1.015	3.78
17	58.13	-0.717	0.034	0.486	0.756	4.43
18	74.67	0.520	0.038	0.492	1.069	1.39
19	32.26	-1.840	0.036	0.346	0.561	11.49
20	57.05	-0.511	0.034	0.529	0.858	4.30
21	39.67	-1.426	0.035	0.387	0.716	11.60
22	49.45	-0.910	0.034	0.438	0.843	6.92
23	32.18	-1.845	0.036	0.456	0.812	14.84
24	42.93	-1.252	0.034	0.442	0.771	3.49
25	40.00	-1.408	0.035	0.513	0.899	3.60
26	37.72	-1.532	0.035	0.332	0.596	10.01
27	31.85	-1.864	0.036	0.454	0.625	9.29
28	38.22	-1.505	0.035	0.454	0.733	5.94
29	17.79	-2.824	0.042	0.225	0.377	22.78
30	32.31	-1.838	0.036	0.396	0.675	15.50

TABLE 58 (CONT.)
 STEP II LEVEL 4 FORM B' PART 1 (VOCAB.)
 ABILITY SUMMARY

30 ITEMS 4615 CASES KR-20= 0.863 EQUATING CONSTANT= -0.152

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	1	-4.324	1.053	155	10.53
2	4	-3.522	0.780	163	7.80
3	6	-3.008	0.665	168	6.65
4	20	-2.611	0.600	172	6.00
5	34	-2.277	0.558	176	5.58
6	50	-1.983	0.528	179	5.28
7	52	-1.716	0.506	181	5.06
8	63	-1.468	0.490	184	4.90
9	105	-1.235	0.477	186	4.77
10	117	-1.012	0.468	188	4.68
11	121	-0.797	0.460	191	4.60
12	147	-0.587	0.455	193	4.55
13	154	-0.382	0.451	195	4.51
14	206	-0.180	0.449	197	4.49
15	196	0.022	0.448	199	4.48
16	234	0.222	0.448	201	4.48
17	253	0.424	0.450	203	4.50
18	256	0.627	0.452	205	4.52
19	315	0.833	0.456	207	4.56
20	288	1.044	0.462	209	4.62
21	313	1.261	0.470	211	4.70
22	307	1.487	0.481	213	4.81
23	344	1.725	0.496	216	4.96
24	270	1.981	0.517	218	5.17
25	209	2.262	0.545	221	5.45
26	189	2.582	0.588	224	5.88
27	154	2.964	0.653	228	6.53
28	122	3.462	0.770	233	7.70
29	85	4.248	1.045	241	10.45

TABLE 59
STEP II LEVEL 4 FORM B PART 2 (COMPR.)
ITEM SUMMARY

30 ITEMS 4603 CASES KR-20= 0.882 EQUATING CONSTANT= 0.510						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	79.27	1.474	0.039	0.334	0.863	2.15
2	68.80	0.827	0.035	0.491	1.368	2.38
3	62.98	0.511	0.034	0.486	1.047	1.47
4	60.72	0.393	0.034	0.512	1.079	2.21
5	53.20	0.007	0.034	0.529	1.056	1.83
6	84.27	1.854	0.043	0.393	1.018	4.46
7	77.04	1.323	0.038	0.471	1.245	4.53
8	64.61	0.598	0.035	0.449	0.895	1.45
9	53.73	0.033	0.034	0.464	0.858	1.04
10	45.99	-0.363	0.034	0.430	0.887	2.44
11	51.66	-0.072	0.034	0.372	0.625	7.45
12	56.64	0.182	0.034	0.521	1.072	2.28
13	61.42	0.429	0.034	0.538	1.319	3.24
14	46.08	-0.359	0.034	0.463	0.922	2.09
15	59.27	0.317	0.034	0.572	1.370	5.55
16	56.20	0.160	0.034	0.454	0.946	1.05
17	60.55	0.384	0.034	0.453	0.842	1.32
18	44.30	-0.452	0.034	0.515	0.909	2.67
19	44.51	-0.420	0.034	0.497	0.966	1.53
20	41.02	-0.625	0.035	0.449	0.781	2.93
21	47.66	-0.277	0.034	0.524	1.077	2.36
22	43.69	-0.484	0.034	0.507	1.002	1.70
23	46.30	-0.348	0.034	0.586	1.221	4.70
24	42.82	-0.529	0.034	0.479	0.822	2.22
25	30.91	-1.198	0.037	0.309	0.661	12.39
26	42.78	-0.532	0.034	0.516	1.037	1.52
27	46.84	-0.320	0.034	0.468	0.970	4.42
28	40.54	-0.651	0.035	0.493	1.040	2.84
29	35.54	-0.927	0.036	0.385	0.794	5.45
30	35.39	-0.935	0.036	0.414	0.713	5.17

193

TABLE 59 (CONT.)
STEP II LEVEL 4 FORM B PART 2 (COMPR.)
ABILITY SUMMARY

30 ITEMS 4603 CASES KR-20= 0.882 EQUATING CONSTANT= 0.510

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	6	-3.632	1.031	169	10.31
2	5	-2.875	0.751	176	7.51
3	24	-2.407	0.629	181	6.29
4	44	-2.057	0.559	185	5.59
5	87	-1.771	0.513	187	5.13
6	134	-1.525	0.480	190	4.80
7	208	-1.308	0.455	192	4.55
8	243	-1.110	0.436	194	4.36
9	262	-0.927	0.421	196	4.21
10	250	-0.754	0.410	198	4.10
11	260	-0.590	0.401	199	4.01
12	233	-0.433	0.394	201	3.94
13	231	-0.280	0.389	202	3.89
14	194	-0.129	0.386	204	3.86
15	191	0.019	0.385	205	3.85
16	208	0.167	0.385	207	3.85
17	194	0.316	0.387	208	3.87
18	175	0.467	0.391	210	3.91
19	163	0.621	0.396	211	3.96
20	159	0.781	0.404	213	4.04
21	163	0.948	0.414	215	4.14
22	140	1.125	0.428	216	4.28
23	159	1.315	0.446	218	4.46
24	163	1.524	0.470	220	4.70
25	178	1.760	0.502	223	5.02
26	163	2.034	0.548	225	5.48
27	151	2.371	0.618	229	6.18
28	119	2.825	0.740	233	7.40
29	92	3.564	1.023	241	10.23

TABLE 60
STEP II LEVEL 4 FORM B-TOTAL READING
ITEM SUMMARY

60 ITEMS 4637 CASES KR-20= 0.930 EQUATING CONSTANT= -0.066

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	95.69	3.079	0.073	0.296	1.588	2.99
2	88.63	1.961	0.049	0.367	1.198	1.70
3	91.74	2.347	0.055	0.351	1.450	2.63
4	94.46	2.803	0.065	0.310	1.278	3.07
5	91.65	2.335	0.055	0.295	1.063	1.18
6	88.85	1.985	0.049	0.409	1.267	4.31
7	85.81	1.677	0.045	0.460	1.615	5.13
8	79.99	1.201	0.040	0.492	1.314	4.15
9	82.06	1.357	0.041	0.474	1.517	3.85
10	72.59	0.710	0.036	0.273	0.608	7.02
11	74.68	0.840	0.037	0.401	0.876	1.92
12	68.23	0.454	0.035	0.515	1.223	1.95
13	81.15	1.287	0.041	0.532	1.917	7.42
14	72.09	0.680	0.036	0.481	1.278	1.42
15	70.46	0.583	0.036	0.575	1.584	5.77
16	64.42	0.242	0.035	0.501	1.095	1.63
17	53.35	-0.339	0.034	0.476	0.905	1.14
18	74.79	0.847	0.037	0.452	1.131	1.90
19	32.59	-1.451	0.036	0.333	0.701	5.36
20	57.24	-0.139	0.034	0.511	0.931	4.00
21	39.86	-1.038	0.034	0.373	0.696	4.84
22	49.69	-0.528	0.034	0.430	0.899	2.87
23	32.50	-1.456	0.036	0.464	0.810	3.46
24	43.20	-0.866	0.034	0.419	0.798	2.06
25	40.28	-1.021	0.034	0.511	0.984	1.14
26	38.02	-1.144	0.035	0.301	0.576	7.13
27	32.18	-1.475	0.036	0.454	0.913	2.98
28	38.52	-1.116	0.035	0.446	0.887	1.70
29	18.18	-2.434	0.042	0.223	0.423	11.16
30	32.63	-1.449	0.036	0.398	0.806	5.08
31	79.43	1.160	0.039	0.346	0.890	1.54
32	69.03	0.500	0.035	0.483	1.236	1.47
33	63.25	0.179	0.034	0.483	1.095	1.95
34	61.01	0.059	0.034	0.524	1.315	1.86
35	53.55	-0.329	0.034	0.517	1.040	3.06
36	64.39	1.549	0.043	0.406	1.039	2.39
37	77.21	1.005	0.038	0.471	1.222	2.11
38	64.87	0.267	0.035	0.443	0.873	1.56
39	54.07	-0.303	0.034	0.454	0.861	2.08
40	46.39	-0.699	0.034	0.415	0.754	2.33
41	52.02	-0.408	0.034	0.358	0.655	3.73
42	56.95	-0.153	0.034	0.505	0.968	1.23
43	61.70	0.096	0.034	0.514	1.084	2.35
44	46.47	-0.694	0.034	0.441	0.789	1.68
45	59.56	-0.017	0.034	0.549	1.211	3.16
46	56.52	-0.176	0.034	0.446	0.802	1.45
47	60.84	0.050	0.034	0.445	0.846	1.06
48	44.71	-0.786	0.034	0.489	0.836	4.40
49	45.31	-0.755	0.034	0.470	0.883	2.21
50	41.45	-0.958	0.034	0.430	0.795	2.88

CONTINUED



195

TABLE 60 (CONT.)
 STEP II LEVEL 4 FORM B TOTAL READING
 ITEM SUMMARY

60 ITEMS 4637 CASES KR-20= 0.930 EQUATING CONSTANT= -0.066

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
51	48.05	-0.613	0.034	0.492	0.954	3.10
52	44.10	-0.818	0.034	0.474	0.870	3.50
53	46.69	-0.683	0.034	0.562	1.229	3.33
54	43.24	-0.863	0.034	0.458	0.775	2.46
55	31.42	-1.520	0.036	0.292	0.574	8.29
56	43.20	-0.866	0.034	0.503	0.908	2.35
57	47.23	-0.655	0.034	0.442	0.809	4.57
58	40.97	-0.984	0.034	0.470	0.934	3.43
59	36.01	-1.255	0.035	0.372	0.725	3.60
60	35.86	-1.263	0.035	0.409	0.794	4.11

197

TABLE 60 (CONT.)
STEP II LEVEL 4 FORM B TOTAL READING
ABILITY SUMMARY

60 ITEMS 4637 CASES KR-20= 0.930 EQUATING CONSTANT= -0.066

SCORE	FREQ	-LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	0	-4.856	1.031	151	10.31
2	0	-4.100	0.750	158	7.50
3	0	-3.634	0.627	163	6.27
4	1	-3.287	0.556	166	5.56
5	1	-3.005	0.507	169	5.07
6	1	-2.766	0.472	172	4.72
7	4	-2.556	0.445	174	4.45
8	4	-2.368	0.423	176	4.23
9	5	-2.197	0.406	177	4.06
10	12	-2.039	0.391	179	3.91
11	20	-1.891	0.378	180	3.78
12	26	-1.753	0.367	182	3.67
13	41	-1.622	0.357	183	3.57
14	43	-1.497	0.349	184	3.49
15	42	-1.378	0.341	186	3.41
16	68	-1.264	0.335	187	3.35
17	78	-1.154	0.329	188	3.29
18	86	-1.047	0.324	189	3.24
19	92	-0.944	0.319	190	3.19
20	101	-0.844	0.315	191	3.15
21	118	-0.746	0.311	192	3.11
22	116	-0.651	0.308	193	3.08
23	117	-0.557	0.305	194	3.05
24	126	-0.465	0.302	195	3.02
25	124	-0.374	0.300	196	3.00
26	113	-0.285	0.298	196	2.98
27	117	-0.197	0.296	197	2.96
28	117	-0.110	0.295	198	2.95
29	130	-0.023	0.294	199	2.94
30	130	0.063	0.293	200	2.93
31	121	0.148	0.292	201	2.92
32	117	0.234	0.292	202	2.92
33	110	0.319	0.292	203	2.92
34	134	0.405	0.293	203	2.93
35	124	0.490	0.293	204	2.93
36	111	0.577	0.294	205	2.94
37	105	0.664	0.296	206	2.96
38	113	0.751	0.297	207	2.97
39	132	0.840	0.299	208	2.99
40	115	0.931	0.302	209	3.02
41	116	1.023	0.305	210	3.05
42	115	1.117	0.309	211	3.09
43	114	1.213	0.313	211	3.13
44	121	1.312	0.317	212	3.17
45	107	1.415	0.323	213	3.23
46	92	1.521	0.329	215	3.29
47	97	1.632	0.337	216	3.37
48	113	1.748	0.345	217	3.45
49	102	1.871	0.355	218	3.55
50	85	2.001	0.367	219	3.67

CONT INUED



TABLE 60 (CONT.)
STEP II LEVEL 4 FORM B TOTAL READING
ABILITY SUMMARY

60 ITEMS 4637 CASES KR-20= 0.930 EQUATING CONSTANT= -0.066

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
51	86	2.141	0.382	221	3.82
52	105	2.294	0.399	222	3.99
53	86	2.461	0.421	224	4.21
54	77	2.649	0.448	225	4.48
55	64	2.865	0.483	228	4.83
56	57	3.122	0.533	231	5.33
57	27	3.444	0.606	234	6.06
58	41	3.883	0.731	238	7.31
59	23	4.610	1.017	245	10.17

TABLE 61
SRA BLUE FORM E VOCABULARY
ITEM SUMMARY

42 ITEMS 21664 CASES KR-20= 0.936 EQUATING CONSTANT= 0.238

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN. SQ FLT
1	82.99	1.741	0.020	0.439	1.135	10.40
2	69.56	0.827	0.017	0.479	0.956	3.47
3	54.07	-0.095	0.016	0.289	0.438	92.90
4	55.87	0.006	0.016	0.579	1.093	7.61
5	65.90	0.582	0.017	0.617	1.517	26.28
6	59.26	0.198	0.016	0.543	1.117	3.11
7	66.58	-0.622	0.017	0.564	1.283	10.36
8	50.26	-0.310	0.016	0.605	1.248	11.18
9	62.20	0.366	0.016	0.593	1.409	11.24
10	53.58	-0.123	0.016	0.550	1.099	2.64
11	47.64	-0.493	0.016	0.552	1.161	5.53
12	41.75	-0.801	0.017	0.538	0.911	10.02
13	82.13	1.670	0.019	0.453	1.190	12.09
14	63.74	1.805	0.020	0.457	1.499	17.38
15	59.67	0.222	0.016	0.526	1.019	2.62
16	57.52	0.100	0.016	0.562	1.147	2.92
17	70.28	0.846	0.017	0.522	1.014	8.95
18	69.59	0.804	0.017	0.569	1.416	15.66
19	66.22	0.601	0.017	0.468	0.902	5.13
20	69.25	0.783	0.017	0.515	1.051	5.88
21	69.89	0.822	0.017	0.562	1.497	14.99
22	66.47	0.616	0.017	0.598	1.408	20.33
23	55.15	-0.034	0.016	0.609	1.201	9.76
24	45.86	-0.561	0.016	0.528	0.859	4.03
25	52.17	-0.202	0.016	0.612	1.266	9.96
26	55.59	-0.009	0.016	0.523	0.981	1.73
27	63.54	0.444	0.017	0.569	1.254	7.94
28	50.31	-0.307	0.016	0.521	0.896	4.45
29	67.72	0.690	0.017	0.525	1.240	3.30
30	63.42	0.437	0.017	0.576	1.377	12.64
31	54.53	-0.069	0.016	0.548	1.059	1.11
32	39.81	-0.916	0.017	0.475	0.899	18.10
33	47.63	-0.460	0.016	0.525	0.969	9.95
34	47.32	-0.477	0.016	0.443	0.817	25.63
35	43.81	-0.680	0.017	0.589	1.103	7.38
36	38.81	-0.976	0.017	0.443	0.736	22.68
37	36.89	-1.094	0.017	0.519	0.943	19.03
38	27.85	-1.686	0.018	0.335	0.611	58.48
39	33.25	-1.323	0.017	0.403	0.647	40.21
40	35.22	-1.198	0.017	0.544	0.988	11.73
41	29.93	-1.542	0.018	0.345	0.584	73.30
42	41.33	-0.825	0.017	0.503	0.900	8.05



199

TABLE 61 (CONT.)
SRA BLUE FORM E VOCABULARY
ABILITY SUMMARY

42 ITEMS 21664 CASES KR-20= 0.936 EQUATING CONSTANT= 0.238

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	6	-4.045	1.022	162	10.22
2	10	-3.306	0.738	169	7.38
3	46	-2.856	0.615	174	6.15
4	70	-2.523	0.543	177	5.43
5	131	-2.254	0.495	180	4.95
6	224	-2.026	0.461	182	4.61
7	389	-1.826	0.435	184	4.35
8	511	-1.647	0.414	186	4.14
9	616	-1.482	0.398	188	3.98
10	738	-1.330	0.384	189	3.84
11	813	-1.186	0.373	191	3.73
12	827	-1.050	0.364	192	3.64
13	819	-0.921	0.356	193	3.56
14	751	-0.796	0.350	194	3.50
15	668	-0.675	0.345	196	3.45
16	616	-0.558	0.341	197	3.41
17	608	-0.443	0.338	198	3.38
18	606	-0.330	0.335	199	3.35
19	560	-0.218	0.333	200	3.33
20	519	-0.107	0.332	201	3.32
21	561	0.003	0.332	202	3.32
22	514	0.113	0.332	204	3.32
23	537	0.224	0.333	205	3.33
24	525	0.335	0.335	206	3.35
25	508	0.448	0.337	207	3.37
26	510	0.563	0.341	208	3.41
27	531	0.681	0.345	209	3.45
28	535	0.801	0.350	210	3.50
29	568	0.925	0.356	212	3.56
30	543	1.055	0.363	213	3.63
31	569	1.190	0.372	214	3.72
32	567	1.332	0.383	216	3.83
33	595	1.484	0.396	217	3.96
34	634	1.647	0.413	219	4.13
35	624	1.826	0.433	221	4.33
36	662	2.024	0.459	223	4.59
37	655	2.250	0.493	225	4.93
38	669	2.516	0.541	228	5.41
39	669	2.846	0.613	231	6.13
40	664	3.294	0.736	235	7.36
41	496	4.029	1.020	243	10.20

200

TABLE 62
SRA BLUE FORM E. READING (COMPR.)
ITEM SUMMARY

48 ITEMS, 21929 CASES KR-20= 0.911 EQUATING CONSTANT= 0.506

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	90.28	2.585	0.023	0.347	1.297	14.07
2	79.64	1.636	0.018	0.364	0.818	6.78
3	72.40	1.178	0.016	0.521	1.286	26.04
4	68.26	0.944	0.016	0.351	0.734	9.58
5	62.57	0.664	0.015	0.448	0.985	3.98
6	65.80	0.812	0.016	0.458	0.990	10.90
7	39.98	-0.491	0.016	0.307	0.645	21.41
8	83.09	1.892	0.019	0.457	1.464	27.02
9	53.29	0.177	0.015	0.392	0.805	4.72
10	50.17	0.023	0.015	0.450	0.920	1.60
11	77.84	1.514	0.017	0.455	1.404	13.78
12	53.14	0.170	0.015	0.433	0.955	2.35
13	52.52	0.139	0.015	0.333	0.657	16.95
14	47.45	-0.112	0.015	0.403	0.787	4.82
15	35.54	-0.728	0.016	0.391	0.763	6.43
16	75.25	1.349	0.017	0.405	0.991	3.57
17	70.08	1.045	0.016	0.465	1.180	7.13
18	60.58	0.542	0.015	0.354	0.708	10.28
19	64.93	0.766	0.016	0.537	1.548	18.63
20	45.45	-0.212	0.015	0.478	0.952	2.79
21	45.44	-0.214	0.015	0.520	1.143	5.88
22	51.74	0.101	0.015	0.388	0.748	10.56
23	52.37	0.132	0.015	0.541	1.306	10.59
24	45.71	-0.199	0.015	0.414	0.802	2.44
25	52.42	0.134	0.015	0.490	1.093	2.43
26	46.69	-0.150	0.015	0.456	0.936	1.42
27	41.08	-0.435	0.015	0.452	0.964	4.82
28	53.50	0.188	0.015	0.558	1.495	14.15
29	38.92	-0.547	0.016	0.380	0.821	6.58
30	44.63	-0.253	0.015	0.539	1.282	8.80
31	28.45	-1.135	0.017	0.369	0.815	13.21
32	44.48	-0.261	0.015	0.488	1.090	3.06
33	36.24	-0.690	0.016	0.326	0.758	22.65
34	47.56	-0.107	0.015	0.545	1.364	13.14
35	37.79	-0.607	0.016	0.451	0.968	3.77
36	36.54	-0.674	0.016	0.350	0.837	13.12
37	44.81	-0.244	0.015	0.514	1.191	7.13
38	27.34	-1.203	0.017	0.365	0.899	17.09
39	49.41	-0.014	0.015	0.574	1.708	21.29
40	42.15	-0.380	0.015	0.514	1.238	9.70
41	40.54	-0.442	0.015	0.453	1.061	5.69
42	41.29	-0.424	0.015	0.562	1.588	16.02
43	32.57	-0.870	0.016	0.513	1.402	14.26
44	38.18	-0.586	0.016	0.449	1.074	7.40
45	27.00	-1.224	0.017	0.346	0.927	17.16
46	28.04	-1.160	0.017	0.326	0.851	14.02
47	28.65	-1.123	0.017	0.383	0.916	9.16
48	22.74	-1.506	0.018	0.240	0.775	40.95

TABLE 62 (CONT.)

SRA BLUE FORM E READING (COMPR.)
ABILITY SUMMARY

48 ITEMS 21929 CASES KR-20= 0.911 EQUATING CONSTANT= 0.506

SCORE	FREQ	LOG	STD	NATIONAL REFERENCE SCALE	
		ABILITY	ERROR	SCALE SCORE	STD ERR
1	2	-4.277	1.028	162	10.28
2	6	-3.529	0.744	176	7.44
3	17	-3.070	0.621	174	6.21
4	36	-2.731	0.548	178	5.48
5	58	-2.458	0.500	180	5.00
6	123	-2.226	0.464	183	4.64
7	170	-2.024	0.437	185	4.37
8	231	-1.843	0.415	187	4.15
9	371	-1.678	0.397	188	3.97
10	475	-1.526	0.383	190	3.83
11	609	-1.385	0.371	191	3.71
12	734	-1.251	0.360	193	3.60
13	816	-1.125	0.351	194	3.51
14	854	-1.004	0.344	195	3.44
15	890	-0.888	0.337	196	3.37
16	894	-0.777	0.331	197	3.31
17	886	-0.668	0.327	198	3.27
18	826	-0.563	0.323	199	3.23
19	811	-0.460	0.319	200	3.19
20	817	-0.359	0.316	201	3.16
21	779	-0.260	0.314	202	3.14
22	715	-0.162	0.312	203	3.12
23	637	-0.065	0.311	204	3.11
24	653	0.032	0.310	205	3.10
25	633	0.128	0.310	206	3.10
26	612	0.225	0.311	207	3.11
27	598	0.321	0.311	208	3.11
28	567	0.419	0.313	209	3.13
29	556	0.517	0.315	210	3.15
30	521	0.617	0.317	211	3.17
31	501	0.718	0.320	212	3.20
32	485	0.822	0.324	213	3.24
33	545	0.929	0.329	214	3.29
34	493	1.039	0.335	215	3.35
35	479	1.153	0.342	217	3.42
36	461	1.273	0.350	218	3.50
37	480	1.398	0.359	219	3.59
38	439	1.531	0.370	220	3.70
39	344	1.673	0.384	222	3.84
40	391	1.827	0.401	223	4.01
41	362	1.996	0.422	225	4.22
42	310	2.185	0.449	227	4.49
43	290	2.402	0.484	229	4.84
44	179	2.659	0.532	232	5.32
45	138	2.950	0.605	235	6.05
46	91	3.418	0.730	239	7.30
47	41	4.143	1.016	246	10.16

TABLE 63
SKA BLUE FORM E TOTAL READING
ITEM SUMMARY.

90 ITEMS 21937 CASES KR-20 0.960 EQUATING CONSTANT= 0.381

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	90.28	2.079	0.021	0.346	1.389	10.23
2	83.19	1.456	0.018	0.431	1.339	12.43
3	79.64	1.224	0.017	0.353	0.777	7.69
4	70.33	0.729	0.016	0.476	1.168	6.43
5	72.40	0.829	0.016	0.513	1.206	13.13
6	68.26	0.632	0.016	0.338	0.658	9.43
7	62.58	0.400	0.016	0.445	0.926	3.25
8	65.80	0.522	0.016	0.447	0.877	6.58
9	40.00	-0.526	0.016	0.287	0.527	20.23
10	83.08	1.449	0.018	0.459	1.585	16.77
11	53.29	0.006	0.015	0.386	0.775	4.64
12	54.63	0.059	0.015	0.291	0.572	18.57
13	50.18	-0.118	0.015	0.450	0.890	1.57
14	77.84	1.117	0.017	0.459	1.379	9.33
15	56.41	0.130	0.015	0.575	1.387	9.89
16	53.15	0.0	0.015	0.433	0.897	2.47
17	52.53	-0.025	0.015	0.323	0.645	14.61
18	47.46	-0.225	0.015	0.390	0.701	5.73
19	35.56	-0.713	0.016	0.387	0.702	8.21
20	75.25	0.975	0.016	0.395	0.896	4.62
21	70.08	0.717	0.016	0.455	1.096	4.83
22	60.59	0.300	0.015	0.337	0.623	10.29
23	66.31	0.545	0.016	0.616	1.960	24.83
24	64.94	0.485	0.016	0.541	1.512	8.94
25	45.46	-0.305	0.015	0.467	0.913	1.74
26	45.42	-0.306	0.015	0.516	1.066	2.34
27	59.76	0.266	0.015	0.545	1.424	7.09
28	51.75	-0.056	0.015	0.265	0.687	9.89
29	52.38	-0.031	0.015	0.541	1.231	4.29
30	45.72	-0.295	0.015	0.395	0.740	5.15
31	52.43	-0.029	0.015	0.487	1.096	1.36
32	46.70	-0.256	0.015	0.460	0.941	2.05
33	41.09	-0.461	0.016	0.448	0.878	4.53
34	66.59	0.575	0.016	0.573	1.795	15.35
35	53.51	0.014	0.015	0.547	1.332	4.78
36	50.87	-0.091	0.015	0.608	1.620	14.20
37	38.93	-0.570	0.016	0.363	0.779	8.86
38	44.65	-0.337	0.015	0.530	1.214	3.64
39	28.46	-1.036	0.016	0.358	0.748	15.31
40	44.50	-0.343	0.015	0.479	1.042	2.88
41	62.66	0.387	0.015	0.601	1.845	16.15
42	36.25	-0.683	0.016	0.312	0.708	20.91
43	47.57	-0.221	0.015	0.526	1.226	5.76
44	37.80	-0.617	0.016	0.436	0.925	5.82
45	36.55	-0.670	0.016	0.327	0.742	15.05
46	54.15	0.040	0.015	0.559	1.410	6.41
47	44.82	-0.330	0.015	0.498	1.169	3.99
48	27.36	-1.090	0.016	0.343	0.819	18.99
49	49.42	-0.148	0.015	0.565	1.588	9.04
50	42.16	-0.438	0.016	0.500	-1.196	6.04

CONTINUED

TABLE 63 (CONT.)
SRA BLUE FORM E TOTAL READING
ITEM SUMMARY

90 ITEMS 21937 CASES KR=20= 0.960 EQUATING CONSTANT= 0.381

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
51	47.69	-0.216	0.015	0.574	1.541	8.13
52	40.55	-0.487	0.016	0.433	0.950	6.93
53	41.30	-0.473	0.016	0.549	1.373	8.03
54	42.46	-0.425	0.016	0.554	1.329	9.15
55	32.98	-0.826	0.016	0.495	1.257	11.45
56	38.19	-0.601	0.016	0.427	0.969	8.40
57	27.02	-1.108	0.016	0.317	0.718	19.54
58	28.06	-1.056	0.016	0.305	0.688	17.20
59	28.67	-1.026	0.016	0.356	0.808	13.40
60	22.76	-1.333	0.017	0.215	0.562	34.37
61	82.34	1.398	0.018	0.434	1.397	11.90
62	83.53	1.510	0.018	0.439	1.635	13.97
63	60.16	0.283	0.015	0.504	1.187	3.55
64	58.04	0.196	0.015	0.543	1.374	5.20
65	70.64	0.743	0.016	0.505	1.237	10.70
66	69.96	0.711	0.016	0.551	1.653	14.44
67	68.63	0.559	0.016	0.453	1.048	4.25
68	69.62	0.695	0.016	0.493	1.130	8.38
69	70.25	0.725	0.016	0.540	1.534	12.86
70	66.88	0.570	0.016	0.577	1.619	16.83
71	55.70	0.101	0.015	0.586	1.424	10.60
72	46.53	-0.262	0.015	0.509	1.055	2.22
73	52.70	-0.016	0.015	0.587	1.467	9.06
74	56.13	0.119	0.015	0.501	1.125	2.11
75	63.99	0.444	0.016	0.547	1.288	9.59
76	50.92	-0.089	0.015	0.506	1.254	2.33
77	68.11	0.626	0.016	0.507	1.433	6.91
78	63.86	0.438	0.016	0.559	1.649	11.22
79	55.09	0.077	0.015	0.529	1.267	3.36
80	40.55	-0.503	0.016	0.463	1.050	4.63
81	48.27	-0.193	0.015	0.512	1.076	4.71
82	47.57	-0.205	0.015	0.428	0.951	4.67
83	44.50	-0.343	0.015	0.572	1.420	7.17
84	39.56	-0.544	0.016	0.435	0.858	4.63
85	37.66	-0.623	0.016	0.505	1.178	7.62
86	28.74	-1.023	0.016	0.337	0.708	13.61
87	34.07	-0.777	0.016	0.395	0.811	9.09
88	36.02	-0.693	0.016	0.538	1.277	7.17
89	30.80	-0.925	0.016	0.343	0.804	17.32
90	42.05	-0.442	0.016	0.492	1.105	2.52

TABLE 63 (CONT.)
SRA BLUE FORM E TOTAL READING
ABILITY SUMMARY

90 ITEMS 21937 CASES KR-20= 0.960 EQUATING CONSTANT= 0.381

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCALE SCORE	STD ERR
1	1	-4.736	1.010	156	10.10
2	1	-4.023	0.721	164	7.21
3	0	-3.598	0.594	168	5.94
4	0	-3.291	0.519	171	5.19
5	2	-3.048	0.468	173	4.68
6	3	-2.846	0.431	175	4.31
7	13	-2.673	0.403	177	4.03
8	7	-2.520	0.380	179	3.80
9	18	-2.383	0.361	180	3.61
10	20	-2.258	0.345	181	3.45
11	35	-2.144	0.332	182	3.32
12	42	-2.037	0.321	183	3.21
13	59	-1.938	0.310	184	3.10
14	86	-1.844	0.302	185	3.02
15	104	-1.756	0.294	186	2.94
16	148	-1.671	0.287	187	2.87
17	153	-1.591	0.280	188	2.80
18	218	-1.514	0.275	189	2.75
19	231	-1.440	0.269	189	2.69
20	354	-1.369	0.265	190	2.65
21	349	-1.300	0.260	191	2.60
22	416	-1.233	0.257	191	2.57
23	413	-1.168	0.253	192	2.53
24	418	-1.105	0.250	193	2.50
25	480	-1.043	0.247	193	2.47
26	499	-0.983	0.244	194	2.44
27	446	-0.924	0.241	195	2.41
28	484	-0.867	0.239	195	2.39
29	425	-0.810	0.237	196	2.37
30	420	-0.755	0.235	196	2.35
31	385	-0.700	0.233	197	2.33
32	384	-0.646	0.231	197	2.31
33	372	-0.593	0.230	198	2.30
34	390	-0.540	0.229	198	2.29
35	368	-0.488	0.227	199	2.27
36	368	-0.437	0.226	199	2.26
37	338	-0.386	0.225	200	2.25
38	313	-0.335	0.224	200	2.24
39	343	-0.285	0.224	201	2.24
40	322	-0.235	0.223	201	2.23
41	312	-0.186	0.223	202	2.23
42	328	-0.136	0.222	202	2.22
43	304	-0.087	0.222	203	2.22
44	303	-0.038	0.222	203	2.22
45	321	0.011	0.221	204	2.21
46	310	0.060	0.221	204	2.21
47	318	0.109	0.222	205	2.22
48	286	0.158	0.222	205	2.22
49	281	0.208	0.222	206	2.22
50	307	0.257	0.222	206	2.22

CGNT INUED

TABLE 63 (CONT.)
SRA BLUE FORM E TOTAL READING
ABILITY SUMMARY

90 ITEMS 21937 CASES KR-20 = 0.960 EQUATING CONSTANT = 0.381

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
51	293	0.307	0.223	207	2.23
52	276	0.356	0.224	207	2.24
53	327	0.406	0.224	208	2.24
54	292	0.457	0.225	208	2.25
55	310	0.508	0.226	209	2.26
56	260	0.559	0.227	209	2.27
57	267	0.611	0.228	210	2.28
58	250	0.664	0.230	210	2.30
59	287	0.717	0.231	211	2.31
60	283	0.771	0.233	212	2.33
61	311	0.825	0.235	212	2.35
62	266	0.881	0.237	213	2.37
63	287	0.937	0.239	213	2.39
64	264	0.995	0.241	214	2.41
65	286	1.054	0.244	214	2.44
66	298	1.114	0.247	215	2.47
67	299	1.176	0.250	216	2.50
68	284	1.240	0.254	216	2.54
69	274	1.305	0.257	217	2.57
70	280	1.372	0.262	218	2.62
71	276	1.442	0.266	218	2.66
72	278	1.514	0.271	219	2.71
73	262	1.589	0.277	220	2.77
74	283	1.667	0.283	220	2.83
75	270	1.749	0.290	221	2.90
76	265	1.836	0.298	222	2.98
77	270	1.927	0.307	223	3.07
78	260	2.024	0.317	224	3.17
79	238	2.128	0.328	225	3.28
80	222	2.240	0.341	226	3.41
81	223	2.362	0.357	227	3.57
82	207	2.496	0.376	229	3.76
83	199	2.646	0.399	230	3.99
84	149	2.816	0.427	232	4.27
85	131	3.014	0.465	234	4.65
86	97	3.255	0.515	236	5.15
87	58	3.557	0.591	235	5.91
88	41	3.977	0.718	244	7.18
89	16	4.686	1.007	251	10.07

207

TABLE 64
SRA BLUE FORM F VOCABULARY
ITEM SUMMARY

42 ITEMS 3262 CASES KR-20= 0.911 EQUATING CONSTANT= -0.137						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN. SQ FIT
1	59.29	0.450	0.040	0.396	0.828	2.02
2	59.59	0.486	0.040	0.413	0.867	1.32
3	59.81	0.477	0.040	0.478	0.934	1.29
4	66.65	0.841	0.041	0.430	0.810	1.37
5	75.72	1.374	0.045	0.444	1.264	1.83
6	49.02	-0.078	0.040	0.529	1.109	1.73
7	44.91	-0.291	0.040	0.529	1.086	1.54
8	57.73	0.369	0.040	0.542	1.231	2.20
9	49.45	-0.056	0.040	0.531	1.105	1.52
10	42.03	-0.443	0.041	0.445	0.933	2.09
11	34.37	-0.868	0.042	0.403	0.746	2.73
12	42.15	-0.437	0.041	0.427	0.814	2.00
13	78.60	1.565	0.046	0.383	0.868	1.32
14	76.21	1.406	0.045	0.371	0.898	0.84
15	76.43	1.420	0.045	0.459	1.176	2.54
16	71.89	1.139	0.043	0.519	1.352	4.13
17	73.42	1.231	0.043	0.495	1.276	3.24
18	69.16	0.981	0.042	0.524	1.432	3.50
19	65.57	0.782	0.041	0.543	1.299	3.77
20	58.22	0.394	0.040	0.358	0.684	3.50
21	64.38	0.718	0.041	0.547	1.420	3.41
22	63.43	0.667	0.041	0.505	1.329	2.02
23	37.65	-0.682	0.042	0.567	1.086	2.07
24	56.56	0.309	0.040	0.538	1.073	2.45
25	48.77	-0.090	0.040	0.507	1.103	1.22
26	42.49	-0.419	0.041	0.494	0.890	1.75
27	65.39	0.773	0.041	0.467	0.947	1.83
28	58.34	0.400	0.040	0.583	0.581	3.97
29	52.67	0.109	0.040	0.405	0.761	2.39
30	49.45	-0.056	0.040	0.565	1.330	2.61
31	33.48	-0.919	0.043	0.430	0.759	1.98
32	38.44	-0.637	0.041	0.447	0.873	1.98
33	38.81	-0.617	0.041	0.455	0.865	2.24
34	35.65	-0.794	0.042	0.400	0.815	3.36
35	33.14	-0.939	0.043	0.491	1.069	1.98
36	39.06	-0.604	0.041	0.485	1.073	1.10
37	22.50	-1.635	0.048	0.373	0.700	7.60
38	50.89	0.018	0.040	0.515	1.199	1.51
39	33.78	-0.901	0.043	0.391	0.760	4.28
40	26.61	-1.347	0.045	0.349	0.657	4.31
41	20.32	-1.801	0.049	0.294	0.615	8.27
42	14.71	-2.297	0.055	0.125	0.322	19.21

TABLE 64 (CONT.)
SRA BLUE FORM F VOCABULARY
ABILITY SUMMARY

42 ITEMS 3262 CASES KR-20= 0.911 EQUATING CONSTANT= -0.137

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	0	-4.068	1.020	158	10.20
2	2	-3.334	0.736	165	7.36
3	5	-2.887	0.613	170	6.13
4	10	-2.556	0.541	173	5.41
5	18	-2.290	0.494	176	4.94
6	34	-2.063	0.460	178	4.60
7	60	-1.864	0.434	180	4.34
8	68	-1.685	0.414	182	4.14
9	81	-1.521	0.398	183	3.98
10	98	-1.368	0.385	185	3.85
11	135	-1.224	0.374	186	3.74
12	134	-1.087	0.366	188	3.66
13	129	-0.956	0.359	189	3.59
14	134	-0.829	0.353	190	3.53
15	148	-0.707	0.348	192	3.48
16	133	-0.587	0.344	193	3.44
17	126	-0.470	0.341	194	3.41
18	104	-0.355	0.339	195	3.39
19	107	-0.241	0.337	196	3.37
20	122	-0.127	0.336	197	3.36
21	119	0.014	0.336	198	3.36
22	106	0.099	0.337	200	3.37
23	97	0.213	0.338	201	3.38
24	94	0.328	0.340	202	3.40
25	99	0.444	0.343	203	3.43
26	86	0.563	0.346	204	3.46
27	108	0.684	0.350	205	3.50
28	75	0.808	0.356	207	3.56
29	94	0.937	0.362	208	3.62
30	87	1.071	0.370	209	3.70
31	85	1.211	0.379	211	3.79
32	67	1.359	0.390	212	3.90
33	77	1.516	0.404	214	4.04
34	68	1.685	0.420	215	4.20
35	65	1.870	0.441	217	4.41
36	64	2.076	0.467	219	4.67
37	63	2.310	0.502	222	5.02
38	54	2.585	0.550	224	5.50
39	40	2.925	0.621	228	6.21
40	35	3.383	0.744	232	7.44
41	31	4.130	1.027	240	10.27

TABLE 65
SNA BLUE FORM F READING (COMPR.)
ITEM SUMMARY

48 ITEMS 3267 CASES KR-20= 0.918 EQUATING CONSTANT= -0.161						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB) SLOPE		MN SQ FIT
1	67.10	0.842	0.041	0.460	1.072	1.61
2	61.83	0.562	0.040	0.404	0.776	1.48
3	65.14	0.736	0.041	0.331	0.659	3.28
4	74.81	1.289	0.044	0.513	1.402	3.73
5	82.89	1.849	0.049	0.425	1.251	3.05
6	84.42	1.974	0.051	0.434	1.335	4.53
7	58.89	0.410	0.040	0.366	0.770	2.50
8	65.14	0.736	0.041	0.463	0.975	0.95
9	73.00	1.179	0.043	0.469	1.270	1.73
10	59.01	0.416	0.040	0.488	1.093	1.03
11	43.71	-0.363	0.040	0.181	0.415	13.80
12	54.09	0.165	0.040	0.411	0.645	2.70
13	51.91	0.056	0.040	0.427	0.772	1.09
14	37.13	-0.713	0.041	0.252	0.462	7.62
15	49.19	-0.082	0.040	0.409	0.719	2.33
16	64.03	0.678	0.041	0.508	0.988	2.31
17	59.63	0.448	0.040	0.436	0.910	0.89
18	31.37	-1.040	0.043	0.362	0.635	5.25
19	82.95	1.854	0.049	0.407	1.351	1.74
20	54.58	0.190	0.040	0.484	1.127	1.14
21	44.14	-0.341	0.040	0.403	0.885	2.53
22	55.25	0.224	0.040	0.493	1.064	1.53
23	45.30	-0.281	0.040	0.301	0.596	5.63
24	46.07	-0.242	0.040	0.523	1.123	1.44
25	55.34	0.229	0.040	0.578	1.264	3.23
26	62.44	0.594	0.040	0.587	1.688	4.61
27	59.29	0.430	0.040	0.603	1.484	4.78
28	61.25	0.531	0.040	0.598	1.711	5.25
29	50.54	-0.014	0.040	0.556	1.257	2.17
30	58.34	0.382	0.040	0.584	1.423	4.23
31	52.56	0.088	0.040	0.555	1.284	1.97
32	64.65	0.710	0.041	0.537	1.389	2.90
33	50.65	-0.039	0.040	0.547	1.377	2.18
34	40.56	-0.528	0.041	0.532	1.281	1.87
35	39.42	-0.589	0.041	0.503	1.128	1.12
36	49.28	-0.078	0.040	0.576	1.353	3.19
37	28.25	-1.230	0.044	0.283	0.660	6.07
38	36.67	-0.738	0.041	0.508	1.066	1.63
39	43.65	-0.366	0.040	0.538	1.232	2.20
40	36.55	-0.745	0.041	0.422	0.824	1.69
41	28.77	-1.198	0.044	0.301	0.602	5.23
42	41.20	-0.494	0.041	0.588	1.368	3.13
43	29.17	-1.173	0.044	0.401	0.823	2.72
44	25.37	-1.415	0.045	0.309	0.690	6.73
45	32.45	-0.977	0.043	0.384	0.752	2.86
46	31.25	-1.047	0.043	0.400	0.788	2.25
47	24.76	-1.456	0.046	0.345	0.738	3.50
48	25.28	-1.421	0.045	0.386	0.907	2.95

TABLE 65 (CONT.)
 SKA BLUE FORM F READING (COMPR.)
 ABILITY SUMMARY

48 ITEMS 3267 CASES KR-20= 0.918 EQUATING CONSTANT= -0.161

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	0	-4.213	1.021	156	10.21
2	1	-3.477	0.737	164	7.37
3	2	-3.029	0.613	168	6.13
4	4	-2.699	0.541	171	5.41
5	8	-2.433	0.492	174	4.92
6	11	-2.209	0.457	176	4.57
7	21	-2.013	0.430	178	4.30
8	30	-1.837	0.409	180	4.09
9	67	-1.677	0.392	182	3.92
10	87	-1.529	0.378	183	3.78
11	90	-1.391	0.366	184	3.66
12	121	-1.261	0.356	186	3.56
13	111	-1.137	0.348	187	3.48
14	117	-1.019	0.340	188	3.40
15	140	-0.905	0.334	189	3.34
16	117	-0.795	0.329	190	3.29
17	98	-0.688	0.325	192	3.25
18	123	-0.584	0.321	193	3.21
19	121	-0.482	0.318	194	3.18
20	101	-0.382	0.316	195	3.16
21	114	-0.283	0.314	196	3.14
22	53	-0.185	0.312	197	3.12
23	83	-0.088	0.312	198	3.12
24	94	0.009	0.311	198	3.11
25	84	0.106	0.311	199	3.11
26	105	0.203	0.312	200	3.12
27	89	0.301	0.313	201	3.13
28	88	0.400	0.315	202	3.15
29	82	0.499	0.317	203	3.17
30	72	0.601	0.320	204	3.20
31	76	0.704	0.323	205	3.23
32	73	0.810	0.327	206	3.27
33	79	0.919	0.332	208	3.32
34	66	1.031	0.338	209	3.38
35	72	1.147	0.345	210	3.45
36	72	1.269	0.353	211	3.53
37	82	1.397	0.362	212	3.62
38	68	1.532	0.374	214	3.74
39	80	1.677	0.388	215	3.88
40	63	1.823	0.404	217	4.04
41	68	2.005	0.425	218	4.25
42	63	2.197	0.452	220	4.52
43	49	2.416	0.487	223	4.87
44	32	2.676	0.535	225	5.35
45	28	2.999	0.608	228	6.08
46	9	3.440	0.732	233	7.32
47	13	4.108	1.017	240	10.17

TABLE 66
SRA BLUE FORM F TOTAL READING
ITEM SUMMARY

90 ITEMS 3270 CASES KR-20= 0.955 EQUATING CONSTANT= -0.150

ITEM NO.	RESPONSE PERCENT	LOG. EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	67.13	0.845	0.041	0.451	0.937	1.27
2	59.39	0.437	0.040	0.387	0.843	1.50
3	61.87	0.565	0.040	0.385	0.756	1.33
4	63.09	0.473	0.040	0.405	0.797	1.39
5	65.17	0.739	0.041	0.316	0.653	2.21
6	74.83	1.291	0.044	0.505	1.375	2.51
7	82.91	1.849	0.049	0.417	1.129	2.13
8	84.43	1.974	0.051	0.424	1.381	2.87
9	58.53	0.414	0.040	0.356	0.650	1.69
10	65.17	0.739	0.041	0.453	0.898	1.14
11	73.63	1.181	0.043	0.453	1.202	1.51
12	59.51	0.464	0.040	0.481	0.937	1.62
13	59.05	0.420	0.040	0.479	1.103	1.14
14	43.76	-0.359	0.040	0.159	0.297	9.04
15	66.73	0.824	0.041	0.445	0.903	1.30
16	54.13	0.169	0.040	0.390	0.585	2.36
17	51.96	0.060	0.040	0.414	0.853	1.28
18	37.19	-0.710	0.041	0.241	0.427	5.21
19	49.24	-0.078	0.040	0.395	0.684	1.69
20	64.07	0.681	0.040	0.491	0.950	1.96
21	59.66	0.451	0.040	0.419	0.844	1.04
22	31.44	-1.037	0.043	0.353	0.648	3.70
23	75.78	1.350	0.044	0.460	1.411	1.31
24	82.97	1.854	0.049	0.392	1.212	1.10
25	54.62	0.194	0.040	0.477	1.013	0.86
26	44.19	-0.337	0.040	0.402	0.754	1.83
27	49.14	-0.083	0.040	0.536	1.231	1.58
28	55.29	0.228	0.040	0.485	1.060	1.08
29	45.35	-0.277	0.040	0.277	0.494	4.49
30	48.12	-0.237	0.040	0.520	1.076	1.23
31	55.38	0.233	0.040	0.569	1.401	1.82
32	62.46	0.597	0.040	0.570	1.491	2.37
33	55.33	0.434	0.040	0.586	1.393	2.76
34	45.05	-0.292	0.040	0.528	1.078	1.43
35	61.28	0.535	0.040	0.584	1.584	3.06
36	57.83	0.357	0.040	0.569	1.382	2.15
37	50.58	-0.010	0.040	0.552	1.212	1.88
38	58.28	0.385	0.040	0.564	1.249	2.42
39	52.60	0.092	0.040	0.545	1.309	1.45
40	64.68	0.713	0.041	0.526	1.321	1.93
41	49.57	-0.061	0.040	0.533	1.179	1.17
42	50.09	-0.035	0.040	0.540	1.276	1.76
43	40.61	-0.525	0.041	0.515	1.179	1.32
44	39.48	-0.585	0.041	0.481	0.961	0.81
45	49.33	-0.074	0.040	0.562	1.406	1.91
46	42.17	-0.442	0.040	0.456	1.027	1.13
47	28.32	-1.228	0.044	0.259	0.592	4.51
48	35.75	-0.735	0.041	0.490	1.001	1.34
49	43.70	-0.362	0.040	0.520	1.188	1.15
50	26.61	-0.742	0.041	0.408	0.835	1.23

TABLE 66 (CONT.)
SRA BLUE FORM F TOTAL READING
ITEM SUMMARY

90 ITEMS 3270 CASES KR-20= 0.955 EQUATING CONSTANT= -0.150

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(1,AB)	SLOPE	MN SQ FIT
51	34.53	-0.858	0.042	0.420	0.897	1.61
52	28.84	-1.195	0.044	0.284	0.545	3.91
53	41.25	-0.490	0.040	0.588	1.382	2.11
54	42.29	-0.436	0.040	0.440	0.955	1.05
55	29.24	-1.171	0.044	0.395	0.777	1.98
56	25.44	-1.414	0.045	0.308	0.672	4.73
57	32.51	-0.974	0.042	0.363	0.683	1.99
58	31.31	-1.045	0.043	0.393	0.793	1.30
59	24.83	-1.455	0.046	0.326	0.678	2.26
60	25.35	-1.420	0.045	0.375	0.743	2.39
61	78.65	1.539	0.046	0.367	0.838	1.04
62	76.27	1.381	0.044	0.343	0.795	1.24
63	76.48	1.395	0.044	0.445	1.097	1.91
64	71.96	1.118	0.042	0.508	1.282	2.20
65	73.49	1.209	0.043	0.493	1.246	1.97
66	69.24	0.962	0.042	0.516	1.360	2.13
67	65.66	0.766	0.041	0.532	1.274	1.95
68	58.32	0.382	0.040	0.341	0.611	1.99
69	64.46	0.702	0.041	0.536	1.400	1.87
70	63.52	0.652	0.040	0.490	1.178	1.30
71	27.89	-0.676	0.041	0.537	1.141	1.19
72	56.67	0.298	0.040	0.523	1.050	1.36
73	48.90	-0.095	0.040	0.492	1.118	1.20
74	42.63	-0.418	0.040	0.471	1.006	1.12
75	65.47	0.756	0.041	0.452	0.986	1.63
76	58.44	0.389	0.040	0.562	1.339	1.75
77	52.78	0.101	0.040	0.381	0.697	1.49
78	49.57	-0.061	0.040	0.548	1.310	1.73
79	33.64	-0.909	0.042	0.396	0.740	1.80
80	38.59	-0.633	0.041	0.413	0.871	1.63
81	38.96	-0.613	0.041	0.427	0.888	1.77
82	35.81	-0.786	0.042	0.377	0.811	2.42
83	33.30	-0.928	0.042	0.464	0.974	1.54
84	39.20	-0.603	0.041	0.462	0.992	1.00
85	22.69	-1.604	0.047	0.344	0.844	3.50
86	51.01	0.012	0.040	0.486	1.088	1.03
87	33.54	-0.891	0.042	0.367	0.777	2.55
88	26.79	-1.325	0.045	0.319	0.679	2.69
89	20.52	-1.765	0.048	0.270	0.618	4.89
90	14.52	-2.242	0.054	0.099	0.306	9.99

TABLE 66 (CONT.)
SKA BLUE FORM F TOTAL READING
ABILITY SUMMARY

212

90 ITEMS 3270 CASES KR-20= 0.955 EQUATING CONSTANT= -0.150

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	0	-4.852	1.011	150	10.11
2	0	-4.138	0.722	157	7.22
3	0	-3.711	0.595	161	5.95
4	0	-3.402	0.521	164	5.21
5	0	-3.158	0.470	167	4.70
6	2	-2.955	0.433	169	4.33
7	0	-2.779	0.405	171	4.05
8	0	-2.625	0.382	172	3.82
9	2	-2.486	0.364	174	3.64
10	3	-2.359	0.348	175	3.48
11	3	-2.242	0.335	176	3.35
12	4	-2.134	0.324	177	3.24
13	2	-2.032	0.314	178	3.14
14	7	-1.937	0.305	179	3.05
15	24	-1.846	0.297	180	2.97
16	19	-1.760	0.291	181	2.91
17	22	-1.677	0.284	182	2.84
18	31	-1.598	0.279	183	2.79
19	38	-1.522	0.274	183	2.74
20	39	-1.448	0.269	184	2.69
21	58	-1.377	0.265	185	2.65
22	68	-1.307	0.261	185	2.61
23	71	-1.240	0.258	186	2.58
24	73	-1.175	0.255	187	2.55
25	62	-1.111	0.252	187	2.52
26	77	-1.048	0.249	188	2.49
27	84	-0.987	0.247	189	2.47
28	84	-0.926	0.244	189	2.44
29	68	-0.867	0.242	190	2.42
30	54	-0.809	0.240	190	2.40
31	51	-0.752	0.239	191	2.39
32	65	-0.695	0.237	192	2.37
33	71	-0.639	0.236	192	2.36
34	51	-0.584	0.234	193	2.34
35	52	-0.529	0.233	193	2.33
36	60	-0.475	0.232	194	2.32
37	59	-0.421	0.231	194	2.31
38	68	-0.368	0.231	195	2.31
39	63	-0.315	0.230	195	2.30
40	56	-0.262	0.229	196	2.29
41	47	-0.210	0.229	196	2.29
42	48	-0.157	0.229	197	2.29
43	49	-0.105	0.228	197	2.28
44	49	-0.053	0.228	198	2.28
45	56	-0.001	0.228	198	2.28
46	47	0.051	0.228	199	2.28
47	46	0.103	0.228	200	2.28
48	38	0.155	0.229	200	2.29
49	53	0.208	0.229	201	2.29
50	54	0.260	0.230	201	2.30

CONTINUED

TABLE 66 (CONT.)
SRA BLUE FORM F TOTAL READING
ABILITY SUMMARY

213

90 ITEMS 3270 CASES KR-20= 0.955 EQUATING CONSTANT= -0.150

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	49	0.313	0.230	202	2.30
52	53	0.366	0.231	202	2.31
53	52	0.419	0.232	203	2.32
54	64	0.473	0.232	203	2.32
55	32	0.528	0.233	204	2.93
56	41	0.582	0.235	204	2.35
57	40	0.638	0.236	205	2.36
58	45	0.694	0.237	205	2.37
59	42	0.750	0.239	206	2.39
60	45	0.808	0.241	207	2.41
61	39	0.866	0.242	207	2.42
62	34	0.925	0.245	208	2.45
63	36	0.986	0.247	208	2.47
64	50	1.047	0.249	209	2.49
65	38	1.110	0.252	210	2.52
66	41	1.174	0.255	210	2.55
67	31	1.240	0.258	211	2.58
68	43	1.307	0.261	212	2.61
69	37	1.376	0.265	212	2.65
70	35	1.448	0.269	213	2.69
71	41	1.521	0.274	214	2.74
72	47	1.598	0.279	214	2.79
73	22	1.677	0.285	215	2.85
74	23	1.760	0.291	216	2.91
75	43	1.846	0.298	217	2.98
76	36	1.937	0.305	218	3.05
77	32	2.033	0.314	219	3.14
78	23	2.135	0.324	220	3.24
79	39	2.244	0.335	221	3.35
80	28	2.360	0.349	222	3.49
81	22	2.487	0.364	223	3.64
82	20	2.627	0.383	225	3.83
83	18	2.782	0.405	226	4.05
84	16	2.957	0.434	228	4.34
85	13	3.161	0.471	230	4.71
86	9	3.405	0.521	233	5.21
87	7	3.715	0.596	236	5.96
88	6	4.142	0.722	240	7.22
89	1	4.856	1.011	247	10.11

215

TABLE 67
SRA GREEN FORM E VOCABULARY
ITEM SUMMARY

214

42 ITEMS 12170 CASES KR-20= 0.927 EQUATING CONSTANT= 1.013

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	85.41	1.815	0.028	0.458	1.408	10.66
2	73.71	0.928	0.023	0.579	1.482	16.02
3	82.48	1.560	0.026	0.492	1.452	11.16
4	73.59	0.920	0.023	0.487	1.012	3.06
5	75.00	1.013	0.024	0.507	1.333	4.93
6	69.42	0.660	0.023	0.545	1.328	5.12
7	42.60	-0.839	0.022	0.379	0.612	18.17
8	43.59	-0.761	0.022	0.359	0.664	25.43
9	50.51	-0.403	0.021	0.456	0.859	4.22
10	39.15	-1.035	0.022	0.434	0.796	14.07
11	59.91	0.111	0.022	0.556	1.179	2.88
12	57.72	-0.010	0.021	0.545	1.187	1.76
13	66.31	0.475	0.022	0.539	1.169	3.92
14	85.82	1.853	0.028	0.412	1.059	4.45
15	82.32	1.547	0.026	0.501	1.466	13.81
16	71.54	0.790	0.023	0.537	1.297	5.87
17	61.29	0.188	0.022	0.549	1.069	3.74
18	62.78	0.272	0.022	0.512	1.066	1.86
19	67.79	0.562	0.022	0.500	0.952	2.64
20	61.75	0.214	0.022	0.620	1.394	12.65
21	56.79	-0.061	0.021	0.430	0.817	8.67
22	57.73	-0.009	0.021	0.605	1.365	9.69
23	44.22	-0.748	0.022	0.476	0.797	4.38
24	49.23	-0.473	0.021	0.503	0.869	1.95
25	58.46	0.031	0.022	0.594	1.272	6.75
26	48.55	-0.511	0.021	0.519	0.908	6.81
27	65.27	0.414	0.022	0.559	1.212	4.79
28	70.81	0.745	0.023	0.594	1.477	15.72
29	65.51	0.428	0.022	0.511	1.064	2.09
30	46.03	-0.649	0.021	0.437	0.750	8.24
31	52.49	-0.296	0.021	0.535	1.055	4.74
32	63.04	0.287	0.022	0.521	1.066	1.80
33	57.30	-0.032	0.021	0.502	1.007	7.38
34	45.82	-0.605	0.021	0.567	1.101	5.57
35	48.58	-0.487	0.021	0.499	0.983	2.69
36	39.84	-0.995	0.022	0.477	0.817	5.35
37	40.38	-0.964	0.022	0.381	0.598	20.49
38	47.72	-0.556	0.021	0.437	0.795	9.34
39	35.18	-1.266	0.022	0.360	0.638	19.12
40	36.72	-1.175	0.022	0.434	0.770	8.02
41	28.07	-1.712	0.023	0.400	0.705	12.74
42	35.85	-1.227	0.022	0.471	0.860	9.89

TABLE 67 (CONT.)
 SRA GREEN FORM E VOCABULARY
 ABILITY SUMMARY

42 ITEMS 12170 CASES KR-20= 0.927 EQUATING CONSTANT= 1.013

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	2	-4.079	1.024	169	10.24
2	4	-3.338	0.740	177	7.40
3	8	-2.885	0.617	181	6.17
4	17	-2.549	0.546	185	5.46
5	56	-2.278	0.498	187	4.98
6	111	-2.047	0.464	190	4.64
7	134	-1.845	0.438	192	4.38
8	242	-1.662	0.417	194	4.17
9	281	-1.495	0.401	195	4.01
10	364	-1.340	0.387	197	3.87
11	359	-1.194	0.376	198	3.76
12	410	-1.056	0.367	200	3.67
13	407	-0.924	0.359	201	3.59
14	393	-0.797	0.353	202	3.53
15	352	-0.675	0.348	203	3.48
16	308	-0.555	0.343	205	3.43
17	332	-0.438	0.340	206	3.40
18	303	-0.324	0.337	207	3.37
19	357	-0.211	0.335	208	3.35
20	342	-0.099	0.334	209	3.34
21	317	0.013	0.334	210	3.34
22	313	0.124	0.334	211	3.34
23	315	0.236	0.334	212	3.34
24	329	0.348	0.336	214	3.36
25	368	0.461	0.338	215	3.38
26	364	0.577	0.341	216	3.41
27	382	0.694	0.345	217	3.45
28	370	0.815	0.350	218	3.50
29	377	0.939	0.356	220	3.56
30	391	1.062	0.363	221	3.63
31	371	1.203	0.372	222	3.72
32	348	1.346	0.383	224	3.83
33	401	1.497	0.396	225	3.96
34	380	1.650	0.412	227	4.12
35	384	1.837	0.432	228	4.32
36	408	2.034	0.458	230	4.58
37	393	2.259	0.492	233	4.92
38	346	2.524	0.540	235	5.40
39	326	2.853	0.612	239	6.12
40	296	3.299	0.735	243	7.35
41	208	4.052	1.020	250	10.20

TABLE 68
SRA GREEN FORM E READING (COMPR.)
ITEM SUMMARY

48 ITEMS 12268 CASES KR-20= 0.925 EQUATING CONSTANT= 1.348

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MIN. SQ. FIT
1	62.81	0.565	0.021	0.462	0.996	1.76
2	64.07	0.631	0.021	0.387	0.715	7.10
3	59.15	0.373	0.021	0.385	0.735	8.16
4	75.31	1.275	0.023	0.452	1.142	5.15
5	54.06	0.113	0.021	0.372	0.764	7.56
6	63.61	0.607	0.021	0.522	1.178	6.64
7	43.11	-0.450	0.021	0.451	0.840	2.46
8	62.08	0.558	0.021	0.493	1.046	3.67
9	49.56	-0.117	0.021	0.416	0.810	3.69
10	71.10	1.021	0.022	0.492	1.300	7.60
11	53.49	0.084	0.021	0.466	0.910	1.74
12	52.04	0.010	0.021	0.370	0.724	7.87
13	64.27	0.642	0.021	0.471	1.091	2.18
14	43.80	-0.414	0.021	0.473	0.944	4.36
15	74.07	1.198	0.022	0.486	1.409	9.37
16	65.14	0.688	0.021	0.503	1.123	5.08
17	63.54	0.603	0.021	0.416	0.886	1.23
18	69.69	0.951	0.022	0.517	1.454	9.76
19	58.69	0.350	0.021	0.574	1.476	11.27
20	61.70	0.506	0.021	0.466	1.085	1.26
21	43.94	-0.407	0.021	0.411	0.825	4.20
22	45.57	-0.322	0.021	0.331	0.736	14.17
23	45.75	-0.313	0.021	0.420	0.806	3.45
24	37.56	-0.749	0.021	0.385	0.830	14.20
25	49.15	-0.137	0.021	0.506	1.123	1.40
26	47.29	-0.233	0.021	0.478	1.042	1.00
27	54.94	0.158	0.021	0.525	1.182	3.85
28	43.30	-0.441	0.021	0.506	1.022	2.05
29	44.66	-0.369	0.021	0.480	1.046	2.05
30	58.15	0.322	0.021	0.549	1.290	6.26
31	42.70	-0.472	0.021	0.516	1.150	2.89
32	52.80	0.048	0.021	0.553	1.385	5.83
33	67.84	0.836	0.021	0.491	1.242	4.54
34	56.30	0.227	0.021	0.470	1.089	1.06
35	50.80	-0.053	0.021	0.498	1.090	1.23
36	58.26	0.328	0.021	0.532	1.317	4.26
37	45.79	-0.310	0.021	0.435	0.906	2.66
38	50.82	-0.052	0.021	0.504	1.075	2.15
39	45.42	-0.330	0.021	0.456	1.061	3.83
40	44.30	-0.385	0.021	0.536	1.214	3.48
41	39.34	-0.652	0.021	0.393	0.923	8.41
42	44.18	-0.394	0.021	0.512	1.104	1.88
43	37.85	-0.733	0.021	0.411	0.877	5.92
44	31.30	-1.109	0.022	0.430	0.915	3.14
45	33.16	-0.999	0.022	0.426	0.941	5.65
46	30.93	-1.131	0.022	0.375	0.744	7.27
47	38.54	-0.095	0.021	0.497	1.137	2.90
48	30.25	-0.822	0.022	0.426	1.003	8.06



TABLE 68 (CONT.)
SRA GREEN FORM E READING (COMPR.)
ABILITY SUMMARY

48 ITEMS 12268 CASES KR-20= 0.925 EQUATING CONSTANT= 1.348

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	0	-4.023	1.015	173	10.15
2	6	-3.300	0.728	180	7.28
3	15	-2.865	0.603	185	6.03
4	24	-2.547	0.530	188	5.30
5	35	-2.292	0.481	191	4.81
6	72	-2.079	0.445	193	4.45
7	110	-1.892	0.419	195	4.19
8	164	-1.726	0.397	196	3.97
9	224	-1.575	0.380	198	3.80
10	284	-1.436	0.366	199	3.66
11	324	-1.307	0.354	200	3.54
12	415	-1.185	0.345	202	3.45
13	468	-1.069	0.336	203	3.36
14	455	-0.958	0.329	204	3.29
15	464	-0.852	0.323	205	3.23
16	424	-0.749	0.318	206	3.18
17	447	-0.649	0.314	207	3.14
18	413	-0.552	0.310	208	3.10
19	372	-0.456	0.307	209	3.07
20	342	-0.363	0.305	210	3.05
21	360	-0.270	0.303	211	3.03
22	351	-0.179	0.302	212	3.02
23	346	-0.088	0.301	213	3.01
24	336	0.003	0.301	214	3.01
25	296	0.093	0.301	214	3.01
26	311	0.164	0.302	215	3.02
27	295	0.275	0.303	216	3.03
28	297	0.368	0.305	217	3.05
29	295	0.461	0.307	218	3.07
30	247	0.556	0.310	219	3.10
31	283	0.653	0.313	220	3.13
32	278	0.752	0.317	221	3.17
33	287	0.855	0.322	222	3.22
34	282	0.961	0.328	223	3.28
35	280	1.071	0.335	224	3.35
36	275	1.186	0.344	225	3.44
37	263	1.307	0.353	227	3.53
38	281	1.436	0.365	228	3.65
39	282	1.574	0.379	229	3.79
40	268	1.724	0.396	231	3.96
41	228	1.890	0.417	232	4.17
42	249	2.075	0.444	234	4.44
43	222	2.288	0.480	236	4.80
44	198	2.541	0.529	239	5.29
45	175	2.858	0.602	242	6.02
46	132	3.292	0.727	246	7.27
47	93	4.014	1.014	254	10.14

TABLE 69
SRA GREEN FORM E TOTAL READING
ITEM SUMMARY

90 ITEMS 12292 CASES KR-20= 0.961 EQUATING CONSTANT= 1.192

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(1,AB)	SLOPE	MN SQ. FIT
1	62.88	0.421	0.021	0.465	0.965	1.17
2	64.13	0.490	0.021	0.398	0.679	4.78
3	59.22	0.225	0.021	0.385	0.667	5.85
4	85.56	1.914	0.027	0.441	1.518	8.48
5	75.35	1.148	0.023	0.443	1.069	2.05
6	73.97	1.061	0.023	0.559	1.529	11.25
7	54.14	-0.042	0.021	0.361	0.659	5.92
8	63.68	0.465	0.021	0.529	1.213	3.62
9	43.22	-0.617	0.021	0.451	0.767	2.21
10	62.75	0.414	0.021	0.497	1.081	2.00
11	82.68	1.668	0.026	0.473	1.496	8.70
12	49.65	-0.276	0.021	0.418	0.773	3.62
13	71.15	0.889	0.022	0.491	1.257	3.09
14	53.57	-0.071	0.021	0.456	0.881	1.93
15	52.12	-0.147	0.021	0.356	0.618	6.18
16	73.85	1.053	0.023	0.478	1.106	3.87
17	64.33	0.501	0.021	0.467	0.996	0.96
18	43.90	-0.581	0.021	0.459	0.855	3.78
19	74.11	1.069	0.023	0.482	1.218	3.74
20	65.20	0.548	0.021	0.496	1.092	2.65
21	75.25	1.142	0.023	0.507	1.519	5.76
22	63.60	0.461	0.021	0.403	0.828	1.57
23	69.94	0.817	0.022	0.512	1.332	3.80
24	69.73	0.805	0.022	0.538	1.561	5.50
25	58.76	0.201	0.021	0.565	1.441	4.83
26	61.76	0.361	0.021	0.455	0.912	0.79
27	44.04	-0.573	0.021	0.388	0.713	5.21
28	45.66	-0.486	0.021	0.315	0.644	10.79
29	45.84	-0.477	0.021	0.400	0.761	3.84
30	37.67	-0.922	0.021	0.371	0.755	11.57
31	49.24	-0.298	0.021	0.506	1.043	1.09
32	45.17	-0.619	0.021	0.378	0.724	5.52
33	47.38	-0.396	0.021	0.463	0.911	1.08
34	55.02	0.004	0.021	0.527	1.189	2.22
35	44.55	-0.546	0.021	0.371	0.812	7.05
36	43.40	-0.607	0.021	0.491	0.936	1.84
37	44.76	-0.534	0.021	0.460	0.916	2.76
38	58.22	0.173	0.021	0.547	1.299	2.60
39	42.81	-0.639	0.021	0.501	1.099	2.74
40	52.68	-0.107	0.021	0.535	1.236	2.71
41	67.89	0.699	0.022	0.479	1.132	1.62
42	56.38	0.076	0.021	0.459	1.049	1.18
43	50.89	-0.212	0.021	0.482	1.025	1.35
44	51.00	-0.206	0.021	0.462	0.976	1.14
45	58.33	0.178	0.021	0.517	1.253	1.71
46	45.89	-0.474	0.021	0.427	0.892	2.73
47	50.92	-0.210	0.021	0.485	0.960	1.38
48	39.75	-0.806	0.021	0.442	0.960	4.36
49	45.52	-0.494	0.021	0.441	0.977	4.60
50	44.46	-0.551	0.021	0.527	1.179	2.53

TABLE 69 (CONT.)
SRA GREEN FORM E TOTAL READING
ITEM SUMMARY

90 ITEMS 12292 CASES KR-20= 0.961 EQUATING CONSTANT= 1.192						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
51	60.31	0.283	0.021	0.571	1.519	4.83
52	39.45	-0.823	0.021	0.375	0.819	7.52
53	44.28	-0.560	0.021	0.493	1.040	2.18
54	37.96	-0.906	0.021	0.389	0.801	5.45
55	31.43	-1.287	0.022	0.415	0.821	2.80
56	33.28	-1.175	0.022	0.416	0.805	5.23
57	31.06	-1.309	0.022	0.363	0.685	6.62
58	38.65	-0.867	0.021	0.483	0.996	2.64
59	58.14	0.168	0.021	0.565	1.535	3.43
60	36.37	-0.996	0.022	0.412	0.929	6.88
61	66.64	0.629	0.021	0.513	1.218	3.20
62	85.96	1.951	0.027	0.386	1.214	3.53
63	82.49	1.655	0.025	0.470	1.469	8.10
64	71.82	0.929	0.022	0.505	1.289	4.24
65	61.67	0.356	0.021	0.524	1.214	2.56
66	63.15	0.436	0.021	0.495	1.122	1.94
67	68.11	0.711	0.022	0.470	1.079	1.71
68	62.13	0.381	0.021	0.592	1.446	7.39
69	57.22	0.120	0.021	0.416	0.755	3.45
70	58.15	0.169	0.021	0.579	1.431	5.34
71	44.78	-0.534	0.021	0.459	0.807	2.29
72	49.73	-0.272	0.021	0.478	0.917	1.38
73	58.88	0.207	0.021	0.573	1.379	4.59
74	49.06	-0.307	0.021	0.497	0.889	2.58
75	65.61	0.571	0.021	0.526	1.347	2.98
76	71.10	0.886	0.022	0.561	1.548	8.76
77	65.85	0.584	0.021	0.482	1.076	1.35
78	46.57	-0.439	0.021	0.426	0.831	2.64
79	52.96	-0.103	0.021	0.513	1.134	2.36
80	63.41	0.450	0.021	0.494	1.147	1.38
81	57.73	0.147	0.021	0.486	1.055	2.71
82	47.35	-0.397	0.021	0.558	1.201	3.24
83	49.49	-0.285	0.021	0.482	1.047	1.25
84	40.43	-0.768	0.021	0.462	0.897	1.67
85	40.97	-0.739	0.021	0.371	0.744	6.93
86	40.23	-0.351	0.021	0.417	0.897	3.15
87	35.83	-1.026	0.022	0.345	0.671	7.13
88	37.35	-0.940	0.022	0.414	0.800	3.12
89	28.78	-1.452	0.023	0.394	0.773	4.66
90	36.00	-0.989	0.022	0.461	0.956	3.09

TABLE 69 (CONT.)
SRA GREEN FORM E TOTAL READING
ABILITY SUMMARY

90 ITEMS 12292 CASES KR=20= 0.961 EQUATING CONSTANT= 1.192

SCORE	FREQ.	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	0	-4.777	1.010	164	10.10
2	0	-4.063	0.722	171	7.22
3	0	-3.637	0.595	176	5.95
4	1	-3.329	0.520	179	5.20
5	1	-3.085	0.469	181	4.69
6	2	-2.882	0.432	183	4.32
7	3	-2.708	0.404	185	4.04
8	3	-2.554	0.381	186	3.81
9	12	-2.416	0.363	188	3.63
10	8	-2.290	0.347	189	3.47
11	17	-2.175	0.334	190	3.34
12	17	-2.067	0.322	191	3.22
13	28	-1.967	0.312	192	3.12
14	35	-1.872	0.303	193	3.03
15	46	-1.783	0.295	194	2.95
16	75	-1.698	0.288	195	2.88
17	87	-1.616	0.282	196	2.82
18	129	-1.538	0.276	197	2.76
19	137	-1.463	0.271	197	2.71
20	157	-1.391	0.267	198	2.67
21	202	-1.321	0.262	199	2.62
22	197	-1.254	0.258	199	2.58
23	236	-1.188	0.255	200	2.55
24	228	-1.124	0.252	201	2.52
25	228	-1.061	0.249	201	2.49
26	272	-1.000	0.246	202	2.46
27	210	-0.940	0.243	203	2.43
28	204	-0.882	0.241	203	2.41
29	203	-0.824	0.239	204	2.39
30	209	-0.768	0.237	204	2.37
31	198	-0.712	0.235	205	2.35
32	193	-0.657	0.233	205	2.33
33	189	-0.603	0.232	206	2.32
34	179	-0.550	0.231	206	2.31
35	181	-0.497	0.229	207	2.29
36	184	-0.445	0.228	207	2.28
37	173	-0.393	0.227	208	2.27
38	207	-0.341	0.226	209	2.26
39	176	-0.290	0.226	209	2.26
40	172	-0.239	0.225	210	2.25
41	165	-0.189	0.225	210	2.25
42	171	-0.139	0.224	211	2.24
43	187	-0.088	0.224	211	2.24
44	148	-0.038	0.224	212	2.24
45	190	0.011	0.223	212	2.23
46	165	0.061	0.223	213	2.23
47	170	0.111	0.224	213	2.24
48	175	0.161	0.224	214	2.24
49	194	0.211	0.224	214	2.24
50	195	0.262	0.224	215	2.24

TABLE 69 (CONT.)
 SRA: GREEN FORM 'E' TOTAL READING
 ABILITY SUMMARY

221

90 ITEMS 12292 CASES KR-20= 0.961 EQUATING CONSTANT= 1.192

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	179	0.312	0.225	215	2.25
52	169	0.363	0.226	216	2.26
53	187	0.414	0.226	216	2.26
54	147	0.465	0.227	217	2.27
55	161	0.517	0.228	217	2.28
56	168	0.569	0.229	218	2.29
57	168	0.622	0.230	218	2.30
58	150	0.675	0.232	219	2.32
59	169	0.729	0.233	219	2.33
60	146	0.784	0.235	220	2.35
61	186	0.840	0.237	220	2.37
62	162	0.896	0.239	221	2.39
63	138	0.954	0.241	221	2.41
64	171	1.012	0.243	222	2.43
65	175	1.072	0.246	223	2.46
66	178	1.133	0.249	223	2.49
67	153	1.196	0.252	224	2.52
68	168	1.260	0.255	225	2.55
69	177	1.327	0.259	225	2.59
70	175	1.395	0.263	226	2.63
71	176	1.465	0.268	227	2.68
72	135	1.538	0.273	227	2.73
73	160	1.614	0.278	228	2.78
74	138	1.694	0.285	229	2.85
75	144	1.777	0.292	230	2.92
76	175	1.864	0.299	231	2.99
77	172	1.956	0.308	231	3.08
78	184	2.054	0.318	232	3.18
79	142	2.159	0.329	234	3.29
80	133	2.272	0.343	235	3.43
81	155	2.394	0.358	236	3.58
82	139	2.529	0.377	237	3.77
83	117	2.680	0.400	239	4.00
84	106	2.851	0.428	240	4.28
85	88	3.050	0.466	242	4.66
86	81	3.290	0.516	245	5.16
87	72	3.594	0.591	248	5.91
88	50	4.016	0.719	252	7.19
89	33	4.725	1.008	259	10.08

TABLE 70
SRA GREEN FORM F VOCABULARY
ITEM SUMMARY

42 ITEMS 1456 CASES KR-20= 0.916 EQUATING CONSTANT= 0.745

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MIN SQ FIT
1	69.92	0.727	0.064	0.504	1.163	1.25
2	66.81	1.955	0.082	0.372	1.080	0.87
3	70.26	0.747	0.064	0.394	0.821	1.48
4	67.31	0.576	0.063	0.482	0.779	2.39
5	62.29	0.297	0.062	0.413	0.829	1.48
6	68.75	0.659	0.064	0.331	0.689	2.19
7	40.11	-0.879	0.062	0.235	0.378	7.37
8	53.85	-0.152	0.061	0.452	0.854	1.92
9	66.96	0.556	0.063	0.545	1.475	1.70
10	71.63	0.829	0.065	0.495	1.197	1.44
11	42.99	-0.723	0.061	0.447	0.832	1.08
12	37.09	-1.047	0.063	0.453	0.902	1.53
13	81.94	1.530	0.074	0.519	1.328	2.94
14	75.69	1.084	0.068	0.345	0.788	1.78
15	71.57	0.825	0.065	0.587	1.670	2.92
16	50.27	-0.339	0.061	0.560	1.181	1.27
17	61.47	0.253	0.062	0.548	1.314	1.16
18	60.85	0.219	0.061	0.504	1.115	0.60
19	53.71	-0.159	0.061	0.456	0.870	1.14
20	53.37	-0.177	0.061	0.603	1.352	1.76
21	55.98	-0.040	0.061	0.501	0.979	1.04
22	45.54	-0.588	0.061	0.573	1.192	1.07
23	76.79	1.157	0.068	0.492	1.186	1.20
24	56.25	-0.025	0.061	0.521	1.033	1.03
25	42.86	-0.731	0.061	0.483	0.819	0.92
26	34.75	-1.180	0.063	0.437	0.833	2.75
27	25.96	-1.721	0.068	0.335	0.537	4.22
28	69.92	0.727	0.064	0.481	1.138	1.11
29	68.96	0.671	0.064	0.535	1.249	1.62
30	69.71	0.715	0.064	0.550	1.423	1.60
31	55.49	-0.065	0.061	0.484	0.931	0.90
32	61.95	0.279	0.062	0.561	1.189	1.16
33	54.60	-0.112	0.061	0.524	1.169	1.43
34	66.35	0.521	0.063	0.521	1.200	0.95
35	63.67	0.372	0.062	0.526	1.089	0.89
36	39.63	-0.906	0.062	0.470	0.926	1.50
37	44.78	-0.628	0.061	0.437	0.783	1.85
38	46.98	-0.512	0.061	0.489	0.912	1.42
39	29.74	-1.479	0.066	0.391	0.685	1.77
40	39.49	-0.913	0.062	0.475	0.923	0.88
41	31.59	-1.365	0.065	0.369	0.701	1.89
42	38.67	-0.959	0.062	0.303	0.541	4.17

TABLE 70 (CONT.)
SRA GREEN FORM F VOCABULARY
ABILITY SUMMARY

42 ITEMS		1456 CASES	KR-20= 0.916	EQUATING CONSTANT= 0.745	

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR

1	0	-4.035	1.022	167	10.22
2	0	-3.298	0.737	174	7.37
3	1	-2.850	0.614	179	6.14
4	4	-2.519	0.542	182	5.42
5	3	-2.252	0.494	185	4.94
6	12	-2.025	0.459	187	4.59
7	15	-1.827	0.433	189	4.33
8	23	-1.648	0.413	191	4.13
9	31	-1.485	0.397	193	3.97
10	41	-1.333	0.383	194	3.83
11	37	-1.191	0.372	196	3.72
12	56	-1.055	0.363	197	3.63
13	49	-0.926	0.356	198	3.56
14	48	-0.802	0.350	199	3.50
15	34	-0.681	0.345	201	3.45
16	42	-0.564	0.341	202	3.41
17	46	-0.449	0.338	203	3.38
18	60	-0.335	0.335	204	3.35
19	45	-0.224	0.334	205	3.34
20	48	-0.113	0.333	206	3.33
21	45	-0.002	0.333	207	3.33
22	30	0.109	0.333	209	3.33
23	39	0.220	0.334	210	3.34
24	47	0.332	0.336	211	3.36
25	40	0.445	0.338	212	3.38
26	49	0.561	0.342	213	3.42
27	50	0.679	0.346	214	3.46
28	44	0.800	0.351	215	3.51
29	43	0.925	0.357	217	3.57
30	48	1.055	0.364	218	3.64
31	43	1.191	0.373	219	3.73
32	59	1.334	0.384	221	3.84
33	53	1.487	0.397	222	3.97
34	45	1.651	0.413	224	4.13
35	48	1.830	0.434	226	4.34
36	38	2.029	0.460	228	4.60
37	38	2.255	0.494	230	4.94
38	29	2.522	0.542	233	5.42
39	36	2.852	0.613	236	6.13
40	25	3.300	0.736	240	7.36
41	12	4.036	1.021	248	10.21

TABLE 71
SRA GREEN FORM F READING (COMPR.)
ITEM SUMMARY

48 ITEMS 1406 CASES KR-20= 0.919 EQUATING CONSTANT= 0.510						
ITEM NO.	RESPONSE PERCENT	LOG EASINES S	STD ERROR	DISCRIMINATION R (I, AB)	SLOPE	MA SQ FIT
1	78.44	1.610	0.070	0.466	1.194	1.08
2	85.02	1.934	0.088	0.406	1.268	1.35
3	85.88	1.610	0.080	0.481	1.711	1.91
4	86.29	1.649	0.081	0.506	1.644	2.31
5	73.19	0.662	0.066	0.489	1.282	0.90
6	85.54	1.578	0.080	0.495	1.106	1.21
7	77.56	0.948	0.069	0.467	1.327	1.19
8	84.64	1.444	0.077	0.344	0.828	1.00
9	74.69	0.757	0.067	0.485	1.189	1.00
10	78.65	1.024	0.070	0.458	1.119	1.18
11	63.98	0.127	0.062	0.406	0.847	1.33
12	77.35	0.934	0.069	0.540	1.414	1.99
13	39.90	-1.129	0.061	0.312	0.533	3.65
14	59.07	-0.136	0.061	0.483	1.078	0.58
15	73.87	0.705	0.066	0.468	1.045	1.08
16	54.16	-0.392	0.060	0.361	0.780	2.10
17	53.07	-0.448	0.060	0.274	0.544	4.75
18	69.65	0.447	0.064	0.543	1.308	1.40
19	53.07	-0.448	0.060	0.485	0.997	1.30
20	44.08	-0.879	0.060	0.458	0.823	1.29
21	52.32	-0.486	0.060	0.378	0.616	2.29
22	51.02	-0.553	0.060	0.386	0.714	2.05
23	44.82	-0.872	0.060	0.349	0.707	2.39
24	46.79	-0.770	0.060	0.462	0.692	2.22
25	38.88	-1.183	0.061	0.447	0.882	1.58
26	64.05	0.131	0.062	0.581	1.247	1.97
27	57.50	-0.218	0.060	0.479	0.918	1.08
28	64.53	0.157	0.062	0.493	0.807	2.18
29	59.82	-0.097	0.061	0.529	1.108	1.25
30	65.62	0.218	0.062	0.550	1.259	1.18
31	55.59	-0.318	0.060	0.519	1.001	1.09
32	41.75	-1.032	0.060	0.331	0.587	3.53
33	58.53	-0.165	0.060	0.354	0.633	2.05
34	64.00	0.161	0.062	0.445	0.869	0.64
35	68.55	0.384	0.063	0.529	1.186	1.07
36	67.74	0.337	0.063	0.548	1.126	1.41
37	67.67	0.333	0.063	0.555	1.233	1.27
38	62.01	0.020	0.061	0.511	1.130	0.72
39	49.59	-0.626	0.060	0.519	0.972	1.76
40	53.96	-0.402	0.060	0.449	0.848	0.92
41	61.80	0.009	0.061	0.550	1.105	1.21
42	47.07	-0.756	0.060	0.521	1.051	1.11
43	55.66	-0.314	0.060	0.534	1.155	1.40
44	38.20	-1.220	0.061	0.494	0.761	1.35
45	33.08	-1.501	0.063	0.265	0.464	4.10
46	39.36	-1.158	0.061	0.378	0.685	1.97
47	59.28	-0.125	0.061	0.531	1.116	1.39
48	35.81	-1.349	0.062	0.320	0.533	2.84

TABLE 71 (CONT.)
SRA GREEN FORM F READING (COMPR.)
ABILITY SUMMARY

225

48 ITEMS 1466 CASES KR=20= 0.919 EQUATING CONSTANT= 0.510

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE √SCALE SCORE	STD ERR
1	0	-4.216	1.021	163	10.21
2	0	-3.481	0.736	170	7.36
3	1	-3.033	0.613	175	6.13
4	1	-2.704	0.541	178	5.41
5	1	-2.438	0.492	181	4.92
6	2	-2.214	0.457	183	4.57
7	7	-2.017	0.431	185	4.31
8	9	-1.841	0.410	187	4.10
9	9	-1.680	0.393	188	3.93
10	14	-1.531	0.379	190	3.79
11	21	-1.393	0.367	191	3.67
12	22	-1.261	0.357	192	3.57
13	20	-1.137	0.349	194	3.49
14	31	-1.018	0.342	195	3.42
15	38	-0.903	0.336	196	3.36
16	38	-0.793	0.330	197	3.30
17	40	-0.685	0.326	198	3.26
18	42	-0.580	0.322	199	3.22
19	34	-0.477	0.319	200	3.19
20	33	-0.377	0.317	201	3.17
21	36	-0.277	0.315	202	3.15
22	38	-0.179	0.313	203	3.13
23	31	-0.081	0.312	204	3.12
24	34	0.016	0.312	205	3.12
25	41	0.113	0.312	206	3.12
26	30	0.210	0.312	207	3.12
27	44	0.308	0.313	208	3.13
28	42	0.406	0.315	209	3.15
29	44	0.506	0.317	210	3.17
30	42	0.607	0.319	211	3.19
31	34	0.709	0.322	212	3.22
32	39	0.815	0.326	213	3.26
33	52	0.923	0.331	214	3.31
34	51	1.034	0.337	215	3.37
35	58	1.150	0.344	217	3.44
36	60	1.270	0.352	218	3.52
37	37	1.397	0.361	219	3.61
38	58	1.532	0.373	220	3.73
39	49	1.675	0.386	222	3.86
40	67	1.831	0.403	223	4.03
41	53	2.001	0.424	225	4.24
42	37	2.192	0.450	227	4.50
43	50	2.410	0.485	229	4.85
44	33	2.668	0.534	232	5.34
45	19	2.990	0.606	235	6.06
46	12	3.430	0.731	239	7.31
47	8	4.156	1.016	247	10.16

TABLE 72
SRA GREEN FORM F TOTAL READING
ITEM SUMMARY

90 ITEMS 1407 CASES KR-20= 0.956 EQUATING CONSTANT= 0.620

ITEM NO.	RESPONSE PERCENT	LUG EASINESS	STD. ERROR	DISCRIMINATION R(I,AB)	SLOPE	MA SQ FIT
1	78.46	1.114	0.069	0.468	1.138	0.96
2	89.03	2.027	0.088	0.388	1.128	1.22
3	85.89	1.707	0.080	0.454	1.448	1.21
4	70.14	0.585	0.064	0.515	1.160	1.09
5	86.30	1.745	0.081	0.488	1.673	1.54
6	86.91	1.805	0.082	0.399	1.185	1.06
7	73.21	0.770	0.065	0.483	1.167	1.07
8	85.55	1.675	0.079	0.384	0.893	1.28
9	77.57	1.053	0.068	0.465	1.230	0.90
10	84.05	1.543	0.076	0.337	0.681	1.33
11	70.48	0.605	0.064	0.393	0.833	1.04
12	74.71	0.864	0.066	0.479	1.167	0.93
13	78.66	1.128	0.069	0.446	1.118	0.97
14	64.01	0.239	0.061	0.378	0.740	1.28
15	77.37	1.039	0.068	0.523	1.613	1.31
16	67.55	0.436	0.062	0.477	0.978	0.94
17	39.55	-1.018	0.061	0.291	0.460	2.88
18	59.10	-0.023	0.060	0.463	0.980	0.74
19	73.89	0.812	0.066	0.443	1.026	0.64
20	54.19	-0.278	0.060	0.346	0.635	1.64
21	62.58	0.162	0.061	0.410	0.853	1.56
22	53.10	-0.334	0.060	0.263	0.450	2.93
23	69.67	0.557	0.063	0.533	1.293	1.23
24	68.98	0.518	0.063	0.333	0.688	1.82
25	53.10	-0.334	0.060	0.477	0.953	1.14
26	44.72	-0.767	0.060	0.475	0.993	1.32
27	52.35	-0.373	0.060	0.368	0.706	2.14
28	51.06	-0.440	0.059	0.343	0.562	2.30
29	44.85	-0.760	0.060	0.308	0.622	2.24
30	46.83	-0.657	0.060	0.459	0.910	1.73
31	38.92	-1.073	0.061	0.441	0.841	1.17
32	40.56	-0.985	0.061	0.242	0.356	3.83
33	64.08	0.243	0.061	0.560	1.282	1.08
34	57.53	-0.105	0.060	0.464	0.893	0.94
35	54.19	-0.278	0.060	0.457	0.975	1.22
36	64.55	0.269	0.061	0.477	0.860	1.31
37	59.85	0.016	0.060	0.506	1.044	1.34
38	65.64	0.329	0.062	0.530	1.079	1.18
39	55.62	-0.204	0.060	0.508	1.057	0.88
40	41.79	-0.920	0.060	0.333	0.578	1.97
41	58.55	-0.052	0.060	0.330	0.586	2.21
42	64.62	0.273	0.061	0.427	0.845	0.81
43	68.58	0.494	0.063	0.493	1.120	0.83
44	67.21	0.417	0.062	0.567	1.442	1.28
45	67.70	0.447	0.062	0.520	1.188	1.45
46	67.69	0.444	0.062	0.535	1.176	0.93
47	62.03	0.132	0.061	0.489	1.036	1.02
48	71.85	0.686	0.064	0.524	1.207	1.23
49	49.63	-0.513	0.060	0.502	0.945	1.11
50	53.99	-0.289	0.060	0.438	0.816	0.98

CONTINUED

TABLE 72 (CONT.)
SRA GREEN FORM F TOTAL READING
ITEM SUMMARY

90 ITEMS 1467 CASES KR-20= 0.956 EQUATING CONSTANT= 0.620

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MIN. SQ FIT
51	43.42	-0.834	0.060	0.450	0.857	1.08
52	61.83	0.121	0.061	0.536	1.217	1.16
53	47.10	-0.643	0.060	0.493	0.958	0.95
54	55.69	-0.201	0.060	0.516	1.120	0.97
55	38.24	-1.110	0.061	0.385	0.680	1.48
56	33.13	-1.394	0.063	0.230	0.424	3.95
57	39.40	-1.047	0.061	0.365	0.678	1.96
58	59.30	-0.012	0.060	0.517	1.118	0.94
59	37.56	-1.147	0.061	0.464	0.903	1.65
60	35.86	-1.240	0.062	0.298	0.517	2.79
61	82.07	1.381	0.073	0.513	1.448	1.60
62	75.87	0.939	0.067	0.331	0.664	1.20
63	71.78	0.682	0.064	0.571	1.454	1.49
64	50.65	-0.461	0.059	0.537	1.124	0.86
65	61.76	0.118	0.061	0.524	1.210	1.52
66	61.15	0.085	0.061	0.476	0.898	1.02
67	54.06	-0.285	0.060	0.420	0.711	1.22
68	53.72	-0.303	0.060	0.580	1.239	1.41
69	56.31	-0.169	0.060	0.490	0.935	1.11
70	45.94	-0.703	0.060	0.552	0.956	1.21
71	76.86	1.011	0.068	0.476	1.196	0.90
72	56.58	-0.155	0.060	0.497	0.981	1.23
73	43.29	-0.841	0.060	0.460	0.837	1.17
74	35.24	-1.274	0.062	0.403	0.699	2.22
75	26.52	-1.792	0.066	0.307	0.481	2.97
76	70.14	0.585	0.064	0.462	1.043	0.74
77	69.19	0.529	0.063	0.521	1.091	1.39
78	69.94	0.573	0.063	0.545	1.385	1.29
79	55.83	-0.194	0.060	0.465	0.853	1.32
80	62.24	0.143	0.061	0.552	1.158	1.10
81	54.94	-0.239	0.060	0.511	1.088	1.11
82	63.60	0.382	0.062	0.505	1.127	0.79
83	63.94	0.235	0.061	0.497	1.124	0.80
84	48.08	-1.011	0.061	0.448	0.833	1.62
85	45.19	-0.742	0.060	0.412	0.790	1.33
86	47.38	-0.629	0.060	0.468	0.914	1.09
87	30.27	-1.561	0.064	0.386	0.797	0.99
88	39.95	-1.018	0.061	0.467	0.952	0.83
89	32.11	-1.453	0.063	0.339	0.671	1.78
90	39.13	-1.062	0.061	0.299	0.553	2.34

TABLE 72 (CONT.)
SRA GREEN FORM F TOTAL READING
ABILITY SUMMARY

90 ITEMS 1457 CASES KR-20= 0.956 EQUATING CONSTANT= 0.620

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	0	-4.845	1.011	158	10.11
2	0	-4.130	0.722	165	7.22
3	0	-3.703	0.596	169	5.96
4	0	-3.393	0.521	172	5.21
5	0	-3.148	0.471	175	4.71
6	0	-2.944	0.434	177	4.34
7	0	-2.769	0.406	179	4.06
8	1	-2.613	0.383	180	3.83
9	0	-2.474	0.365	181	3.65
10	0	-2.347	0.349	183	3.49
11	0	-2.230	0.336	184	3.36
12	2	-2.121	0.324	185	3.24
13	1	-2.019	0.314	186	3.14
14	3	-1.923	0.306	187	3.06
15	0	-1.832	0.298	188	2.98
16	5	-1.746	0.291	189	2.91
17	3	-1.663	0.285	190	2.85
18	4	-1.583	0.279	190	2.79
19	11	-1.507	0.274	191	2.74
20	19	-1.433	0.269	192	2.69
21	15	-1.362	0.265	193	2.65
22	15	-1.293	0.261	193	2.61
23	13	-1.225	0.258	194	2.58
24	27	-1.160	0.255	195	2.55
25	13	-1.096	0.252	195	2.52
26	17	-1.033	0.249	196	2.49
27	25	-0.972	0.246	196	2.46
28	22	-0.912	0.244	197	2.44
29	24	-0.853	0.242	198	2.42
30	18	-0.795	0.240	198	2.40
31	24	-0.738	0.238	199	2.38
32	15	-0.681	0.237	199	2.37
33	23	-0.626	0.235	200	2.35
34	19	-0.571	0.234	200	2.34
35	22	-0.516	0.233	201	2.33
36	18	-0.462	0.232	202	2.32
37	16	-0.409	0.231	202	2.31
38	26	-0.356	0.230	203	2.30
39	17	-0.303	0.229	203	2.29
40	23	-0.251	0.229	204	2.29
41	10	-0.199	0.228	204	2.28
42	24	-0.147	0.228	205	2.28
43	18	-0.095	0.227	205	2.27
44	23	-0.044	0.227	206	2.27
45	16	0.008	0.227	206	2.27
46	26	0.060	0.227	207	2.27
47	18	0.111	0.227	207	2.27
48	25	0.163	0.227	208	2.27
49	24	0.215	0.228	208	2.28
50	25	0.267	0.228	209	2.28

CONTINUED



TABLE 72 (CONT.)
 SRA GREEN FORM F TOTAL READING
 ABILITY SUMMARY

90 ITEMS 467 CASES KR-20= 0.956 EQUATION CONSTANT= 0.620

SCORE	FREQ	LOG ABILITY	STD ERRGR	NATIONAL REFERENCE SCALE SCORE	STD ERR
51	36	0.319	0.229	209	2.29
52	20	0.371	0.229	210	2.29
53	19	0.424	0.230	210	2.30
54	21	0.477	0.231	211	2.31
55	19	0.530	0.232	211	2.32
56	21	0.584	0.233	212	2.33
57	23	0.639	0.234	213	2.34
58	22	0.694	0.236	213	2.36
59	25	0.750	0.237	214	2.37
60	27	0.807	0.239	214	2.39
61	12	0.864	0.241	215	2.41
62	27	0.922	0.243	215	2.43
63	20	0.982	0.245	216	2.45
64	23	1.042	0.247	217	2.47
65	19	1.104	0.250	217	2.50
66	33	1.167	0.253	218	2.53
67	28	1.231	0.256	219	2.56
68	22	1.298	0.259	219	2.59
69	28	1.366	0.263	220	2.63
70	35	1.436	0.267	221	2.67
71	33	1.509	0.272	221	2.72
72	20	1.584	0.277	222	2.77
73	20	1.662	0.282	223	2.82
74	28	1.743	0.288	224	2.88
75	28	1.828	0.295	224	2.95
76	22	1.917	0.303	225	3.03
77	25	2.012	0.312	226	3.12
78	19	2.112	0.321	227	3.21
79	26	2.219	0.333	228	3.33
80	21	2.334	0.346	230	3.46
81	22	2.459	0.362	231	3.62
82	14	2.596	0.380	232	3.80
83	14	2.745	0.403	234	4.03
84	8	2.922	0.431	235	4.31
85	15	3.123	0.468	237	4.68
86	5	3.366	0.519	240	5.19
87	6	3.672	0.593	243	5.93
88	1	4.096	0.720	247	7.20
89	0	4.808	1.009	254	10.09

TABLE 73
SAT INTERMEDIATE I FORM WORD MEANING
ITEM SUMMARY

38 ITEMS 10524 CASES KR=20= 0.894 EQUATING CONSTANT= 0.539

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I, AB)	SLOPE	MN SQ. FIT
1	80.82	1.970	0.027	0.437	1.030	5.82
2	74.36	1.527	0.025	0.514	1.385	9.06
3	73.27	1.459	0.024	0.460	1.096	3.55
4	81.69	2.037	0.027	0.367	0.913	1.68
5	72.41	1.406	0.024	0.454	1.008	2.11
6	65.74	1.022	0.023	0.554	1.213	9.21
7	59.88	0.709	0.023	0.539	1.317	6.08
8	58.87	0.656	0.022	0.503	1.205	4.08
9	78.58	1.808	0.026	0.494	1.429	9.43
10	63.86	0.920	0.023	0.468	1.064	2.42
11	55.43	0.478	0.022	0.493	1.074	4.76
12	59.66	0.697	0.023	0.578	1.316	11.08
13	55.60	0.459	0.022	0.443	0.860	1.82
14	56.21	0.518	0.022	0.505	1.070	2.60
15	56.59	0.538	0.022	0.561	1.285	7.36
16	58.63	0.643	0.022	0.464	0.875	1.16
17	72.60	1.418	0.024	0.489	1.036	5.79
18	46.40	0.016	0.022	0.593	1.505	9.59
19	51.43	0.273	0.022	0.397	0.704	9.75
20	47.81	0.089	0.022	0.404	0.854	5.26
21	46.74	0.034	0.022	0.519	1.087	2.37
22	40.63	-0.284	0.023	0.491	1.025	2.03
23	43.51	-0.133	0.022	0.447	0.838	2.46
24	36.00	-0.534	0.023	0.352	0.720	11.03
25	37.24	-0.466	0.023	0.387	0.574	19.50
26	41.11	-0.259	0.023	0.500	1.183	2.89
27	34.85	-0.598	0.023	0.469	1.023	2.32
28	31.47	-0.793	0.024	0.443	0.950	3.17
29	27.15	-1.056	0.025	0.425	0.963	4.80
30	32.54	-0.731	0.024	0.456	1.059	3.49
31	20.58	-1.510	0.027	0.350	0.849	12.32
32	24.24	-1.247	0.026	0.521	1.273	9.83
33	13.69	-2.104	0.031	0.275	0.743	14.96
34	13.16	-2.159	0.031	0.255	0.732	24.48
35	16.65	-1.880	0.029	0.335	0.812	10.12
36	19.16	-1.619	0.028	0.332	0.843	16.69
37	19.08	-1.625	0.028	0.323	0.801	11.93
38	18.40	-1.680	0.028	0.363	0.934	14.92

TABLE 73 (CONT.)
 SAT INTERMEDIATE I FORM W WORD MEANING
 ABILITY SUMMARY

33 ITEMS 10524 CASES KR-20= 0.894 EQUATING CONSTANT= 0.539

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	8	-4.180	1.028	164	10.28
2	46	-3.429	0.747	171	7.47
3	54	-2.965	0.626	176	6.26
4	107	-2.619	0.556	179	5.56
5	183	-2.335	0.510	182	5.10
6	235	-2.092	0.478	184	4.78
7	263	-1.876	0.453	187	4.53
8	368	-1.679	0.434	189	4.34
9	402	-1.498	0.419	190	4.19
10	460	-1.327	0.408	192	4.08
11	480	-1.165	0.398	194	3.98
12	448	-1.010	0.390	195	3.90
13	484	-0.860	0.384	197	3.84
14	462	-0.714	0.379	198	3.79
15	453	-0.571	0.376	200	3.76
16	449	-0.431	0.373	201	3.73
17	425	-0.293	0.372	202	3.72
18	428	-0.155	0.371	204	3.71
19	428	-0.018	0.371	205	3.71
20	453	0.120	0.372	207	3.72
21	393	0.259	0.373	208	3.73
22	410	0.399	0.376	209	3.76
23	410	0.542	0.379	211	3.79
24	334	0.687	0.384	212	3.84
25	368	0.837	0.389	214	3.89
26	307	0.991	0.396	215	3.96
27	281	1.151	0.404	217	4.04
28	247	1.318	0.414	219	4.14
29	236	1.495	0.426	220	4.26
30	220	1.683	0.441	222	4.41
31	165	1.886	0.460	224	4.60
32	178	2.108	0.485	226	4.85
33	104	2.358	0.517	229	5.17
34	101	2.648	0.563	232	5.63
35	65	3.002	0.632	235	6.32
36	40	3.473	0.751	240	7.51
37	22	4.230	1.031	248	10.31

TABLE 74
SAT INTERMEDIATE I FORM W PARAGRAPH MEANING
ITEM SUMMARY

60 ITEMS 10532 CASES KR-20= 0.914 EQUATING CONSTANT= 0.591

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	79.57	1.859	0.026	0.291	0.633	2.59
2	75.57	1.595	0.024	0.519	1.407	13.72
3	68.27	1.152	0.023	0.486	1.095	5.76
4	57.54	0.606	0.022	0.398	0.793	2.33
5	60.48	0.751	0.022	0.492	1.104	4.59
6	68.21	1.149	0.023	0.520	1.367	8.43
7	49.16	0.202	0.022	0.441	0.962	2.31
8	77.27	1.678	0.025	0.480	1.217	9.69
9	76.90	1.654	0.025	0.518	1.732	13.49
10	75.93	1.593	0.024	0.503	1.495	10.81
11	72.86	1.409	0.024	0.425	0.982	3.44
12	61.99	0.827	0.022	0.369	0.784	3.28
13	62.46	0.850	0.022	0.406	0.874	1.74
14	58.76	0.666	0.022	0.471	1.012	2.42
15	65.75	1.019	0.022	0.542	1.500	10.33
16	62.01	0.828	0.022	0.430	1.023	1.52
17	49.69	0.227	0.022	0.410	0.910	0.98
18	53.55	0.413	0.022	0.382	0.860	2.38
19	66.07	1.036	0.022	0.555	1.535	11.49
20	54.72	0.469	0.022	0.474	1.145	2.30
21	46.55	0.172	0.022	0.483	1.247	3.03
22	54.86	0.476	0.022	0.424	0.799	5.59
23	47.32	0.112	0.022	0.498	1.265	3.90
24	50.84	0.282	0.022	0.460	1.099	1.81
25	50.37	0.260	0.022	0.484	1.184	1.93
26	42.11	-0.143	0.022	0.438	0.863	1.64
27	51.69	0.323	0.022	0.584	1.666	10.25
28	56.91	0.576	0.022	0.467	1.106	1.98
29	46.04	0.050	0.022	0.363	0.831	2.62
30	29.53	-0.807	0.024	0.255	0.674	8.11
31	48.31	0.168	0.022	0.537	1.399	6.40
32	55.64	0.514	0.022	0.520	1.410	4.65
33	52.14	0.345	0.022	0.520	1.378	5.01
34	62.74	0.865	0.022	0.537	1.517	7.59
35	33.39	-0.592	0.023	0.424	1.054	1.39
36	27.66	-0.397	0.022	0.310	0.642	5.47
37	35.24	-0.494	0.023	0.406	0.836	1.47
38	31.01	-0.723	0.023	0.245	0.622	9.75
39	46.52	0.073	0.022	0.455	-1.169	1.40
40	32.55	-0.626	0.023	0.323	0.875	5.95
41	35.60	-0.475	0.023	0.369	0.975	4.76
42	44.78	-0.011	0.022	0.466	1.188	2.18
43	15.49	-1.778	0.029	0.082	0.570	32.42
44	32.76	-0.627	0.023	0.343	0.875	8.49
45	25.78	-1.031	0.024	0.350	0.870	2.86
46	22.84	-1.221	0.025	0.311	0.835	5.80
47	31.29	-0.708	0.023	0.383	0.796	2.35
48	26.10	-1.011	0.024	0.406	0.875	3.31
49	19.72	-1.439	0.027	0.110	0.440	22.58
50	31.69	-0.685	0.023	0.453	1.201	4.53

TABLE 74 (CONT.)
 SAT INTERMEDIATE I FORM W PARAGRAPH MEANING
 ITEM SUMMARY

60 ITEMS 10532 CASES KR-20= 0.914 EQUATING CONSTANT= 0.591

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(1,AB)	SLOPE	MN SQ FIT
51	38.65	-0.316	0.022	0.471	1.333	3.80
52	30.83	-0.733	0.023	0.396	1.001	2.66
53	32.17	-0.659	0.023	0.275	0.772	10.43
54	22.05	-1.274	0.026	0.374	0.994	3.99
55	18.67	-1.518	0.027	0.202	0.723	17.85
56	26.47	-0.989	0.024	0.357	1.001	7.00
57	19.59	-1.449	0.027	0.263	0.864	10.34
58	16.45	-1.696	0.028	0.081	0.460	27.17
59	18.53	-1.528	0.027	0.184	0.632	16.46
60	22.84	-1.221	0.025	0.183	0.537	15.73

TABLE 74 (CONT.)
SAT INTERMEDIATE I FORM W PARAGRAPH MEANING
ABILITY SUMMARY

60 ITEMS 10532 CASES KR-20= 0.914 EQUATING CONSTANT= 0.591

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	7	-4.489	1.016	161	10.16
2	5	-3.764	0.729	168	7.29
3	13	-3.327	0.605	173	6.05
4	13	-3.006	0.532	176	5.32
5	20	-2.751	0.483	178	4.83
6	22	-2.535	0.447	181	4.47
7	43	-2.348	0.420	182	4.20
8	62	-2.181	0.398	184	3.98
9	74	-2.029	0.381	186	3.81
10	114	-1.890	0.366	187	3.66
11	161	-1.760	0.354	188	3.54
12	169	-1.638	0.344	190	3.44
13	237	-1.523	0.335	191	3.35
14	320	-1.413	0.328	192	3.28
15	353	-1.308	0.321	193	3.21
16	401	-1.207	0.315	194	3.15
17	359	-1.110	0.310	195	3.10
18	375	-1.015	0.306	196	3.06
19	378	-0.923	0.302	197	3.02
20	363	-0.833	0.298	198	2.98
21	348	-0.745	0.295	198	2.95
22	332	-0.658	0.293	199	2.93
23	326	-0.573	0.291	200	2.91
24	289	-0.490	0.289	201	2.89
25	299	-0.407	0.287	202	2.87
26	303	-0.325	0.286	203	2.86
27	296	-0.243	0.285	203	2.85
28	275	-0.162	0.284	204	2.84
29	280	-0.081	0.284	205	2.84
30	253	0.001	0.284	206	2.84
31	270	0.080	0.284	207	2.84
32	245	0.161	0.285	208	2.85
33	264	0.242	0.285	208	2.85
34	250	0.323	0.286	209	2.86
35	288	0.406	0.287	210	2.87
36	248	0.489	0.289	211	2.89
37	260	0.573	0.291	212	2.91
38	213	0.658	0.293	212	2.93
39	209	0.745	0.296	213	2.96
40	198	0.833	0.299	214	2.99
41	190	0.923	0.302	215	3.02
42	173	1.015	0.306	216	3.06
43	159	1.110	0.310	217	3.10
44	170	1.208	0.315	218	3.15
45	144	1.309	0.321	219	3.21
46	116	1.414	0.328	220	3.28
47	114	1.524	0.335	221	3.35
48	109	1.639	0.344	222	3.44
49	87	1.761	0.354	224	3.54
50	77	1.891	0.366	225	3.66

TABLE 74 (CONT.)
 SAT INTERMEDIATE I FORM W PARAGRAPH MEANING
 ABILITY SUMMARY

60 ITEMS 10532 CASES KR-20= 0.914 EQUATING CONSTANT= 0.591

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	72	2.031	0.381	226	3.81
52	53	2.182	0.398	228	3.98
53	43	2.349	0.420	229	4.20
54	36	2.536	0.447	231	4.47
55	18	2.751	0.482	233	4.82
56	18	3.006	0.531	236	5.31
57	7	3.326	0.604	239	6.04
58	1	3.763	0.729	244	7.29
59	4	4.487	1.015	251	10.15

237

TABLE 75
SAT INTERMEDIATE I FORM W TOTAL READING
ITEM SUMMARY

98 ITEMS 10533 CASES KR-20= 0.947 EQUATING CONSTANT= 0.571

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	80.77	1.910	0.026	0.427	1.134	4.89
2	74.33	1.487	0.024	0.492	1.344	5.33
3	73.24	1.422	0.024	0.439	1.110	2.74
4	81.65	1.974	0.027	0.355	0.845	1.67
5	72.37	1.372	0.024	0.429	0.996	2.26
6	65.71	1.006	0.022	0.540	1.313	5.86
7	59.86	0.707	0.022	0.516	1.233	3.55
8	58.84	0.657	0.022	0.476	1.065	1.96
9	78.54	1.755	0.025	0.476	1.619	5.52
10	63.84	0.909	0.022	0.450	0.978	2.11
11	55.41	0.488	0.022	0.467	1.205	2.21
12	59.64	0.697	0.022	0.564	1.490	6.13
13	55.04	0.470	0.022	0.416	0.889	1.12
14	56.19	0.526	0.022	0.481	1.013	2.96
15	56.57	0.545	0.022	0.552	1.332	4.79
16	58.61	0.645	0.022	0.447	0.986	1.26
17	72.56	1.383	0.024	0.471	1.134	4.47
18	46.39	0.049	0.022	0.577	1.541	5.14
19	51.41	0.293	0.022	0.362	0.697	4.14
20	47.80	0.118	0.022	0.380	0.883	1.25
21	46.73	0.065	0.022	0.497	1.670	1.95
22	40.62	-0.238	0.022	0.461	1.143	1.11
23	43.59	-0.094	0.022	0.411	0.850	1.25
24	36.00	-0.477	0.022	0.321	0.760	3.39
25	37.24	-0.412	0.022	0.278	0.500	7.22
26	41.10	-0.214	0.022	0.473	1.182	1.34
27	34.65	-0.538	0.023	0.426	1.003	1.20
28	31.47	-0.723	0.023	0.405	0.927	1.37
29	27.15	-0.975	0.024	0.379	0.943	2.28
30	32.54	-0.664	0.023	0.414	1.005	1.97
31	20.57	-1.409	0.026	0.319	0.907	6.03
32	24.25	-1.158	0.025	0.492	1.325	4.39
33	12.71	-1.978	0.030	0.239	0.737	6.34
34	13.18	-2.031	0.031	0.198	0.710	9.55
35	16.06	-1.764	0.029	0.298	0.862	3.63
36	19.17	-1.513	0.027	0.285	0.861	6.42
37	19.09	-1.519	0.027	0.277	0.809	4.91
38	18.41	-1.572	0.027	0.317	0.910	6.07
39	79.56	1.852	0.026	0.284	0.599	2.81
40	75.96	1.588	0.024	0.528	1.631	5.86
41	68.26	1.142	0.023	0.484	1.180	3.53
42	57.55	0.592	0.022	0.387	0.727	2.19
43	60.48	0.738	0.022	0.504	1.164	3.38
44	68.20	1.139	0.023	0.523	1.288	5.84
45	49.16	0.184	0.022	0.433	0.879	1.59
46	77.26	1.671	0.025	0.458	1.140	5.04
47	76.89	1.647	0.025	0.507	1.564	7.57
48	75.92	1.585	0.024	0.497	1.473	6.43
49	72.85	1.400	0.024	0.406	0.918	2.09
50	61.99	0.814	0.022	0.361	0.775	2.49

TABLE 75 (CONT.)
 SAT INTERMEDIATE I FORM W TOTAL READING
 ITEM SUMMARY

98 ITEMS 10533 CASES KR-25= 0.947 EQUATING CONSTANT= 0.571

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MIN SQ FIT
51	62.45	0.838	0.022	0.394	0.835	1.13 ³
52	58.76	0.653	0.022	0.464	0.968	2.00
53	65.75	1.008	0.022	0.540	1.486	6.59
54	62.01	0.815	0.022	0.413	0.930	1.51
55	49.68	0.209	0.022	0.393	0.882	1.53
56	53.55	0.397	0.022	0.364	0.799	2.21
57	66.07	1.025	0.022	0.534	1.415	5.62
58	54.71	0.454	0.022	0.461	1.057	1.57
59	48.54	0.154	0.022	0.471	1.172	2.28
60	54.86	0.461	0.022	0.400	0.706	4.75
61	47.32	0.094	0.022	0.493	1.216	2.62
62	50.83	0.265	0.022	0.434	0.991	1.15
63	50.27	0.243	0.022	0.461	1.084	1.27
64	42.11	-0.163	0.022	0.398	0.840	1.80
65	51.69	0.307	0.022	0.575	1.525	5.81
66	56.91	0.561	0.022	0.437	1.029	1.13
67	46.04	0.031	0.022	0.345	0.753	2.49
68	29.53	-0.834	0.024	0.232	0.555	7.63
69	48.21	0.142	0.022	0.526	1.352	3.33
70	55.63	0.499	0.022	0.505	1.264	2.36
71	52.13	0.328	0.022	0.504	1.320	2.74
72	62.74	0.652	0.022	0.524	1.494	3.92
73	33.39	-0.617	0.023	0.412	1.002	1.71
74	37.07	-0.420	0.022	0.288	0.609	5.13
75	35.23	-0.518	0.023	0.391	0.801	1.72
76	31.01	-0.749	0.023	0.230	0.568	7.85
77	46.51	0.055	0.022	0.436	1.055	1.07
78	32.04	-0.691	0.023	0.307	0.762	5.29
79	35.59	-0.498	0.023	0.355	0.837	3.81
80	44.77	-0.031	0.022	0.452	1.155	1.24
81	15.49	-1.814	0.029	0.083	0.523	20.98
82	32.75	-0.652	0.023	0.331	0.904	6.67
83	25.76	-1.060	0.024	0.338	0.813	2.60
84	22.83	-1.252	0.025	0.202	0.748	4.70
85	31.26	-0.754	0.023	0.365	0.847	2.27
86	26.10	-1.040	0.024	0.398	0.918	2.18
87	19.72	-1.472	0.027	0.093	0.379	16.36
88	31.69	-0.711	0.023	0.452	1.145	2.63
89	38.65	-0.339	0.022	0.457	1.235	2.16
90	30.83	-0.760	0.023	0.390	0.945	1.71
91	32.17	-0.684	0.023	0.258	0.683	7.58
92	22.04	-1.305	0.026	0.364	0.859	2.71
93	18.67	-1.552	0.027	0.198	0.671	12.26
94	26.47	-1.017	0.024	0.355	0.974	4.87
95	19.59	-1.482	0.027	0.258	0.772	7.51
96	16.44	-1.731	0.028	0.080	0.437	17.63
97	18.53	-1.562	0.027	0.181	0.528	11.36
98	22.83	-1.252	0.025	0.173	0.461	11.38

TABLE 75 (CONT.)
SAT INTERMEDIATE I FORM W TOTAL READING
ABILITY SUMMARY

98 ITEMS 10533 CASES KR-20= 0.947 EQUATING CONSTANT= 0.571

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	0	-5.046	1.010	155	10.10
2	1	-4.333	0.721	162	7.21
3	2	-3.907	0.595	167	5.95
4	1	-3.599	0.520	170	5.20
5	6	-3.355	0.470	172	4.70
6	7	-3.152	0.433	174	4.33
7	11	-2.977	0.405	176	4.05
8	6	-2.822	0.382	177	3.82
9	13	-2.683	0.364	179	3.64
10	13	-2.557	0.348	180	3.48
11	16	-2.440	0.335	181	3.35
12	14	-2.332	0.324	182	3.24
13	26	-2.230	0.314	183	3.14
14	34	-2.135	0.305	184	3.05
15	38	-2.044	0.297	185	2.97
16	43	-1.957	0.291	186	2.91
17	73	-1.875	0.284	187	2.84
18	96	-1.796	0.279	188	2.79
19	107	-1.719	0.274	189	2.74
20	125	-1.646	0.269	189	2.69
21	141	-1.574	0.265	190	2.65
22	162	-1.505	0.261	191	2.61
23	183	-1.438	0.258	191	2.58
24	210	-1.372	0.255	192	2.55
25	233	-1.308	0.252	193	2.52
26	230	-1.245	0.249	193	2.49
27	264	-1.184	0.246	194	2.46
28	218	-1.124	0.244	194	2.44
29	210	-1.065	0.242	195	2.42
30	253	-1.007	0.240	196	2.40
31	215	-0.950	0.238	196	2.38
32	214	-0.893	0.237	197	2.37
33	213	-0.838	0.235	197	2.35
34	212	-0.783	0.234	198	2.34
35	202	-0.729	0.232	198	2.32
36	211	-0.675	0.231	199	2.31
37	209	-0.622	0.230	199	2.30
38	186	-0.569	0.229	200	2.29
39	152	-0.516	0.228	201	2.28
40	185	-0.464	0.228	201	2.28
41	195	-0.413	0.227	202	2.27
42	192	-0.361	0.227	202	2.27
43	173	-0.310	0.226	203	2.26
44	176	-0.259	0.226	203	2.26
45	175	-0.208	0.225	204	2.25
46	170	-0.157	0.225	204	2.25
47	155	-0.107	0.225	205	2.25
48	194	-0.056	0.225	205	2.25
49	158	-0.006	0.225	206	2.25
50	157	0.045	0.225	206	2.25

CONTINUED

TABLE 75 (CONT.)
 SAT-INTERMEDIATE I FORM W TOTAL READING
 ABILITY SUMMARY

98 ITEMS 10533 CASES KR-20= 0.947 EQUATING CONSTANT= 0.571

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	160	0.095	0.225	207	2.25
52	164	0.146	0.225	207	2.25
53	160	0.197	0.226	208	2.26
54	179	0.248	0.226	208	2.26
55	154	0.299	0.227	209	2.27
56	188	0.351	0.227	209	2.27
57	156	0.402	0.228	210	2.28
58	168	0.454	0.228	210	2.28
59	155	0.507	0.229	211	2.29
60	152	0.559	0.230	211	2.30
61	146	0.613	0.231	212	2.31
62	121	0.666	0.232	212	2.32
63	145	0.721	0.233	213	2.33
64	149	0.775	0.235	213	2.35
65	90	0.831	0.236	214	2.36
66	136	0.887	0.238	215	2.38
67	126	0.944	0.239	215	2.39
68	126	1.002	0.241	216	2.41
69	104	1.060	0.243	216	2.43
70	103	1.120	0.245	217	2.45
71	105	1.181	0.248	218	2.48
72	89	1.243	0.250	218	2.50
73	89	1.306	0.253	219	2.53
74	95	1.371	0.256	219	2.56
75	68	1.437	0.259	220	2.59
76	63	1.505	0.263	221	2.63
77	87	1.575	0.266	221	2.66
78	71	1.647	0.271	222	2.71
79	61	1.722	0.275	223	2.75
80	66	1.799	0.280	224	2.80
81	57	1.879	0.286	224	2.86
82	42	1.962	0.292	225	2.92
83	39	2.050	0.299	226	2.99
84	23	2.141	0.306	227	3.06
85	35	2.238	0.315	228	3.15
86	28	2.340	0.325	229	3.25
87	26	2.449	0.336	230	3.36
88	29	2.567	0.349	231	3.49
89	16	2.694	0.365	233	3.65
90	17	2.833	0.383	234	3.83
91	9	2.989	0.406	236	4.06
92	6	3.164	0.434	237	4.34
93	4	3.368	0.471	239	4.71
94	3	3.613	0.521	242	5.21
95	6	3.922	0.595	245	5.95
96	3	4.348	0.722	249	7.22
97	6	5.062	1.010	256	10.10

TABLE 76
SAT INTERMEDIATE I FORM X WORD MEANING
ITEM SUMMARY

38 ITEMS 1257 CASES KR-20= 0.899 EQUATING CONSTANT= 0.439						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(A,B)	SLOPE	MN SQ FIT
1	74.46	1.779	0.072	0.519	1.318	1.37
2	71.92	1.620	0.070	0.479	0.975	0.96
3	64.92	1.218	0.067	0.567	1.199	2.07
4	64.44	1.192	0.067	0.522	1.080	2.22
5	65.31	1.240	0.067	0.528	1.056	1.36
6	58.63	0.882	0.065	0.461	0.846	1.39
7	67.54	1.364	0.068	0.500	0.932	2.32
8	53.86	0.636	0.065	0.548	1.183	1.35
9	54.42	0.665	0.065	0.499	1.067	0.84
10	58.47	0.874	0.065	0.507	1.065	1.02
11	55.21	0.705	0.065	0.507	0.965	0.87
12	38.19	-0.176	0.066	0.511	1.026	0.84
13	57.52	0.825	0.065	0.593	1.343	1.89
14	54.20	0.656	0.065	0.475	0.903	0.86
15	41.29	-0.011	0.065	0.508	1.000	1.11
16	55.45	0.718	0.065	0.572	1.345	1.18
17	45.43	0.204	0.065	0.483	0.800	0.99
18	44.55	0.159	0.065	0.336	0.548	4.12
19	43.12	0.085	0.065	0.560	1.220	1.06
20	45.27	0.196	0.065	0.462	1.046	1.26
21	42.88	0.072	0.065	0.416	0.829	1.80
22	34.84	-0.359	0.067	0.430	0.785	1.20
23	35.08	-0.346	0.067	0.476	1.067	1.05
24	40.33	-0.061	0.066	0.575	1.231	1.73
25	42.56	0.056	0.065	0.472	1.003	0.77
26	38.74	-0.146	0.066	0.512	1.102	1.12
27	28.72	-0.715	0.070	0.304	0.519	4.76
28	30.39	-0.615	0.069	0.394	0.759	1.26
29	19.65	-1.329	0.078	0.304	0.681	2.82
30	29.51	-0.667	0.070	0.319	0.562	3.37
31	28.48	-0.730	0.070	0.444	1.054	1.76
32	20.84	-1.239	0.077	0.302	0.605	2.65
33	26.89	-0.829	0.071	0.498	0.933	0.90
34	25.14	-0.941	0.073	0.341	0.654	2.38
35	16.55	-1.546	0.082	0.354	0.799	2.50
36	13.21	-1.892	0.090	0.254	0.563	2.76
37	16.55	-1.580	0.083	0.382	0.971	1.25
38	12.49	-1.967	0.092	0.251	0.693	2.77

TABLE 76 (CONT.)
SAT INTERMEDIATE I FORM X WORD MEANING
ABILITY SUMMARY

241

38 ITEMS 1257 CASES KR-20= 0.859 EQUATING CONSTANT= 0.439

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	12	-4.011	1.024	164	10.24
2	13	-3.270	0.741	172	7.41
3	15	-2.815	0.619	176	6.19
4	18	-2.477	0.548	180	5.48
5	35	-2.203	0.502	182	5.02
6	52	-1.969	0.468	185	4.68
7	45	-1.761	0.443	187	4.43
8	51	-1.574	0.424	189	4.24
9	75	-1.401	0.409	190	4.09
10	64	-1.239	0.396	192	3.96
11	67	-1.086	0.387	194	3.87
12	54	-0.940	0.379	195	3.79
13	45	-0.799	0.372	196	3.72
14	35	-0.665	0.367	198	3.67
15	51	-0.530	0.363	199	3.63
16	50	-0.399	0.361	200	3.61
17	48	-0.270	0.359	202	3.59
18	40	-0.141	0.358	203	3.58
19	40	0.014	0.358	204	3.58
20	42	0.114	0.358	206	3.58
21	46	0.243	0.360	207	3.60
22	33	0.374	0.362	208	3.62
23	47	0.506	0.366	209	3.66
24	51	0.641	0.370	211	3.70
25	40	0.760	0.376	212	3.76
26	33	0.924	0.383	214	3.83
27	28	1.073	0.391	215	3.91
28	30	1.250	0.402	217	4.02
29	21	1.396	0.414	218	4.14
30	14	1.574	0.430	220	4.30
31	21	1.767	0.449	222	4.49
32	15	1.979	0.475	224	4.75
33	6	2.220	0.508	227	5.08
34	10	2.501	0.555	229	5.55
35	4	2.846	0.625	233	6.25
36	3	3.308	0.746	237	7.46
37	2	4.058	1.028	245	10.28

243

TABLE 77
SAT INTERMEDIATE I FORM X PARAGRAPH MEANING
ITEM SUMMARY

60 ITEMS 1261 CASES KR-20= 0.906 EQUATING CONSTANT= 0.495

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	75.57	1.783	0.070	0.440	1.002	1.58
2	73.83	1.656	0.068	0.438	1.130	1.71
3	71.85	1.544	0.067	0.461	0.769	2.40
4	55.67	0.733	0.062	0.392	0.854	0.81
5	56.30	0.763	0.062	0.405	0.835	1.08
6	57.34	0.811	0.062	0.468	1.012	1.14
7	54.24	0.665	0.062	0.480	1.239	1.41
8	53.93	0.651	0.061	0.339	0.494	2.24
9	55.99	0.748	0.062	0.482	1.011	1.45
10	61.38	1.005	0.062	0.494	1.149	1.16
11	61.93	1.032	0.063	0.537	1.477	1.74
12	38.07	-0.107	0.064	0.283	0.486	1.52
13	58.84	0.883	0.062	0.398	0.778	1.36
14	47.66	0.357	0.062	0.498	1.269	0.81
15	38.38	-0.091	0.063	0.218	0.521	2.84
16	62.89	1.079	0.063	0.461	0.972	1.30
17	37.19	-0.151	0.064	0.343	0.618	1.32
18	58.84	0.883	0.062	0.487	1.090	1.19
19	54.72	0.688	0.062	0.498	1.017	1.41
20	44.73	0.218	0.062	0.464	1.082	1.22
21	56.78	0.785	0.062	0.518	1.281	1.47
22	59.71	0.925	0.062	0.486	1.186	1.00
23	47.82	0.364	0.062	0.339	0.590	1.50
24	33.15	-0.361	0.065	0.229	0.436	2.23
25	25.46	-0.800	0.070	0.169	0.298	3.13
26	28.37	-0.643	0.068	0.209	0.536	2.29
27	35.84	-0.220	0.064	0.331	0.685	1.40
28	37.59	-0.131	0.064	0.364	0.609	1.57
29	40.60	0.019	0.063	0.370	0.729	0.93
30	27.28	-0.689	0.069	0.381	0.871	1.03
31	26.24	-0.199	0.064	0.395	0.733	0.92
32	46.07	0.282	0.062	0.434	0.906	0.96
33	34.51	-0.290	0.055	0.356	0.806	0.87
34	49.17	0.427	0.052	0.462	1.052	0.83
35	39.49	-0.036	0.063	0.437	1.002	0.58
36	44.09	0.187	0.062	0.445	0.956	0.86
37	42.43	0.107	0.062	0.537	1.150	1.43
38	42.35	0.103	0.062	0.487	1.255	0.99
39	39.02	-0.060	0.063	0.473	1.026	0.68
40	40.92	0.034	0.063	0.484	1.076	1.40
41	21.56	-0.446	0.066	0.361	0.959	1.71
42	45.04	0.233	0.062	0.444	1.000	0.92
43	44.01	0.184	0.062	0.497	1.179	1.09
44	33.54	-0.340	0.065	0.335	0.736	1.52
45	35.21	-0.252	0.065	0.420	1.050	1.09
46	28.39	-0.624	0.068	0.409	0.930	0.78
47	18.16	-1.301	0.079	0.227	0.644	2.07
48	36.24	-0.199	0.064	0.546	1.387	1.36
49	17.92	-1.319	0.079	0.265	0.506	2.09
50	13.48	-1.704	0.088	0.125	0.495	2.99

TABLE 77 (CONT.)
 SAT INTERMEDIATE I FORM X PARAGRAPH MEANING
 ITEM SUMMARY

243

60 ITEMS 1261 CASES KR-20= 0.906 EQUATING CONSTANT= 0.495

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
51	29.50	-0.561	0.067	0.339	0.665	1.21
52	26.69	-0.761	0.070	0.404	0.984	1.37
53	34.42	-0.294	0.065	0.396	1.037	1.30
54	18.40	-1.282	0.078	0.318	0.895	1.17
55	27.28	-0.689	0.069	0.275	0.607	1.91
56	27.28	-0.689	0.069	0.362	0.950	0.94
57	17.13	-1.382	0.080	0.203	0.469	2.03
58	25.38	-0.805	0.070	0.327	0.867	1.19
59	14.43	-1.614	0.085	0.030	0.242	4.85
60	20.78	-1.107	0.075	0.153	0.419	2.96

245

TABLE 77 (CONT.)
 SAT INTERMEDIATE I FORM X PARAGRAPH MEANING
 ABILITY SUMMARY

63 ITEMS 1261 CASES KR-20= 0.906 EQUATING CONSTANT= 0.495

SCORE	FREQ.	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	1	-4.375	1.014	161	10.14
2	1	-3.653	0.727	168	7.27
3	1	-3.218	0.602	173	6.02
4	5	-2.901	0.529	176	5.29
5	5	-2.649	0.479	178	4.79
6	2	-2.437	0.443	181	4.43
7	6	-2.253	0.416	182	4.16
8	9	-2.090	0.394	184	3.94
9	16	-1.942	0.376	186	3.76
10	20	-1.806	0.361	187	3.61
11	28	-1.680	0.349	188	3.49
12	26	-1.562	0.338	188	3.38
13	45	-1.451	0.329	190	3.29
14	45	-1.345	0.321	192	3.21
15	75	-1.244	0.315	193	3.15
16	44	-1.147	0.309	193	3.09
17	57	-1.054	0.303	194	3.03
18	56	-0.963	0.299	195	2.99
19	58	-0.875	0.295	196	2.95
20	47	-0.790	0.291	197	2.91
21	50	-0.706	0.288	198	2.88
22	43	-0.624	0.285	199	2.85
23	41	-0.543	0.283	200	2.83
24	38	-0.463	0.281	200	2.81
25	35	-0.385	0.280	201	2.80
26	35	-0.307	0.278	202	2.78
27	30	-0.230	0.277	203	2.77
28	23	-0.153	0.277	203	2.77
29	36	-0.077	0.276	204	2.76
30	20	0.001	0.276	205	2.76
31	26	0.076	0.276	206	2.76
32	28	0.152	0.277	206	2.77
33	25	0.229	0.277	207	2.77
34	31	0.306	0.278	208	2.78
35	24	0.384	0.280	209	2.80
36	25	0.462	0.281	210	2.81
37	21	0.542	0.283	210	2.83
38	7	0.623	0.286	211	2.86
39	16	0.702	0.288	212	2.88
40	16	0.789	0.291	213	2.91
41	15	0.875	0.295	214	2.95
42	28	0.963	0.299	215	2.99
43	15	1.053	0.304	215	3.04
44	8	1.147	0.309	216	3.09
45	13	1.244	0.315	217	3.15
46	12	1.345	0.322	218	3.22
47	11	1.451	0.330	219	3.30
48	8	1.563	0.339	221	3.39
49	6	1.681	0.349	222	3.49
50	7	1.817	0.362	223	3.62

TABLE 77 (CONT.)
 SAT INTERMEDIATE I FORM X PARAGRAPH MEANING
 ABILITY SUMMARY

60 ITEMS 1261 CASES KR-20= 0.906 EQUATING CONSTANT= 0.495

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	3	1.943	0.376	224	3.76
52	6	2.091	0.394	226	3.94
53	5	2.254	0.416	227	4.16
54	3	2.438	0.443	229	4.43
55	1	2.650	0.479	231	4.79
56	2	2.902	0.529	234	5.29
57	6	3.219	0.602	237	6.02
58	0	3.654	0.727	241	7.27
59	1	4.376	1.014	249	10.14

247

TABLE 78
SAT INTERMEDIATE I FORM X TOTAL READING
ITEM SUMMARY

98 ITEMS 1201 CASES KR-20= 0.945 EQUATING CONSTANT= 0.473						
ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	74.39	1.691	0.069	0.475	1.159	1.13
2	71.85	1.545	0.067	0.426	0.819	0.98
3	64.87	1.173	0.064	0.518	1.262	1.66
4	64.39	1.149	0.064	0.532	1.161	1.53
5	65.27	1.193	0.064	0.490	1.088	1.16
6	58.60	0.863	0.062	0.426	0.789	0.70
7	67.49	1.308	0.065	0.472	0.987	1.32
8	53.85	0.635	0.062	0.557	1.636	1.12
9	54.40	0.661	0.062	0.501	1.328	0.91
10	58.45	0.855	0.062	0.480	0.906	0.82
11	55.19	0.699	0.062	0.477	0.978	0.92
12	38.22	-0.123	0.064	0.502	1.248	0.93
13	57.49	0.809	0.062	0.566	1.563	1.31
14	54.24	0.654	0.062	0.433	0.865	0.88
15	41.32	0.032	0.063	0.477	1.017	0.87
16	55.43	0.710	0.062	0.538	1.266	1.13
17	45.44	0.233	0.062	0.484	0.784	1.10
18	44.57	0.191	0.062	0.332	0.511	1.63
19	43.14	0.122	0.063	0.536	1.411	1.00
20	45.28	0.226	0.062	0.469	1.136	0.89
21	42.90	0.110	0.063	0.372	0.751	0.89
22	34.89	-0.295	0.065	0.380	0.779	0.94
23	35.13	-0.283	0.065	0.415	0.885	0.97
24	40.36	-0.015	0.063	0.550	1.357	1.10
25	42.59	0.095	0.063	0.476	0.951	1.06
26	38.78	-0.095	0.064	0.467	1.081	0.69
27	28.79	-0.632	0.068	0.246	0.484	2.14
28	30.45	-0.537	0.067	0.340	0.707	1.57
29	19.75	-1.220	0.077	0.300	0.647	1.26
30	29.58	-0.587	0.068	0.303	0.669	1.32
31	28.55	-0.646	0.068	0.395	0.830	1.07
32	20.94	-1.134	0.075	0.294	0.670	1.21
33	26.56	-0.741	0.069	0.405	0.813	0.93
34	25.22	-0.848	0.071	0.285	0.591	1.40
35	17.05	-1.430	0.081	0.354	0.879	1.21
36	13.32	-1.764	0.089	0.189	0.600	1.60
37	16.65	-1.462	0.081	0.345	0.861	1.20
38	12.61	-1.837	0.090	0.218	0.599	1.38
39	75.97	1.787	0.070	0.415	0.839	1.10
40	73.85	1.659	0.068	0.411	0.858	1.23
41	71.85	1.545	0.067	0.439	0.866	2.36
42	55.67	0.722	0.062	0.381	0.674	1.12
43	56.30	0.752	0.062	0.375	0.706	1.02
44	57.34	0.802	0.062	0.445	0.829	0.93
45	54.24	0.654	0.062	0.478	0.852	1.02
46	53.53	0.638	0.062	0.327	0.533	2.11
47	55.59	0.737	0.062	0.467	1.027	1.18
48	61.38	0.998	0.063	0.469	0.835	0.98
49	61.93	1.026	0.063	0.529	1.366	1.16
50	38.07	-0.131	0.064	0.256	0.458	2.26

CONT INUED

TABLE 78 (CONT.)
SAT INTERMEDIATE I FORM X TOTAL READING
ITEM SUMMARY

98 ITEMS 1261 CASES KR-20= 0.945 EQUATING CONSTANT= 0.473

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I, AB)	SLOPE	MN SQ FIT
51	58.84	0.874	0.062	0.370	0.634	1.65
52	47.66	0.340	0.062	0.494	1.084	0.90
53	38.38	-0.115	0.064	0.197	0.321	2.23
54	62.89	1.073	0.063	0.434	0.890	0.81
55	37.19	-0.175	0.064	0.340	0.511	1.64
56	58.84	0.874	0.062	0.458	0.913	0.98
57	54.72	0.676	0.062	0.476	0.942	1.24
58	44.73	0.199	0.062	0.474	0.937	0.95
59	56.78	0.775	0.062	0.510	1.172	1.24
60	59.71	0.917	0.062	0.458	0.853	1.13
61	47.82	0.348	0.062	0.314	0.581	1.77
62	33.15	-0.388	0.066	0.211	0.336	2.32
63	25.46	-0.833	0.071	0.146	0.332	2.59
64	28.07	-0.674	0.069	0.214	0.390	2.18
65	35.84	-0.245	0.065	0.323	0.635	1.31
66	37.59	-0.155	0.064	0.353	0.595	1.08
67	40.60	-0.003	0.063	0.254	0.758	1.55
68	27.28	-0.721	0.069	0.376	0.896	0.88
69	36.24	-0.225	0.064	0.383	0.662	1.18
70	46.07	0.264	0.062	0.406	0.727	0.97
71	34.50	-0.316	0.065	0.344	0.641	1.17
72	49.17	0.412	0.062	0.434	1.021	0.99
73	39.49	-0.059	0.063	0.416	0.873	1.04
74	44.09	0.168	0.062	0.430	0.901	0.73
75	42.43	0.087	0.063	0.532	1.214	1.34
76	42.35	0.083	0.063	0.480	1.174	0.73
77	39.02	-0.083	0.064	0.459	1.054	0.72
78	40.92	0.012	0.063	0.468	0.891	1.05
79	31.56	-0.475	0.067	0.359	0.681	1.36
80	45.04	0.214	0.062	0.416	0.862	0.77
81	44.01	0.164	0.062	0.479	1.048	1.07
82	33.54	-0.367	0.066	0.310	0.636	1.25
83	35.21	-0.278	0.065	0.404	0.756	1.10
84	28.37	-0.656	0.068	0.389	0.796	1.01
85	18.16	-1.341	0.079	0.212	0.574	1.86
86	36.24	-0.225	0.064	0.521	1.312	0.85
87	17.92	-1.359	0.079	0.254	0.498	1.96
88	13.48	-1.749	0.088	0.131	0.453	2.02
89	20.50	-0.591	0.068	0.333	0.752	1.03
90	26.09	-0.794	0.070	0.397	0.862	1.29
91	34.42	-0.320	0.065	0.395	0.859	1.39
92	18.40	-1.322	0.079	0.310	0.777	0.85
93	27.28	-0.721	0.069	0.266	0.630	1.48
94	27.28	-0.721	0.069	0.355	0.848	1.19
95	17.13	-1.423	0.081	0.188	0.543	1.66
96	25.38	-0.838	0.071	0.316	0.773	1.19
97	14.43	-1.658	0.086	0.043	0.242	3.28
98	20.70	-1.145	0.075	0.158	0.429	2.10

TABLE 78 (CONT.)
SAT INTERMEDIATE I FORM X TOTAL READING
ABILITY SUMMARY

98 ITEMS		1261 CASES		KR-20 = 0.945		EQUATING CONSTANT = 0.473	
SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR		
1	0	-4.908	1.009	156	10.09		
2	1	-4.197	0.720	163	7.20		
3	0	-3.774	0.593	167	5.93		
4	0	-3.468	0.518	170	5.18		
5	2	-3.227	0.467	172	4.67		
6	1	-3.027	0.430	174	4.30		
7	2	-2.855	0.401	176	4.01		
8	2	-2.703	0.379	178	3.79		
9	2	-2.567	0.360	179	3.60		
10	5	-2.443	0.344	180	3.44		
11	2	-2.329	0.331	181	3.31		
12	2	-2.223	0.319	183	3.19		
13	6	-2.125	0.309	183	3.09		
14	8	-2.032	0.301	184	3.01		
15	10	-1.944	0.293	185	2.93		
16	13	-1.860	0.286	186	2.86		
17	15	-1.780	0.279	187	2.79		
18	16	-1.704	0.274	188	2.74		
19	24	-1.630	0.269	188	2.69		
20	22	-1.560	0.264	189	2.64		
21	20	-1.491	0.260	190	2.60		
22	30	-1.425	0.256	190	2.56		
23	34	-1.360	0.252	191	2.52		
24	25	-1.297	0.249	192	2.49		
25	38	-1.236	0.246	192	2.46		
26	44	-1.177	0.243	193	2.43		
27	33	-1.118	0.241	194	2.41		
28	31	-1.061	0.238	194	2.38		
29	35	-1.005	0.236	195	2.36		
30	31	-0.950	0.234	195	2.34		
31	27	-0.895	0.232	196	2.32		
32	17	-0.842	0.230	196	2.30		
33	28	-0.789	0.229	197	2.29		
34	29	-0.737	0.227	197	2.27		
35	31	-0.686	0.226	198	2.26		
36	20	-0.635	0.225	198	2.25		
37	25	-0.585	0.224	199	2.24		
38	32	-0.535	0.223	199	2.23		
39	32	-0.485	0.222	200	2.22		
40	21	-0.436	0.221	200	2.21		
41	15	-0.388	0.220	201	2.20		
42	25	-0.339	0.220	201	2.20		
43	21	-0.291	0.219	202	2.19		
44	16	-0.243	0.219	202	2.19		
45	16	-0.195	0.219	203	2.19		
46	19	-0.147	0.218	203	2.18		
47	10	-0.100	0.218	204	2.18		
48	22	-0.052	0.218	204	2.18		
49	23	-0.005	0.218	205	2.18		
50	17	0.043	0.218	205	2.18		

CONTINUED

TABLE 78 (CONT.)
 SAT INTERMEDIATE I FORM X TOTAL READING
 ABILITY SUMMARY

98 ITEMS 1261 CASES KR-20= 0.945. EQUATING CONSTANT= 0.473.

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	16	0.090	0.218	206	2.18
52	26	0.138	0.219	206	2.19
53	16	0.186	0.219	207	2.19
54	19	0.234	0.219	207	2.19
55	10	0.282	0.220	208	2.20
56	21	0.330	0.220	208	2.20
57	22	0.379	0.221	209	2.21
58	14	0.428	0.222	209	2.22
59	15	0.477	0.222	209	2.22
60	11	0.527	0.223	210	2.23
61	14	0.577	0.224	210	2.24
62	11	0.627	0.226	211	2.26
63	11	0.678	0.227	212	2.27
64	11	0.730	0.228	212	2.28
65	10	0.782	0.230	213	2.30
66	11	0.835	0.231	213	2.31
67	9	0.889	0.233	214	2.33
68	11	0.944	0.235	214	2.35
69	8	1.000	0.237	215	2.37
70	16	1.056	0.239	215	2.39
71	8	1.114	0.242	216	2.42
72	3	1.173	0.244	216	2.44
73	8	1.233	0.247	217	2.47
74	15	1.295	0.250	218	2.50
75	8	1.358	0.254	218	2.54
76	8	1.424	0.257	219	2.57
77	8	1.491	0.261	220	2.61
78	6	1.560	0.265	220	2.65
79	4	1.631	0.270	221	2.70
80	3	1.706	0.275	222	2.75
81	2	1.783	0.281	223	2.81
82	3	1.864	0.287	223	2.87
83	5	1.948	0.294	224	2.94
84	5	2.037	0.302	225	3.02
85	2	2.131	0.311	226	3.11
86	3	2.230	0.321	227	3.21
87	2	2.337	0.332	228	3.32
88	1	2.452	0.346	229	3.46
89	0	2.576	0.361	230	3.61
90	2	2.714	0.380	232	3.80
91	1	2.866	0.403	233	4.03
92	1	3.040	0.431	235	4.31
93	1	3.241	0.468	237	4.68
94	0	3.483	0.519	240	5.19
95	0	3.790	0.594	243	5.94
96	1	4.215	0.720	247	7.20
97	0	4.927	1.009	254	10.09

TABLE 79
SAT INTERMEDIATE II FORM W WORD MEANING
ITEM SUMMARY

48 ITEMS 21766 CASES KR-20= 0.917 EQUATING CONSTANT= 1.486

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	79.07	1.924	0.018	0.485	1.503	15.31
2	66.49	2.530	0.021	0.379	1.011	6.76
3	78.19	1.863	0.018	0.478	1.127	14.09
4	80.80	2.050	0.019	0.481	1.446	16.28
5	66.18	1.131	0.016	0.460	1.041	1.91
6	78.12	1.857	0.018	0.409	0.944	2.83
7	66.76	1.163	0.016	0.527	1.344	10.98
8	63.90	1.007	0.016	0.315	0.638	19.64
9	57.36	0.663	0.016	0.493	0.746	6.15
10	79.60	1.962	0.018	0.421	1.072	4.57
11	61.71	0.890	0.016	0.560	1.348	14.44
12	55.80	0.583	0.016	0.527	1.240	6.33
13	46.40	0.161	0.016	0.488	1.030	6.53
14	52.10	0.393	0.015	0.359	0.770	15.53
15	47.66	0.176	0.016	0.154	0.358	112.44
16	55.66	0.545	0.015	0.514	1.236	4.49
17	49.91	0.281	0.015	0.508	0.994	2.86
18	52.56	0.417	0.015	0.448	0.872	1.67
19	42.72	-0.091	0.016	0.555	1.319	9.62
20	36.95	-0.402	0.016	0.543	1.106	11.40
21	69.27	1.305	0.016	0.465	1.073	3.56
22	53.07	0.443	0.015	0.553	1.346	8.75
23	50.97	0.336	0.015	0.542	1.284	5.50
24	45.13	0.035	0.016	0.361	0.651	17.43
25	41.40	-0.161	0.016	0.532	1.181	10.28
26	52.07	0.392	0.015	0.488	1.066	1.28
27	46.06	0.083	0.016	0.466	0.974	3.14
28	41.29	-0.167	0.016	0.471	1.003	1.79
29	52.90	0.434	0.015	0.579	1.465	12.59
30	32.39	-0.661	0.017	0.298	0.674	32.70
31	40.17	-0.226	0.016	0.437	0.877	6.01
32	43.37	-0.057	0.016	0.557	1.350	10.73
33	25.21	-1.109	0.018	0.485	1.102	5.23
34	30.14	-0.795	0.017	0.458	1.039	4.03
35	22.60	-1.216	0.018	0.348	0.912	11.77
36	29.86	-0.811	0.017	0.509	1.253	2.60
37	34.63	-0.532	0.016	0.624	1.773	28.48
38	40.63	-0.202	0.016	0.620	1.563	21.90
39	25.39	-1.097	0.018	0.498	1.154	5.14
40	30.16	-0.794	0.017	0.504	1.169	2.35
41	25.42	-1.095	0.018	0.481	1.176	9.24
42	25.53	-1.088	0.018	0.350	0.800	13.53
43	17.80	-1.662	0.020	0.291	0.735	16.78
44	21.51	-1.370	0.019	0.401	1.053	6.93
45	16.52	-1.773	0.020	0.374	0.916	8.65
46	13.74	-2.036	0.022	0.272	0.829	23.66
47	11.00	-2.267	0.023	0.234	0.695	25.49
48	6.76	-2.952	0.028	0.113	0.474	31.63

TABLE 79 (CONT.)
 SAT INTERMEDIATE II FORM W WORD MEANING
 ABILITY SUMMARY

48 ITEMS 21760 CASES KR-20= 0.917 EQUATING CONSTANT= 1.486

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	7	-4.481	1.027	170	10.27
2	37	-3.733	0.745	178	7.45
3	59	-3.272	0.623	182	6.23
4	132	-2.930	0.552	186	5.52
5	194	-2.653	0.504	188	5.04
6	244	-2.417	0.470	191	4.70
7	351	-2.208	0.444	193	4.44
8	439	-2.021	0.423	195	4.23
9	576	-1.849	0.406	196	4.06
10	645	-1.690	0.392	198	3.92
11	698	-1.541	0.381	199	3.81
12	813	-1.400	0.371	201	3.71
13	824	-1.265	0.363	202	3.63
14	858	-1.136	0.356	203	3.56
15	911	-1.012	0.350	205	3.50
16	853	-0.891	0.345	206	3.45
17	816	-0.774	0.340	207	3.40
18	844	-0.660	0.337	208	3.37
19	779	-0.547	0.334	209	3.34
20	800	-0.437	0.331	210	3.31
21	730	-0.328	0.329	212	3.29
22	679	-0.220	0.328	213	3.28
23	675	-0.112	0.327	214	3.27
24	625	-0.005	0.327	215	3.27
25	649	0.102	0.328	216	3.28
26	627	0.209	0.328	217	3.28
27	600	0.318	0.330	218	3.30
28	529	0.427	0.332	219	3.32
29	456	0.538	0.334	220	3.34
30	507	0.650	0.337	221	3.37
31	449	0.765	0.341	223	3.41
32	491	0.882	0.345	224	3.45
33	446	1.003	0.350	225	3.50
34	430	1.128	0.356	226	3.56
35	386	1.257	0.364	227	3.64
36	290	1.393	0.372	229	3.72
37	393	1.535	0.382	230	3.82
38	378	1.685	0.394	232	3.94
39	299	1.846	0.408	233	4.08
40	279	2.019	0.425	235	4.25
41	281	2.209	0.446	237	4.46
42	190	2.420	0.473	239	4.73
43	148	2.660	0.508	241	5.08
44	101	2.943	0.557	244	5.57
45	51	3.291	0.629	248	6.29
46	41	3.760	0.751	252	7.51
47	10	4.518	1.033	260	10.33

TABLE 80
SAT INTERMEDIATE II FORM W PARAGRAPH MEANING
ITEM SUMMARY

64 ITEMS 21760 CASES KR-20= 0.928 EQUATING CONSTANT= 1.618

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R (I, AB)	SLOPE	MN SQ FIT
1	72.01	1.240	0.016	0.376	0.770	3.43
2	77.18	1.554	0.017	0.417	0.929	8.38
3	60.51	0.629	0.015	0.443	0.954	3.51
4	81.65	1.863	0.019	0.458	1.478	21.16
5	72.36	1.260	0.016	0.440	1.100	6.85
6	62.07	0.708	0.015	0.378	0.794	2.22
7	66.39	0.931	0.016	0.451	0.924	6.17
8	52.53	0.236	0.015	0.484	0.990	4.04
9	69.68	1.109	0.016	0.446	1.103	5.18
10	75.61	1.454	0.017	0.514	1.772	24.38
11	70.34	1.146	0.016	0.482	1.342	10.08
12	44.15	-0.176	0.015	0.288	0.552	16.78
13	77.87	1.599	0.017	0.477	1.404	19.70
14	66.29	0.926	0.016	0.503	1.218	12.15
15	55.52	0.382	0.015	0.469	1.049	3.62
16	51.38	0.180	0.015	0.399	0.889	2.54
17	60.35	0.621	0.015	0.452	1.079	2.66
18	68.86	1.064	0.016	0.443	1.138	4.20
19	36.13	-0.588	0.016	0.263	0.575	21.88
20	61.02	0.655	0.015	0.461	1.174	3.30
21	36.58	-0.564	0.016	0.284	0.632	18.99
22	51.62	0.191	0.015	0.392	0.943	2.47
23	48.29	0.029	0.015	0.414	0.828	1.79
24	57.67	0.488	0.015	0.498	1.282	5.19
25	60.79	0.643	0.015	0.460	1.146	3.09
26	56.23	0.417	0.015	0.523	1.282	8.75
27	45.39	-0.114	0.015	0.372	0.829	4.31
28	47.23	-0.023	0.015	0.510	1.208	5.50
29	63.35	0.773	0.015	0.523	1.420	11.93
30	35.68	-0.612	0.016	0.466	1.121	4.49
31	55.25	0.369	0.015	0.447	1.089	1.24
32	52.27	0.224	0.015	0.456	1.107	1.41
33	42.18	-0.275	0.015	0.416	1.012	2.15
34	45.83	-0.093	0.015	0.399	0.966	3.22
35	30.95	-0.440	0.016	0.495	1.182	4.66
36	50.23	0.124	0.015	0.455	1.029	2.50
37	53.39	0.278	0.015	0.518	1.417	6.26
38	37.22	-0.530	0.016	0.248	0.632	26.45
39	44.75	-0.146	0.015	0.287	0.668	18.93
40	34.93	-0.653	0.016	0.401	1.006	3.79
41	47.12	-0.029	0.015	0.350	0.692	14.64
42	46.34	-0.067	0.015	0.473	1.240	4.20
43	35.07	-0.645	0.016	0.428	1.079	8.46
44	46.29	-0.070	0.015	0.514	1.179	6.52
45	47.82	0.006	0.015	0.576	1.775	16.76
46	40.58	-0.356	0.015	0.482	1.091	3.49
47	43.16	-0.226	0.015	0.552	1.545	11.03
48	36.74	-0.556	0.016	0.445	1.017	2.62
49	45.79	-0.095	0.015	0.484	1.195	3.18
50	39.94	-0.389	0.015	0.396	1.041	4.25

CONTINUED

TABLE 80 (CONT.)
SAT INTERMEDIATE II FORM W PARAGRAPH MEANING
ABILITY SUMMARY

64 ITEMS 21700 CASES KR-20= 0.928 EQUATING CONSTANT= 1.618

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
1	2	-4.470	1.014	171	10.14
2	7	-3.748	0.727	179	7.27
3	14	-3.314	0.602	183	6.02
4	18	-2.997	0.528	186	5.28
5	24	-2.745	0.478	189	4.78
6	40	-2.534	0.442	191	4.42
7	50	-2.351	0.415	193	4.15
8	71	-2.188	0.393	194	3.93
9	120	-2.041	0.375	196	3.75
10	183	-1.906	0.360	197	3.60
11	218	-1.780	0.348	198	3.48
12	295	-1.663	0.337	200	3.37
13	335	-1.553	0.328	201	3.28
14	470	-1.448	0.320	202	3.20
15	552	-1.348	0.313	203	3.13
16	551	-1.252	0.306	204	3.06
17	644	-1.160	0.301	205	3.01
18	682	-1.071	0.296	205	2.96
19	721	-0.985	0.292	206	2.92
20	700	-0.900	0.288	207	2.88
21	687	-0.819	0.285	208	2.85
22	617	-0.738	0.282	209	2.82
23	633	-0.660	0.279	210	2.79
24	592	-0.583	0.277	210	2.77
25	586	-0.507	0.275	211	2.75
26	582	-0.431	0.273	212	2.73
27	620	-0.357	0.272	213	2.72
28	564	-0.284	0.271	213	2.71
29	557	-0.211	0.270	214	2.70
30	552	-0.138	0.269	215	2.69
31	514	-0.066	0.269	216	2.69
32	582	0.000	0.268	216	2.68
33	489	0.078	0.268	217	2.68
34	487	0.150	0.269	218	2.69
35	506	0.222	0.269	218	2.69
36	437	0.295	0.270	219	2.70
37	454	0.368	0.271	220	2.71
38	426	0.442	0.272	221	2.72
39	436	0.517	0.274	221	2.74
40	420	0.592	0.276	222	2.76
41	378	0.669	0.278	223	2.78
42	381	0.747	0.280	224	2.80
43	367	0.826	0.283	224	2.83
44	355	0.907	0.287	225	2.87
45	262	0.992	0.290	226	2.90
46	309	1.076	0.294	227	2.94
47	384	1.164	0.299	228	2.99
48	313	1.255	0.305	229	3.05
49	279	1.350	0.311	230	3.11
50	242	1.449	0.318	231	3.18

TABLE 80 (CONT.)
 SAT INTERMEDIATE II FORM W PARAGRAPH MEANING
 ITEM SUMMARY

64 ITEMS 21760 CASES KR-20= 0.928 EQUATING CONSTANT= 1.618

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I, AB)	SLOPE	MN SQ FIT
51	33.44	-0.735	0.016	0.396	0.895	4.30
52	41.60	-0.304	0.015	0.490	1.276	5.27
53	24.93	-1.242	0.017	0.288	0.705	13.17
54	38.23	-0.477	0.016	0.376	0.862	5.07
55	30.02	-0.929	0.016	0.397	0.851	7.61
56	25.24	-1.222	0.017	0.232	0.629	25.30
57	21.37	-1.485	0.018	0.378	1.050	9.14
58	37.27	-0.528	0.016	0.454	1.298	9.42
59	26.72	-1.128	0.017	0.435	1.167	7.34
60	31.26	-0.851	0.016	0.376	1.087	14.99
61	24.48	-1.272	0.017	0.409	1.105	10.98
62	17.66	-1.769	0.019	0.158	0.613	42.73
63	24.48	-1.272	0.017	0.269	0.821	27.64
64	24.92	-1.243	0.017	0.358	1.066	16.39

TABLE 80 (CONT.)
 SAT INTERMEDIATE II FORM W PARAGRAPH MEANING
 ABILITY SUMMARY

255

64 ITEMS 21760 CASES KR-20= 0.928 EQUATING CONSTANT= 1.618

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	244	1.552	0.326	232	3.26
52	233	1.661	0.335	233	3.35
53	236	1.777	0.346	234	3.46
54	246	1.901	0.358	235	3.58
55	198	2.034	0.373	237	3.73
56	205	2.180	0.391	238	3.91
57	152	2.341	0.413	240	4.13
58	146	2.522	0.440	241	4.40
59	121	2.732	0.476	243	4.76
60	70	2.982	0.526	246	5.26
61	52	3.296	0.600	249	6.00
62	37	3.728	0.726	253	7.26
63	11	4.448	1.013	261	10.13

257

TABLE 81
SAT INTERMEDIATE II FORM W TOTAL READING
ITEM SUMMARY

112 ITEMS - 21763 CASES KR-20= 0.958 EQUATING CONSTANT= 1.411						
ITEM NO.	RESPONSE PERCENT	LOG (EASINESS)	STD. ERROR	DISCRIMINATION R(I,AB)	DISCRIMINATION SLOPE	MA SQ FIT
1	79.06	1.457	0.017	0.470	1.628	12.29
2	86.48	1.980	0.019	0.369	1.201	9.17
3	78.18	1.406	0.017	0.456	1.224	10.82
4	80.79	1.564	0.017	0.461	1.519	13.04
5	66.17	0.805	0.015	0.445	1.209	4.05
6	78.11	1.401	0.017	0.387	1.025	4.84
7	66.75	0.831	0.015	0.502	1.407	8.19
8	63.89	0.706	0.015	0.294	0.705	5.74
9	57.35	0.434	0.015	0.373	0.810	2.13
10	79.59	1.489	0.017	0.409	1.180	6.96
11	61.70	0.613	0.015	0.546	1.545	11.06
12	55.80	0.371	0.015	0.516	1.294	5.97
13	46.39	-0.003	0.015	0.465	0.998	3.86
14	52.09	0.223	0.015	0.239	0.825	3.75
15	47.85	0.055	0.015	0.138	0.395	32.66
16	55.06	0.342	0.015	0.494	1.298	3.81
17	49.90	0.137	0.015	0.492	1.168	3.50
18	52.56	0.242	0.015	0.424	1.004	1.19
19	42.71	-0.150	0.015	0.545	1.409	-6.46
20	36.94	-0.389	0.015	0.529	1.324	7.74
21	69.26	0.946	0.016	0.448	1.162	5.66
22	53.07	0.262	0.015	0.538	1.539	6.43
23	50.97	0.179	0.015	0.528	1.464	5.25
24	45.12	-0.053	0.015	0.330	0.806	4.87
25	41.40	-0.204	0.015	0.512	1.293	5.93
26	52.06	0.222	0.015	0.466	1.167	2.23
27	46.05	-0.016	0.015	0.445	1.055	1.84
28	41.29	-0.208	0.015	0.445	1.128	1.39
29	52.89	0.255	0.015	0.560	1.603	8.61
30	32.39	-0.589	0.016	0.261	0.629	12.29
31	40.17	-0.254	0.015	0.419	0.892	2.95
32	43.37	-0.124	0.015	0.529	1.459	6.17
33	25.21	-0.937	0.017	0.463	1.116	5.05
34	30.14	-0.693	0.016	0.430	1.079	3.84
35	23.65	-1.021	0.017	0.316	0.861	6.14
36	29.87	-0.705	0.016	0.486	1.294	3.22
37	34.63	-0.489	0.016	0.606	1.889	14.82
38	40.62	-0.235	0.015	0.598	1.723	11.72
39	25.39	-0.926	0.017	0.468	1.212	6.71
40	30.16	-0.692	0.016	0.482	1.172	3.66
41	25.42	-0.926	0.017	0.442	1.180	6.15
42	25.53	-0.920	0.017	0.309	0.709	7.35
43	17.80	-1.376	0.018	0.247	0.676	9.47
44	21.51	-1.142	0.017	0.366	1.048	5.24
45	16.52	-1.465	0.018	0.345	0.946	6.57
46	13.73	-1.680	0.019	0.233	0.760	11.82
47	11.60	-1.872	0.020	0.203	0.724	11.64
48	6.76	-2.460	0.024	0.080	0.487	13.30
49	72.67	1.077	0.016	0.374	0.874	3.77
50	77.18	1.348	0.016	0.413	1.024	7.22

CONTINUED

TABLE 81 (CONT.)
SAT-INTERMEDIATE-II FORM W TOTAL READING
ITEM SUMMARY

112 ITEMS 21763 CASES KR-20= 0.958 EQUATING CONSTANT= 1.411

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MIN SQ FIT
51	60.51	0.564	0.015	0.447	1.041	3.54
52	81.66	1.621	0.017	0.441	1.535	11.98
53	72.37	1.095	0.016	0.430	1.093	5.64
54	62.08	0.629	0.015	0.359	0.758	2.84
55	66.40	0.816	0.015	0.441	0.928	5.58
56	52.54	0.241	0.015	0.480	1.046	2.96
57	69.69	0.966	0.016	0.427	1.112	3.98
58	75.61	1.262	0.016	0.495	1.704	13.23
59	70.35	0.997	0.016	0.467	1.344	6.76
60	44.16	-0.092	0.015	0.275	0.539	10.36
61	77.83	1.388	0.017	0.454	1.369	10.69
62	66.29	0.811	0.015	0.494	1.301	7.55
63	55.53	0.361	0.015	0.459	1.103	2.89
64	51.39	0.196	0.015	0.384	0.917	3.14
65	60.36	0.557	0.015	0.445	1.107	2.57
66	68.87	0.928	0.015	0.425	1.033	3.68
67	26.13	-0.424	0.015	0.250	0.567	12.61
68	61.03	0.585	0.015	0.445	1.081	2.51
69	36.59	-0.405	0.015	0.274	0.632	10.95
70	51.62	0.205	0.015	0.373	0.892	2.52
71	48.33	0.073	0.015	0.392	0.830	1.58
72	57.68	0.448	0.015	0.486	1.303	3.41
73	60.79	0.575	0.015	0.449	1.146	2.89
74	56.23	0.389	0.015	0.523	1.388	6.29
75	45.39	-0.042	0.015	0.362	0.855	2.56
76	47.24	0.031	0.015	0.506	1.167	4.07
77	63.36	0.683	0.015	0.517	1.422	8.25
78	35.69	-0.443	0.016	0.474	1.146	4.10
79	55.25	0.350	0.015	0.424	1.040	1.18
80	52.28	0.231	0.015	0.432	1.051	1.00
81	42.19	-0.171	0.015	0.400	0.947	1.70
82	45.83	-0.025	0.015	0.384	0.951	2.24
83	30.90	-0.305	0.015	0.491	1.238	3.67
84	50.24	0.153	0.015	0.440	1.022	1.86
85	52.40	0.276	0.015	0.504	1.419	3.84
86	27.23	-0.377	0.015	0.232	0.563	15.18
87	44.75	-0.068	0.015	0.260	0.648	12.27
88	34.94	-0.475	0.016	0.381	0.937	2.82
89	47.13	0.027	0.015	0.328	0.666	8.63
90	46.35	-0.004	0.015	0.461	1.265	2.68
91	35.08	-0.469	0.016	0.422	1.104	4.07
92	46.20	-0.066	0.015	0.502	1.203	3.78
93	47.82	0.054	0.015	0.572	1.766	9.87
94	40.59	-0.237	0.015	0.471	1.159	2.14
95	43.16	-0.132	0.015	0.551	1.631	7.19
96	36.75	-0.397	0.015	0.439	1.075	1.86
97	45.79	-0.027	0.015	0.471	1.155	1.71
98	39.95	-0.263	0.015	0.384	0.967	2.91
99	33.45	-0.541	0.016	0.381	0.901	3.15
100	41.61	-0.195	0.015	0.477	1.220	2.88

TABLE 81 (CONT.)
 SAT INTERMEDIATE II FORM W TGTAL READING
 ITEM SUMMARY

112 ITEMS 21703 CASES KR-20= 0.958 EQUATING CONSTANT= 1.411

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MIN SQ FIT
101	24.94	-0.951	0.017	0.274	0.660	8.85
102	38.24	-0.334	0.015	0.361	0.886	3.26
103	30.63	-0.698	0.016	0.390	0.814	4.86
104	25.25	-0.935	0.017	0.229	0.634	13.45
105	21.38	-1.150	0.017	0.363	1.009	6.24
106	37.28	-0.375	0.015	0.450	1.187	6.12
107	26.73	-0.859	0.016	0.429	1.229	5.27
108	31.37	-0.635	0.016	0.362	1.039	8.58
109	24.49	-0.975	0.017	0.401	1.147	7.11
110	17.67	-1.384	0.018	0.149	0.574	21.26
111	24.49	-0.975	0.017	0.258	0.828	15.31
112	24.53	-0.952	0.017	0.346	1.028	9.36

TABLE 81 (CONT.)
SAT INTERMEDIATE II FORM # TGTAL READING
ABILITY SUMMARY

112 ITEMS 21763 CASES KR-20= 0.958 EQUATING CONSTANT= 1.411

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	0	-5.019	1.008	164	10.08
2	0	-4.310	0.718	171	7.18
3	1	-3.889	0.591	175	5.91
4	0	-3.585	0.516	178	5.16
5	2	-3.346	0.465	181	4.65
6	6	-3.148	0.427	183	4.27
7	6	-2.978	0.399	184	3.99
8	9	-2.828	0.375	186	3.75
9	8	-2.694	0.357	187	3.57
10	15	-2.573	0.341	188	3.41
11	16	-2.462	0.327	189	3.27
12	35	-2.358	0.315	191	3.15
13	35	-2.262	0.305	191	3.05
14	44	-2.172	0.296	192	2.96
15	55	-2.087	0.288	193	2.88
16	60	-2.006	0.281	194	2.81
17	88	-1.929	0.274	195	2.74
18	113	-1.855	0.268	196	2.68
19	119	-1.785	0.263	196	2.63
20	144	-1.717	0.258	197	2.58
21	157	-1.651	0.254	198	2.54
22	190	-1.588	0.250	198	2.50
23	227	-1.527	0.246	199	2.46
24	260	-1.467	0.242	199	2.42
25	274	-1.409	0.239	200	2.39
26	323	-1.353	0.236	201	2.36
27	364	-1.298	0.233	201	2.33
28	369	-1.244	0.230	202	2.30
29	417	-1.192	0.228	202	2.28
30	413	-1.140	0.226	203	2.26
31	418	-1.090	0.224	203	2.24
32	385	-1.040	0.222	204	2.22
33	431	-0.992	0.220	204	2.20
34	308	-0.944	0.218	205	2.18
35	441	-0.897	0.216	205	2.16
36	413	-0.850	0.215	206	2.15
37	394	-0.804	0.214	206	2.14
38	415	-0.759	0.212	207	2.12
39	374	-0.714	0.211	207	2.11
40	350	-0.670	0.210	207	2.10
41	377	-0.626	0.209	208	2.09
42	360	-0.583	0.208	208	2.08
43	354	-0.539	0.207	209	2.07
44	349	-0.497	0.206	209	2.06
45	368	-0.454	0.206	210	2.06
46	351	-0.412	0.205	210	2.05
47	333	-0.370	0.204	210	2.04
48	326	-0.329	0.204	211	2.04
49	329	-0.287	0.203	211	2.03
50	324	-0.246	0.203	212	2.03

TABLE 81 (CONT.)
SAT INTERMEDIATE II FORM W TCTAL READING
ABILITY SUMMARY

112 ITEMS 21763 CASES KR-20= 0.958 EQUATING CONSTANT= 1.411

SCORE	FREQ	NATIONAL REFERENCE SCALE			
		LOG ABILITY	STD ERROR	SCALE SCORE	STD ERR
51	341	-0.205	0.203	212	2.03
52	324	-0.164	0.202	212	2.02
53	310	-0.123	0.202	213	2.02
54	326	-0.082	0.202	213	2.02
55	295	-0.042	0.202	214	2.02
56	288	-0.001	0.202	214	2.02
57	282	0.040	0.202	215	2.02
58	309	0.081	0.202	215	2.02
59	297	0.121	0.202	215	2.02
60	269	0.162	0.202	216	2.02
61	264	0.203	0.203	216	2.03
62	256	0.244	0.203	217	2.03
63	242	0.286	0.203	217	2.03
64	268	0.327	0.204	217	2.04
65	254	0.369	0.204	218	2.04
66	239	0.410	0.205	218	2.05
67	252	0.452	0.205	219	2.05
68	216	0.495	0.206	219	2.06
69	234	0.537	0.207	219	2.07
70	242	0.581	0.208	220	2.08
71	208	0.624	0.209	220	2.09
72	201	0.668	0.210	221	2.10
73	197	0.712	0.211	221	2.11
74	207	0.757	0.212	222	2.12
75	226	0.802	0.213	222	2.13
76	207	0.848	0.215	223	2.15
77	192	0.894	0.216	223	2.16
78	210	0.941	0.218	224	2.18
79	193	0.989	0.220	224	2.20
80	183	1.038	0.222	224	2.22
81	187	1.088	0.224	225	2.24
82	191	1.138	0.226	225	2.26
83	184	1.189	0.228	226	2.28
84	163	1.242	0.230	227	2.30
85	164	1.296	0.233	227	2.33
86	148	1.351	0.236	228	2.36
87	130	1.407	0.239	228	2.39
88	174	1.465	0.242	229	2.42
89	157	1.524	0.246	229	2.46
90	142	1.586	0.250	230	2.50
91	111	1.649	0.254	231	2.54
92	144	1.715	0.258	231	2.58
93	128	1.783	0.263	232	2.63
94	125	1.854	0.269	233	2.69
95	115	1.928	0.275	233	2.75
96	92	2.005	0.281	234	2.81
97	106	2.086	0.289	235	2.89
98	104	2.172	0.297	236	2.97
99	79	2.262	0.306	237	3.06
100	64	2.359	0.316	238	3.16

CONTINUED

TABLE 81 (CONT.)
 SAT INTERMEDIATE II FORM W TCTAL READING
 ABILITY SUMMARY

261

112 ITEMS 21763 CASES KR-20= 0.958 EQUATING CONSTANT= 1.411

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
101	50	2.463	0.328	239	3.28
102	47	2.575	0.342	240	3.42
103	39	2.697	0.358	241	3.58
104	40	2.832	0.377	242	3.77
105	26	2.982	0.400	244	4.00
106	17	3.153	0.429	246	4.29
107	12	3.353	0.466	248	4.66
108	10	3.593	0.517	250	5.17
109	4	3.899	0.592	253	5.92
110	2	4.322	0.720	257	7.20
111	0	5.033	1.009	264	10.09

263

TABLE 82
SAT INTERMEDIATE II FORM X WORD MEANING
ITEM SUMMARY

48 ITEMS 2802 CASES KR-20= 0.907 EQUATING CONSTANT= 1.638

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLORE	MA SQ FIT
1	74.16	1.640	0.047	0.501	1.323	2.39
2	80.05	2.034	0.051	0.499	1.468	2.98
3	75.37	1.717	0.048	0.513	1.304	2.74
4	69.91	1.388	0.045	0.415	0.873	1.03
5	60.14	0.863	0.043	0.461	0.936	0.88
6	65.63	1.151	0.044	0.539	1.141	2.77
7	60.28	0.871	0.043	0.517	1.156	1.96
8	71.63	1.488	0.046	0.523	1.340	2.87
9	71.77	1.496	0.046	0.515	1.369	2.65
10	53.21	0.515	0.043	0.457	0.879	1.59
11	56.28	0.668	0.043	0.512	1.088	1.35
12	55.50	0.629	0.043	0.434	0.871	0.95
13	56.28	0.668	0.043	0.542	1.353	1.96
14	41.22	-0.085	0.043	0.437	0.904	0.84
15	61.49	0.933	0.043	0.538	1.134	2.77
16	64.95	1.115	0.044	0.525	1.166	2.22
17	50.57	0.384	0.042	0.300	0.535	5.53
18	44.83	0.098	0.043	0.443	0.906	1.21
19	35.58	-0.381	0.044	0.323	0.697	3.80
20	39.86	-0.155	0.043	0.452	0.942	1.08
21	44.00	0.056	0.043	0.492	0.991	1.00
22	43.54	0.033	0.043	0.448	0.944	1.06
23	47.82	0.248	0.043	0.493	1.163	1.48
24	45.04	0.108	0.043	0.537	1.339	2.41
25	40.58	-0.118	0.043	0.440	1.083	1.62
26	48.72	0.292	0.043	0.445	1.095	1.52
27	54.00	0.554	0.043	0.432	0.999	1.39
28	40.72	-0.111	0.043	0.344	0.757	2.70
29	33.44	-0.498	0.045	0.347	0.697	2.52
30	30.16	-0.684	0.046	0.344	0.750	2.76
31	29.34	-0.732	0.046	0.519	1.269	2.49
32	40.40	-0.127	0.043	0.481	1.193	1.09
33	34.65	-0.431	0.044	0.369	0.852	2.17
34	38.76	-0.212	0.044	0.477	1.116	1.00
35	61.28	0.922	0.043	0.581	1.674	3.04
36	30.41	-0.669	0.046	0.427	0.962	1.24
37	23.20	-1.118	0.049	0.394	0.976	2.68
38	26.16	-0.925	0.048	0.270	0.598	3.61
39	28.66	-0.772	0.046	0.399	0.914	2.19
40	35.55	-0.383	0.044	0.495	1.310	1.49
41	24.63	-1.023	0.048	0.281	0.633	3.52
42	20.16	-1.332	0.052	0.214	0.551	5.49
43	21.06	-1.267	0.051	0.280	0.756	3.31
44	20.09	-1.337	0.052	0.348	0.853	2.04
45	14.99	-1.754	0.057	0.336	0.940	1.55
46	16.49	-1.622	0.055	0.212	0.475	4.12
47	14.99	-1.754	0.057	0.330	0.889	1.49
48	9.21	-2.384	0.069	0.213	0.686	3.91

TABLE 82 (CONT.)
SAT INTERMEDIATE II FORM X WORD MEANING
ABILITY SUMMARY

48 ITEMS 2802 CASES KR-20= 0.907 EQUATING CONSTANT= 1.638					
SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	2	-4.305	1.021	173	10.21
2	8	-3.569	0.737	181	7.37
3	22	-3.171	0.613	185	6.13
4	20	-2.791	0.541	188	5.41
5	32	-2.524	0.493	191	4.93
6	46	-2.298	0.459	192	4.59
7	43	-2.105	0.433	195	4.33
8	55	-1.922	0.412	197	4.12
9	67	-1.760	0.395	199	3.95
10	91	-1.609	0.382	200	3.82
11	102	-1.467	0.371	202	3.71
12	100	-1.334	0.361	203	3.61
13	101	-1.206	0.353	204	3.53
14	137	-1.084	0.346	206	3.46
15	111	-0.966	0.341	207	3.41
16	104	-0.852	0.336	208	3.36
17	80	-0.740	0.332	209	3.32
18	109	-0.631	0.328	210	3.28
19	96	-0.524	0.326	211	3.26
20	115	-0.419	0.324	212	3.24
21	112	-0.315	0.322	213	3.22
22	86	-0.212	0.321	214	3.21
23	91	-0.109	0.320	215	3.20
24	83	-0.007	0.320	216	3.20
25	69	0.095	0.320	217	3.20
26	73	0.198	0.321	218	3.21
27	81	0.302	0.322	219	3.22
28	68	0.406	0.324	220	3.24
29	92	0.512	0.327	221	3.27
30	78	0.619	0.329	222	3.29
31	67	0.729	0.333	224	3.33
32	52	0.841	0.337	225	3.37
33	73	0.955	0.342	226	3.42
34	60	1.070	0.348	227	3.48
35	51	1.189	0.355	228	3.55
36	44	1.320	0.363	230	3.63
37	42	1.453	0.373	231	3.73
38	34	1.607	0.385	232	3.85
39	22	1.763	0.398	234	3.98
40	18	1.923	0.415	236	4.15
41	19	2.106	0.436	237	4.36
42	20	2.307	0.462	239	4.62
43	12	2.537	0.497	242	4.97
44	8	2.807	0.545	244	5.45
45	8	3.142	0.617	248	6.17
46	6	3.575	0.743	252	7.40
47	1	4.336	1.024	260	10.24

TABLE 83
SAT INTERMEDIATE II FORM X PARAGRAPH MEANING
ITEM SUMMARY

64 ITEMS 2803 CASES KR-20= 0.917 EQUATING CONSTANT= 1.663

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
1	66.36	1.163	0.043	0.451	1.097	1.29
2	64.18	1.053	0.043	0.528	1.388	3.40
3	59.12	0.805	0.042	0.537	1.425	2.86
4	70.82	1.399	0.044	0.453	1.098	1.97
5	67.36	1.215	0.043	0.402	0.974	1.31
6	56.48	0.678	0.042	0.449	1.091	1.01
7	64.72	1.080	0.043	0.482	1.021	2.39
8	64.29	1.058	0.043	0.405	0.940	1.05
9	57.65	0.734	0.042	0.506	1.169	1.92
10	45.70	0.167	0.042	0.360	0.724	1.60
11	65.14	1.101	0.043	0.385	0.705	1.25
12	55.87	0.649	0.041	0.335	0.617	1.59
13	51.48	0.442	0.041	0.540	1.334	2.66
14	63.25	1.007	0.042	0.446	1.065	1.29
15	51.20	0.428	0.041	0.355	0.711	1.28
16	65.07	1.098	0.043	0.472	1.209	2.11
17	45.13	0.140	0.042	0.489	1.092	1.70
18	53.09	0.517	0.041	0.440	0.824	1.37
19	48.63	0.307	0.041	0.499	1.127	1.44
20	48.09	0.281	0.041	0.497	0.941	1.20
21	52.66	0.497	0.041	0.424	0.859	1.30
22	52.12	0.472	0.041	0.514	1.268	2.47
23	33.96	-0.419	0.044	0.406	0.754	2.02
24	41.42	-0.040	0.042	0.436	0.888	1.12
25	41.03	-0.059	0.042	0.431	0.896	1.06
26	30.72	-0.595	0.045	0.348	0.861	2.23
27	41.21	-0.050	0.042	0.389	0.854	1.22
28	46.31	0.196	0.042	0.433	1.030	0.91
29	43.85	0.078	0.042	0.258	0.486	3.06
30	49.52	0.349	0.041	0.373	0.714	1.75
31	39.35	-0.142	0.043	0.298	0.646	2.08
32	38.10	-0.205	0.043	0.395	0.890	1.71
33	43.99	0.085	0.042	0.351	0.820	1.77
34	40.88	-0.066	0.042	0.332	0.652	1.67
35	31.68	-0.542	0.045	0.373	0.856	1.32
36	40.78	-0.071	0.042	0.471	1.085	0.93
37	32.07	-0.521	0.044	0.265	0.663	2.94
38	51.80	0.457	0.041	0.550	1.574	2.63
39	48.23	0.288	0.041	0.472	1.190	1.18
40	47.45	0.251	0.041	0.432	0.613	2.52
41	47.73	0.264	0.041	0.448	0.986	1.09
42	36.75	-0.274	0.043	0.350	0.737	1.83
43	35.78	-0.272	0.043	0.369	0.660	1.21
44	36.75	-0.274	0.043	0.458	1.150	0.93
45	44.60	0.114	0.042	0.544	1.315	2.26
46	20.26	-1.251	0.051	0.133	0.362	5.39
47	27.36	-0.788	0.046	0.420	1.075	1.31
48	41.99	-0.012	0.042	0.428	0.990	0.80
49	46.24	0.193	0.042	0.499	1.277	1.34
50	29.43	-0.670	0.045	0.360	0.967	1.84

CONTINUED

TABLE 83 (CONT.)
 SAT INTERMEDIATE II FORM X PARAGRAPH MEANING
 ITEM SUMMARY

64 ITEMS		2803 CASES	KR-20= 0.917	EQUATING CONSTANT=		1.663

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT

51	38.32	-0.194	0.043	0.553	1.423	2.85
52	32.00	-0.525	0.044	0.300	0.641	2.13
53	19.37	-1.316	0.052	0.221	0.531	2.29
54	31.89	-0.530	0.044	0.377	1.011	1.88
55	32.25	-0.51	0.044	0.450	1.225	1.56
56	17.30	-1.476	0.054	0.061	0.347	7.86
57	22.12	-1.121	0.049	0.382	1.016	1.33
58	26.61	-0.833	0.047	0.295	0.834	2.76
59	27.47	-0.782	0.046	0.428	1.206	1.53
60	17.12	-1.490	0.054	0.084	0.369	6.23
61	23.08	-1.056	0.049	0.240	0.519	2.54
62	24.30	-0.977	0.048	0.216	0.650	4.03
63	32.75	-0.484	0.044	0.388	1.012	1.41
64	23.65	-1.019	0.048	0.312	0.890	1.82

266

TABLE 83 (CONT.)
SAT INTERMEDIATE II FORM X PARAGRAPH MEANING
ABILITY SUMMARY

64 ITEMS		2803 CASES		KR-20= 0.917		EQUATING CONSTANT= 1.663	
SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE		SCALE SCORE	STD ERR
1	0	-4.377	1.012	173	10.12		
2	2	-3.660	0.724	180	7.24		
3	2	-3.231	0.598	184	5.98		
4	4	-2.919	0.524	187	5.24		
5	5	-2.671	0.474	190	4.74		
6	9	-2.465	0.438	192	4.38		
7	5	-2.285	0.410	194	4.10		
8	13	-2.127	0.388	195	3.88		
9	21	-1.983	0.370	197	3.70		
10	32	-1.852	0.355	198	3.55		
11	44	-1.731	0.342	199	3.42		
12	50	-1.617	0.332	200	3.32		
13	79	-1.510	0.322	202	3.22		
14	95	-1.409	0.314	203	3.14		
15	97	-1.312	0.307	204	3.07		
16	110	-1.220	0.301	204	3.01		
17	108	-1.131	0.296	205	2.96		
18	119	-1.045	0.291	206	2.91		
19	104	-0.961	0.287	207	2.87		
20	114	-0.880	0.283	208	2.83		
21	94	-0.801	0.280	209	2.80		
22	92	-0.723	0.277	209	2.77		
23	86	-0.648	0.274	210	2.74		
24	83	-0.573	0.272	211	2.72		
25	80	-0.499	0.270	212	2.70		
26	69	-0.427	0.269	212	2.69		
27	72	-0.355	0.267	213	2.67		
28	72	-0.284	0.266	214	2.66		
29	55	-0.213	0.265	214	2.65		
30	54	-0.143	0.265	215	2.65		
31	58	-0.073	0.265	216	2.65		
32	55	0.003	0.265	217	2.65		
33	57	0.067	0.265	217	2.65		
34	59	0.137	0.265	218	2.65		
35	62	0.207	0.266	219	2.66		
36	57	0.278	0.267	219	2.67		
37	49	0.350	0.268	220	2.68		
38	51	0.422	0.269	221	2.69		
39	57	0.494	0.271	222	2.71		
40	41	0.568	0.273	222	2.73		
41	39	0.643	0.275	223	2.75		
42	44	0.719	0.277	224	2.77		
43	40	0.797	0.280	225	2.80		
44	48	0.876	0.284	225	2.84		
45	39	0.958	0.288	226	2.88		
46	26	1.042	0.292	227	2.92		
47	40	1.128	0.297	228	2.97		
48	27	1.218	0.302	229	3.02		
49	25	1.311	0.308	230	3.08		
50	32	1.408	0.315	231	3.15		

267

TABLE 83 (CONT.)
SAT INTERMEDIATE II FORM X PARAGRAPH MEANING
ABILITY SUMMARY

64 ITEMS 2803 CASES KR-20= 0.917 EQUATING CONSTANT= 1.663

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
51	24	1.510	0.324	232	3.24
52	21	1.618	0.333	233	3.33
53	16	1.732	0.344	234	3.44
54	19	1.854	0.356	235	3.56
55	9	1.986	0.371	236	3.71
56	8	2.131	0.389	238	3.89
57	7	2.290	0.411	240	4.11
58	5	2.470	0.439	241	4.39
59	8	2.678	0.475	243	4.75
60	4	2.927	0.525	246	5.25
61	4	3.240	0.599	249	5.99
62	2	3.670	0.725	253	7.25
63	0	4.388	1.012	261	10.12

TABLE 84
SAT INTERMEDIATE II FORM X TCTAL READING
ITEM SUMMARY

112 ITEMS 2803 CASES KR-20= 0.952 EQUATING CONSTANT= 1.652

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MIN SQ FIT
1	74.13	1.591	0.046	0.470	1.356	1.68
2	80.02	1.965	0.050	0.470	1.543	2.45
3	75.35	1.663	0.047	0.478	1.326	2.03
4	69.89	1.351	0.044	0.381	0.865	1.08
5	60.11	0.849	0.042	0.439	0.865	1.16
6	65.61	1.124	0.043	0.522	1.212	2.10
7	60.26	0.856	0.042	0.504	1.216	1.53
8	71.60	1.445	0.045	0.500	1.371	1.90
9	71.74	1.453	0.045	0.499	1.323	1.78
10	53.19	0.516	0.041	0.443	0.951	0.96
11	56.26	0.663	0.042	0.506	1.224	1.19
12	55.48	0.625	0.042	0.414	0.852	1.07
13	56.26	0.663	0.042	0.522	1.353	1.49
14	41.21	-0.082	0.042	0.416	0.880	0.96
15	61.47	0.916	0.042	0.524	1.425	1.61
16	64.93	1.090	0.043	0.512	1.491	1.50
17	50.55	0.390	0.041	0.268	0.429	2.80
18	44.81	0.114	0.042	0.438	0.843	0.93
19	35.57	-0.349	0.043	0.309	0.681	1.86
20	35.85	-0.130	0.042	0.423	0.814	1.03
21	43.99	0.074	0.042	0.498	1.046	1.30
22	43.52	0.052	0.042	0.441	1.016	0.98
23	47.81	0.258	0.042	0.492	1.302	1.20
24	45.02	0.124	0.042	0.526	1.363	1.28
25	40.56	-0.094	0.042	0.426	0.899	0.98
26	48.70	0.301	0.041	0.421	1.033	0.89
27	53.98	0.553	0.041	0.425	1.016	0.98
28	40.71	-0.087	0.042	0.315	0.668	1.63
29	33.43	-0.462	0.044	0.322	0.701	1.50
30	30.15	-0.643	0.045	0.324	0.667	1.25
31	29.33	-0.690	0.045	0.517	1.328	1.58
32	40.39	-0.103	0.042	0.467	1.169	0.86
33	34.64	-0.398	0.044	0.344	0.778	1.40
34	38.74	-0.186	0.043	0.445	1.010	0.87
35	61.26	0.905	0.042	0.546	1.780	1.73
36	30.40	-0.629	0.045	0.408	0.874	1.01
37	23.19	-1.067	0.049	0.373	0.948	1.58
38	20.15	-0.878	0.047	0.248	0.544	2.16
39	28.65	-0.729	0.046	0.376	0.875	1.56
40	35.53	-0.351	0.043	0.478	1.234	1.17
41	24.62	-0.974	0.048	0.262	0.606	1.95
42	20.16	-1.277	0.051	0.170	0.482	3.00
43	21.05	-1.213	0.050	0.240	0.691	2.34
44	20.09	-1.282	0.051	0.317	0.799	1.31
45	14.98	-1.692	0.057	0.319	0.890	1.27
46	16.48	-1.562	0.055	0.171	0.497	2.63
47	14.98	-1.692	0.057	0.308	0.903	1.12
48	9.20	-2.315	0.069	0.192	0.738	2.23
49	66.36	1.163	0.043	0.446	1.128	0.87
50	64.18	1.052	0.043	0.539	1.370	2.27

CONTINUED



TABLE 84 (CONT.)
SAT INTERMEDIATE II FORM X TOTAL READING
ITEM SUMMARY

112 ITEMS 2803 CASES KR-20= 0.952 EQUATING CONSTANT= 1.652

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I, AB)	SLOPE	MN SQ FIT
51	59.12	0.801	0.042	0.552	1.499	1.90
52	70.82	1.401	0.045	0.436	1.105	1.15
53	67.36	1.215	0.043	0.386	0.809	1.14
54	56.48	0.673	0.042	0.442	1.018	1.08
55	64.72	1.079	0.043	0.485	1.169	1.45
56	64.29	1.057	0.043	0.398	0.873	1.08
57	57.65	0.730	0.042	0.505	1.306	1.39
58	45.70	0.157	0.042	0.341	0.605	1.41
59	65.14	1.101	0.043	0.366	0.714	1.18
60	55.87	0.644	0.042	0.310	0.600	1.80
61	51.48	0.434	0.041	0.532	1.227	1.67
62	63.25	1.005	0.042	0.436	1.043	1.02
63	51.20	0.420	0.041	0.332	0.712	1.74
64	65.07	1.097	0.043	0.448	0.950	1.40
65	45.13	0.130	0.042	0.487	1.021	1.54
66	53.09	0.511	0.041	0.428	0.833	1.18
67	48.63	0.298	0.042	0.475	0.987	1.00
68	48.09	0.272	0.042	0.385	0.785	1.14
69	52.66	0.499	0.041	0.412	0.802	1.20
70	52.12	0.465	0.041	0.510	1.181	1.38
71	33.56	-0.434	0.044	0.385	0.822	1.24
72	41.42	-0.052	0.042	0.414	0.867	1.23
73	41.03	-0.071	0.042	0.403	0.785	1.09
74	30.72	-0.611	0.045	0.341	0.817	1.73
75	41.21	-0.062	0.042	0.374	0.875	1.66
76	46.31	0.186	0.042	0.415	0.881	0.82
77	43.88	0.067	0.042	0.228	0.374	3.33
78	49.52	0.340	0.041	0.349	0.663	1.45
79	39.35	-0.155	0.043	0.277	0.592	1.85
80	38.10	-0.218	0.043	0.378	0.776	0.96
81	43.97	0.074	0.042	0.321	0.713	1.36
82	40.88	-0.078	0.042	0.324	0.672	1.36
83	31.60	-0.557	0.045	0.351	0.760	1.43
84	40.78	-0.084	0.042	0.463	1.049	1.01
85	32.07	-0.536	0.044	0.249	0.593	2.44
86	51.00	0.449	0.041	0.556	1.579	1.56
87	40.23	0.279	0.042	0.453	0.994	0.97
88	47.45	0.241	0.042	0.378	0.686	2.36
89	47.73	0.255	0.042	0.437	0.949	0.92
90	36.75	-0.288	0.043	0.336	0.709	1.30
91	36.78	-0.286	0.043	0.362	0.731	1.51
92	35.75	-0.288	0.043	0.443	1.139	1.07
93	44.60	0.104	0.042	0.530	1.158	1.49
94	20.20	-1.269	0.051	0.112	0.356	4.22
95	27.36	-0.805	0.046	0.406	0.932	1.00
96	41.59	-0.024	0.042	0.428	0.996	0.72
97	46.24	0.183	0.042	0.479	1.124	0.92
98	29.40	-0.686	0.045	0.357	0.838	1.45
99	38.32	-0.207	0.043	0.551	1.488	1.73
100	32.00	-0.540	0.044	0.289	0.630	2.00

TABLE 84 (CONT.)
 SAT INTERMEDIATE II FORM X TCTAL READING
 ITEM SUMMARY

112 ITEMS 2803 CASES KR-20= 0.952 EQUATING CONSTANT= 1.652

ITEM NO.	RESPONSE PERCENT	LOG EASINESS	STD ERROR	DISCRIMINATION R(I,AB)	SLOPE	MN SQ FIT
101	19.37	-1.334	0.052	0.203	0.480	2.16
102	31.89	-0.546	0.044	0.365	0.850	1.48
103	32.25	-0.526	0.044	0.433	1.030	1.26
104	17.30	-1.495	0.054	0.057	0.245	4.68
105	22.12	-1.139	0.049	0.372	0.929	1.36
106	26.61	-0.850	0.047	0.284	0.691	1.78
107	27.47	-0.799	0.046	0.418	0.968	1.19
108	17.12	-1.509	0.054	0.077	0.278	4.86
109	23.08	-1.074	0.049	0.241	0.544	2.15
110	24.20	-0.995	0.048	0.205	0.545	2.92
111	32.75	-0.499	0.044	0.392	0.947	1.05
112	23.65	-1.036	0.048	0.310	0.777	1.35

TABLE 84 (CONT.)
SAT INTERMEDIATE II FORM X TCTAL READING
ABILITY SUMMARY

271

112 ITEMS 2803 CASES KR-20= 0.952 EQUATING CONSTANT= 1.652

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
1	0	-5.039	1.008	166	10.08
2	0	-4.331	0.718	173	7.18
3	0	-3.909	0.591	177	5.91
4	0	-3.606	0.516	180	5.16
5	1	-3.367	0.465	183	4.65
6	2	-3.169	0.427	185	4.27
7	1	-2.999	0.398	187	3.98
8	2	-2.849	0.375	188	3.75
9	2	-2.716	0.357	189	3.57
10	3	-2.594	0.341	191	3.41
11	1	-2.483	0.327	192	3.27
12	6	-2.380	0.316	193	3.16
13	7	-2.283	0.305	194	3.05
14	9	-2.193	0.296	195	2.96
15	5	-2.108	0.288	195	2.88
16	12	-2.027	0.281	196	2.81
17	20	-1.949	0.275	197	2.75
18	20	-1.876	0.269	198	2.69
19	24	-1.805	0.263	198	2.63
20	29	-1.737	0.259	199	2.59
21	35	-1.671	0.254	200	2.54
22	31	-1.608	0.250	200	2.50
23	30	-1.546	0.246	201	2.46
24	47	-1.486	0.243	202	2.43
25	47	-1.428	0.240	202	2.40
26	62	-1.372	0.237	203	2.37
27	51	-1.318	0.234	203	2.34
28	61	-1.262	0.231	204	2.31
29	63	-1.210	0.229	204	2.29
30	65	-1.158	0.227	205	2.27
31	61	-1.107	0.224	205	2.24
32	65	-1.057	0.223	206	2.23
33	56	-1.008	0.221	206	2.21
34	67	-0.960	0.219	207	2.19
35	53	-0.912	0.217	207	2.17
36	60	-0.865	0.216	208	2.16
37	57	-0.819	0.215	208	2.15
38	50	-0.773	0.213	209	2.13
39	45	-0.728	0.212	209	2.12
40	48	-0.683	0.211	210	2.11
41	59	-0.638	0.210	210	2.10
42	47	-0.595	0.209	211	2.09
43	43	-0.551	0.208	211	2.08
44	43	-0.508	0.208	211	2.08
45	39	-0.465	0.207	212	2.07
46	42	-0.422	0.206	212	2.06
47	48	-0.380	0.206	213	2.06
48	53	-0.337	0.205	213	2.05
49	32	-0.295	0.205	214	2.05
50	38	-0.254	0.204	214	2.04

TABLE 84 (CONT.)
SAT INTERMEDIATE II FORM X TOTAL READING,
ABILITY SUMMARY

112 ITEMS 2803 CASES KR-20= 0.952 EQUATING CONSTANT= 1.652

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE SCORE	STD ERR
51	39	-0.212	0.204	214	2.04
52	27	-0.170	0.204	215	2.04
53	28	-0.129	0.204	215	2.04
54	32	-0.087	0.204	216	2.04
55	38	-0.046	0.204	216	2.04
56	40	-0.004	0.204	216	2.04
57	36	0.037	0.204	217	2.04
58	30	0.078	0.204	217	2.04
59	39	0.120	0.204	218	2.04
60	27	0.161	0.204	218	2.04
61	39	0.203	0.204	219	2.04
62	32	0.245	0.205	219	2.05
63	42	0.287	0.205	219	2.05
64	36	0.329	0.206	220	2.06
65	28	0.371	0.206	220	2.06
66	27	0.414	0.207	221	2.07
67	27	0.457	0.207	221	2.07
68	36	0.500	0.208	222	2.08
69	36	0.543	0.209	222	2.09
70	30	0.587	0.210	222	2.10
71	22	0.631	0.211	223	2.11
72	29	0.676	0.212	223	2.12
73	26	0.721	0.213	224	2.13
74	24	0.766	0.214	224	2.14
75	22	0.812	0.215	225	2.15
76	26	0.859	0.217	225	2.17
77	31	0.906	0.218	226	2.18
78	30	0.954	0.220	226	2.20
79	18	1.003	0.221	227	2.21
80	14	1.052	0.222	227	2.23
81	18	1.102	0.225	228	2.25
82	22	1.154	0.227	228	2.27
83	13	1.206	0.230	229	2.30
84	15	1.259	0.232	229	2.32
85	21	1.314	0.235	230	2.35
86	20	1.369	0.238	230	2.38
87	15	1.426	0.241	231	2.41
88	14	1.485	0.244	231	2.44
89	13	1.545	0.247	232	2.47
90	12	1.607	0.251	233	2.51
91	14	1.672	0.255	233	2.55
92	10	1.738	0.260	234	2.60
93	13	1.807	0.265	235	2.65
94	9	1.878	0.270	235	2.70
95	3	1.953	0.276	236	2.76
96	5	2.030	0.282	237	2.82
97	4	2.112	0.290	238	2.90
98	2	2.198	0.298	238	2.98
99	4	2.290	0.307	239	3.07
100	2	2.387	0.317	240	3.17

CONTINUED

274



TABLE 84 (CONT.)
 SAT INTERMEDIATE-II FORM X TCTAL READING
 ABILITY SUMMARY

112 TESTS 2803 CASES KR-20= 0.952 EQUATING CONSTANT= 1.652

SCORE	FREQ	LOG ABILITY	STD ERROR	NATIONAL REFERENCE SCALE	
				SCALE SCORE	STD ERR
101	6	2.491	0.329	241	3.29
102	4	2.603	0.342	243	3.42
103	3	2.726	0.358	244	3.58
104	1	2.861	0.377	245	3.77
105	4	3.011	0.400	247	4.00
106	1	3.183	0.429	248	4.29
107	1	3.382	0.456	250	4.66
108	1	3.623	0.517	253	5.17
109	3	3.928	0.592	256	5.92
110	3	4.350	0.719	260	7.19
111	4	5.061	1.008	267	10.08

Appendix III

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS = 40						
SAMPLE SIZE = 23188.						
DIFF	0.592	0.188	-0.084	2.016	0.598	0.142
MAX	-0.000	1.177	0.081	2.272	-0.042	0.803
RPBIS	0.479	0.080	-0.550	2.399	-0.497	0.062
SLOPE	1.013	0.236	0.214	2.940	1.008	0.153
MSFIT	15.314	16.005	2.091	8.069	9.058	8.652

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	1	0	3	6	6	5	4	6	5	4
MAX	1	2	5	8	5	6	4	4	3	2
RPBIS	0	0	1	2	3	9	5	10	10	0
SLOPE	2	1	4	4	8	8	6	4	0	3
MSFIT*	17	9	5	5	1	1	1	0	0	1

MSFIT* = MSFIT(1500/N)

DIFF

MS	1	2	3	4	5	6	7	8	9	10
10		2	1	1						
9		2	2	1						
8		4	1	1	1					
7		1	1	1		1				
6		3	2							
5		3	2		1					
4		2	2	1	1					
3		1			1			1		
2										
1						1				

MAX

MS	1	2	3	4	5	6	7	8	9	10
10		1						1		
9		1						2		
8		2						2		
7		3						1		
6		2	2	1						1
5		3	2							
4		4	2					2		
3		1	3	1						
2									1	
1										1

RPBIS

MS	1	2	3	4	5	6	7	8	9	10
10										
9		1	6	1	2					
8		7		1	2					
7		5								
6		2	3	2	1	1				
5		1		1		1				
4		1					1			
3									1	
2										
1										

SLOPE

MS	1	2	3	4	5	6	7	8	9	10
10						1	2			
9										
8			1	2	1					
7			3	2	1					
6			5	3						
5			8							
4			1	2			1			
3			1	2	1					
2									1	
1										1

	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFIT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS = 42						
SAMPLE SIZE = 23351.						
DIFF	0.566	0.186	-0.103	2.145	0.569	0.132
MAX	-0.000	1.064	0.252	2.808	-0.040	0.676
RPBIS	0.420	0.097	-1.043	3.132	0.460	0.065
SLOPE	1.016	0.284	-0.220	2.426	1.043	0.164
MSFIT	18.386	20.645	2.215	7.924	12.504	5.879

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	3	4	4	5	7	4	10	3	2
MAX	0	3	6	5	8	5	10	2	1	2
RPBIS	2	1	3	4	2	8	15	7	0	0
SLOPE	5	3	2	1	7	6	8	4	3	3
MSFT*	15	12	7	0	2	3	0	1	0	2

MSFT* = MSFIT(1500/N)

DIFF

10		2								
9		1	1	1						
8		4	4	2						
7		2	2							
6		5	2							
5		3	2							
4		1	2		1					
3		1		2	1					
2				1		2				
1										

MS 1 2 3 4 5 6 7 8 9 10

MAX

10							2			
9			1							
8				1				1		
7		4	4	2						
6		2	3							
5		6	2							
4		3	1					1		
3			1	2				2	1	
2								1		2
1										

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10										
9										
8			4	2	1					
7		11	4							
6		4	4							
5				2						
4				3	1					
3					1	2				
2							1			
1									2	

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10			1	1				1		
9			2	1						
8		1	3							
7		4	2	2						
6		5	1							
5		5	2							
4			1							
3					2					
2					1		1	1		
1								2	1	2

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS = 82						
SAMPLE SIZE = 23376						
DIFF	0.581	0.186	-0.093	2.146	0.586	0.139
MAX	-0.000	1.091	0.171	2.575	-0.037	0.734
RPBIS	0.430	0.094	-0.964	3.704	0.444	0.051
SLOPE	1.019	0.285	-0.086	2.993	1.014	0.189
MSFIT	10.393	12.550	2.563	10.105	5.503	5.510

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	1	3	6	11	11	10	10	16	7	7
MAX	2	5	8	15	12	14	12	6	5	3
RPBIS	3	0	7	5	7	21	21	12	6	0
SLOPE	7	3	6	10	14	9	11	11	6	5
MSFIT*	54	10	10	2	3	0	1	1	1	0

MSFIT* = MSFIT(1500/N)

DIFF

10	3	2	2							
9	3	2	2							
8	15	1	1							
7	8	1	1							
6	9	1								
5	9	2								
4	7		3	1						
3		2		1	2	1				
2			1			1	1			
1				1						

MS 1 2 3 4 5 6 7 8 9 10

MAX

10		2	1							
9	3		2							
8	3	2	1							
7	11		1							
6	12	1	1							
5	11	1								
4	12	2	1							
3	2	2	2				2			
2						1	1		1	1
1							1	1		

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10										
9	2	2	2							
8	10	1	1							
7	18	1	2							
6	18	3								
5	5		2							
4		3	2							
3	1		1	2	3					
2										
1						1	1	1		

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10			1	4						
9	3	2	1							
8	9	1	1							
7	9	2								
6	9									
5	12	2								
4	9	1								
3	3	1	2							
2			2				1			
1						2	2		1	1

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .8
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.0
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .6
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.4
MSFIT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.5

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS = 40						
SAMPLE SIZE = 3772.						
DIFF	0.536	0.167	-0.061	2.116	0.570	0.125
MAX	0.000	0.992	0.060	2.458	0.173	0.691
RPBIS	0.495	0.064	-0.693	3.237	0.503	0.037
SLOPE	1.007	0.207	0.015	3.207	1.009	0.124
MSFIT	2.917	2.139	1.740	5.960	2.404	1.028

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	3	3	6	6	7	6	6	2	1
MAX	0	3	3	6	6	8	10	2	1	1
RPBIS	0	0	0	2	1	5	12	11	8	1
SLOPE	3	0	3	5	7	11	4	4	2	1
MSFIT*	8	13	10	4	2	1	1	0	1	0

MSFIT* = MSFIT(1500/N)

DIFF

10				1						
9			2							
8		1	1	2	1	1				
7		2	3	1						
6		3	3	1						
5		1	4		1					
4		1	2	2		1				
3				2	1					
2				1		1				
1										

MS 1 2 3 4 5 6 7 8 9 10

MAX

10								1		
9								1		
8								2		
7		2	4	2	1	1				
6		4	3	1						
5		1	4					1		
4		1	2	2					1	
3				2	1					
2						1			1	1
1										

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10				1						
9			3	3	1	1				
8		3	8							
7		5	1	6						
6			1		3	1				
5						1				
4							1		1	
3										
2										
1										

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10								1		
9								1		1
8								4		
7						3			1	
6		3	7	1						
5		4	2	1						
4		1	1	2	1					
3					1	1	1			
2										
1									1	1

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .8
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.0
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .6
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.4
MSFIT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.5

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS = 42						
SAMPLE SIZE = 3801.						
DIFF	0.514	0.157	0.758	3.458	0.474	0.096
MAX	-0.000	0.893	1.042	4.517	-0.228	0.475
RPBIS	0.422	0.077	-0.605	2.859	0.421	0.049
SLOPE	1.003	0.271	0.044	2.247	0.996	0.161
MSFIT	3.105	2.368	1.856	6.470	2.231	1.210

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	1	0	5	7	10	10	3	2	1	3
MAX	0	1	0	10	12	10	5	1	1	2
RPBIS	0	1	2	5	6	11	10	7	0	0
SLOPE	3	5	1	3	9	6	5	3	3	4
MSFIT*	6	18	6	6	3	0	1	1	0	1

MSFIT* = MSFIT(1500/N)

DIFF

10			1	1	1					
9			1							
8	2									
7	1	1		1						
6		6	2	2						
5	2	6	1		1					
4	1	3		2			1			
3		2	1		1					
2										
1										1

MS 1 2 3 4 5 6 7 8 9 10

MAX

10								1		1
9									1	
8								1		
7			3	1				1		
6				6	2			2		
5			2	7	1			1	1	
4			1	4	1			1	1	1
3										
2										
1										1

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10										
9										
8			2	2	3					
7	4	6								
6	1	9	1							
5	1	1	2	1	1					
4			1	2	2					
3						1	1			
2									1	
1										

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10							1	2	1	
9							1	1	1	
8							1	1	1	
7			1	3	1					
6			3	3						
5			2	6	1					
4				3						
3									1	
2							1	1	2	1
1										1

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFIT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50



SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS = 82						
SAMPLE SIZE = 3809.						
DIFF	0.528	0.161	0.341	2.678	0.523	0.117
MAX	-0.000	0.916	0.576	3.472	-0.045	0.602
RPBIS	0.440	0.079	-0.646	3.135	0.445	0.053
SLOPE	1.011	0.283	0.167	2.554	1.001	0.195
MSFIT	2.350	1.829	3.000	14.901	1.841	0.757

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	1	3	8	13	15	18	9	8	3	4
MAX	1	2	6	16	21	14	14	3	2	3
RPBIS	0	2	2	7	13	19	19	16	4	0
SLOPE	7	4	9	6	15	9	12	8	4	8
MSFIT*	22	35	15	4	3	1	1	0	0	1

MSFIT* = MSFIT(1500/N)

DIFF

10	2	1	1							
9	2	1								
8	4	3	1							
7	2	6	1							
6	9	6	3							
5	4	8	2	1						
4	2	7	1	1	1					
3	1	3	2	1	1					
2		1	1	1						
1										1

MS 1 2 3 4 5 6 7 8 9 10

MAX

10		1	1	1						
9		1	1							
8		2	1							
7	4	6	3		1					
6	7	5	2							
5	8	9	3		1					
4	2	8	2	2	1			1		
3	1	3	1					1		
2			1	1						
1										1

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10										
9		1	2		1					
8	3	10	3							
7	12	6	1							
6	5	10	3	1						
5	2	7	4							
4		1	2	3	1					
3					1		1			
2						1				1
1										

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10		2	4	1	1					
9		2	2							
8	1	7								
7	6	5	1							
6	6	2	1							
5	7	7	1							
4	2	4								
3		6	3							
2			3		1					
1					2	2	1	1		1

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .8
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.0
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .6
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.4
MSFIT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.5



SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
DIFF	0.533	0.204	-0.188	1.693	0.570	0.191
MAX	0.000	1.154	-0.078	2.000	0.168	1.020
RPBIS	0.439	0.127	-0.737	2.532	0.475	0.101
SLOPE	1.045	0.292	-0.212	2.158	1.095	0.227
MSFIT	11.935	11.102	1.784	6.006	8.855	4.994

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	1	6	4	3	3	4	7	7	4	1
MAX	1	4	5	4	5	5	6	9	0	1
RPBIS	3	2	0	6	1	6	5	9	6	2
SLOPE	4	1	3	7	1	4	7	4	4	5
MSFIT*	8	9	6	8	3	1	2	0	0	3

MSFIT* = MSFIT(1500/N)

DIFF

MS	1	2	3	4	5	6	7	8	9	10
10	1									
9	4									
8	1	1	1	2						
7	2	1	1	2	1					
6	1	2	1							
5		1	2							
4			1	1	1					
3		1	1	1	1					
2				1		1	2			2
1										1

MAX

MS	1	2	3	4	5	6	7	8	9	10
10	1									
9										
8		5	2	1	1					
7		1	1	1	3	1				
6		1	3	1						
5		1	1	2	1					
4				1	2	1				
3			1	1	1	1	1	1		
2						1			1	2
1										1

RPBIS

MS	1	2	3	4	5	6	7	8	9	10
10				1	1					
9			2	4						
8	1	7	1							
7	4	1								
6	3	2		1						
5			1							
4			1	3	1	1				
3										
2						2				
1									3	

SLOPE

MS	1	2	3	4	5	6	7	8	9	10
10				1	4					
9		2	2							
8	1	2				1				
7	3	3		1						
6	2	1	1							
5	1									
4	1	1	1	2	2					
3			1	1		1				
2										1
1								2		2

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.23	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFIT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 45
SUMMARY OF DATA, MEAN

SAMPLE SIZE = 11543.
STD SKEW KUR MED Q

DIFF	0.481	0.194	0.493	2.398	0.462	0.138
MAX	-0.000	1.060	0.801	3.468	-0.105	0.668
RPBIS	0.377	0.097	-0.263	2.242	0.389	0.068
SLOPE	1.055	0.347	0.732	3.181	1.020	0.184
MSFIT	6.909	5.535	0.908	2.415	5.158	3.487

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	1	7	5	9	4	7	5	3	2	2
MAX	0	1	7	8	9	8	5	3	2	2
RPBIS	2	4	5	3	11	10	6	3	1	0
SLOPE	2	6	3	4	5	8	6	1	3	7
MSFT*	19	12	4	3	6	1	0	0	0	0

MSFT* = MSFIT(1500/N)

DIFF

10	2									
9		1	1							
8	2	1								
7	3		2							
6	5	2								
5	2	1		1						
4	5	2	2							
3	2	1		2						
2		3	3		1					
1			1							

MS 1 2 3 4 5 6 7 8 9 10

MAX

10		2								
9			1	1						
8		2	1							
7		3						2		
6		6	2							
5		5	2		1	1				
4		3	2		1	2				
3			3	3					1	
2					1					
1										

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10										
9				1						
8		1		2						
7	2	3		1						
6	7	2	1							
5	9	1	1							
4	1	1	1							
3		4		1						
2			1	1	2					
1				1		1				

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10		2	1		4					
9		1	2							
8		1								
7		4	2							
6		6	2							
5		4	1							
4		2		2						
3		1	1	1						
2			2		2	1	1			
1					1	1				

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.

NUMBER OF ITEMS = 85
SUMMARY OF DATA

SAMPLE SIZE = 11544.
STD SKEW

KUR

MED

Q

DIFF	0.505	0.199	0.165	1.939	0.486	0.166
MAX	0.000	1.087	0.383	2.643	-0.109	0.825
RPBIS	0.384	0.121	-0.384	2.302	0.405	0.089
SLOPE	1.031	0.377	0.224	2.151	0.957	0.265
MSFIT	5.715	4.197	1.275	4.068	4.268	2.411

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	2	13	9	12	7	11	12	10	6	3
MAX	0	7	11	13	12	14	11	11	3	3
RPBIS	7	6	10	8	10	16	13	8	6	1
SLOPE	14	2	10	7	12	6	3	10	4	17
MSFT*	36	28	12	5	4	0	0	0	0	0

MSFT* = MSFIT(1500/N)

DIFF

10	1	2	1							
9	1	5	1							
8	1	3	4	3						
7	1	5	4	3						
6	1	9	1	1						
5	1	2	4	1						
4	1	4	6		2					
3	1	4	3		1	1				
2	1	2	4	4		3				
1	1				2					

MS 1 2 3 4 5 6 7 8 9 10

MAX

10	1	2	1							
9	1	2	1							
8	1	5	4	2						
7	1	5	2	4						
6	1	10	3	1						
5	1	4	7	1						
4	1	4	5		3	1				
3	1	3	4	2		2				
2	1	1	1	2	2	1				
1	1									

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10	1									
9	1	5								
8	1	5	2							
7	6	7								
6	14	2								
5	9	1								
4	4	4								
3	2	7	1							
2	1	2	2	1						
1	1	3	3							

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10	9	8								
9	3	1								
8	6	4								
7	3									
6	6									
5	11	1								
4	3	4								
3	4	5	1							
2	1	1								
1	3	2	5	4						

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS = 40						
SAMPLE SIZE = 1924.						
DIFF	0.466	0.158	-0.179	1.949	0.456	0.122
MAX	-0.000	0.816	-0.345	2.260	-0.023	0.586
RPBIS	0.398	0.085	-0.020	2.735	0.397	0.044
SLOPE	0.944	0.286	1.054	3.927	0.907	0.122
MSFIT	1.845	0.869	0.864	2.855	1.749	0.473

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	2	3	6	8	2	9	7	3	0	0
MAX	0	2	2	7	10	6	8	5	0	0
RPBIS	0	2	4	4	11	10	5	1	3	0
SLOPE	3	2	7	8	9	4	2	0	1	4
MSFT*	0	12	13	6	5	3	1	0	0	0

MSFT* = MSFIT(1500/N)

DIFF

10	9	8	7	6	5	4	3	2	1
		1	1	1					
			4	2	1				
		3	3	3					
			2						
		3	2	2	1				
		2	4						
				2	1				
		1			1				

MAX

10	9	8	7	6	5	4	3	2	1

RPBIS

10	9	8	7	6	5	4	3	2	1

SLOPE

10	9	8	7	6	5	4	3	2	1

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	>
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	>
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.

NUMBER OF ITEMS = 45
SUMMARY OF DATA

SAMPLE SIZE = 1926
STD SKEW

	MEAN	STD	SKEW	KUR	MED	Q
DIFF	0.521	0.172	0.657	2.590	0.498	0.113
MAX	0.000	0.947	1.114	4.131	-0.152	0.537
RPBIS	-0.378	0.097	-0.524	2.702	0.392	0.064
SLOPE	0.987	0.337	0.524	3.102	0.955	0.134
MSFIT	2.115	1.256	1.975	7.778	1.889	0.649

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	1	7	8	10	6	4	4	1	4
MAX	0	0	6	9	14	7	2	3	3	1
RPBIS	2	5	3	4	10	11	7	2	1	0
SLOPE	6	4	1	5	8	9	3	1	3	5
MSFT*	1	11	11	12	4	4	0	0	0	2

MSFT* = MSFIT(1500/N)

DIFF

10	1	1	1	1						
9			1							
8		1	1	2						
7	2	1			1					
6	2	2	2							
5	4	4	1		1					
4	1	2	2	3						
3			2	1	2					2
2			1							
1										

MAX

10							1			
9								1	1	1
8								1	1	1
7								1	1	
6							3	2	1	1
5							5	6	2	1
4							1	2	1	3
3									3	1
2										2
1										

RPBIS

10										
9						1				
8					2					
7			4	3						
6		5	3	2	1					
5	1	5	2	2						
4			1	3						
3		1	1	1						
2				1	1	3				
1									2	

SLOPE

10									3	1
9								1		
8								1	1	
7								1	1	
6								3	2	4
5							1	3	3	1
4								3	1	1
3									1	
2										4
1										

KEY

	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50



NUMBER OF ITEMS = 85 SAMPLE SIZE = 1926.
 SUMMARY OF DATA MEAN STD SKEW KUR MED

DIFF	0.495	0.167	0.351	2.719	0.491	0.114
MAX	-0.000	0.887	0.677	4.253	-0.034	0.537
RPBIS	0.363	0.096	-0.284	2.746	0.377	0.056
SLOPE	0.946	0.349	0.946	3.768	0.881	0.196
MSFIT	1.567	0.668	1.426	4.733	1.400	0.370

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	2	4	13	16	12	15	10	8	1	4
MAX	0	3	6	15	19	19	13	6	2	2
RPBIS	5	6	9	14	20	16	9	3	3	0
SLOPE	11	6	13	15	11	6	8	4	1	10
MSFIT*	0	34	32	9	6	4	0	0	0	0

MSFIT* = MSFIT(1500/M)

DIFF

10	1	3								
9				1						
8	2	2	1							
7	5	1	1							
6	9	5	1							
5	6	3		1						
4	6	9	1							
3	2	5	2	2	2					
2	1	1	1	1						
1			1	1						

MAX

10	1	1								
9		2								
8	1	2	2		1					
7	6	4	1	2						
6	12	6	1							
5	10	7	1		1					
4	3	6	2	2	2					
3	1	4	1							
2			1	2						
1										

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10										
9				1	2					
8		2	1							
7	1	6	2							
6	13	3								
5	14	5	1							
4	3	10	1							
3	2	6			1					
2	1		3	2						
1			2	3						

SLOPE

10			5	3	2					
9			1							
8	1	2	1							
7	6	2								
6	6									
5	7	4								
4	10	4	1							
3	4	8	1							
2		5			1					
1		1	3	4	3					

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFIT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 40
SUMMARY OF DATA MEAN

SAMPLE SIZE = 22198.
STD SKEW KUR MED Q

DIFF	0.616	0.170	-0.326	2.272	0.657	0.132
MAX	0.000	1.041	0.051	2.716	0.160	0.748
RPBIS	0.472	0.091	-0.717	2.695	0.488	0.068
SLOPE	1.039	0.265	0.149	2.468	1.030	0.179
MSFIT	18.261	16.831	1.680	6.439	14.508	9.298

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	1	3	4	4	6	5	10	5	2
MAX	1	2	5	4	7	6	10	3	0	2
RPBIS	0	1	1	2	5	3	9	12	6	1
SLOPE	2	2	4	3	7	10	1	4	2	5
MSFT#	13	8	7	5	2	2	2	0	0	1

MSFT# = MSFIT(1500/N)

DIFF

10	1	1								
9			2	3						
8	6	1	1	1	1					
7	2	2	1							
6	2	1	2		1					
5	2	1	1							
4		2		1	1					
3			1	1	1					
2					1					
1										

MAX

10	1	1								
9										
8						1	2			
7	6		2	1	1					
6	2	2	1	1						
5	2	2	2					1		
4	2	1	1							
3		2						1	1	1
2							1	1	1	
1										1

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10					1					
9		1	4	1						
8	4	3	3	2						
7	7	2								
6	1	1		1						
5	1	1		1	1	1				
4					1	1				
3						1				
2									1	
1										

SLOPE

10			3	1	1					
9		1	1							
8		2		2						
7	1									
6	5	2	3							
5	7									
4		3								
3				2	1	1				
2						1	1			
1								1		1

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
IFF	< -.20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
AX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
PBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
LOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
SFT#	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 45
SUMMARY OF DATA MEAN

SAMPLE SIZE = 22304
STD SKEW

KUR

MED

Q

DIFF	0.580	0.134	-0.212	2.069	0.585	0.095
MAX	-0.000	0.725	-0.105	2.136	0.002	0.499
RPBIS	0.459	0.099	-0.466	2.541	0.464	0.056
SLOPE	1.053	0.316	0.658	3.305	1.021	0.181
MSFIT	16.186	15.001	1.117	3.506	8.332	10.568

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	0	2	6	7	10	9	7	4	0
MAX	0	1	4	7	9	13	7	4	0	0
RPBIS	0	2	2	3	4	6	10	11	5	2
SLOPE	2	4	4	3	7	9	5	4	1	6
MSFIT*	18	9	3	6	5	2	0	1	1	0

MSFIT = MSFIT(1500/N)

DIFF

10										
9		2	1	1						
8		3	2	2						
7		4	1	3	1					
6		7	1	1	1					
5		2	5							
4				1	2	1	1	1		
3				1	1					
2										
1										

MAX

10										
9										
8		2		1				1		
7		3	2		2					
6		6	2		3	1	1			
5		6	2	1						
4		1	3	1			1	1		1
3							1	1	1	1
2								1		
1										

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10				1		1				
9				1	3	1				
8		5	5	1						
7		7	3							
6		5		1						
5		1	1		1	1				
4				1	1	1				
3					2					
2							1	1		
1										

SLOPE

10						1	3	1	1	
9						1				
8		1	2				1			
7		3	2							
6		5	4							
5		6				1				
4		3								
3				1			1	1	1	
2							1	3		
1										1 1

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .8
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.0
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .6
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.4
MSFIT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.5

NUMBER OF ITEMS = 85
SUMMARY OF DATA

SAMPLE SIZE = 22324.
STD SKEW

KUR

MED

Q

DIFF	0.598	0.151	-0.205	2.330	0.602	0.117
MAX	0.000	0.872	0.136	2.945	-0.029	0.632
RPBIS	0.448	0.096	-0.615	2.665	0.461	0.066
SLOPE	1.042	0.321	0.405	2.694	1.001	0.180
MSFIT	9.207	8.042	1.492	5.125	6.236	4.867

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	1	5	9	12	15	15	17	9	2
MAX	1	2	7	17	17	16	17	6	0	2
RPBIS	0	4	3	10	6	15	17	20	9	1
SLOPE	7	6	6	8	15	13	8	4	4	14
MSFT*	48	21	11	2	2	1	0	0	0	0

MSFT* = MSFIT(1500/N)

DIFF

10	1	1								
9	2	6	1							
8	12	4	1							
7	10	3	2							
6	12	1	1	1						
5	10	2								
4	1	2	3	1	1	1				
3		2	2	1						
2			1							
1										

MAX

10	1	1								
9										
8	2	3	1							
7	10	6	1							
6	10	4	2							
5	14	1	1	1						
4	11	4	1					1		
3		2	2	1	2					
2			2							
1			1							

RPBIS

10			1							
9	1	7	1							
8	12	7	1							
7	17									
6	13	2								
5	3	3								
4	2	2	5	1						
3			2	1						
2			1		2	1				
1										

SLOPE

10	1	10	3							
9	3	1								
8	1	3								
7	8									
6	12	1								
5	13	2								
4	6	2								
3	4	2								
2			5	1						
1			3	1	2	1				

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 40
SUMMARY OF DATA MEAN

SAMPLE SIZE = 3280
STD SKEW KUR MED Q

DIFF	0.501	0.153	0.525	2.970	0.485	0.109
MAX	0.000	0.902	0.895	4.353	-0.096	0.580
RPBIS	0.477	0.094	0.323	2.407	0.485	0.060
SLOPE	1.060	0.335	1.123	4.515	0.980	0.178
MSFIT	3.526	2.513	1.395	4.011	2.645	1.517

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	2	7	6	8	6	7	1	2	1
MAX	0	1	3	9	9	7	7	2	1	1
RPBIS	0	0	2	3	3	6	9	7	8	2
SLOPE	2	1	4	8	7	3	4	4	2	5
MSFT*	1	15	10	2	7	0	0	3	0	2

MSFT* = MSFIT(1500/N)

DIFF

10	1									
9		1	1							
8				1						
7		2	1	1	2					1
6		3	3							
5		6	2							
4		3	2				1			
3	1		1	1	2		1	1		
2					1		1			
1										

MAX

10										
9								1		
8							1	1		
7						2	1	1	2	
6						4	3			
5						7	2			
4						1	1	3	1	1
3									1	1
2									1	2
1										

RPBIS

10					1					1
9		2	3	1	2					
8		6			1					
7		4	5							
6	1	2	2	1						
5					2		1			
4		1			1		1			
3							1		1	
2										
1										

SLOPE

10								4		
9							1	1		
8						4				
7						2	2			
6						1	2			
5						4	2	1		
4		1	4	2				1		
3						1		2		1
2										1
1										1

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50



NUMBER OF ITEMS = 45 SAMPLE SIZE = 3289.

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
DIFF	0.524	0.134	-0.359	2.263	0.532	0.102
MAX	-0.000	0.698	-0.392	2.482	0.040	0.512
RPBIS	0.440	0.125	-1.157	4.922	0.468	0.086
SLOPE	1.020	0.366	-0.006	2.538	1.068	0.252
MSFIT	3.748	3.925	3.693	19.350	2.871	1.199

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	1	5	7	6	11	10	4	1	0
MAX	0	1	3	7	8	12	12	2	0	0
RPBIS	2	0	3	3	7	7	5	8	9	1
SLOPE	5	3	6	6	2	2	8	2	3	8
MSFIT	4	13	12	5	4	3	0	1	0	3

MSFIT* = MSFIT(1500/N)

DIFF

10	9	8	7	6	5	4	3	2	1
1									
2	1								
3	2	1							
4	3	3	1	2					
5	2	3	4	1	1				
6	1	3	2						
7		2	2	2	1				
8			1	1		1	2		
9							1		
10									

MAX

10	9	8	7	6	5	4	3	2	1
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									

RPBIS

10	9	8	7	6	5	4	3	2	1
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									

SLOPE

10	9	8	7	6	5	4	3	2	1
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFIT	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 85
SUMMARY OF DATA MEAN

SAMPLE SIZE = 3289
STD SKEW

KUR

MED

Q

DIFF	0.514	0.143	0.119	2.657	0.527	0.111
MAX	0.000	0.781	0.391	3.832	0.059	0.565
RPBIS	0.440	0.114	-0.984	4.817	0.464	0.083
SLOPE	1.038	0.381	0.470	3.490	0.985	0.259
MSFIT	2.393	1.988	4.245	27.785	1.853	0.583

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	3	12	13	14	17	17	5	3	1
MAX	0	1	7	16	17	22	17	3	1	1
RPBIS	2	2	6	8	9	13	13	18	12	2
SLOPE	7	9	8	7	13	5	11	7	5	13
MSFIT*	14	38	18	8	2	3	1	0	0	1

MSFIT* = MSFIT(1500/N)

DIFF

10	1									
9		2	1							
8	1	2	2							
7	3	7	5	1	1					
6	5	9	3							
5	3	10	1							
4	1	7	1	4						
3	1	2	3	2	1	2	1			
2		1			1					1
1										

MS 1 2 3 4 5 6 7 8 9 10

MAX

10							1			
9								1		
8						3				
7	1	8	6	1					1	
6	8	11	3							
5	3	10	2	2						
4	2	7	3	2	1					1
3		1	1	2	1	2				
2										1
1										

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10				1	1					
9		5	7							
8		15	2	1						
7	7	6								
6	6	6	1							
5	1	4	3	1						
4		2	5		1					
3				4	2					
2				1	1					
1						1				1

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10			3	7	2		1			
9			5							
8			6	1						
7	3	7	1							
6	3	2								
5	5	7	1							
4	3	3	1							
3		2	5	1						
2		3	2	3	1					
1				2	2	1	1			1

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFIT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50



NUMBER OF ITEMS = 40
SUMMARY OF DATA MEAN

SAMPLE SIZE = 11112
STD SKEW

KUR.

MED

Q

DIFF	0.506	0.170	0.256	1.938	0.486	0.136
MAX	-0.000	0.930	-0.312	2.137	-0.108	0.705
RPBIS	0.449	0.098	-0.903	3.440	0.462	0.058
SLOPE	1.043	0.269	0.185	2.399	1.025	0.177
MSFIT	9.684	10.564	2.354	8.628	5.479	3.973

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	4	4	8	8	4	4	4	3	1
MAX	0	1	5	8	8	6	6	3	2	1
RPBIS	2	0	2	2	2	8	9	14	0	1
SLOPE	1	4	3	3	7	8	2	5	3	4
MSFT*	10	14	6	2	4	0	2	0	0	2

MSFT* = MSFIT(1500/N)

DIFF

10	1									
9	1	1	1							
8	1	1	2							
7	1	3								
6	1	1	1		1					
5	3	4	1							
4	1	5		1	1					
3			1	1		2				
2	1	1	1	1						
1										

MAX

10	1									
9		1		1						
8	2		1							
7	1	3	1	1						
6	2	1	2					1		
5	3	5								
4		4	1		1	1			1	1
3	1		1		2					1
2		1								
1										

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10					1					
9										
8		8	3	2	1					
7	4	4	1							
6	5	1	2							
5	1	1								
4				2						
3				1	1					
2										
1									2	

SLOPE

10			1	2	1					
9		2						1		
8		2	3							
7		2								
6	4	3	1							
5	4	2	1							
4	1	2								
3	1	1					1			
2							2	1		1
1										1

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 45 SUMMARY OF DATA		MEAN	STD	SKEW	KUR	MED	Q
DIFF	0.519	0.135	-0.147	1.882	0.519	0.092	
MAX	0.000	0.672	-0.142	1.937	0.003	0.474	
RPBIS	0.404	0.094	-0.303	2.976	0.418	0.054	
SLOPE	0.994	0.298	0.633	3.064	0.969	0.153	
MSFIT	6.561	6.849	2.006	6.996	4.211	3.112	

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	0	8	4	11	7	7	8	0	0
MAX	0	0	6	5	11	12	9	2	0	0
RPBIS	1	2	1	9	6	13	6	5	2	0
SLOPE	3	2	6	7	9	4	6	1	2	5
MSFT*	20	11	8	2	0	2	1	0	1	0

MSFT* = MSFIT(1500/N)

DIFF

10	9	8	7	6	5	4	3	2	1
		4 3 1	1 1 4	4 1 1	10 1	2 1 1	1 4 1		

MS 1 2 3 4 5 6 7 8 9 10

MAX

10	9	8	7	6	5	4	3	2	1
		1 1	4 3 2	5 2 2	9 1 1	1 1 2	1 4		

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10	9	8	7	6	5	4	3	2	1
		1 4	3 2 1	12 1	4 2	1 5 3	1		

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10	9	8	7	6	5	4	3	2	1
		3 1 1	2	1	4 2	4 1	3 3 1	1 4	

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .8
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.0
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .6
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.4
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.5

NUMBER OF ITEMS = 85
SUMMARY OF DATA

SAMPLE SIZE = 11132
STD SKEW

KUR MED Q

DIFF	0.513	0.152	0.089	2.029	0.512	0.111
MAX	-0.000	0.784	0.144	2.249	-0.010	0.547
RPBIS	0.408	0.101	-0.490	2.941	0.423	0.073
SLOPE	1.020	0.329	0.501	2.877	1.001	0.230
MSFIT	4.778	4.369	2.018	7.045	3.691	1.982

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	4	12	12	19	11	11	12	3	1
MAX	0	0	12	13	20	17	16	5	2	0
RPBIS	4	2	6	11	10	23	8	18	1	2
SLOPE	6	10	7	8	11	15	6	5	5	12
MSFIT*	43	29	5	3	3	2	0	0	0	0

MSFIT* = MSFIT(1500/N)

DIFF

10	1
9	1 1 1
8	6 4 2
7	4 6 1
6	5 4 1 1
5	16 2 1
4	5 5 1 1
3	3 5 2 2
2	2 2
1	

MAX

10	
9	1 1
8	2 1 2
7	8 7 1
6	7 7 2 1
5	17 2 1
4	4 6 1 1 1
3	4 5 2 1
2	
1	

RPBIS

10				2						
9		1								
8	6	9	3							
7	3	5								
6	21	2								
5	9	1								
4	4	7								
3		4	2							
2				1	1					
1					2	2				

SLOPE

10	1	6	3	2						
9	2	3								
8	1	4								
7	4	2								
6	13	2								
5	10	1								
4	6	2								
3	4	2	1							
2	2	6	1		1					
1		1		1	2	2				

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFIT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 40
SUMMARY OF DATA

SAMPLE SIZE = 1547.
STD SKEW

KUR

MED

Q

DIFF	0.461	0.159	0.316	2.311	0.464	0.119
MAX	0.000	0.840	0.346	2.647	0.033	0.595
RPBIS	0.420	0.091	-0.511	3.055	0.427	0.066
SLOPE	0.970	0.267	0.405	2.629	0.938	0.159
MSFIT	1.895	1.031	1.257	5.098	1.633	0.649

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	1	6	7	3	8	6	6	1	1	1
MAX	0	1	5	8	6	8	8	2	1	1
RPBIS	1	0	2	7	4	10	7	6	3	0
SLOPE	3	1	5	9	6	5	3	2	3	3
MSFT*	1	7	9	8	9	2	2	1	0	1

MSFT* = MSFIT(1500/N)

DIFF

10				1						
9	1									
8		1								
7		1	3	1	1					
6	3	1	1	1						
5	1	4	1	2						
4	1	1		1						
3		3	1	1	1	1				
2	1		1	2	2					
1										1

MS 1 2 3 4 5 6 7 8 9 10

MAX

10									1	
9							1			
8								1		1
7							1	1	4	2
6							3	5		
5						1	1		1	3
4								3	1	1
3							1	1	2	1
2										
1										

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10										
9					2	1				
8			1	3	2					
7		4	1	2						
6	1	3	5	1						
5			1	1	2					
4			1	1	3		1	1		
3						1	1			
2										
1										1

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10									2	1
9							1		1	
8								1	1	
7							1	1		
6							2	1	2	
5						1	2	3		
4							1	2	2	4
3								2	1	
2									1	
1										1

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .8
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.0
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .6
SLOPE	< .00	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.4
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.5

NUMBER OF ITEMS = 45
SUMMARY OF DATA MEAN

SAMPLE SIZE = 1548
STD SKEW KUR MED

	MEAN	STD	SKEW	KUR	MED	Q
DIFF	0.521	0.151	0.175	2.701	0.503	0.090
MAX	0.000	0.793	0.296	3.254	-0.095	0.435
RPBIS	0.401	0.088	0.728	2.711	0.421	0.061
SLOPE	1.000	0.314	0.710	4.825	1.036	0.205
MSFIT	1.782	0.955	1.781	6.680	1.606	0.374

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	1	2	3	6	14	7	6	2	3	1
MAX	0	2	1	7	16	8	6	4	0	1
RPBIS	1	2	4	5	7	8	16	2	0	0
SLOPE	5	3	4	4	6	6	8	3	3	3
MSFIT*	0	8	14	12	4	3	1	2	0	1

MSFIT* = MSFIT(1500/N)

DIFF

10	9	8	7	6	5	4	3	2	1
1	2	1 1	1 1 3	3 3 1	3 5 4	1 1	1 1	4	1

MAX

10	9	8	7	6	5	4	3	2	1
1	1	1 2	1 1 3	4 3 1	3 7 4	2 1 1	1 2	1 1	1

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10	9	8	7	6	5	4	3	2	1
1	2	3 8 3	1 1	2 3 2	1 1	1 1 1	1 1	1 1	1

SLOPE

10	9	8	7	6	5	4	3	2	1
1	1	3 5 3	3 1 1	4 1 1	1 3	3 1	1 2	1 1 2	1

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -1.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFIT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

SUMMARY OF DATA	MEAN	STD	SKREW	KUR	MED	Q
NUMBER OF ITEMS = 85						
SAMPLE SIZE = 1548.						
DIFF	0.493	0.157	0.211	2.522	0.490	0.109
MAX	0.000	0.818	0.289	2.980	-0.009	0.528
RPBIS	0.391	0.093	-0.481	2.912	0.405	0.064
SLOPE	0.905	0.281	0.202	2.644	0.918	0.196
MSFIT	1.401	0.633	2.000	8.523	1.195	0.337

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	2	8	10	9	22	13	12	3	4	2
MAX	0	2	9	13	19	21	12	6	1	2
RPBIS	2	3	11	10	16	18	18	5	2	0
SLOPE	11	9	14	7	13	10	10	3	4	4
MSFIT*	0	26	39	28	5	1	0	1	1	0

MSFIT* = MSFIT(1500/N)

DIFF

	1	2	3	4	5	6	7	8	9	10
10	1	1								
9		3	1							
8	2	1								
7	2	8	2							
6	9	3	1							
5	7	9	5	1						
4	5	3			1					
3		5	4	1						
2		1	3	3	1					
1		1				1				

MS 1 2 3 4 5 6 7 8 9 10

MAX

	1	2	3	4	5	6	7	8	9	10
10	1	1								
9		1								
8	2	3	1							
7	2	8	2							
6	13	6	1	1						
5	7	7	5							
4	1	6	4	1					1	
3		2	3	3	1					
2		1								1
1										

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

	1	2	3	4	5	6	7	8	9	10
10										
9			2							
8		2	3							
7	10	8								
6	10	8								
5	3	12	1							
4	2	4	4							
3	1	1	5	4						
2			1	1	1					
1						1	1			

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

	1	2	3	4	5	6	7	8	9	10
10		2	2							
9		2	2							
8	2	1								
7	5	5								
6	8	1	1							
5	3	10								
4	3	4								
3	4	6	3	1						
2	1	4	3	1						
1			5	3	1			1	1	

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .8
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.0
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .6
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.4
MSFIT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.5



NUMBER OF ITEMS = 38
SUMMARY OF DATA MEAN

SAMPLE SIZE = 10503.
STD SKEW KUR

	MEAN	STD	SKEW	KUR	MED	Q
DIFF	0.537	0.124	-0.064	2.376	0.542	0.075
MAX	-0.000	0.664	-0.018	2.488	0.020	0.385
RPBIS	0.464	0.078	-0.442	2.459	0.466	0.051
SLOPE	1.035	0.246	0.292	2.803	1.034	0.116
MSFIT	6.960	5.473	0.947	2.911	4.985	3.914

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	0	5	3	9	9	7	4	1	0
MAX	0	0	3	5	10	13	3	4	0	0
RPBIS	0	0	1	3	3	5	13	9	3	1
SLOPE	0	4	3	2	7	9	4	4	3	2
MSFT*	13	10	5	5	3	1	1	0	0	0

MSFT* = MSFIT(1500/N)

DIFF

DIFF	1	2	3	4	5	6	7	8	9	10
10										
9			1							
8	1	2	1							
7	2	2	1	2						
6	5	2		2						
5	5	4								
4		2	1							
3			1	2	1	1				
2										
1										

MS 1 2 3 4 5 6 7 8 9 10

MAX

MAX	1	2	3	4	5	6	7	8	9	10
10										
9										
8							2	1	1	
7						2		1		
6					6	4		3		
5					5	4		1		
4						2	2		1	
3									1	1
2										
1										

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

RPBIS	1	2	3	4	5	6	7	8	9	10
10				1						
9		1		2						
8	1	4	2	1	1					
7	9	3	1							
6	3	1	1							
5		1	1	1						
4					2	1				
3							1			
2										
1										

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

SLOPE	1	2	3	4	5	6	7	8	9	10
10							1		1	
9							1	2		
8							2	2		
7						1	2	1		
6						5	3	1		
5						5	1	1		
4						2				
3							1	1		1
2								1	2	1
1										

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

SUMMARY OF DATA	MEAN	STD	SKEW.	KUR	MED	Q
NUMBER OF ITEMS = 68						
SAMPLE SIZE = 10533.						
DIFF	0.468	0.139	0.045	1.875	0.458	0.117
MAX	-0.000	0.702	-0.023	1.954	-0.030	0.574
RPBIS	0.404	0.123	-0.910	3.515	0.426	0.085
SLOPE	0.987	0.295	0.282	3.520	0.975	0.191
MSFIT	6.148	6.111	3.005	14.267	4.685	2.454

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	8	9	15	12	8	11	5	0	0
MAX	0	0	7	11	18	12	15	5	0	0
RPBIS	5	2	5	10	5	11	14	11	5	0
SLOPE	7	2	9	10	8	5	12	7	4	4
MSFT*	27	22	10	4	3	0	0	0	1	1

MSFT* = MSFIT(1500/N)

DIFF

10	9	8	7	6	5	4	3	2	1
10									
9									
8	1	2	1		1				
7	2	6	3						
6	2	4	2						
5	11		1						
4	10	5							
3	1	5	1	2					
2			2	2	2		1	1	
1									

MS 1 2 3 4 5 6 7 8 9 10

MAX

10	9	8	7	6	5	4	3	2	1
10									
9									
8	1	2	1		1				
7	4	6	5						
6	8	4							
5	13	4	1						
4	1	6	1	2	1				
3			2	2	1				1 1
2									
1									

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10	9	8	7	6	5	4	3	2	1
10									
9		3	1		1				
8	1	6	4						
7	9	4	1						
6	11								
5	4	1							
4	2	7	1						
3		1	3	1					
2				1	1				
1				2	1				1 1

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10	9	8	7	6	5	4	3	2	1
10									
9		2	1		1				
8		2	2						
7	3	3	1						
6	7	4	1						
5	5								
4	3	3	2						
3	6	4							
2	3	3	1	1	1				
1			1	1	1				1 1

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .8
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.0
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .6
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.4
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.5

NUMBER OF ITEMS = 106
SUMMARY OF DATA MEAN

SAMPLE SIZE = 10534.
STD SKEW

KUR

MED

Q

DIFF	0.493	0.137	-0.053	2.085	0.495	0.101
MAX	0.000	0.703	-0.088	2.232	0.020	0.498
RPBIS	0.410	0.112	-1.020	4.100	0.433	0.078
SLOPE	0.989	0.296	0.182	3.157	1.001	0.203
MSFIT	3.845	3.763	3.659	20.794	2.777	1.486

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	8	14	18	21	17	18	9	1	0
MAX	0	0	10	16	27	25	19	8	1	0
RPBIS	6	2	8	15	8	22	22	17	6	0
SLOPE	8	10	15	6	13	19	12	7	9	7
MSFT*	61	35	6	2	0	0	1	1	0	0

MSFT* = MSFIT.(1500/N)

DIFF

10	9	8	7	6	5	4	3	2	1
10									
9		1							
8	3	5	1						
7	10	8							
6	11	6							
5	20	1							
4	14	4							
3	3	9	2						
2		2	2	2		1	1		
1									

MS 1 2 3 4 5 6 7 8 9 10

MAX

10	9	8	7	6	5	4	3	2	1
10									
9		1							
8	3	5							
7	10	8	1						
6	19	6							
5	24	3							
4	5	10	1						
3		3	3	2				1	1
2									
1									

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10	9	8	7	6	5	4	3	2	1
10									
9		5	1						
8	7	9	1						
7	17	5							
6	22								
5	7	1							
4	8	7							
3		7	1						
2		1		1					
1			3	1		1	1		

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10	9	8	7	6	5	4	3	2	1
10				5	2				
9		4	5						
8		4	3						
7		9	3						
6		17	2						
5		11	2						
4		5	1						
3		10	5						
2		1	7	1	1				
1			2	3	1			1	1

MS -1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 38 SAMPLE SIZE = 2091.
 SUMMARY OF DATA MEAN STD SKEW KUR MED Q

DIFF	0.540	0.163	0.058	1.886	0.507	0.121
MAX	-0.000	0.869	0.092	1.982	-0.184	0.618
RPBIS	0.433	0.089	-1.654	6.704	0.449	0.047
SLOPE	0.993	0.300	0.004	3.166	0.999	0.182
MSFIT	2.453	2.207	3.425	16.775	1.777	0.741

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	3	3	3	12	3	4	6	4	0
MAX	0	1	4	4	13	3	6	6	1	0
RPBIS	1	0	2	2	5	9	11	8	0	0
SLOPE	2	3	5	5	4	5	8	1	1	4
MSFT*	0	9	17	2	5	0	2	1	1	1

MSFT* = MSFIT(1500/N)

DIFF

10										
9	1	2		1						
8	1	2	1	1		1				
7		2	1	1						
6	1	2								
5	5	7								
4	3	2								
3				2					1	
2					1	1				1
1										

MAX

10										
9									1	
8			2	3						1
7				2	2	2				
6					3					
5					6	7				
4					1	2				1
3								2	1	1
2										1
1										

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10										
9										
8	2	2	2	1		1				
7	3	7		1						
6	4	3		2						
5		5								
4				1		1				
3							1	1		
2										1
1										

SLOPE

10					1	2			1	
9					1					
8						1				
7					3	5				
6					2	3				
5					2	1			1	
4					1	3			1	
3					1	4				
2									1	1
1										1

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.

NUMBER OF ITEMS = 68 SAMPLE SIZE = 2095.
 SUMMARY OF DATA MEAN STD SKEW KUR MED Q

DIFF	0.520	0.156	-0.131	2.181	0.512	0.120
MAX	-0.000	0.827	-0.116	2.381	-0.045	0.602
RPBIS	0.422	0.116	-0.835	2.785	0.453	0.076
SLOPE	0.950	0.323	-0.040	2.578	0.973	0.220
MSFIT	1.968	1.428	2.102	7.213	1.461	0.451

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	5	7	8	17	9	9	11	1	1
MAX	0	4	6	9	18	12	10	8	1	0
RPBIS	4	4	4	4	8	9	14	13	8	0
SLOPE	12	4	3	8	9	10	6	8	4	4
MSFIT*	0	31	23	0	5	4	1	1	1	2

MSFIT* = MSFIT(1500/N)

DIFF

10	1
9	1
8	3
7	4
6	4
5	14
4	1
3	3
2	1
1	1

MAX

10	
9	1
8	4
7	6
6	5
5	14
4	1
3	2
2	1
1	1

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10	
9	6
8	6
7	13
6	9
5	3
4	4
3	
2	3
1	1

SLOPE

10	2
9	4
8	4
7	6
6	8
5	7
4	5
3	1
2	3
1	1

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFIT	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 106
SUMMARY OF DATA MEAN

SAMPLE SIZE = 2095.
STD SKEW

KUR

MED

Q

DIFF	0.528	0.158	-0.051	2.142	0.512	0.124
MAX	-0.000	0.533	-0.028	2.309	-0.086	0.618
RPBIS	0.410	0.107	-1.030	3.793	0.432	0.060
SLOPE	0.921	0.299	-0.152	2.907	0.957	0.181
MSFIT	1.592	0.979	2.707	11.656	1.265	0.288

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	7	11	11	29	12	13	17	5	1
MAX	0	4	10	15	30	15	17	13	2	0
RPBIS	6	3	7	5	18	22	22	18	5	0
SLOPE	18	3	14	14	14	15	13	5	3	7
MSFT*	1	70	15	10	5	0	3	1	0	1

MSFT* = MSFIT(1500/N)

DIFF

10	1									
9	3	1	1							
8	13	2	2							
7	11	2								
6	10	2								
5	1	25	2	1						
4	5	3	2	1						
3	1	3	3	3	1					
2	1		1	1	3					1
1						1				

MAX

10										
9	1	1								
8	10	1	2							
7	13	3	1							
6	13	2								
5	1	26	2	1						
4	6	4	3	2						
3	1	2	2	3					1	1
2					1				3	
1										

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10										
9	2	2	1							
8	14	3	1							
7	20	2								
6	1	19	2							
5	13	4	1							
4	2	2	1							
3			4	3						
2			1	2						
1			1		3	1		1		

SLOPE

10										
9	2	3	2							
8	2	1								
7	4	1								
6	12	1								
5	15									
4	1	9	4							
3	11	2	1							
2	1	2								
1	1	7	5	3	1			1		

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 43
SUMMARY OF DATA

SAMPLE SIZE = 10893.
STD SKEW KUR MED Q

	MEAN	STD	SKEW	KUR	MED	Q
DIFF	0.559	0.117	-0.607	3.515	0.572	0.078
MAX	-0.000	0.638	-0.646	3.953	0.063	0.409
RPBIS	0.470	0.093	-1.382	6.003	0.485	0.044
SLOPE	1.039	0.247	0.097	3.896	1.044	0.145
MSFIT	7.028	8.589	3.493	17.634	3.905	2.529

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	1	1	3	9	13	11	4	1	0
MAX	1	0	1	6	13	14	7	1	0	0
RPBIS	1	0	1	3	2	6	11	12	6	1
SLOPE	1	2	3	6	6	8	7	6	1	3
MSFIT#	19	13	4	1	4	0	1	0	0	1

MSFIT# = MSFIT(1500/N)

DIFF

10	9	8	7	6	5	4	3	2	1
1	1	2	2	4	2	2	1	1	1

MAX

10	9	8	7	6	5	4	3	2	1
1	1	2	4	8	7	3	3	1	1

RPBIS

10	9	8	7	6	5	4	3	2	1
1	1	2	10	2	1	1	1	1	1

SLOPE

10	9	8	7	6	5	4	3	2	1
1	1	4	6	7	4	2	1	2	1

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFIT#	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 74 SAMPLE SIZE = 10914.
 SUMMARY OF DATA MEAN STD SKEW KUR MED Q

DIFF	0.491	0.140	0.328	2.164	0.484	0.100
MAX	-0.000	0.713	0.344	2.306	-0.035	0.492
RPBIS	0.412	0.089	-0.899	3.412	0.424	0.057
SLOPE	0.992	0.243	0.069	2.647	0.984	0.160
MSFIT	4.707	4.273	2.138	7.919	2.978	2.034

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	4	11	16	16	10	7	8	2	0
MAX	0	0	5	13	23	15	9	8	1	0
RPBIS	3	3	3	4	18	16	14	13	0	0
SLOPE	5	5	6	10	14	9	10	9	1	5
MSFT*	42	20	6	3	1	2	0	0	0	0

MSFT* = MSFIT(1500/N)

DIFF

10										
9		1		1						
8		1	4	3						
7		2	4	1						
6		8	2							
5		14	1		1					
4		12	4							
3		5	4	2						
2				1	1	2				
1										

MS 1 2 3 4 5 6 7 8 9 10

MAX

10										
9								1		
8		1	4	3						
7		3	5	1						
6		13	2							
5		19	3		1					
4		6	5	2						
3			1		1	1	2			
2										
1										

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10										
9										
8		2	7	3	1					
7		13	1							
6		12	4							
5		15	1	2						
4			4							
3			3							
2				1	2					
1					1	2				

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10			2	2	1					
9			1							
8		6	2	1						
7		6	4							
6		6	3							
5		12	1	1						
4		8	2							
3		4	1	1						
2			4		1					
1				1	1	1	2			

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .8
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.0
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .6
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.4
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.5

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS = 117			SAMPLE SIZE = 10915.			
DIFF	0.516	0.135	-0.022	2.228	0.518	0.099
MAX	-0.000	0.899	-0.016	2.406	0.006	0.489
RPBIS	0.419	0.094	-0.956	3.992	0.434	0.058
SLOPE	0.996	0.266	0.143	3.055	1.015	0.170
MSFIT	3.434	3.009	2.705	11.352	2.420	1.208

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	5	12	19	25	23	18	12	3	0
MAX	0	1	8	21	28	32	17	9	1	0
RPBIS	4	3	4	7	25	24	29	17	3	1
SLOPE	8	8	13	13	15	21	16	9	8	6
MSFT*	81	28	4	1	3	0	0	0	0	0

MSFT* = MSFIT(1500/N)

DIFF

10										
9	1	2								
8	5	7								
7	13	5								
6	21	1	1							
5	21	3	1							
4	15	4								
3	5	6	1							
2			1	1	3					
1										

MAX

10										
9		1								
8	5	4								
7	9	8								
6	29	2	1							
5	24	3	1							
4	13	8								
3	1	2	2	1	2					
2									1	
1										

RPBIS

10			1							
9		3								
8	9	8								
7	27	2								
6	22	2								
5	22	3								
4	1	6								
3		4								
2			3							
1				1	3					

SLOPE

10										
9	1	4	1							
8	3	5								
7	7	2								
6	13	3								
5	21									
4	12	3								
3	13									
2	10	3								
1	1	6	1							

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS = 43						
SAMPLE SIZE = 2193.						
DIFF	0.518	0.118	-0.259	2.248	0.529	0.084
MAX	-0.000	0.603	-0.265	2.373	0.059	0.417
RPBIS	0.437	0.092	-0.786	3.396	0.452	0.051
SLOPE	0.981	0.270	-0.027	2.849	1.009	0.167
MSFIT	2.018	1.573	2.323	8.285	1.552	0.627

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	1	4	8	6	14	8	2	0	0
MAX	0	0	3	7	9	15	7	2	0	0
RPBIS	1	1	2	2	6	9	13	6	2	1
SLOPE	4	1	4	6	6	10	3	4	3	2
MSFT*	0	19	11	8	1	1	0	1	0	2

MSFT* = MSFIT(1500/N)

DIFF

10										
9										
8	1			1						
7	2	3	3							
6	8	3	2	1						
5	3	1	2							
4	4	3			1					
3	1		1			2				
2		1								
1										

MS 1 2 3 4 5 6 7 8 9 10

MAX

10										
9										
8							1		1	
7							1	3	3	
6							9	3	2	1
5							6	1	2	
4							2	3		1
3								1	1	
2										
1										

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10					1					
9				2						
8	1	1	4							
7	9	4								
6	6	3								
5	3	2	1							
4		1	1							
3				1		1				
2									1	
1									1	

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10								1		1
9							1	2		
8							1	1	1	
7							1	1	1	
6							8	1	1	
5							4	2		
4							3	3		
3							1	2	1	
2									1	
1										1

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50



NUMBER OF ITEMS = 74
SUMMARY OF DATA MEAN

SAMPLE SIZE = 2195.
STD SKEW

KUR

MED

Q

DIFF	0.523	0.161	0.004	2.181	0.520	0.123
MAX	0.000	0.844	0.061	2.471	-0.028	0.605
RPBIS	0.406	0.113	-0.622	2.617	0.434	0.082
SLOPE	0.933	0.338	0.819	5.358	0.952	0.219
MSFIT	1.974	1.133	1.812	6.439	1.604	0.563

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	1	4	8	11	13	11	11	9	5	1
MAX	0	3	6	11	19	15	11	6	3	0
RPBIS	3	5	6	9	8	7	21	11	4	0
SLOPE	13	6	8	8	4	12	9	7	3	4
MSFT*	1	29	25	8	4	4	1	0	2	0

MSFT* = MSFIT(1500/N)

DIFF

10										
9	1	4								
8	3	4	2							
7	6	3	2							
6	1	7	2	1						
5	6	5	2							
4	5	3	1	1	1					
3	1	3	1	1	2					
2		1		1		2				
1							1			

MAX

10										
9			2						1	
8			2	3	1					
7			4	5	2					
6	1	10	3	1						
5		8	6	3	1	1				
4		4	4	1	1	1				
3		1	2		1	1				1
2					1		1		1	1
1										

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10										
9			2	2						
8			2	7	1		1			
7	1	5	5							
6		5	2							
5		5	3							
4		2	5	2						
3			1	2	2	1				
2				1	2	2				
1							1		2	

SLOPE

10				2	1			1		
9				1	2					
8				2	5					
7	1			5	3					
6				9	3					
5				4						
4				5	3					
3				2	5	1				
2				2	2		2			
1					1	4	2	3	1	2

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS = 117						
SAMPLE SIZE = 2195						
DIFF	0.521	0.146	-0.034	2.397	0.522	0.104
MAX	0.000	0.756	0.018	2.730	-0.001	0.510
RPBIS	0.401	0.105	-0.717	3.002	0.423	0.067
SLOPE	0.916	0.314	0.523	4.471	0.913	0.201
MSFIT	1.545	0.724	1.903	6.701	1.315	0.298

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	1	5	12	18	20	25	19	11	5	1
MAX	0	2	10	18	29	30	17	8	3	0
RPBIS	5	9	5	13	19	20	25	16	5	0
SLOPE	18	10	11	19	10	18	16	4	5	6
MSFT*	0	75	21	14	3	3	1	0	0	0

MSFT* = MSFIT*(1500/N)

DIFF

MS	1	2	3	4	5	6	7	8	9	10
10				1						
9	3	1	1							
8	7	2	2							
7	15	3	1							
6	19	5	1							
5	16	2	2							
4	12	4	1	1						
3	2	3	4	2	1					
2	1	1	1		2					
1					1					

MAX

MS	1	2	3	4	5	6	7	8	9	10
10										
9		1		2						
8		5	1	2						
7		12	5							
6		24	5	1						
5		22	3	3	1					
4		9	5	3	1					
3		2	2	3	1	1	1			
2					2					
1					1					

RPBIS

MS	1	2	3	4	5	6	7	8	9	10
10										
9	1	4								
8	10	5	1							
7	23	1	1							
6	18	2								
5	17	2								
4	6	6	1							
3		1	4							
2			7	2						
1			1	3	1					

SLOPE

MS	1	2	3	4	5	6	7	8	9	10
10				4	2					
9		3	2							
8		3	1							
7		13	3							
6		18								
5		10								
4		16	3							
3		9	2							
2		3	5	2						
1			1	10	3	3	1			

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS = 46						
SAMPLE SIZE = 11104.						
DIFF	0.544	0.161	-0.636	2.866	0.583	0.117
MAX	-0.000	0.885	-1.046	4.758	0.202	0.585
RPBIS	0.414	0.112	-1.526	6.698	0.432	0.060
SLOPE	1.034	0.318	-0.113	3.754	1.016	0.214
MSFIT	8.061	9.299	2.909	13.813	4.402	3.379

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	1	2	3	4	5	6	7	8	9	10
MAX	1	2	3	7	4	8	11	8	2	0
RPBIS	1	0	4	8	8	9	12	4	0	0
SLOPE	1	2	3	3	9	7	12	6	3	0
MSFT*	3	1	3	9	6	7	4	4	4	5
MSFT*	20	8	8	3	2	3	0	1	0	1

MSFT* = MSFIT(1500/N)

DIFF

10	9	8	7	6	5	4	3	2	1
10	2	3	6	4	2	3	1	1	1
9	1	1	1	2	1	1	1	1	1
8	1	2	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1

MAX

10	9	8	7	6	5	4	3	2	1
10	1	1	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1

MS

1	2	3	4	5	6	7	8	9	10
1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1

MS

1	2	3	4	5	6	7	8	9	10
1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1

RPBIS

10	9	8	7	6	5	4	3	2	1
10	1	1	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1

SLOPE

10	9	8	7	6	5	4	3	2	1
10	1	1	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1

MS

1	2	3	4	5	6	7	8	9	10
1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1

MS

1	2	3	4	5	6	7	8	9	10
1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1
3	1	1	1	1	1	1	1	1	1
4	1	1	1	1	1	1	1	1	1
5	1	1	1	1	1	1	1	1	1
6	1	1	1	1	1	1	1	1	1
7	1	1	1	1	1	1	1	1	1
8	1	1	1	1	1	1	1	1	1
9	1	1	1	1	1	1	1	1	1
10	1	1	1	1	1	1	1	1	1

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 76
SUMMARY OF DATA

SAMPLE SIZE = 11108.
STD SKEW

KUR

MED

Q

DIFF	0.449	0.118	0.218	2.298	0.439	0.090
MAX	-0.000	0.580	0.104	2.433	-0.033	0.430
RPBIS	0.380	0.094	-0.731	3.417	0.384	0.066
SLOPE	0.987	0.270	0.465	3.014	0.956	0.196
MSFIT	3.949	3.233	2.377	10.202	2.840	1.596

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	4	14	21	16	10	9	2	0	0
MAX	0	0	3	11	26	18	15	3	0	0
RPBIS	3	4	7	10	17	15	16	3	1	0
SLOPE	4	7	11	6	11	12	10	4	7	4
MSFIT*	45	25	4	0	1	1	0	0	0	0

MSFIT* = MSFIT(1500/N)

DIFF

10										
9										
8		1	1							
7	6	3								
6	6	4								
5	9	6	1							
4	18	3								
3	5	8	1							
2	1	1	1	1						
1										

MS 1 2 3 4 5 6 7 8 9 10

MAX

10										
9										
8		1	1	1						
7		8	7							
6		11	6	1						
5		21	5							
4		4	6	1						
3				1		1	1			
2										
1										

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10										
9										
8										
7	6	9	1							
6	15									
5	17									
4	6	4								
3	1	6								
2		3								
1				1	1					

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10			2	2						
9		2	5							
8		3	1							
7		8	2							
6		10	2							
5		11								
4		4	2							
3		7	3	1						
2			6	1						
1			2			1	1			

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.
MSFIT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS	=122	SAMPLE SIZE =11108.				
DIFF	0.485	0.143	0.017	2.408	0.463	0.108
MAX	0.000	0.730	-0.283	3.604	-0.093	0.515
RPBIS	0.378	0.103	-1.040	4.721	0.389	0.068
SLOPE	0.981	0.310	0.248	3.813	0.966	0.220
MSFIT	3.314	2.719	2.554	11.382	2.374	1.246

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	1	6	17	28	20	18	20	10	2	0
MAX	1	1	8	18	38	21	23	11	1	0
RPBIS	7	7	7	18	25	24	25	9	0	0
SLOPE	9	14	10	14	22	15	7	14	7	10
MSFT*	86	27	6	2	1	0	0	0	0	0

MSFT* = MSFIT(1500/N)

DIFF	10	9	8	7	6	5	4	3	2	1
10										
9	2									
8	4	4	2							
7	15	4	1							
6	16	2								
5	15	5								
4	25	3								
3	8	8	1							
2	1	1	2	2						
1					1					

MAX	10	9	8	7	6	5	4	3	2	1
10										
9	1									
8	5	4	2							
7	17	5	1							
6	18	3								
5	33	5								
4	10	8								
3	2	2	3	1						
2				1						
1								1		

RPBIS	10	9	8	7	6	5	4	3	2	1
10										
9										
8	1	5	3							
7	20	5								
6	24									
5	25									
4	13	5								
3	3	4								
2		7								
1		1	3	2	1					

SLOPE	10	9	8	7	6	5	4	3	2	1
10										
9	1	7	2							
8	6	1								
7	13	1								
6	6	1								
5	14		1							
4	22									
3	13	1								
2	6	4								
1	5	7	2							

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 46
SUMMARY OF DATA: MEAN

SAMPLE SIZE = 2178.
STD SKEW

KUR

MED

Q

DIFF	0.513	0.129	-0.160	1.953	0.517	0.108
MAX	0.000	0.652	-0.172	2.029	0.016	0.532
RPBIS	0.420	0.094	-0.607	3.070	0.438	0.049
SLOPE	0.996	0.299	0.085	2.826	0.996	0.126
MSFIT	2.103	1.558	1.682	5.038	1.391	0.782

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	1	7	6	11	8	8	5	0	0
MAX	0	0	2	11	9	13	7	4	0	0
RPBIS	1	3	1	4	9	9	11	4	4	0
SLOPE	6	1	3	5	8	7	9	0	1	6
MSFT*	0	24	10	3	2	2	1	2	0	2

MSFT* = MSFIT(1500/N)

DIFF

10										
9										
8	2	2		1						
7	2	3	1		1	1				
6	7	1								
5	7	2	1			1				
4	5			1						
3	1	2	1	1			1		1	
2										1
1										

MS 1 2 3 4 5 6 7 8 9 10

MAX

10										
9										
8										
7										
6										
5										
4										
3										
2										
1										

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10										
9				1		2	1			
8	2	2								
7	7	4								
6	8		1							
5	7	2								
4		2	1	1						
3				1						
2							2		1	
1										1

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10			2	1		2	1			
9			1							
8										
7			7	2						
6			5	2						
5			7		1					
4			4	1						
3				2		1				
2				1						
1						1	1		2	2

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.

NUMBER OF ITEMS = 76
SUMMARY OF DATA MEAN

SAMPLE SIZE = 2178
STD SKEW

KUR

MED

Q

DIFF	0.485	0.134	0.440	2.888	0.483	0.086
MAX	0.000	0.673	0.511	3.293	-0.011	0.411
RPBIS	0.386	0.094	-0.643	3.229	0.396	0.062
SLOPE	0.938	0.272	0.078	3.444	0.948	0.183
MSFIT	1.556	0.851	2.363	9.776	1.281	0.411

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	2	12	18	18	13	5	5	2	1
MAX	0	0	2	15	22	23	8	3	2	1
RPBIS	3	5	3	14	15	14	16	5	1	0
SLOPE	7	9	6	12	11	10	11	4	3	3
MSFT*	1	43	21	6	1	2	1	1	0	0

MSFT* = MSFIT(1500/N)

IFF

10	9	8	7	6	5	4	3	2	1
1									
1	1								
1	1	1							
1	3	2							
1	3	2							
1	6	5	1						
1	13	4		1					
1	13	4				1			
1	4	2	3		2	1			
1	1	1							
1									

MS 1 2 3 4 5 6 7 8 9 10

MAX

10	9	8	7	6	5	4	3	2	1
1									
1	1								
1	1	1							
1	2	1							
1	4	4							
1	14	6	1	1					
1	16	5						1	
1	6	3	3		2	1			
1	1	1							
1									

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10	9	8	7	6	5	4	3	2	1
1									
1	1	4							
1	10	5	1						
1	13								
1	14	1							
1	5	8	1						
1	3								
1		3	1	1					
1			1	1	1				

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10	9	8	7	6	5	4	3	2	1
2	1								
2	1	1							
2	1	1							
8	3								
1	8	1							
10	1								
11		1							
2	4								
7	2								
1	1	1	1	2	1	1			

MS 1 2 3 4 5 6 7 8 9 10

	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 122
SUMMARY OF DATA MEAN

SAMPLE SIZE = 2178.
STD SKEW

KUR

MED

Q

DIFF	0.496	0.132	0.217	2.495	0.500	0.093
MAX	-0.000	0.661	0.263	2.806	0.017	0.445
RPBIS	0.383	0.096	-0.594	3.290	0.392	0.065
SLOPE	0.920	0.289	0.255	3.268	0.912	0.183
MSFIT	1.384	0.621	2.079	7.901	1.175	0.272

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	3	19	24	29	21	13	10	2	1
MAX	0	1	4	26	28	37	15	9	2	0
RRBIS	7	5	6	21	27	23	25	4	4	0
SLOPE	15	10	14	21	14	19	12	8	2	7
MSFT*	0	87	22	8	4	1	0	0	0	0

MSFT* = MSFIT(1500/N)

IF==

IC	1	2	3	4	5	6	7	8	9	10
10	1									
9	1	1								
8	7	2	1							
7	9	4								
6	19	2								
5	24	3	2							
4	20	3		1						
3	7	6	3	3						
2		1	1	1						
1										

MAX

IC	1	2	3	4	5	6	7	8	9	10
10										
9										
8										
7										
6										
5										
4										
3										
2										
1										

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

IC	1	2	3	4	5	6	7	8	9	10
10										
9										
8										
7										
6										
5										
4										
3										
2										
1										

SLOPE

IC	1	2	3	4	5	6	7	8	9	10
10										
9										
8										
7										
6										
5										
4										
3										
2										
1										

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

	1	2	3	4	5	6	7	8	9	10
EY	1	2	3	4	5	6	7	8	9	10
IF==	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
AX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50



NUMBER OF ITEMS = 50
SUMMARY OF DATA MEAN

SAMPLE SIZE = 11150.
STD SKEW

KUR

MED

Q

DIFF	0.680	0.169	-0.683	2.828	0.700	0.109
MAX	-0.000	1.210	-0.225	2.571	0.003	0.773
RPBIS	0.517	0.099	-0.975	3.282	0.552	0.077
SLOPE	1.018	0.258	-0.221	3.061	1.030	0.146
MSFIT	8.812	10.232	2.776	11.476	5.249	2.793

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	1	3	1	3	6	7	11	8	10
MAX	4	1	4	6	10	7	8	5	3	2
RPBIS	0	1	1	2	3	6	4	7	18	8
SLOPE	4	2	4	3	6	12	7	6	4	2
MSFT*	14	18	9	3	0	2	0	1	0	3

MSFT* = MSFIT.(1500/N)

DIFF

10	4	3	2						1
9	3	5							
8	5	4	2						
7	1	2	1	1	2				
6	1	4	1						
5			2	1					
4			1						
3				1					2
2									1
1									

MAX

10	1	1								
9	2	1								
8	1	1	2							1
7	3	5								
6	4	2	1							
5	2	4	2						2	
4	1	3	1	1						
3		1	2	1						
2			1							
1										3

RPBIS

10		5	3							
9	6	8	3	1						
8	4	2	1							
7	1	1	1	1						
6	2	2	1	1						
5					2					1
4	1								1	
3									1	
2								1		
1										

SLOPE

10			2							
9			2	2						
8			6							
7	5	2								
6	6	5	1							
5	3	2	1							
4		1	1	1						
3			2	1				1		
2				1				1		
1									1	3

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS = 45						
SAMPLE SIZE = 11243.						
DIFF	0.590	0.155	0.344	2.080	0.556	0.113
MAX	-0.000	0.939	0.584	2.443	-0.245	0.618
RPBIS	0.481	0.097	-0.893	3.339	0.495	0.054
SLOPE	1.055	0.323	0.057	1.802	1.038	0.264
MSFIT	10.777	9.685	2.641	11.714	9.130	4.061

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	0	2	5	9	11	5	4	5	4
MAX	0	1	3	12	11	7	3	4	3	1
RPBIS	0	1	2	1	6	2	12	9	9	3
SLOPE	3	4	5	5	4	3	4	5	4	8
MSFT*	8	10	8	12	2	2	0	1	0	2

MSFT* = MSFIT(1500/N)

DIFF

DIFF	1	2	3	4	5	6	7	8	9	10
10			1	3						
9	1	1	1	2						
8	1	1	1	1						
7		1	1	2			1			
6	3	4	1	3						
5	2	3	1		1	2				
4	1		2		1			1		
3				1			1			
2										
1										

MS 1 2 3 4 5 6 7 8 9 10

MAX

MAX	1	2	3	4	5	6	7	8	9	10
10									1	
9								1	2	
8			1	1				2		
7		1	1	1						1
6		1	1	2	3					
5	3	4	1	3						1
4	2	3	3				1	2		1
3	1						1	1		
2									1	
1										

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

RPBIS	1	2	3	4	5	6	7	8	9	10
10			1	2						
9	1	3	3	2						
8	3	4	1	1						
7	4	2	3	2	1					
6		1		1						
5				4	1	1				
4					1					
3							1		1	
2								1		
1										

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

SLOPE	1	2	3	4	5	6	7	8	9	10
10						2	6			
9			1	2	1					
8			3	1	1					
7		2	2							
6		1	1	1						
5	3	1								
4	2	1	2							
3		1			3	1				
2						1	1	2		
1									1	2

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

SUMMARY OF DATA	MEAN	STD	SKREW	KUR	MED	Q
NUMBER OF ITEMS = 95						
SAMPLE SIZE = 11264						
DIFF	0.640	0.168	-0.173	2.106	0.641	0.132
MAX	-0.000	1.095	0.172	2.299	-0.095	0.809
RPBIS	0.486	0.099	-0.909	3.354	0.518	0.061
SLOPE	1.030	0.311	-0.057	2.372	1.050	0.232
MSFIT	5.965	5.565	2.960	14.077	4.181	1.848

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	1	5	5	13	17	12	15	13	14
MAX	2	6	11	16	14	15	12	10	6	3
RPBIS	1	3	2	3	8	12	18	24	20	4
SLOPE	13	4	6	10	6	14	14	10	8	10
MSFT*	38	38	9	4	2	2	1	0	0	1

MSFT* = MSFIT(1500/N)

DIFF

MS	1	2	3	4	5	6	7	8	9	10
10		6	7	1						
9		6	7							
8		11	4							
7		3	4	4			1			
6		6	9	2						
5		4	4	1	1	2				
4		2	2		1					
3			1	1	1		2			
2					1					
1										

MAX

MS	1	2	3	4	5	6	7	8	9	10
10	1	2								
9	3	3								
8	5	4	1							
7	7	5								
6	8	7								
5	4	5	4						1	
4	5	8	2				1			
3	4	3	1	1	1					1
2	1	1	1	2				2		
1		1		1						

RPBIS

MS	1	2	3	4	5	6	7	8	9	10
10			4							
9		5	14	1						
8		14	10							
7		12	5	1						
6		6	5		1					
5				6	2					
4		1			1	1				
3					1	1				
2			1			1	1			
1								1		

SLOPE

MS	1	2	3	4	5	6	7	8	9	10
10										10
9		2	6							
8		6	4							
7		9	5							
6		7	6	1						
5		5	1							
4		8	2							
3		1	3	2						
2			1	2	1					
1				4	3	2	2	1		1

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 50		SAMPLE SIZE = 1611.			KUR	MED	Q
SUMMARY OF DATA		MEAN	STD	SKEW			
DIFF	0.686	0.173	-0.525	2.774	0.710	0.116	
MAX	0.000	1.306	0.146	2.770	-0.005	0.799	
RPBIS	0.502	0.103	-0.600	2.241	0.528	0.076	
SLOPE	0.951	0.237	-0.362	2.611	0.953	0.182	
MSFIT	2.129	2.115	3.660	17.165	1.554	0.452	

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	1	3	1	2	7	9	9	9	9
MAX	4	1	4	7	9	9	7	3	2	4
RPBIS	0	0	2	3	5	4	4	13	11	8
SLOPE	4	3	6	7	10	5	7	7	1	0
MSFT*	0	8	19	11	5	1	3	0	0	3

MSFT* = MSFIT(1500/N)

DIFF

10	1	6	2							
9	1	6	1	1						
8	3	2	3		1					
7	1	4	3	1						
6	2	1	2	1	1					
5				2						
4					1					
3					1					2
2										1
1										1

MAX

10		1	1	2						
9			2							
8			3							
7		1	4	1	1					
6		3	3	2					1	
5		1	5	2	1					
4		1		4	1	1				
3		1	1		2					
2									1	
1									1	3

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10			3	5						
9		2	5	3	1					
8		5	5		2	1				
7			3	1						
6					2		2			
5			2			1				2
4			1	2						
3		1								1
2										
1										

SLOPE

10										
9						1				
8		1	6							
7			5	2						
6			2	3						
5		6	1	2	1					
4		1	3	1	2					
3			2	2	1	1				
2						1		2		
1								1		3

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .8
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.0
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .6
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.4
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.5

NUMBER OF ITEMS = 45
SUMMARY OF DATA MEAN

SAMPLE SIZE = 1618.
STD SKEW

	MEAN	STD	SKEW	KUR	MED	Q
DIFF	0.586	0.160	-0.007	2.283	0.598	0.106
MAX	-0.000	0.930	0.263	2.627	0.014	0.571
RPBIS	0.458	0.078	-0.149	2.262	0.452	0.059
SLOPE	0.997	0.307	0.926	3.577	0.909	0.172
MSFIT	2.244	1.269	1.462	5.149	2.021	0.704

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	2	2	6	5	8	10	5	3	4
MAX	0	2	5	5	10	11	6	2	3	1
RPBIS	0	0	1	3	5	13	8	7	8	0
SLOPE	3	2	5	12	6	5	2	2	4	4
MSFT*	0	6	10	10	8	4	3	1	0	3

MSFT* = MSFIT(1500/N)

DIFF

DIFF	1	2	3	4	5	6	7	8	9	10
10	1	1	2							
9		2			1					
8	3	1	1							
7	1	3	4	1	1					
6	1	3	1	3						
5	1	3				1				
4			3	2			1			
3						2				
2							2			
1								2		

MAX

MAX	1	2	3	4	5	6	7	8	9	10
10										1
9							1		1	1
8								1		1
7							3	1	1	1
6							1	4	4	1
5							2	3	1	3
4								2	1	2
3									2	
2										2
1										1

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

RPBIS	1	2	3	4	5	6	7	8	9	10
10										
9				2	3	1	1	1		
8		2	2	3						
7		1	2	2	2	1				
6		3	6	3		1				
5				3	1	1				
4							1			2
3									1	
2										
1										

SLOPE

SLOPE	1	2	3	4	5	6	7	8	9	10
10									1	2
9							3	1		1
8							1	1		
7							1			1
6							2	1	1	1
5							3	2		1
4							1	4	4	3
3							2	1	1	1
2										1
1									1	2

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 95 SAMPLE SIZE = 1619.
 SUMMARY OF DATA MEAN STD SKEW KUR MED Q

DIFF	0.640	0.173	-0.216	2.381	0.643	0.113
MAX	-0.000	1.149	0.359	2.945	-0.097	0.674
RPBIS	0.463	0.096	-0.330	2.141	0.481	0.072
SLOPE	0.963	0.295	0.005	2.260	0.963	0.225
MSFIT	1.635	0.932	2.361	8.702	1.349	0.333

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	3	5	7	7	15	18	15	12	13
MAX	3	6	6	18	19	15	12	7	3	6
RPBIS	0	0	7	8	11	15	12	22	15	5
SLOPE	12	6	13	9	11	14	6	11	9	4
MSFIT*	0	19	48	13	7	1	1	2	2	2

MSFIT* = MSFIT(1500/N)

DIFF

10	4	9								
9	2	10								
8	6	7	2							
7	3	11	4							
6	4	6	2	2	1					
5		4	2	1						
4		1	2	3			1			
3			1	1		1	1			
2					1					2
1										

MAX

10		2	4							
9			3							
8		3	4							
7		3	8	1						
6		4	9	2						
5		4	11	3				1		
4		3	8	4	3					
3			1	2	3					
2				1	1			1	1	2
1									1	2

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10			3	2						
9		2	12	1						
8		9	11	2						
7		3	9							
6		3	6	5	1					
5			3	3	4	1				
4		1	3		2		1	1		
3		1	1			1	1	1	2	
2										
1										

SLOPE

10			3	1						
9		2	6	1						
8		2	9							
7		2	4							
6		5	7	2						
5		4	6	1						
4		4	5							
3			7	5	1					
2			1	3	1	1				
1					5		1	2	2	2

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFIT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 50
SUMMARY OF DATA MEAN

SAMPLE SIZE = 22367.
STD SKEW

KUR

MED

Q

DIFF	0.607	0.188	-0.158	1.870	0.635	0.146
MAX	-0.000	1.175	0.149	2.237	0.071	0.841
RPBIS	0.468	0.074	0.096	2.153	0.466	0.056
SLOPE	1.007	0.244	0.390	2.557	0.989	0.161
MSFIT	11.571	7.896	0.982	3.424	9.797	4.979

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	2	5	4	6	5	6	11	5	6
MAX	2	4	5	8	5	10	7	3	4	2
RPBIS	0	0	0	1	10	10	13	9	5	2
SLOPE	0	5	6	9	6	6	7	5	4	2
MSFT*	20	18	6	5	1	0	0	0	0	0

MSFT* = MSFIT(1500/N)

DIFF

10	2	4								
9	3	1	1							
8	3	0	1	1						
7	5		1							
6	4		1							
5	2	4								
4	1	1		2						
3		2	1	1	1					
2			1	1						
1										

MS 1 2 3 4 5 6 7 8 9 10

MAX

10	1	1								
9	1	3								
8	1	1	1							
7	4	3								
6	4	3	2	1						
5	5									
4	3	4	1							
3	1	1		2	1					
2		2	1	1						
1			1	1						

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10			1	1						
9		4	1							
8	6	3								
7	8	4		1						
6	4	4	1	1						
5	1	3	3	2	1					
4	1									
3										
2										
1										

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10			1	1						
9	1	3								
8		4	1							
7	3	4								
6	6									
5	4	1		1						
4	5	3	1							
3	1	3	1	1						
2			2	2	1					
1										

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS = 45						
SAMPLE SIZE = 22436						
DIFF	0.570	0.169	0.080	1.734	0.565	0.152
MAX	0.000	0.957	0.201	1.856	-0.069	0.820
RPBIS	0.460	0.086	-0.401	2.152	0.468	0.059
SLOPE	1.028	0.294	0.244	2.372	1.047	0.232
MSFIT	17.520	12.992	1.553	5.260	13.839	5.944

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	1	3	10	4	8	6	5	5	3
MAX	0	2	6	8	8	8	4	5	4	0
RPBIS	0	0	4	1	5	10	6	12	7	0
SLOPE	2	6	4	7	0	8	2	10	2	4
MSFT*	8	16	11	4	1	3	1	0	1	0

MSFT* = MSFIT.(1500/N)

DIFF

DIFF	1	2	3	4	5	6	7	8	9	10
10	1	1	1							
9		2		1	1	1				
8	1	2	2							
7	4	2								
6	1	4	3							
5	1	1	2							
4		4	2	2	1	1				
3			1	1	1					
2							1			
1										

MAX

MAX	1	2	3	4	5	6	7	8	9	10
10										
9	1	1	1	1						
8		2	1			1	1			
7	1	2	1							
6	4	3	1							
5	2	3	3							
4		4	3	1						
3		1	1	2				1	1	
2								1		1
1										

RPBIS

RPBIS	1	2	3	4	5	6	7	8	9	10
10										
9		4	2			1				
8	2	0	2	1	1					
7	2	3	1							
6	4	3	3							
5			2	3						
4			1							
3					2	1		1		
2										
1										

SLOPE

SLOPE	1	2	3	4	5	6	7	8	9	10
10							1	1	1	1
9							2			
8	1	8	1							
7	2									
6	2	5	1							
5										
4	3	1	3							
3		2	1	1						
2			2	1				1	1	1
1							1			

KEY

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS = 95						
SAMPLE SIZE = 22458.						
DIFF	0.590	0.179	-0.031	1.849	0.599	0.159
MAX	0.000	0.834	0.317	2.409	-0.032	0.673
RPBIS	0.450	0.080	-0.277	2.417	0.457	0.056
SLOPE	1.084	0.308	0.199	2.661	1.088	0.221
MSFIT	8.711	5.338	1.423	5.619	7.390	3.095

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	3	7	15	10	13	12	16	10	9
MAX	0	1	9	21	21	17	15	8	2	1
RPBIS	0	0	4	8	12	22	21	18	9	1
SLOPE	6	4	9	10	9	12	10	13	9	13
MSFT*	48	38	6	3	0	0	0	0	0	0
MSFT* = MSFIT(1500/N)										

DIFF

DIFF	3	6	1	2
10	3	6		
9	5	4	1	
8	8	6	2	
7	10	2		
6	11	2		
5	5	5		
4	4	8	1	2
3	2	3	2	
2		2		1
1				

MAX

MAX	1	1	7	6	1	2	2	1
10	1							
9	1	1						
8	1	7						
7	8	6	1					
6	12	3	2					
5	15	6						
4	8	10	1	2				
3	2	4	2	1				
2					1			
1								

RPBIS

MS	1	2	3	4	5	6	7	8	9	10
10			1							
9	1	6	2							
8	10	8								
7	18	3								
6	12	10								
5	4	7	1							
4	3	4	1							
3			1	3						
2										
1										

SLOPE

MS	1	2	3	4	5	6	7	8	9	10
10	1	9	3							
9	1	8								
8	11	2								
7	8	2								
6	10	2								
5	7	2								
4	8	2								
3	1	6	2							
2	1	3								
1		2	1	3						

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED.	
NUMBER OF ITEMS = 50						SAMPLE SIZE = 3250.
DIFF	0.596	0.203	-0.341	2.330	0.624	0.151
MAX	-0.000	1.268	-0.070	2.665	0.074	0.833
RPBIS	0.452	0.084	-0.975	4.986	0.459	0.047
SLOPE	0.987	0.280	0.164	2.591	0.986	0.206
MSFIT	2.756	2.281	2.832	11.895	2.195	0.773

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	2	3	2	6	3	7	7	11	2	7
MAX	3	3	5	5	8	8	10	1	3	4
RPBIS	1	0	2	1	7	10	16	8	4	1
SLOPE	4	2	8	7	5	7	4	6	3	4
MSFT*	4	20	16	5	1	1	1	0	0	2

MSFT* = MSFIT(1500/N).

DIFF

MS	1	2	3	4	5	6	7	8	9	10
10			3	2	2					
9			1	1						
8	2		4	4		1				
7	2		4	1						
6			4	2	1					
5			1	1	1					
4			2	3			1			
3			1	1						
2				1		1				1
1				1						1

MAX

MS	1	2	3	4	5	6	7	8	9	10
10							2	1	1	
9							1	1	1	
8							1	1		
7							1	5	3	1
6							3	3	2	
5								5	2	1
4								1	3	1
3								3	1	1
2									1	1
1									1	1

RPBIS

MS	1	2	3	4	5	6	7	8	9	10
10					1					
9				4						
8			5	3						
7	4		8	3	1					
6			4	5	1					
5			3	1	3					
4						1				
3							1			1
2										
1										1

SLOPE

MS	1	2	3	4	5	6	7	8	9	10
10				2	1	1				
9				3						
8				2	4					
7				4						
6				2	4	1				
5				1	3		1			
4					3	4				
3					1	4	2	1		
2								2		
1									1	1

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

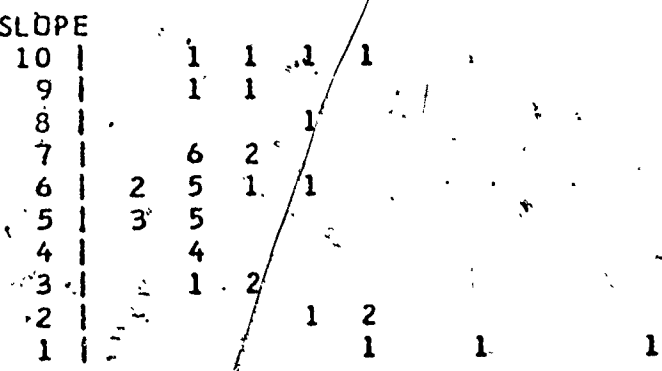
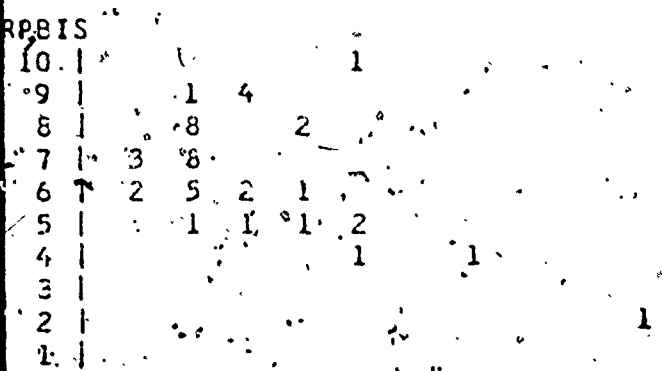
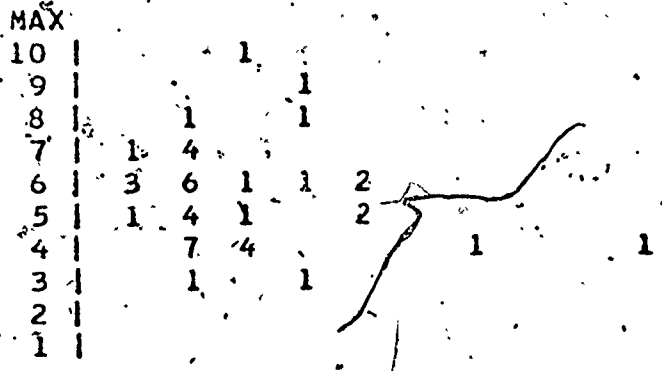
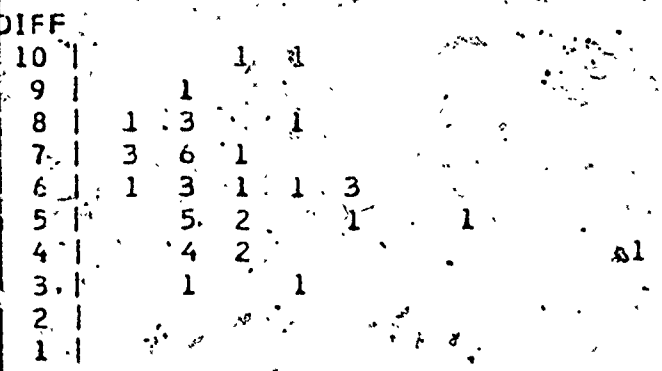
NUMBER OF ITEMS = 45 SAMPLE SIZE = 3237.
 SUMMARY OF DATA MEAN STD SKEW KUR MED Q

DIFF	0.568	0.131	0.409	2.558	0.570	0.087
MAX	0.000	0.748	0.670	3.199	-0.011	0.459
RPBIS	0.469	0.081	-0.563	3.029	0.483	0.052
SLOPE	0.999	0.253	-0.076	2.760	1.009	0.135
MSFIT	2.518	2.126	2.992	14.085	1.814	0.743

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	0	2	7	9	9	10	5	1	2
MAX	0	0	2	13	8	13	5	2	1	1
RPBIS	0	1	0	2	5	10	11	10	5	1
SLOPE	3	3	3	4	8	9	8	1	2	4
MSFIT*	5	23	7	4	4	0	1	0	0	1

MSFIT* = MSFIT(1500/N)



KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFIT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50



NUMBER OF ITEMS = 95		SAMPLE SIZE = 3252.					
SUMMARY OF DATA		MEAN	STD	SKEW	KUR	MED	Q
DIFF	0.583	0.172	-0.117	2.691	0.593	0.126	
MAX	-0.000	1.038	0.149	3.301	-0.004	0.677	
RPBIS	0.445	0.081	-0.932	4.477	0.452	0.051	
SLOPE	0.970	0.260	0.154	2.953	0.965	0.165	
MSFIT	1.856	1.239	3.061	13.225	1.570	0.343	

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	2	3	4	10	15	15	18	16	3	9
MAX	2	4	6	20	16	20	16	2	4	5
RPBIS	1	1	4	6	11	23	23	19	7	0
SLOPE	7	6	9	16	16	12	9	12	3	5
MSFT*	13	64	11	2	2	0	2	1	0	0

MSFT* = MSFIT(1500/N)

DIFF

MS	1	2	3	4	5	6	7	8	9	10
10	7	2								
9	3									
8	4	11	1							
7	7	10	1							
6	2	9	3	1						
5		10	3	1	1					
4		9		1						
3		3	1							
2		1	1		1					
1		1				1				

MAX

MS	1	2	3	4	5	6	7	8	9	10
10				4	1					
9				3	1					
8				2						
7			4	11	1					
6			7	12	1					
5			2	9	4	1				
4				15	2	2		1		
3				5	1					
2				2		1		1		
1				1						1

RPBIS

MS	1	2	3	4	5	6	7	8	9	10
10										
9		5	2							
8		1	17	1						
7		7	16							
6		5	16	2						
5			7	4						
4			3	2	1					
3				1	2		1			
2							1			
1								1		

SLOPE

MS	1	2	3	4	5	6	7	8	9	10
10				3	2					
9				3						
8			1	10	1					
7			1	7	1					
6			3	9						
5			4	11	1					
4			3	13						
3			1	7	1					
2				1	4				1	
1					1	2	2		1	1

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS =	30					
SAMPLE SIZE =	32623					
DIFF	0.658	0.210	-0.437	1.735	0.703	0.209
MAX	0.000	1.382	-0.159	1.745	0.107	1.340
RPBIS	0.477	0.071	-0.756	2.750	0.495	0.040
SLOPE	0.986	0.277	-0.270	2.316	0.982	0.210
MSFIT	30.059	37.244	2.170	7.156	16.786	15.255

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	1	3	4	0	3	3	3	4	9
MAX	2	5	1	3	3	3	4	4	3	2
RPBIS	0	0	0	2	3	3	8	11	3	0
SLOPE	4	0	4	1	6	6	1	5	1	2
MSFT*	10	6	6	4	0	1	0	0	1	2

MSFT* = MSFIT(1500/N)

DIFF

MS	1	2	3	4	5	6	7	8	9	10
10	4	2	2	1						
9	1	1	2							
8	3									
7	2	1								
6		2	1							
5										
4			1	2	1					
3				1			1	1		
2							1			
1										

MAX

MS	1	2	3	4	5	6	7	8	9	10
10	2									
9	1	1						1		
8	1	1	2							
7	1	1	2							
6	3									
5	2	1								
4		2	1							
3			1							
2							3	1		1
1									1	1

RPBIS

MS	1	2	3	4	5	6	7	8	9	10
10										
9										
8	4	1	1	1						
7	3	1	1	3						
6			1			1			1	
5	3									
4							2			
3										
2										
1										

SLOPE

MS	1	2	3	4	5	6	7	8	9	10
10				1	1					
9				1						
8	2	2	1							
7	1									
6	4	1	1							
5	2	3	1							
4	1									
3			1	3						
2										
1								1	1	2

Y	1	2	3	4	5	6	7	8	9	10
FF	< .20	.29	.36	.44	.52	.60	.68	.76	.84	> .84
X	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
BIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
OPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
FT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

MS	1	2	3	4	5	6	7	8	9	10
10										
9										
8										
7										
6										
5										
4										
3										
2										
1										

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q ⁴
NUMBER OF ITEMS =	30	SAMPLE SIZE = 33002.				
DIFF	0.539	0.114	0.426	2.882	0.529	0.060
MAX	-0.000	0.607	0.490	3.024	-0.058	0.304
RPBIS	0.458	0.086	-0.888	3.443	0.477	0.056
SLOPE	1.072	0.265	-0.237	2.356	1.035	0.184
MSFIT	23.073	30.944	3.015	13.606	11.302	12.136

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	0	1	3	9	11	2	1	3	0
MAX	0	0	1	4	12	8	2	3	0	0
RPBIS	0	1	0	3	2	6	9	5	4	0
SLOPE	1	2	1	4	3	6	3	4	2	4
MSFT*	15	3	5	4	1	1	0	0	0	1

MSFT* = MSFIT(1500/N)

DIFF

MS	1	2	3	4	5	6	7	8	9	10
10										
9	2		1							
8			1							
7		1		1						
6	7	2	1	1						
5	4		2	2			1			
4	2				1					
3				1						
2										
1										

MAX

MS	1	2	3	4	5	6	7	8	9	10
10										
9										
8		2				1				
7						1	1			
6	6	1				1				
5	5	2	3	2						
4	2							1		1
3								1		
2										
1										

RPBIS

MS	1	2	3	4	5	6	7	8	9	10
10										
9			2	2						
8	2	2		1						
7	7		2							
6	5		1							
5	1	1								
4				1	1	1				
3										
2									1	
1										

SLOPE

MS	1	2	3	4	5	6	7	8	9	10
10			1	1	2					
9				1	1					
8	1	1	2							
7	3									
6	6									
5	2		1							
4	3	1								
3							1			
2								1	1	
1										1

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 60		SAMPLE SIZE = 33081.				
SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
DIFF	0.601	0.177	0.187	1.944	0.562	0.152
MAX	0.000	1.079	0.489	2.358	-0.297	0.842
RPBIS	0.447	0.079	-0.941	3.731	0.461	0.049
SLOPE	1.029	0.286	-0.057	2.535	1.043	0.199
MSFIT	15.195	16.885	3.385	18.102	9.791	6.169

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	1	4	7	9	13	4	6	7	9
MAX	0	3	7	11	14	6	9	2	5	3
RPBIS	1	0	3	5	5	11	17	17	1	0
SLOPE	4	3	6	8	8	5	9	5	6	6
MSFT*	34	15	6	1	3	0	0	0	0	1

MSFT* = MSFIT(1500/N)

DIFF

10	3	4	2							
9	4	1	2							
8	6									
7	2	2								
6	9	4								
5	4	2	2							1
4	5	1		1						
3	1	1		2						
2			1							
1										

MS 1 2 3 4 5 6 7 8 9 10

MAX

10	2	1								
9		3	2							
8	2									
7	6	1	2							
6	5	1								
5	9	5								
4	6	2	2							1
3	4	1						2		
2		1					1	1		
1										

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10										
9		1								
8	8	6	3							
7	15	1	1							
6	7	3	1							
5	2	3								
4	2	1	1	1						
3				3						
2										
1										1

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10		2	4							
9	3	3								
8	4	1								
7	6	2	1							
6	3	2								
5	7	1								
4	7	1								
3	3	3								
2	1		1	1						
1					3					1

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS = 30						
SAMPLE SIZE = 4615.						
DIFF	0.627	0.234	-0.210	1.575	0.692	0.211
MAX	0.000	1.543	0.117	1.830	0.173	1.244
RPBIS	0.449	0.088	-0.387	2.582	0.454	0.069
SLOPE	0.998	0.329	0.217	2.061	0.966	0.260
MSFIT	6.717	5.026	1.236	4.354	4.842	3.260

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	1	0	4	5	1	2	1	6	3	7
MAX	1	6	3	3	1	4	4	2	2	4
RPBIS	0	1	0	4	5	4	6	8	1	1
SLOPE	3	3	4	4	1	3	3	4	1	4
MSFT*	2	4	9	2	3	0	5	2	0	3

MSFT* = MSFIT(150.0/N)

DIFF

DIFF	1	2	3	4	5	6	7	8	9	10
10	1	2	2	1	1					
9			1		1					
8	1	2	1			2				
7			1							
6			2							
5					1					
4		2	1			1	1			
3						1	1	2		
2										
1							1			

MAX

MAX	1	2	3	4	5	6	7	8	9	10
10	1	1	2							
9		1		1						
8			1		1					
7	1	1						1		1
6		1	1							2
5			1		1					
4				2				1		
3					2					1
2						1			2	1
1										2

RPBIS

RPBIS	1	2	3	4	5	6	7	8	9	10
10							1			
9							1			
8		1	5		2					
7	1		1	2			1		1	
6		2	1		1					
5		1	2					1	1	
4	1						2	1		
3										
2									1	
1										

SLOPE

SLOPE	1	2	3	4	5	6	7	8	9	10
10			2		1			1		
9			1							
8		1	1		1			1		
7		2		1						
6	2		1							
5		1								
4			2		1					1
3			2	1					1	
2								2		1
1								1	1	1

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS = 30						
SAMPLE SIZE = 4603.						
DIFF	0.528	0.132	0.623	2.681	0.497	0.085
MAX	-0.000	0.720	0.752	3.050	-0.175	0.438
RPBIS	0.469	0.064	-0.609	3.001	0.475	0.033
SLOPE	0.980	0.192	0.332	2.557	0.968	0.107
MSFIT	3.229	2.351	2.108	8.246	2.368	1.381

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	0	3	5	8	5	5	1	2	1
MAX	0	0	1	6	9	8	3	2	1	0
RPBIS	0	0	0	2	3	4	11	8	2	0
SLOPE	0	2	3	6	5	9	0	2	3	0
MSFT*	7	13	4	4	1	0	0	0	1	0

MSFT* = MSFIT(1500/N)

DIFF

MS	1	2	3	4	5	6	7	8	9	10
10										
9	1	1								
8	1									
7	3	1	1							
6	2	2		1						
5	1	4	1	1	1					
4	1	4								
3				2			1			
2										
1										

MAX

MS	1	2	3	4	5	6	7	8	9	10
10										
9								1		
8							1	1		
7						2	1			
6						3	3	1	1	
5						1	5	1	1	1
4						1	3		2	
3										
2										
1										

RPBIS

MS	1	2	3	4	5	6	7	8	9	10
10										
9				2						
8	1	6	1							
7	5	4	2							
6	1	2		1						
5			1	1	1					
4		1					1			
3										
2										
1										

SLOPE

MS	1	2	3	4	5	6	7	8	9	10
10										
9			1	1	1					
8				1	1					
7										
6			2	6	1					
5			2	2	1					
4			3	3						
3				1		2				
2								1		
1										1

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 60
SUMMARY OF DATA

SAMPLE SIZE = 4637.
STD SKEW

KUR

MED

Q

DIFF	0.580	0.194	0.273	2.001	0.553	0.152
MAX	-0.000	1.204	0.625	2.718	-0.240	0.820
RPBIS	0.436	0.077	-0.700	2.903	0.453	0.046
SLOPE	1.002	0.291	0.788	3.484	0.910	0.206
MSFIT	3.237	1.967	1.655	6.271	2.878	1.088

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	1	0	6	10	9	8	6	7	5	8
MAX	1	1	10	14	8	7	6	5	4	4
RPBIS	0	1	4	4	6	14	18	11	2	0
SLOPE	3	3	8	14	8	6	2	8	2	6
MSFT*	9	26	15	5	3	1	0	1	0	0

MSFT* = MSFIT(1500/N)

DIFF

10	1	5	1	1						
9	1	1	2		1					
8	2	3		1	1					
7	1	5								
6	3	2	3							
5		4	5							
4	1	5	2	1	1					
3		1	2	2		1				
2										
1										1

MS 1 2 3 4 5 6 7 8 9 10

MAX

10	1	3								
9		2	1	1						
8	1	1	2		1					
7	2	2		1	1					
6	1	6								
5	3	2	3							
4		8	6							
3	1	2	3	3	1					
2								1		
1										1

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10										
9			1	1						
8	2	6	2		1					
7	3	7	7	1						
6	2	9	3							
5		2	2	2						
4	1	1		1	1					
3	1	1			1	1				
2										1
1										

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10		2	1	2	1					
9		1	1							
8	2	3	3							
7		2								
6	1	5								
5	3	2	3							
4	3	6	4	1						
3		5	2	1						
2			1	1	1					
1					1	1			1	

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS = 42						
SAMPLE SIZE = 21664.						
DIFF	0.556	0.141	0.008	2.274	0.554	0.103
MAX	0.000	0.847	0.099	2.495	-0.022	0.589
RPBIS	0.517	0.076	-1.132	3.969	0.527	0.047
SLOPE	1.068	0.256	-0.255	2.637	1.076	0.173
MSFIT	15.480	18.822	2.601	9.720	9.987	6.125

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	1	3	6	6	10	8	5	3	0
MAX	0	2	3	6	11	7	10	0	3	0
RPBIS	0	0	1	2	0	4	5	15	11	4
SLOPE	2	2	1	4	8	6	6	6	1	6
MSFT*	13	16	6	3	0	1	0	0	1	2

MSFT* = MSFIT(1500/N)

DIFF

10										
9		2	1							
8	2	1	2							
7	2	4	1	1						
6	6	3				1				
5	3	2		1						
4		3	2	1						
3		1			1					
2						1				
1							1			

MAX

10										
9		2	1							
8										
7	4	2	3	1						
6	3	4								
5	5	4		1						1
4	1	3	1	1						
3		1	1					1		
2									1	1
1										

RPBIS

10		3		1						
9	2	6	3							
8	9	5	1							
7	2	1	2							
6		1		2		1				
5										
4							1	1		
3								1		
2										
1										

SLOPE

10			1	4	1					
9			1							
8	1	5								
7	3	3								
6	4	2								
5	3	4	1							
4	2		1	1						
3				1						
2								1		1
1										2

Y	1	2	3	4	5	6	7	8	9	10
FF : <	.20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
X : <	-1.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
BIS : <	.20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
OPE : <	.60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
FT* : <	0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS = 48						
SAMPLE SIZE = 21929						
DIFF	0.495	0.160	0.622	2.701	0.462	0.092
MAX	-0.000	0.878	0.777	3.317	-0.175	0.466
RPBIS	0.434	0.079	-0.127	2.198	0.449	0.067
SLOPE	1.040	0.271	0.628	2.364	0.966	0.222
MSFIT	11.028	7.932	1.340	5.394	9.638	4.694

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	3	5	10	12	6	4	4	3	1
MAX	0	1	5	7	15	8	5	3	3	1
RPBIS	0	1	0	7	10	6	12	9	3	0
SLOPE	0	2	7	8	11	4	3	4	2	7
MSFT*	20	17	7	3	0	1	0	0	0	0

MSFT* = MSFIT(150.0/N)

DIFF

DIFF	1	2	3	4
10	1			
9	1	1		1
8	2	1		1
7	1	2	1	
6	3	2	1	
5	8	3	1	
4	4	3	2	1
3	1	4		
2		2		1
1				

MAX

MAX	1	2	3	4	5	6	7	8	9	10
10										
9	1	1						1		
8	2							1		
7	1	3	1							
6	4	3	1							
5	9	3	3							
4	3	3		1						
3		3	2							
2									1	
1										

RPBIS

RPBIS	1	2	3	4	5	6	7	8	9	10
10										
9		1	2							
8	2	5	1	1						
7	9	2		1						
6	5	1								
5	4	5	1							
4		3	3	1						
3										
2					1					
1										

SLOPE

SLOPE	1	2	3	4	5	6	7	8	9	10
10			3	3	1					
9			2							
8			3		1					
7	3									
6	3	1								
5	8	2	1							
4	4	3	1							
3	2	3		1		1				
2			2							
1										

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .88
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 90	SAMPLE SIZE = 21937					
SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
DIFF	0.526	0.154	0.298	2.375	0.513	0.119
MAX	0.000	0.679	0.541	3.059	-0.073	0.483
RPBIS	0.462	0.089	-0.438	2.329	0.471	0.072
SLOPE	1.120	0.334	0.238	2.207	1.115	0.280
MSFIT	2.172	5.911	1.256	5.371	8.172	4.112

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	3	8	16	19	15	12	10	6	1
MAX	0	0	7	14	29	18	15	5	1	1
RPBIS	0	1	2	11	11	12	15	23	12	3
SLOPE	3	5	11	10	7	8	8	10	9	19
MSFT*	41	34	13	1	1	0	0	0	0	0

MSFT* = MSFIT(1500/N)

DIFF

10	9	8	7	6	5	4	3	2	1
1	5	6	4	10	15	8	5	2	
1	1	4	4	4	4	5	3		
1		1	3	1	1	3	3		
1			1			2	2		
1							1		

MAX

10	9	8	7	6	5	4	3	2	1
1	1	4	6	10	21	4	3		
1	1	1	6	6	8	6	2		
1		2	2	2	8	4	4		
1			1	2	4	4	4		
1					1	4	1		

RPBIS

10	9	8	7	6	5	4	3	2	1
1	1	8	16	11	8	4	5		
1	1	2	7	3	4	6	2		
1		1	3	1	1	1	2		
1			1						
1									

SLOPE

10	9	8	7	6	5	4	3	2	1
1	4	2	6	8	6	6	3		
1	10	7	4	8	1	2	4		
1	4	4	2	2	1	2	4		
1									
1									

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS = 42						
SAMPLE SIZE = 3262.						
DIFF	0.509	0.166	-0.169	2.089	0.502	0.130
MAX	-0.000	0.929	-0.311	2.458	-0.019	0.678
RPBIS	0.456	0.086	-1.314	5.997	-0.463	0.060
SLOPE	0.999	0.264	0.017	2.597	0.940	0.192
MSFIT	3.001	2.979	4.000	21.268	2.080	0.835

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	1	3	5	7	6	8	5	4	3	0
MAX	1	2	1	9	8	9	6	5	1	0
RPBIS	1	0	1	1	6	10	8	12	3	0
SLOPE	1	3	5	10	3	5	5	4	3	3
MSFT*	1	21	8	9	0	0	1	1	0	1

MSFT* = MSFIT(1500/N)

DIFF

10	9	8	7	6	5	4	3	2	1
1	1	1	2	3	3	2	1	1	1

MS 1 2 3 4 5 6 7 8 9 10

MAX

10	9	8	7	6	5	4	3	2	1
1	1	1	3	4	7	5	2	2	1

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10	9	8	7	6	5	4	3	2	1
1	1	1	2	4	2	1	1	1	1

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10	9	8	7	6	5	4	3	2	1
3	1	1	1	1	3	7	2	1	1

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 48 SAMPLE SIZE = 3267.

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
DIFF	0.508	0.158	0.180	2.292	0.512	0.116
MAX	0.000	0.865	0.262	2.555	0.021	0.599
RPBIS	0.449	0.101	-0.421	2.516	0.448	0.071
SLOPE	1.029	0.323	0.084	1.995	1.065	0.261
MSFIT	3.174	2.250	2.397	11.124	2.617	1.134

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	3	6	8	8	10	8	2	2	1
MAX	0	0	8	6	10	11	8	2	3	0
RPBIS	1	0	2	5	4	12	6	9	8	1
SLOPE	3	6	7	3	4	4	3	7	6	5
MSFT*	4	13	16	4	6	2	2	0	0	1

MSFT# = MSFIT(1500/N)

DIFF

10	9	8	7	6	5	4	3	2	1
1	1	1	2	3	4	2	3	1	1

MAX

10	9	8	7	6	5	4	3	2	1
1	1	1	2	3	2	4	3	1	1

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10	9	8	7	6	5	4	3	2	1
1	2	4	4	3	2	1	1	1	1

SLOPE

10	9	8	7	6	5	4	3	2	1
2	1	4	3	1	2	1	1	1	1

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 90 SAMPLE SIZE = 3270.
 SUMMARY OF DATA MEAN STD SKEW KUR MED Q

DIFF	0.509	0.161	0.006	2.234	0.508	0.119
MAX	-0.000	0.1882	-0.024	2.559	0.001	0.615
RPBIS	0.440	0.097	-0.814	3.800	0.452	0.068
SLOPE	0.985	0.288	-0.125	2.259	0.980	0.217
MSFIT	2.091	1.458	3.282	16.118	1.741	0.458

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	1	6	11	15	14	17	14	6	5	1
MAX	1	2	9	15	18	20	14	7	4	0
RPBIS	2	1	4	7	16	13	20	17	10	0
SLOPE	7	11	9	11	9	10	8	9	10	6
MSFT*	8	58	14	3	5	0	0	0	1	1

MSFT* = MSFIT(1500/N)

DIFF

10	1
9	1 4
8	4 2
7	11 3
6	3 11 3
5	1 12 1
4	3 10 1
3	6 2 2 1
2	3 1 2
1	1

MAX

10	
9	1 2 1
8	5 2
7	11 3
6	4 13 3
5	1 15 1
4	2 10 2 1
3	2 3 2 2
2	1 1
1	1

RPBIS

10	
9	6 4
8	5 15 2
7	2 10 1
6	1 10 4 1
5	2 3 1 1
4	1 3
3	1
2	
1	1 1

SLOPE

10	4 2
9	7 3
8	7 2
7	8
6	3 7
5	3 6
4	2 7 1 1
3	7 2
2	5 3 1 2
1	1 1 3 1 1

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 42 SAMPLE SIZE = 12170.
 SUMMARY OF DATA MEAN STD SKEW KUR MED Q

DIFF	0.573	0.148	0.124	2.108	0.577	0.109
MAX	-0.000	0.875	0.287	2.358	-0.010	0.505
RPBIS	0.495	0.067	-0.258	2.346	0.501	0.054
SLOPE	1.041	0.263	0.105	1.819	1.057	0.228
MSFIT	8.182	5.820	1.027	3.311	6.309	3.620

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	0	3	6	8	7	8	6	2	2
MAX	0	1	4	9	8	9	6	1	4	0
RPBIS	0	0	0	0	4	7	8	15	6	2
SLOPE	1	3	6	5	3	8	4	3	4	5
MSFT*	11	14	7	6	2	1	1	0	0	0

MSFT* = MSFIT(1500/N)

DIFF

10	1	1								
9		1	1							
8	1	3		2						
7	6	1		1						
6	2	3	2							
5	2	4	2							
4		2		1	1	1	1			
3			1	1	1					
2										
1										

MAX

10										
9			1	2	1					
8			1							
7	2	2			2					
6	6	2			1					
5	3	3	2							
4		4	2			1	1	1		
3			1	1	1	1				
2						1				
1										

RPBIS

10			1	1						
9	1	3		2						
8	8	0		1						
7	2	3	3							
6		2	3	2						
5					2	1	1			
4										
3										
2										
1										

SLOPE

10			2	3						
9			2	1	1					
8			3							
7	3	1								
6	5	3								
5	2	1								
4	1	2	2							
3		2	2	2						
2					2			1		
1									1	

KEY

1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84 >
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00 >
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60 >
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40 >
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50 >

KEY

1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84 >
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00 >
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60 >
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40 >
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50 >

NUMBER OF ITEMS = 48
SUMMARY OF DATA MEAN

SAMPLE SIZE = 12268.
STD SKEW

KUR

MED

Q

DIFF	0.519	0.115	0.157	2.092	0.508	0.092
MAX	0.000	0.606	0.161	2.185	-0.053	0.471
RPBIS	0.463	0.056	-0.268	2.296	0.470	0.044
SLOPE	1.035	0.202	0.277	2.290	1.046	0.132
MSFIT	4.910	3.281	1.010	3.558	4.024	2.511

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	0	3	10	12	10	9	4	0	0
MAX	0	0	2	6	17	10	10	3	0	0
RPBIS	0	0	0	1	7	9	17	12	2	0
SLOPE	0	0	6	7	7	11	8	4	2	3
MSFT*	24	18	4	2	0	0	0	0	0	0

MSFT* = MSFIT(1500/N)

DIFF

10										
9										
8			2	2						
7		5	4							
6		3	6	1						
5		11			1					
4		4	4	1	1					
3		1	2							
2										
1										

MS 1 2 3 4 5 6 7 8 9 10

MAX

10										
9										
8				2	1					
7		5	4	1						
6		3	6	1						
5		14	2		1					
4		1	3	1	1					
3		1	1							
2										
1										

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10										
9			1	1						
8		7	4	1						
7		12	4	1						
6		5	4							
5			5	1	1					
4				1						
3										
2										
1										

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10					3					
9				2						
8		1	3							
7		5	3							
6		10	1							
5		4	2	1						
4		4	2		1					
3			5		1					
2										
1										

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS =	90	SAMPLE SIZE = 12292				
DIFF	0.547	0.133	0.283	2.366	0.533	0.096
MAX	-0.000	0.742	0.432	2.766	-0.087	0.508
RPBIS	0.465	0.062	-0.155	2.386	0.470	0.045
SLOPE	1.042	0.257	0.403	2.167	1.010	0.196
MSFIT	3.867	2.438	1.152	3.929	3.135	1.588

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	0	5	15	22	16	17	11	2	2
MAX	0	0	5	21	21	22	12	5	4	0
RPBIS	0	0	0	2	14	15	34	16	9	0
SLOPE	0	7	9	15	14	12	7	11	3	12
MSFIT*	58	26	6	0	0	0	0	0	0	0

MSFIT* = MSFIT(1500/N)

DIFF

MS	1	2	3	4	5	6	7	8	9	10
10	1		1							
9		1	1							
8	6	3	2							
7	14	3								
6	10	6								
5	18	3	1							
4	8	6	1							
3	1	4								
2										
1										

MAX

MS	1	2	3	4	5	6	7	8	9	10
10										
9	1	1	2							
8	3	1	1							
7	9	2	1							
6	15	7								
5	17	3	1							
4	12	8	1							
3	1	4								
2										
1										

RPBIS

MS	1	2	3	4	5	6	7	8	9	10
10										
9	2	5	2							
8	13	3								
7	32	1	1							
6	10	4	1							
5	1	14	1							
4		1	1							
3										
2										
1										

SLOPE

MS	1	2	3	4	5	6	7	8	9	10
10	1	7	4							
9	2	1								
8	10	1								
7	7									
6	12									
5	11	3								
4	11	4								
3	4	4	1							
2		6	1							
1										

DIFF	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFIT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 42		SAMPLE SIZE = 1456.			KUR	MED	Q
SUMMARY OF DATA		MEAN	STD	SKEW			
DIFF	0.563	0.151	-0.144	2.032	0.561	0.130	
MAX	-0.000	0.848	-0.014	2.296	-0.033	0.697	
RPBIS	0.469	0.082	-0.789	3.151	0.483	0.043	
SLOPE	1.001	0.272	0.076	2.679	0.955	0.184	
MSFIT	1.754	1.194	2.838	12.634	1.460	0.382	

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	1	3	7	4	7	8	9	2	1
MAX	0	1	4	9	8	5	11	2	2	0
RPBIS	0	1	0	4	4	4	12	12	4	1
SLOPE	3	2	4	7	6	3	9	2	3	3
MSFT*	0	7	14	13	2	1	2	0	2	1

MSFT* = MSFIT(1500/N)

DIFF

10	9	8	7	6	5	4	3	2	1
1									
	1								
		1							
			1						
				1					
					1				
						1			
							1		
								1	
									1

MS 1 2 3 4 5 6 7 8 9 10

MAX

10	9	8	7	6	5	4	3	2	1

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10	9	8	7	6	5	4	3	2	1

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10	9	8	7	6	5	4	3	2	1

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50



NUMBER OF ITEMS = 48
SUMMARY OF DATA MEAN

SAMPLE SIZE = 1466.
STD SKEW KUR MED Q

DIFF	0.606	0.148	0.098	2.076	0.595	0.106
MAX	0.000	0.863	0.369	2.355	-0.111	0.572
RPBIS	0.453	0.081	-0.580	2.320	0.467	0.063
SLOPE	0.988	0.288	0.199	2.574	1.023	0.208
MSFIT	1.680	0.880	1.612	5.486	1.354	0.476

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	0	2	5	6	12	9	5	4	5
MAX	0	1	6	6	12	11	5	3	4	0
RPBIS	0	0	2	5	5	7	13	14	2	0
SLOPE	5	4	4	7	3	4	11	5	2	3
MSFT*	0	5	24	3	11	1	0	2	1	1

MSFT* = MSFIT(1500/N)

DIFF

10		3	1	1						
9		3		1						
8	1	4								
7	2	5		2						
6	2	6		3		1				
5		2	1	3						
4		1	1	1		2				
3					1		1			
2										
1										

MAX

10										
9			2	1	1					
8			3							
7		1	3		1					
6		2	7		2					
5		2	6		3					1
4			2	1	3					
3			1	1	1	1	1	2		
2										1
1										

RPBIS

10										
9			1		1					
8		1	10	1	2					
7		2	8	1	2					
6		2	4	1						
5					5					
4			1		1	1	2			
3								1	1	
2										
1										

SLOPE

10							1	2		
9						2				
8			1	3			1			
7			1	10						
6			1	3						
5				2	1					
4			2	3	1	1				
3				1		3				
2							4			
1								1	2	1

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS = 90						
SAMPLE SIZE = 1467.						
DIFF	0.588	0.150	-0.021	2.196	0.592	0.114
MAX	-0.000	0.849	0.214	2.504	-0.018	0.607
RPBIS	0.447	0.082	-0.706	2.686	0.465	0.060
SLOPE	0.959	0.274	0.071	2.732	0.957	0.174
MSFIT	1.398	0.632	1.971	7.226	1.218	0.276

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	0	1	5	12	10	19	17	14	6	6
MAX	0	2	12	12	20	19	13	6	5	1
RPBIS	0	2	4	10	9	10	29	20	6	0
SLOPE	10	9	5	13	14	8	17	7	1	6
MSFT*	0	22	42	12	8	3	1	1	1	0

MSFT* = MSFIT(1500/N)

DIFF

MS	1	2	3	4	5	6	7	8	9	10
10		5	1							
9	4	1	1							
8	4	8	2							
7	5	10	2							
6	6	9	1	2	1					
5	2	5	2	2						
4	1	3	3	3	1	1				
3		1	1	1	1		1			
2						1				
1										

MAX

MS	1	2	3	4	5	6	7	8	9	10
10										
9										
8			4	1	1					
7			3	8	2					
6			6	11	2					
5			7	8	1	3	1			
4			1	7	1	2	2	1		
3			1	1	4	3	2		1	
2					1			1		
1										

RPBIS

MS	1	2	3	4	5	6	7	8	9	10
10										
9			5	1						
8		6	12	2						
7		12	14	3						
6		4	3	2	1					
5			0	1	2					
4			2	3	4	1				
3				1	3					
2							1	1		
1										

SLOPE

MS	1	2	3	4	5	6	7	8	9	10
10				3	3					
9				1						
8			1	5	1					
7			11	6						
6			3	5						
5			4	8	2					
4			3	8	2					
3				4		1				
2				2	4	3				
1						4	3	1	1	1

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 38	SAMPLE SIZE = 10524.					
SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
DIFF	0.142	0.115	1.171	5.661	0.147	0.078
MAX	-0.000	1.597	-0.894	2.737	0.631	0.813
RPBIS	0.171	0.115	-0.096	1.779	0.191	0.105
SLOPE	1.014	0.499	-0.227	2.731	1.025	0.309
MSFIT	7.839	10.586	4.251	23.166	4.877	3.018

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	28	7	2	0	0	1	0	0	0	0
MAX	7	2	0	2	2	4	11	7	2	1
RPBIS	22	5	6	3	2	0	0	0	0	0
SLOPE	5	4	4	3	2	3	1	4	5	7
MSFT*	12	12	7	4	1	0	1	0	0	1

MSFT* = MSFIT(1500/N)

DIFF

10	9	8	7	6	5	4	3	2	1
							1	1	
							1	1	1
							1	1	1
							1	1	1
							1	1	1
							1	1	1
							1	1	1
							1	1	1
							1	1	1

MS 1 2 3 4 5 6 7 8 9 10

MAX

10	9	8	7	6	5	4	3	2	1
	1	1							
	1	2	1	1					
	1	3	2	3					
	1	1	2						
		2							
	1	1							
		1	1						
	5	1	1						

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10	9	8	7	6	5	4	3	2	1
					1				
					1				
			1	2					
			1	2					
			1	2					
			1	2					
			1	2					
			1	2					

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10	9	8	7	6	5	4	3	2	1

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS =	.60	SAMPLE SIZE = 10532.				
DIFF	0.457	0.181	0.088	1.887	0.478	0.142
MAX	-0.000	0.960	0.003	2.025	0.136	0.712
RPBIS	0.398	0.118	-0.934	3.329	0.417	0.069
SLOPE	1.017	0.304	0.308	2.403	0.988	0.197
MSFIT	6.804	6.385	1.954	7.146	4.623	3.680

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	6	6	11	3	11	8	7	5	3	0
MAX	0	4	7	10	6	14	9	5	5	0
RPBIS	5	2	4	5	9	10	14	9	2	0
SLOPE	4	5	6	11	5	7	6	4	4	8
MSFT*	25	15	10	4	2	1	1	1	0	1

MSFT* = MSFIT(1500/N)

DIFF

DIFF	1	2	3	4	5	6	7	8	9	10
10										
9	1	1	1							
8	1	1	1	2						
7	3	1	2	1						
6	5	3								
5	8	2	1							
4	1	2								
3	4	3	4							
2	2	3		1						
1		1	1	1	1	1	1			

MS 1 2 3 4 5 6 7 8 9 10

MAX

MAX	1	2	3	4	5	6	7	8	9	10
10										
9	1		1	3						
8	1	1	2	1						
7	6	2	1							
6	9	4	1							
5	3	3								
4	3	3	4							
3	2	2	1		1		1			
2					1	1		1		1
1										

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

RPBIS	1	2	3	4	5	6	7	8	9	10
10										
9			1	1						
8		3	3	3						
7	8	5	1							
6	9	1								
5	6	3								
4	1	3	1							
3	1		3							
2		1			1					
1				2		1	1		1	

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

SLOPE	1	2	3	4	5	6	7	8	9	10
10		1	3	4						
9		3	1							
8	1	2	1							
7	5	1								
6	5	2								
5	3	2								
4	7	2	2							
3	3	1	1			1				
2	1	1	2		1					
1					1		1	1		1

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS = 98						
SAMPLE SIZE = 10533						
DIFF	0.462	0.190	0.037	1.903	0.476	0.143
MAX	0.000	1.031	-0.065	2.078	0.106	0.721
RPBIS	0.398	0.110	-0.836	3.402	0.413	0.069
SLOPE	0.989	0.285	0.244	2.547	0.956	0.186
MSFIT	4.321	3.574	2.173	8.949	3.144	1.922

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	12	9	14	8	15	16	9	9	6	0
MAX	1	9	10	14	10	21	15	10	8	0
RPBIS	7	3	8	8	17	17	22	12	4	0
SLOPE	9	4	11	16	15	10	11	6	6	10
MSFT*	52	32	8	3	1	2	0	0	0	0

MSFT* = MSFIT(1500/N)

DIFF

10	9	8	7	6	5	4	3	2	1
2	3	1							
3	5	1							
5	4								
12	4								
12	3								
6	1	1							
8	3	3							
4	4		1						
5	2	2	1	2					

MS 1 2 3 4 5 6 7 8 9 10

MAX

10	9	8	7	6	5	4	3	2	1
2	4	2							
3	7								
11	4								
17	4								
7	2	1							
9	2	3							
3	4	1	1	1					
5			2						
1		1							

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10	9	8	7	6	5	4	3	2	1
4									
4	6	2							
15	7								
15	2								
14	3								
3	5								
1	4	3							
	1	2							
		1	3	1	2				

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10	9	8	7	6	5	4	3	2	1
8	2								
2	4								
4	2								
7	4								
10									
11	4								
12	4								
5	4	2							
2		2	1	1					
1	1	3	2	1	2				

MS 1 2 3 4 5 6 7 8 9 10

DIFF	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 38
SUMMARY OF DATA MEAN

SAMPLE SIZE = 1257.
STD SKEW

KUR

MED

Q

DIFF	0.426	0.172	-0.009	1.919	0.427	0.134
MAX	-0.000	0.988	-0.211	2.129	0.064	0.716
RPBIS	0.449	0.095	-0.542	2.135	0.475	0.065
SLOPE	0.940	0.230	-0.155	2.085	0.973	0.141
MSFIT	1.735	0.948	1.340	4.353	1.355	0.634

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	5	3	6	7	3	8	4	2	0	0
MAX	0	4	2	6	6	6	8	4	2	0
RPBIS	0	0	2	6	3	4	8	10	5	0
SLOPE	4	4	3	3	6	10	3	2	3	0
MSFT*	0	2	15	5	5	4	4	0	1	2

MSFT* = MSFIT(1500/N)

DIFF

10										
9										
8		1	1							
7			1	1	2					
6		1	4	2	1					
5			2				1			
4		1	4		2					
3			2	1	1			1	1	
2			1		1	1				
1			1		1	3				

MS 1 2 3 4 5 6 7 8 9 10

MAX

10										
9								1	1	
8								1	1	2
7							1	4	2	1
6							1	3	1	
5								5	1	
4								1	1	1
3									1	1
2									1	2
1										2

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10										
9			2		3					
8			5	3		2				
7			2	5	1					
6				2		2				
5			1	1		1				
4						1	2		1	2
3							2			
2										
1										

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10										
9								1	1	1
8								1	1	
7								1	1	1
6							2	5	1	1
5								5		1
4								1	1	1
3								1	1	
2										1
1										3

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 60		SAMPLE SIZE = 1261.					
SUMMARY OF DATA		MEAN	STD	SKEW	KUR	MED	Q
DIFF	0.412	0.152	0.229	2.341	0.393	0.128	
MAX	0.000	0.802	-0.011	2.516	-0.048	0.634	
RPBIS	0.382	0.113	-0.905	3.341	0.401	0.069	
SLOPE	0.867	0.280	-0.178	2.275	0.918	0.210	
MSFIT	1.506	0.735	2.017	8.582	1.362	0.349	

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	6	7	10	12	8	11	3	3	0	0
MAX	0	2	5	9	15	12	11	3	3	0
RPBIS	4	5	3	8	10	10	16	4	0	0
SLOPE	12	6	5	6	7	13	5	4	1	1
MSFT*	0	6	20	18	7	4	1	3	0	1

MSFT* = MSFIT(1500/N)

DIFF

10	9	8	7	6	5	4	3	2	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1

MAX

10	9	8	7	6	5	4	3	2	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1

RPBIS

10	9	8	7	6	5	4	3	2	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1

SLOPE

10	9	8	7	6	5	4	3	2	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 98
SUMMARY OF DATA MEAN

SAMPLE SIZE = 1261.
STD SKEW KUR MED Q

DIFF	0.417	0.160	0.133	2.189	0.408	0.132
MAX	-0.000	0.856	-0.112	2.400	0.004	0.665
RPBIS	0.389	0.109	-0.737	3.104	0.405	0.074
SLOPE	0.839	0.277	0.411	3.076	0.837	0.173
MSFIT	1.281	0.470	1.550	5.665	-1.143	0.214

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	11	10	18	19	11	19	7	5	0	0
MAX	0	4	9	15	21	18	20	6	5	0
RPBIS	7	5	6	13	16	16	22	11	2	0
SLOPE	19	12	13	22	8	8	5	4	4	3
MSFT*	0	8	56	20	5	7	1	1	0	0

MSFT* = MSFIT(1500/N)

DIFF

10										
9										
8		4			1					
7	1	3	3							
6	2	14	2		1					
5	2	7	1	1						
4	3	11	3		2					
3		8	5		3					
2		5	3	1		1				
1		4	3	3			1			

MS 1 2 3 4 5 6 7 8 9 10

MAX

10										
9								4		1
8							1	2	3	
7							2	15	2	1
6							3	12	2	1
5							2	11	5	3
4								7	5	2
3								5	1	3
2									2	1
1										1

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10										
9			1	1						
8			8	3						
7		4	17	1						
6		4	11			1				
5			11	5						
4			6	5	1	1				
3			2	2	1	1				
2				1	1	3				
1				2	2	1	1	1		

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10								2	1	
9								4		
8								2	2	
7							1	3	1	
6							2	6		
5							2	5	1	
4							2	17	2	1
3							1	10	2	
2								6	6	
1								1	5	5

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 48		SAMPLE SIZE = 21760					
SUMMARY OF DATA		MEAN	STD	SKEW	KUR	MED	Q
DIFF	0.455	0.202	0.153	2.200	0.456	0.133	
MAX	-0.000	1.207	-0.087	2.651	0.059	0.713	
RPBIS	0.444	0.111	-0.957	3.679	0.474	0.072	
SLOPE	1.057	0.288	-0.047	2.876	1.059	0.186	
MSFIT	12.896	16.722	4.423	26.310	9.188	5.448	

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	5	6	5	7	6	8	4	1	5	1
MAX	3	2	6	5	7	11	4	4	4	2
RPBIS	2	1	3	3	4	6	13	9	5	2
SLOPE	2	4	3	4	5	9	7	4	5	5
MSFT*	21	14	6	4	2	0	0	0	0	1

MSFT* = MSFIT(1500/N)

DIFF

10	9	8	7	6	5	4	3	2	1
1	2	1	2	1	5	4	3	2	1
1	1	2	1	2	1	4	3	4	1
1	1	1	2	1	1	1	1	1	1

MAX

10	9	8	7	6	5	4	3	2	1
1	2	1	3	6	2	4	3	2	1
1	1	1	1	2	4	1	4	1	1
1	1	1	1	2	1	1	1	1	1

RPBIS

10	9	8	7	6	5	4	3	2	1
2	5	6	8	6	1	1	1	1	1
2	3	3	3	6	1	2	1	1	1
2	1	1	2	1	1	1	1	1	1

SLOPE

10	9	8	7	6	5	4	3	2	1
1	5	4	2	9	3	2	1	1	1
1	2	2	5	2	2	1	2	1	1
1	1	1	1	1	1	1	1	1	1

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS = 64						
SAMPLE SIZE = 21760.						
DIFF	0.480	0.157	0.207	2.227	0.463	0.119
MAX	-0.000	0.827	0.148	2.418	-0.069	0.593
RPBIS	0.421	0.083	-0.894	3.584	0.443	0.051
SLOPE	1.052	0.266	0.335	3.213	1.072	0.156
MSFIT	9.279	8.197	1.634	5.882	5.834	4.577

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	1	7	6	12	14	7	8	6	3	0
MAX	0	1	7	11	16	12	8	6	3	0
RPBIS	1	2	6	1	13	13	19	7	2	0
SLOPE	2	6	3	7	6	14	11	7	1	7
MSFT*	36	13	9	5	0	1	0	0	0	0

MSFT* = MSFIT.(1500/N)

DIFF

MS	1	2	3	4	5	6	7	8	9	10
10										
9		1	2							
8	4	1		1						
7	6	2								
6	6	1								
5	10		4							
4	7	2	1	2						
3	3	2	1							
2		4	1	2						
1					1					

MAX

MS	1	2	3	4	5	6	7	8	9	10
10										
9		1	2							
8	4	1		1						
7	6	2								
6	10	1	1							
5	12	1	3							
4	4	3	2	2						
3		4	1	2						
2								1		
1										

RPBIS

MS	1	2	3	4	5	6	7	8	9	10
10										
9		1	1							
8	3	3		1						
7	15	2	2							
6	9	4								
5	9	2	2							
4		1								
3		1	3	2						
2				2						
1					1					

SLOPE

MS	1	2	3	4	5	6	7	8	9	10
10										
9		1	3	1						
8	4	3								
7	9	2								
6	10	2	2							
5	5	1								
4	5	1		1						
3	2	1								
2			3	2				1		
1			1	1						

MS 1 2 3 4 5 6 7 8 9 10

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

SAT INTERMEDIATE II FORM W TOTAL READING

355

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS	=112					
SAMPLE SIZE		=21763				
DIFF	0.469	0.177	0.128	2.393	0.462	0.120
MAX	0.000	0.807	-0.071	3.095	-0.011	0.487
RPBIS	0.414	0.099	-0.859	3.713	0.439	0.057
SLOPE	1.084	0.299	0.157	2.819	1.087	0.181
MSFIT	6.464	4.662	2.091	10.700	5.425	2.737

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	6	13	11	19	20	15	12	7	8	1
MAX	1	2	6	17	33	25	16	9	3	0
RPBIS	3	5	8	7	18	27	25	14	4	1
SLOPE	6	7	5	12	9	18	19	13	6	17
MSFT*	77	30	4	0	1	0	0	0	0	0

MSFT* = MSFIT(1500/N)

DIFF

MS	1	2	3	4	5	6	7	8	9	10
10	1									
9	3	5								
8	6	1								
7	8	4								
6	14	1								
5	15	4	1							
4	14	4	1							
3	8	2	1							
2	8	4	1							
1	1	4	1							

MAX

MS	1	2	3	4	5	6	7	8	9	10
10										
9		3								
8	5	4								
7	12	4								
6	21	3								
5	25	6	2							
4	10	6	1							
3	4	1	1							
2		2								
1		1								

RPBIS

MS	1	2	3	4	5	6	7	8	9	10
10			1							
9	1	3								
8	10	4								
7	19	0								
6	20	1								
5	16	2								
4	4	3								
3	1	6	1							
2		4	1							
1		1	1	1						

SLOPE

MS	1	2	3	4	5	6	7	8	9	10
10		6	10	1						
9		3	3							
8		11	2							
7		19								
6		16	2							
5		9								
4		11		1						
3		2	3							
2			7							
1			3	2		1				

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
NUMBER OF ITEMS = 48						
SAMPLE SIZE = 2802.						
DIFF	0.439	0.184	0.093	2.011	0.424	0.142
MAX	-0.000	1.029	-0.118	2.319	-0.026	0.737
RPBIS	0.425	0.097	-0.618	2.343	0.444	0.081
SLOPE	0.997	0.266	0.171	2.518	0.953	0.156
MSFIT	2.260	1.125	0.961	3.713	2.182	0.701

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	4	6	8	7	6	5	6	5	1	0
MAX	1	3	5	5	10	7	9	5	2	1
RPBIS	0	3	4	7	3	9	9	12	1	0
SLOPE	4	4	3	6	11	3	7	1	7	2
MSFT*	2	18	17	6	3	2	0	0	0	0

MSFT* = MSFIT(1500/N)

DIFF

10										
9			1							
8		1	3	1						
7	1		4	1						
6		4	1							
5		4	1		1					
4	1	5	1							
3		2	5		1					
2			2	3		1				
1		2		2						

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10										
9				1						
8		1	10	1						
7	1	7		1						
6	1	8								
5			3							
4		2	4		1					
3				3		1				
2					2	1				
1										

MS 1 2 3 4 5 6 7 8 9 10

MAX

10								1		
9								2		
8							1	3	1	
7						1	4	3	1	
6							5	1		1
5					1		5	3		1
4							1	3	1	
3								2	2	1
2							2			1
1									1	

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10									2	
9							1	5	1	
8								1		
7							3	4		
6								3		
5						2	7	2		
4							4	2		
3								2	1	
2								1	1	2
1									1	2

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 64

SAMPLE SIZE = 2803.

SUMMARY OF DATA	MEAN	STD	SKEW	KUR	MED	Q
DIFF	0.429	0.139	0.072	2.140	0.429	0.100
MAX	0.000	0.719	-0.113	2.282	0.033	0.494
RPBIS	0.393	0.105	-1.028	4.233	0.405	0.052
SLOPE	0.927	0.276	-0.024	2.477	0.940	0.192
MSFIT	2.004	1.232	2.628	11.330	1.687	0.529

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	3	8	9	14	14	7	8	1	0	0
MAX	0	0	7	11	14	18	5	9	0	0
RPBIS	3	3	5	5	13	16	11	7	1	0
SLOPE	6	8	6	11	6	12	4	5	3	3
MSFT*	4	34	17	5	1	1	1	0	1	0

MSFT* = MSFIT(1500/N)

DIFF

10	9	8	7	6	5	4	3	2	1
1									
2	1								
3	3	8	1	2					
4	4	4	1						
5	1	9	4						
6	4	2	1						
7	5	2	1						
8		1							
9									
10									

MS 1 2 3 4 5 6 7 8 9 10

MAX

10	9	8	7	6	5	4	3	2	1
1									
2									
3									
4									
5	3	8	2	1					
6	1	11	5	1					
7		3	1	1					
8		5	3	1					
9									
10									

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10	9	8	7	6	5	4	3	2	1
1									
2									
3									
4									
5									
6	2	12	2						
7	2	6	3						
8		5	2						
9			1						
10									

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10	9	8	7	6	5	4	3	2	1
1									
2									
3									
4									
5	1	5	2						
6	2	7	3						
7	1	2	1						
8		3	2						
9			2						
10			1	2					

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .84
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.00
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .60
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.40
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.50

NUMBER OF ITEMS = 112		SAMPLE SIZE = 2803.					
SUMMARY OF DATA		MEAN	STD	SKEW	KUR	MED	Q
DIFF	0.433	0.159	0.113	2.254	0.428	0.115	
MAX	-0.000	0.847	-0.123	2.599	0.014	0.570	
RPBIS	0.391	0.106	-0.800	3.460	0.413	0.073	
SLOPE	0.924	0.299	0.307	2.848	0.877	0.207	
MSFIT	1.565	0.717	2.309	9.795	1.397	0.337	

TALLY BY CLASSIFICATION (SEE KEY BELOW)

	1	2	3	4	5	6	7	8	9	10
DIFF	7	14	17	22	19	12	14	6	1	0
MAX	1	4	10	17	24	25	14	14	3	0
RPBIS	6	7	5	17	17	28	14	15	3	0
SLOPE	13	12	14	21	12	10	8	5	10	7
MSFT*	9	80	17	3	1	2	0	0	0	0

MSFT* = MSFIT(1500/N)

DIFF:

10										
9			1							
8		4	2							
7		1	11	2						
6			11	1						
5		5	12	2						
4		3	18		1					
3			15	2						
2			7	4	2	1				
1			2	3						

MS 1 2 3 4 5 6 7 8 9 10

MAX

10										
9			1	2						
8		1	10	3						
7			13	1						
6		5	17	2	1					
5		3	21							
4			12	4	1					
3			4	3	1	1	1			
2			2	1				1		
1				1						

MS 1 2 3 4 5 6 7 8 9 10

RPBIS

10										
9			2	1						
8			12	3						
7		2	10	2						
6		7	21							
5			16	1						
4			17							
3			2	3						
2				5	2					
1				2	1	1	2			

MS 1 2 3 4 5 6 7 8 9 10

SLOPE

10			5	2						
9			7	3						
8			4	1						
7		3	5							
6		2	8							
5		2	10							
4		2	19							
3			13	1						
2			8	4						
1			1	6	3	1	2			

MS 1 2 3 4 5 6 7 8 9 10

KEY	1	2	3	4	5	6	7	8	9	10
DIFF	< .20	.28	.36	.44	.52	.60	.68	.76	.84	> .8
MAX	< -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	> 2.0
RPBIS	< .20	.25	.30	.35	.40	.45	.50	.55	.60	> .6
SLOPE	< .60	.70	.80	.90	1.00	1.10	1.20	1.30	1.40	> 1.4
MSFT*	< 0.50	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50	> 4.5
