

NAEP 2005 Mathematics Report for Idaho



This report provides selected results from the National Assessment of Educational Progress (NAEP) for Idaho's public school students at grade 4. Beginning in 1990, mathematics has been assessed in six different years at the state level (at grade 8 in 1990, and at both grades 4 and 8 in 1992, 1996, 2000, 2003, and 2005).

In the 2005 assessment, 52 jurisdictions participated: the 50 states, the District of Columbia, and the Department of Defense Schools (domestic and overseas). Idaho participated and met the criteria for reporting public school results.

NAEP is a project of the National Center for Education Statistics (NCES). For more information about the assessment, see *The Nation's Report Card, Mathematics 2005*, which is available on the NAEP website along with the full set of national and state results in an interactive database (<http://nces.ed.gov/nationsreportcard/>). Released test questions, scoring guides, and question-level performance data are also available on the website.

K E Y F I N D I N G S F O R 2 0 0 5

Grade 4:

- The average mathematics score for students in Idaho was 242. This was higher than that in 1992 (222) and was higher than that in 2003 (235).
- Idaho's average score (242) was higher than that of the nation's public schools (237).
- The percentage of students in Idaho who performed at or above *Proficient* was 40 percent. This was greater than that in 1992 (16 percent) and was greater than that in 2003 (31 percent).
- In Idaho, the percentage of students who performed at or above *Proficient* was greater than that for the nation's public schools (35 percent).
- The percentage of students in Idaho who performed at or above *Basic* was 86 percent. This was greater than that in 1992 (63 percent) and was greater than that in 2003 (80 percent).
- In Idaho, the percentage of students who performed at or above *Basic* was greater than that for the nation's public schools (79 percent).

The U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP) has provided software that generated user-selectable data, statistical significance test result statements, and technical descriptions of the NAEP assessments for this report. Content may be added or edited by states or other jurisdictions. This document, therefore, is not an official publication of the National Center for Education Statistics.

Introduction

What Was Assessed?

The content for each NAEP assessment is determined by the National Assessment Governing Board (NAGB). The objectives for each NAEP assessment are described in a "framework," a document that delineates the important content and process areas to be measured, as well as the types of questions to be included on the assessment. In 2000, NAGB awarded a contract to the Council of Chief State School Officers (CCSSO) to update the mathematics assessment framework for 2005. CCSSO established a steering committee, representative of national policy organizations, mathematics associations, research mathematicians, business and industry, and educators to develop policy recommendations for the mathematics assessment and to guide the direction and scope of the project. Care was taken to ensure that the diversity of opinion regarding mathematics issues was represented and reflected.

The mathematics framework for the 2005 National Assessment of Educational Progress is based on the frameworks that guided the 1990, 1992, 1996, 2000, and 2003 mathematics assessments. Those frameworks were developed with the guidance of the College Board and directed by NAGB. The 2005 NAEP mathematics framework calls for questions based on five mathematics content areas: number properties and operations; measurement; geometry; data analysis and probability; and algebra. The mathematics framework is available on the NAGB website (http://www.nagb.org/pubs/m_framework_05/761607-Math%20Framework.pdf).

The 2005 mathematics framework classifies test items in two dimensions—content area and mathematical complexity. Although the names of the content areas, as well as some of the topics in those areas, have changed from one framework to the next, a consistent focus has remained across frameworks on collecting information on student performance in the five content areas mentioned above. The two dimensions of mathematical ability and power in the 1996–2003 frameworks have been replaced in the 2005 framework by the dimension of mathematical complexity.

A combination of multiple-choice and constructed-response questions was used to assess students' mathematics performance. Short constructed-response questions ask students to provide the answer for a numerical problem or to briefly describe the solution to a problem. Longer constructed-response questions require students to produce both a solution and a justification, explanation, or interpretation for the solution. Released test questions, along with student performance data by state, are available on the NAEP website (<http://nces.ed.gov/nationsreportcard/itmlr/>).

The framework incorporates the use of calculators (four-function at grade 4 and scientific at grade 8), rulers, protractors (grade 8), and manipulatives such as spinners and geometric shapes. The use of these ancillary materials and the use of calculators were incorporated into some parts of the assessment, but not all. Calculator use was permitted on approximately one-third of the test questions.

Who Was Assessed?

Fifty-two jurisdictions participated in NAEP in 2005: the 50 states, the District of Columbia, and the Department of Defense Education Activity Schools (domestic and overseas). The target sample for each state or other jurisdiction was approximately 100 schools at each grade tested and approximately 3,000 students for each subject at each grade, except in small or sparsely populated jurisdictions.

The sample of schools and students was chosen in a two-stage sampling process. First, the sample of schools was selected by probability sampling methods. Then, within the participating schools, random samples of students were chosen.

Beginning in 2002, the national sample was obtained by aggregating the samples from each state. The national results include the results from the states and from a sample of private schools, weighted appropriately to represent the U.S. student population. Only public schools, however, are included in the state reports.

The overall participation rates for schools and students must meet guidelines established by the National Center for Education Statistics (NCES) and the National Assessment Governing Board (NAGB) in order for assessment results to be reported publicly. Participation rates before substitution needed to be at least 80 percent for schools and at least 85 percent for students in each subject and grade.

Participation rates for the 2005 mathematics assessment are available at the NAEP website (<http://nces.ed.gov/nationsreportcard/mathematics/sampledesign.asp>).

How Is Student Mathematics Performance Reported?

The results of student performance on the NAEP assessments are reported for various groups of students (e.g., fourth-grade female students or students who took the assessment in a particular year). NAEP does not produce scores for individual students, nor does it report scores for schools or for school districts. Some large urban districts, however, have voluntarily participated in the assessment on a trial basis and were sampled as states were sampled. Mathematics performance for groups of students is reported in two ways: as average scale scores and as achievement levels.

Scale Scores: Student performance is reported as an average score based on the NAEP mathematics scale, which ranges from 0 to 500 and is linked to the corresponding scales in 1990, 1992, 1996, 2000, and 2003. Subscales were created to reflect performance on each of the five content areas defined in the NAEP mathematics framework.

An overall composite scale was developed by weighting each of the mathematics subscales for the grade based on its relative importance in the framework. This composite scale is the metric used to present the average scale scores and selected percentiles used in NAEP reports.

Achievement Levels: Student performance is also reported in terms of three achievement levels—*Basic*, *Proficient*, and *Advanced*. Results based on achievement levels are expressed in terms of the percentage of students who attained each level. The three achievement levels are defined as follows:

- *Basic:* This level denotes partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade.
- *Proficient:* This level represents solid academic performance for each grade assessed. Students reaching this level have demonstrated competency over challenging subject matter, including subject-matter knowledge, application of such knowledge to real-world situations, and analytical skills appropriate to the subject matter.
- *Advanced:* This level signifies superior performance.

The achievement levels are cumulative. Therefore, students performing at the *Proficient* level also display the competencies associated with the *Basic* level, and students at the *Advanced* level demonstrate the competencies associated with both the *Basic* and the *Proficient* levels.

The achievement levels are performance standards adopted by the National Assessment Governing Board (NAGB) as part of its statutory responsibilities mandated by Congress. The levels represent collective judgments of what students should know and be able to do for each grade tested. They are based on recommendations made by broadly representative panels of classroom teachers, education specialists, and members of the general public from throughout the United States. As provided by law, the National Center for Education Statistics (NCES), upon review of congressionally mandated evaluations of NAEP, has determined that the achievement levels are to be used on a trial basis until it is determined that they are "reasonable, valid, and informative to the public." (No Child Left Behind Act of 2001, P.L., 107-110, 115 Stat.1425 [2002]). However, both NCES and NAGB believe these performance standards are useful for understanding trends in student achievement. They have been widely used by national and state officials as a common yardstick for academic performance. The mathematics achievement-level descriptions are summarized in figure 1.

Figure 1-A	The Nation's Report Card 2005 State Assessment
	Descriptions of NAEP mathematics achievement levels, grade 4

Basic Level (214)	Fourth-grade students performing at the <i>Basic</i> level should show some evidence of understanding the mathematical concepts and procedures in the five NAEP content areas.
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Fourth-graders performing at the *Basic* level should be able to estimate and use basic facts to perform simple computations with whole numbers, show some understanding of fractions and decimals, and solve some simple real-world problems in all NAEP content areas. Students at this level should be able to use—though not always accurately—four-function calculators, rulers, and geometric shapes. Their written responses are often minimal and presented without supporting information.

Proficient Level (249)	Fourth-grade students performing at the <i>Proficient</i> level should consistently apply integrated procedural knowledge and conceptual understanding to problem solving in the five NAEP content areas.
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Fourth-graders performing at the *Proficient* level should be able to use whole numbers to estimate, compute, and determine whether results are reasonable. They should have a conceptual understanding of fractions and decimals; be able to solve real-world problems in all NAEP content areas; and use four-function calculators, rulers, and geometric shapes appropriately. Students performing at the *Proficient* level should employ problem-solving strategies such as identifying and using appropriate information. Their written solutions should be organized and presented both with supporting information and explanations of how they were achieved.

Advanced Level (282)	Fourth-grade students performing at the <i>Advanced</i> level should apply integrated procedural knowledge and conceptual understanding to complex and nonroutine real-world problem solving in the five NAEP content areas.
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Fourth-graders performing at the *Advanced* level should be able to solve complex and nonroutine real-world problems in all NAEP content areas. They should display mastery in the use of four-function calculators, rulers, and geometric shapes. The students are expected to draw logical conclusions and justify answers and solution processes by explaining why, as well as how, they were achieved. They should go beyond the obvious in their interpretations and be able to communicate their thoughts clearly and concisely.

NOTE: The scores in parentheses indicate the cut point on the scale at which the achievement-level range begins.
SOURCE: National Assessment Governing Board. (2004). *Mathematics Framework for the 2005 National Assessment of Educational Progress*. Washington, DC: Author.

Assessing Students With Disabilities (SD) and/or English Language Learners (ELL)

The results displayed in this report and official publications of NAEP 2005 results are based on representative samples that include students with disabilities (SD) and students who are English language learners (ELL). Some of these students were assessed using accommodations (such as extra time and testing in small groups). In state NAEP mathematics assessments prior to 2000, no testing accommodations or adaptations were permitted for students with disabilities and students who were English language learners. However, research carried out by NAEP showed that the results for students who were accommodated could be combined with the results for unaccommodated students without compromising the validity of the NAEP scales in trend comparisons. Therefore, the SD and ELL students who were identified as SD or ELL and typically received accommodations in their classroom testing, and who required these accommodations to participate, also received them in the NAEP assessment, provided the accommodations did not change the nature of what was tested.

Students who had an Individualized Education Program (IEP) or were protected under Section 504 of the Rehabilitation Act of 1973 were to be included in the NAEP assessment except when

- the school's IEP team determined that the student could not participate, because the student's cognitive functioning was so severely impaired that she or he could not participate,
- the student's IEP required that the student had to be tested with an accommodation or adaptation that NAEP does not allow and the student could not demonstrate his or her knowledge without that accommodation.

All ELL who received academic instruction in English for three years or more were to be included in the assessment. Those ELL who received instruction in English for less than three years were to be included unless school staff judged them to be incapable of participating in the assessment in English.

In 2000, NAEP was administered using a split sample of schools—one sample in which accommodations were permitted for special-needs students who normally received them and another sample in which accommodations were not permitted. Therefore, there were two different sets of results available for 2000. The results for both samples are shown in the tables in this report. Results for the assessment years where accommodations were not permitted in state NAEP assessments (1990, 1992, 1996) are reported in the same tables as the results where accommodations were permitted (2000, 2003, and 2005).

Cautions in Interpreting Results

The averages and percentages in this report are estimates based on samples of students rather than on entire populations. Moreover, the collection of questions used at each grade level is only a sample of the many questions that could have been asked to assess the skills and abilities described in the NAEP framework. Therefore, the results are subject to a measure of uncertainty, reflected in the standard error of the estimates—a range of up to a few points above or below the score or percentage—which takes into account potential score fluctuation due to sampling error and measurement error. Statistical tests that factor in these standard errors are used to determine whether the differences between average scores or percentages are significant. All differences were tested for statistical significance at the .05 level.

NAEP sample sizes have increased since 2002 compared to previous years, resulting in smaller standard errors. As a consequence, smaller differences are detected as statistically significant than in previous assessments. In addition, estimates based on smaller groups are likely to have relatively large standard errors. As a consequence, some seemingly large differences may not be statistically significant. That is, it cannot be determined whether these differences are due to the particular makeup of the samples of students who were selected, or to true differences in the population of interest.

Differences between scores or between percentages are discussed in this report only when they are significant from a statistical perspective. Statistically significant differences are referred to as "significant differences" or "significantly different." Significant differences between 2005 and prior assessments are marked with a notation (*) in the tables. Any differences in scores within a year or across years that are mentioned in the text as "higher," "lower," "greater," or "smaller" are statistically significant.

It is important to note that simple cross-tabulations of a variable with measures of educational achievement, like the ones presented in this report, cannot constitute proof that a difference in the variable causes differences in educational achievement. There might be several reasons why the performance of one group of students might differ from another. Only through controlled experiments with random assignment of students to groups can we test hypotheses about the causes of performance differences.

NAEP 2005 Mathematics Overall Scale Score and Achievement-Level Results for Public School Students

Overall Scale Score Results

In this section student performance is reported as an average score based on the NAEP mathematics scale, which ranges from 0 to 500. Scores on this scale are comparable from 1990 through 2005.

Prior to 2000, testing accommodations were not provided for students with special needs in NAEP state mathematics assessments. For 2000, results are displayed for both the sample in which accommodations were permitted and the sample in which they were not permitted. Subsequent assessment results were based on the more inclusive samples. In the text of this report, comparisons to 2000 results refer only to the sample in which accommodations were permitted.

Table 1 presents the overall performance results of grade 4 public school students in Idaho, the nation (public), and the region. The list of states making up a given region for NAEP prior to 2003 differed from the list used by the U.S. Census Bureau which has been used in NAEP from 2003 onward. Therefore, the data for the state's region are given only for 2003 and 2005. The first column of results presents the average score on the NAEP mathematics scale. The remaining columns show the scores at selected percentiles. A percentile indicates the percentage of students whose scores fell at or below a particular score. For example, the 25th percentile demarks the cut point for the lowest 25 percent of students within the distribution of scale scores.

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Grade 4 Scale Score Results

- In 2005, the average scale score for students in Idaho was 242. This was higher than that for students across the nation (237).
- In Idaho, the average scale score for students in 2005 was higher than that in 1992 (222).
- In Idaho, the average scale score for students in 2005 was higher than that in 2000 (224).
- In Idaho, the average scale score for students in 2005 was higher than that in 2003 (235).
Similarly, the average scale score for students in public schools across the nation in 2005 was higher than that in 2003 (234).

**Table
1**

The Nation's Report Card 2005 State Assessment

Average mathematics scale scores and selected percentiles, grade 4 public schools: various years, 1992–2005

Year and jurisdiction		Average scale score	10th Percentile	25th Percentile	50th Percentile	75th Percentile	90th Percentile
1992 ¹	Nation (public)	219(0.8)*	176(1.1)*	197(0.8)*	220(0.9)*	241(1.3)*	259(0.8)*
	Idaho	222(1.0)*	186(2.3)*	204(1.9)*	223(1.2)*	241(0.8)*	256(1.1)*
2000 ¹	Nation (public)	226(1.0)*	185(1.1)*	206(1.4)*	228(0.9)*	249(1.2)*	265(0.9)*
	Idaho	227(1.2)*	191(3.3)*	210(1.5)*	229(1.8)*	246(1.1)*	261(1.2)*
2000	Nation (public)	224(1.0)*	183(1.4)*	203(1.4)*	225(1.3)*	247(1.2)*	264(1.0)*
	Idaho	224(1.4)*	187(3.2)*	207(1.7)*	228(1.2)*	245(1.0)*	259(1.2)*
2003	Nation (public)	234(0.2)*	196(0.3)*	215(0.3)*	235(0.2)*	254(0.3)*	270(0.2)*
	West ²	230(0.5)*	191(0.6)*	210(0.7)*	231(0.5)*	251(0.6)*	267(0.8)*
	Idaho	235(0.7)*	200(1.1)*	218(0.9)*	237(0.7)*	253(1.0)*	267(0.5)*
2005	Nation (public)	237(0.2)	199(0.3)	219(0.2)	239(0.2)	257(0.2)	272(0.2)
	West ²	233(0.4)	193(0.6)	213(0.4)	235(0.4)	254(0.5)	270(0.5)
	Idaho	242(0.7)	208(1.3)	226(1.4)	243(1.3)	259(1.1)	273(1.8)

* Value is significantly different from the value for the same jurisdiction in 2005.

¹ Accommodations were not permitted for this assessment.

² The four regions defined by the U.S. Census Bureau are Northeast, South, Midwest, and West.

NOTE: The NAEP mathematics scale ranges from 0 to 500. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

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

Overall Achievement-Level Results

In this section student performance is reported as the percentage of students performing relative to performance standards set by the National Assessment Governing Board (NAGB). These performance standards for what students should know and be able to do were based on the recommendations of broadly representative panels of educators and members of the public.

In 2000 only, results were obtained for two student samples: one for which accommodations were permitted and one for which accommodations were not permitted. However, in the text of this report, comparisons to 2000 results refer only to the sample in which accommodations were permitted.

Table 2 presents the percentage of students at grade 4 who performed below *Basic*, at or above *Basic*, at or above *Proficient*, and at the *Advanced* level. Because the percentages are cumulative from *Basic* to *Proficient* to *Advanced*, they sum to more than 100 percent. Only the percentage of students performing at or above *Basic* (which includes the students at *Proficient* and *Advanced*) plus the students below *Basic* will sum to 100 percent (except for rounding).

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Grade 4 Achievement-Level Results

- In 2005, the percentage of Idaho's students who performed at or above *Proficient* was 40 percent. This was greater than the percentage of the nation's public school students who performed at or above *Proficient* (35 percent).
- In Idaho, the percentage of students who performed at or above *Proficient* in 2005 was greater than that in 1992 (16 percent).
- In Idaho, the percentage of students who performed at or above *Proficient* in 2005 was greater than that in 2000 (20 percent).
- In Idaho, the percentage of students who performed at or above *Proficient* in 2005 was greater than that in 2003 (31 percent).

**Table
2**

The Nation's Report Card 2005 State Assessment

Percentage of students at or above mathematics achievement levels, grade 4 public schools: various years, 1992–2005

Year and jurisdiction		Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
1992 ¹	Nation (public)	43(1.2)*	57(1.2)*	17(1.1)*	2(0.3)*
	Idaho	37(1.7)*	63(1.7)*	16(1.0)*	1(0.3)*
2000 ¹	Nation (public)	33(1.2)*	67(1.2)*	25(1.2)*	2(0.3)*
	Idaho	29(1.7)*	71(1.7)*	21(1.6)*	1(0.4)*
2000	Nation (public)	36(1.4)*	64(1.4)*	22(1.1)*	2(0.3)*
	Idaho	32(1.8)*	68(1.8)*	20(1.5)*	1(0.4)*
2003	Nation (public)	24(0.3)*	76(0.3)*	31(0.3)*	4(0.1)*
	West ²	29(0.7)*	71(0.7)*	27(0.8)*	3(0.3)*
	Idaho	20(1.0)*	80(1.0)*	31(1.1)*	2(0.4)*
2005	Nation (public)	21(0.2)	79(0.2)	35(0.2)	5(0.1)
	West ²	26(0.5)	74(0.5)	31(0.6)	4(0.2)
	Idaho	14(0.8)	86(0.8)	40(1.6)	5(0.6)

* Value is significantly different from the value for the same jurisdiction in 2005.

¹ Accommodations were not permitted for this assessment.

² The four regions defined by the U.S. Census Bureau are Northeast, South, Midwest, and West.

NOTE: Achievement levels correspond to the following points on the NAEP mathematics scale: below *Basic*, 213 or lower; *Basic*, 214–248; *Proficient*, 249–281; and *Advanced*, 282 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

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

Comparisons Between Idaho, the Nation, and Other Participating States and Jurisdictions

Fifty-two jurisdictions participated in the mathematics assessment in 2005. These include the 50 states, the District of Columbia, and the Department of Defense Education Activity (DoDEA) schools (domestic and overseas). Previous NAEP reports presented results for the Department of Defense Dependents Schools (DoDDS) overseas and the Department of Defense Domestic Dependent Elementary and Secondary Schools (DDESS) in the United States separately. Data for the two jurisdictions in prior years have been retroactively combined to provide comparable data for the single DoDEA jurisdiction.

Comparisons by Average Scale Scores

Figure 2 compares Idaho's 2005 overall mathematics scale scores at grade 4 with those of public schools in the nation and all other participating states and jurisdictions. The different shadings indicate whether the average score of the nation (public), a state, or a jurisdiction was found to be higher than, lower than, or not significantly different from that of Idaho in the NAEP 2005 mathematics assessment.

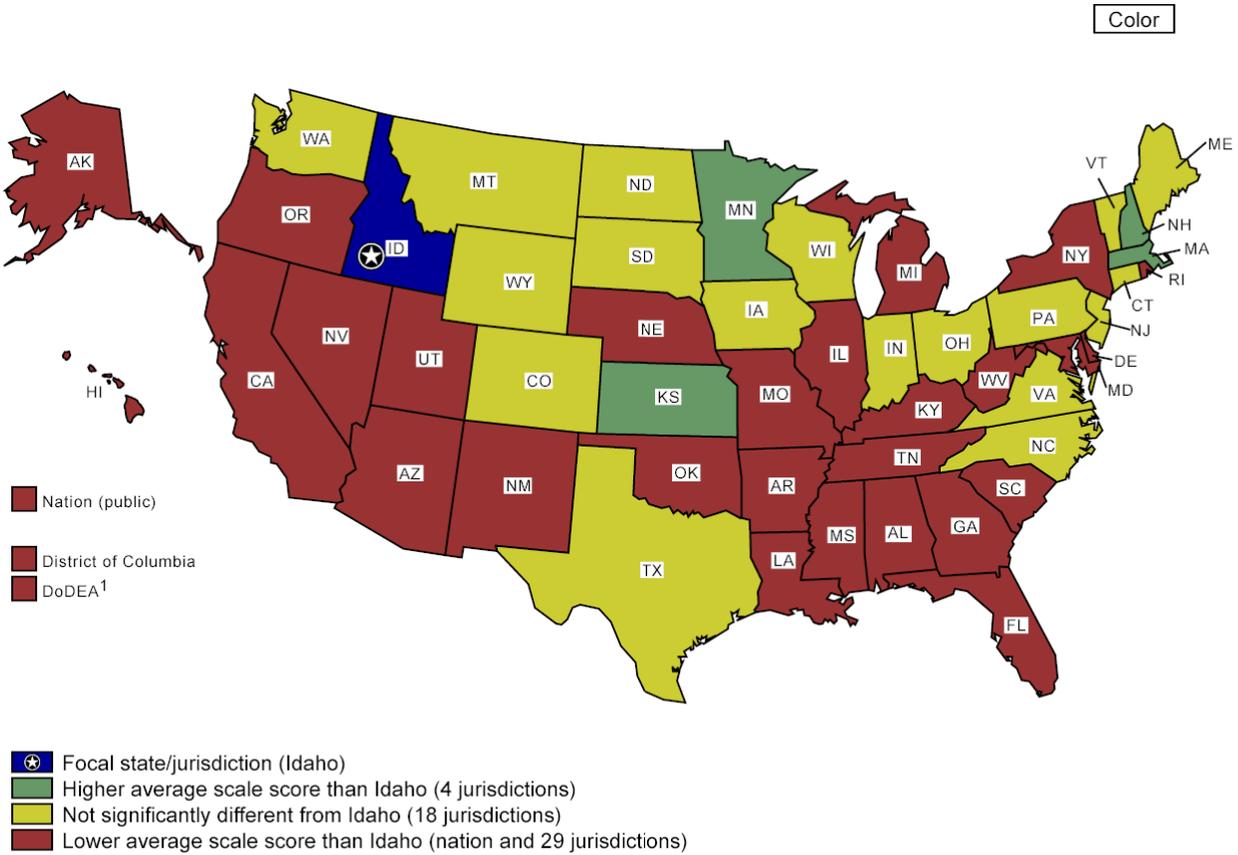
Grade 4 Scale Score Comparisons Results

- Students' average scores in Idaho were higher than those in 29 jurisdictions, not significantly different from those in 18 jurisdictions, and lower than those in 4 jurisdictions.

The Nation's Report Card 2005 State Assessment

Figure 2

Idaho's average mathematics scale score compared with scores for the nation and other participating jurisdictions, grade 4 public schools: 2005



¹ Department of Defense Education Activity schools (domestic and overseas).

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

Comparisons by Achievement Levels

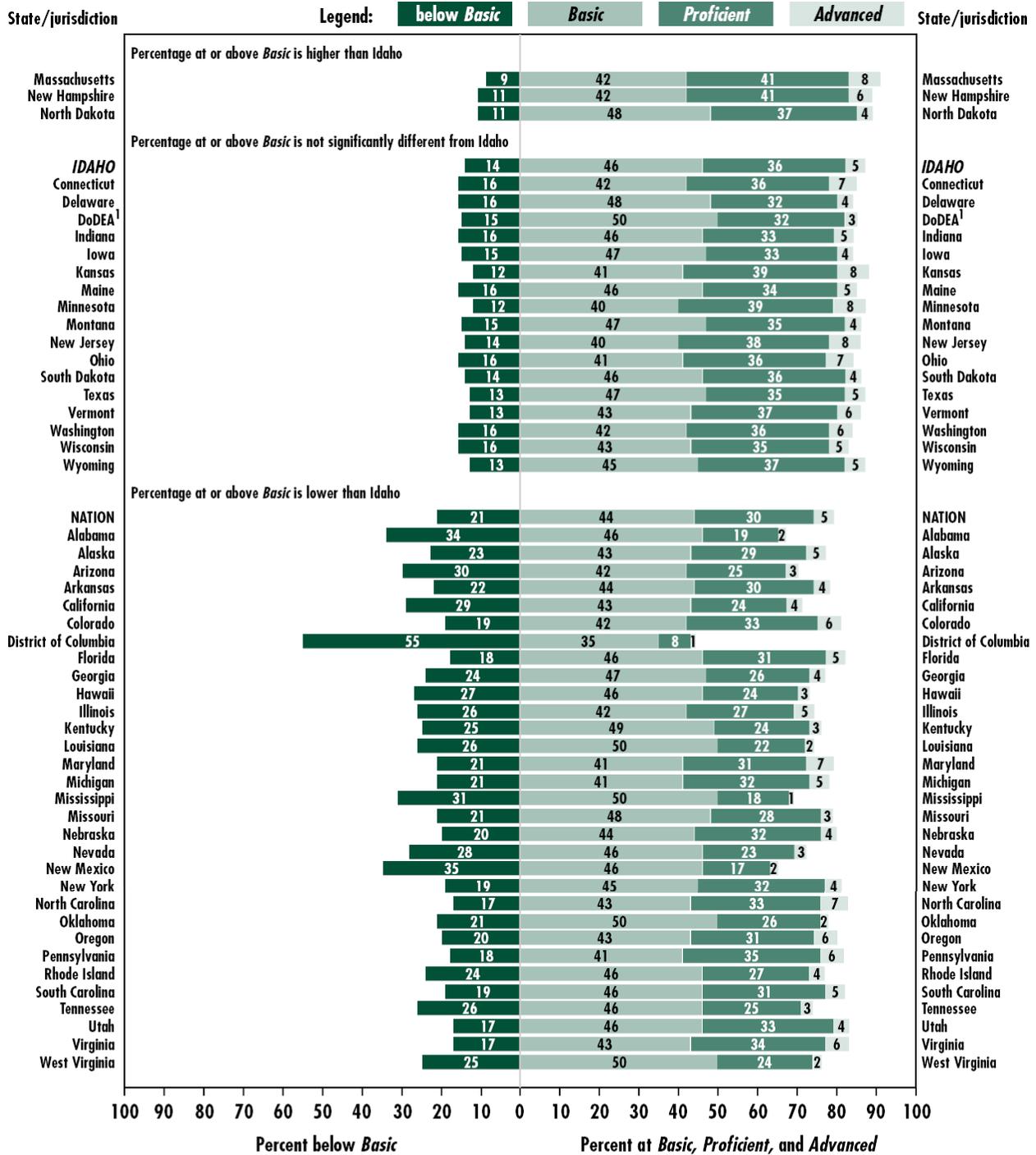
Figure 3 permits comparisons of all jurisdictions (and the nation) participating in the NAEP 2005 mathematics assessment in terms of percentages of grade 4 students performing at or above *Basic*. The participating states and jurisdictions are grouped into categories reflecting whether the percentage of their students performing at or above *Basic* (including *Proficient* and *Advanced*) was found to be higher than, not significantly different from, or lower than the percentage in Idaho. Note that the selected state and the nation are listed first in their category and the other states and jurisdictions within each category are listed alphabetically; statistical comparisons among jurisdictions in each of the three categories are not included in this report.

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Figure 3

Percentage of students within each mathematics achievement level, and Idaho's percentage at or above *Basic* compared with the nation and other participating jurisdictions, grade 4 public schools: By state, 2005



¹ Department of Defense Education Activity schools (domestic and overseas).

NOTE: The bars above contain percentages of students in each NAEP mathematics achievement level. Achievement levels corresponding to each population of students are aligned at the point where the *Proficient* category begins, so that they may be compared at *Basic* and above. Detail may not sum to totals because of rounding. The shaded bars are graphed using unrounded numbers. Significance tests used a multiple-comparison procedure based on all jurisdictions that participated.

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

Mathematics Performance of Selected Student Groups

This section of the report presents trend results for students in Idaho and the nation by demographic characteristics. Student performance data are reported for

- gender
- race/ethnicity
- student eligibility for free/reduced-price school lunch
- type of location (for 2005 only) .

Definitions of NAEP reporting groups are available on the NAEP website (<http://nces.ed.gov/nationsreportcard/mathematics/results2005/interpret-results.asp#RepGroups>).

Each of the variables is reported in tables that present the percentage of students belonging to each group in the first column and the average scale score in the second column. The columns to the right show the percentage of students below *Basic* and at or above each achievement level.

Differences between scores or percentages mentioned in the text are calculated using unrounded values. The result of subtracting the rounded values displayed in the tables may differ (usually by one point) from the results that would be obtained by subtracting the unrounded values.

The reader is cautioned against making causal inferences about the performance of groups of students relative to demographic variables. Many factors other than those discussed here, including home and school factors, may affect student performance.

NAEP collects information on many additional variables, including school and home factors related to achievement. All of this information is in an interactive database available on the NAEP website (<http://nces.ed.gov/nationsreportcard/>).

Gender

Information on student gender is reported by the student's school when rosters of the students eligible to be assessed are submitted to NAEP.

Table 3 shows average scale scores and achievement-level data for public school students at grade 4 in Idaho and the nation by gender. In 2000 only, results were obtained for student samples for which accommodations were permitted and those for which accommodations were not permitted. However, in the text of this report, comparisons to 2000 results refer only to the sample for which accommodations were permitted.

Grade 4 Scale Score Results by Gender

- In 2005, male students in Idaho had an average score that was not found to be significantly different from that of female students. In 1992, the average score for male students was higher than that of female students by 3 points.
- In 2005, male students in Idaho had an average scale score in mathematics (242) that was higher than that of male students in public schools across the nation (238). Similarly, female students in Idaho had an average scale score (241) that was higher than that of female students across the nation (236).
- In Idaho, the average scale scores of both males and females were higher in 2005 than in 1992.
- In Idaho, the average scale scores of both males and females were higher in 2005 than in 2000.
- In Idaho, the average scale scores of both males and females were higher in 2005 than in 2003.

Grade 4 Achievement-Level Results by Gender

- In the 2005 assessment, 42 percent of males and 39 percent of females performed at or above *Proficient* in Idaho. The difference between these percentages was not significant.
- The percentage of males in Idaho's public schools who were at or above *Proficient* in 2005 (42 percent) was greater than that of males in the nation (37 percent).
- The percentage of females in Idaho's public schools who were at or above *Proficient* in 2005 (39 percent) was greater than that of females in the nation (33 percent).
- In Idaho, the percentages of both males and females performing at or above *Proficient* were greater in 2005 than in 1992.
- In Idaho, the percentages of both males and females performing at or above *Proficient* were greater in 2005 than in 2000.
- In Idaho, the percentages of both males and females performing at or above *Proficient* were greater in 2005 than in 2003.

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**Table
3**

Average mathematics scale scores and percentage of students at or above each achievement level, by gender, grade 4 public schools: various years, 1992–2005

Gender		Percent of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
Male							
1992 ¹	Nation (public)	50(0.7)	220(0.9)*	41(1.3)*	59(1.3)*	19(1.2)*	2(0.4)*
	Idaho	49(0.8)	223(1.1)*	35(2.1)*	65(2.1)*	17(1.1)*	1(0.4)*
2000 ¹	Nation (public)	51(0.7)	227(1.1)*	32(1.2)*	68(1.2)*	27(1.3)*	3(0.4)*
	Idaho	50(1.2)	227(1.5)*	29(2.1)*	71(2.1)*	23(2.2)*	1(0.4)*
2000	Nation (public)	51(0.6)	225(1.1)*	35(1.5)*	65(1.5)*	25(1.3)*	3(0.4)*
	Idaho	50(1.1)	224(1.7)*	33(2.4)*	67(2.4)*	20(2.0)*	1(0.5)*
2003	Nation (public)	51(0.2)	235(0.3)*	23(0.4)*	77(0.4)*	34(0.4)*	5(0.2)*
	Idaho	51(0.8)	237(0.8)*	19(1.2)*	81(1.2)*	34(1.3)*	3(0.6)*
2005	Nation (public)	51(0.2)	238(0.2)	20(0.2)	80(0.2)	37(0.3)	6(0.1)
	Idaho	51(1.0)	242(1.0)	14(1.1)	86(1.1)	42(2.2)	6(0.9)
Female							
1992 ¹	Nation (public)	50(0.7)	218(1.1)*	44(1.8)*	56(1.8)*	16(1.4)*	1(0.3)*
	Idaho	51(0.8)	220(1.1)*	40(1.8)*	60(1.8)*	14(1.2)*	#(***)
2000 ¹	Nation (public)	49(0.7)	225(1.0)*	34(1.4)*	66(1.4)*	22(1.3)*	2(0.4)*
	Idaho	50(1.2)	227(1.3)*	30(1.9)*	70(1.9)*	20(1.8)*	1(0.6)*
2000	Nation (public)	49(0.6)	223(1.1)*	38(1.7)*	62(1.7)*	20(1.3)*	1(0.4)*
	Idaho	50(1.1)	225(1.5)*	32(2.1)*	68(2.1)*	19(1.9)*	1(0.3)*
2003	Nation (public)	49(0.2)	233(0.2)*	25(0.4)*	75(0.4)*	29(0.3)*	3(0.1)*
	Idaho	49(0.8)	233(0.9)*	22(1.3)*	78(1.3)*	27(1.4)*	2(0.4)*
2005	Nation (public)	49(0.2)	236(0.2)	21(0.2)	79(0.2)	33(0.3)	4(0.1)
	Idaho	49(1.0)	241(0.7)	14(0.9)	86(0.9)	39(1.7)	3(0.6)

Estimate rounds to zero.

* Value is significantly different from the value for the same jurisdiction in 2005.

¹ Accommodations were not permitted for this assessment.

NOTE: The NAEP mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scale: below *Basic*, 213 or lower; *Basic*, 214–248; *Proficient*, 249–281; and *Advanced*, 282 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

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

Race/Ethnicity

Schools reported the racial/ethnic subgroup that best described the students eligible to be assessed. The six mutually exclusive categories are White, Black, Hispanic, Asian/Pacific Islander, American Indian/Alaska Native, and Unclassified. Black includes African American, Hispanic includes Latino, and Pacific Islander includes Native Hawaiian. Race categories exclude Hispanic origin unless specified. Table 4 shows average scale scores and achievement-level data for public school students at grade 4 in Idaho and the nation by race/ethnicity. In 2000 only, results were obtained for student samples for which accommodations were permitted and those for which accommodations were not permitted. However, in the text of this report, comparisons to 2000 results refer only to the sample for which accommodations were permitted.

Grade 4 Scale Score Results by Race/Ethnicity

- In 2005, White students in Idaho had an average scale score that was higher than that of Hispanic students.
- The average scale scores of White and Hispanic students in Idaho were higher in 2005 than in 1992.
- The average scale scores of White and Hispanic students in Idaho were higher in 2005 than in 2000.
- The average scale scores of White and Hispanic students in Idaho were higher in 2005 than in 2003.
- Data are not reported for Black students in 2005, because reporting standards were not met.
- In 2005, Hispanic students had an average score that was lower than that of White students by 19 points. In 1992, the average score for Hispanic students was lower than that of White students by 24 points.

Grade 4 Achievement-Level Results by Race/Ethnicity

- In Idaho in 2005, the percentage of White students performing at or above *Proficient* was greater than that of Hispanic students.
- The respective percentages of White and Hispanic students in Idaho performing at or above *Proficient* were greater in 2005 than in 1992.
- The respective percentages of White and Hispanic students in Idaho performing at or above *Proficient* were greater in 2005 than in 2000.
- The percentage of White students in Idaho performing at or above *Proficient* was greater in 2005 than in 2003. The differences between the percentages of Hispanic students in Idaho performing at or above *Proficient* in 2003 and the percentage in 2005 was not found to be significant.

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**Table
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Average mathematics scale scores and percentage of students at or above each achievement level, by race/ethnicity, grade 4 public schools: various years, 1992–2005

Race/ethnicity		Percent of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
White							
1992 ¹	Nation (public)	72(0.7)*	227(0.9)*	32(1.3)*	68(1.3)*	22(1.5)*	2(0.4)*
	Idaho	92(0.8)*	223(0.9)*	35(1.7)*	65(1.7)*	17(1.0)*	1(0.3)*
2000 ¹	Nation (public)	67(0.7)*	234(1.1)*	22(1.3)*	78(1.3)*	32(1.5)*	3(0.4)*
	Idaho	84(1.4)	230(1.3)*	25(1.7)*	75(1.7)*	24(1.7)*	1(0.5)*
2000	Nation (public)	62(1.9)*	233(0.9)*	24(1.5)*	76(1.5)*	30(1.4)*	3(0.5)*
	Idaho	85(1.3)	227(1.4)*	29(1.9)*	71(1.9)*	21(1.8)*	1(0.4)*
2003	Nation (public)	58(0.4)*	243(0.2)*	13(0.2)*	87(0.2)*	42(0.3)*	5(0.2)*
	Idaho	83(1.2)	238(0.6)*	16(0.8)*	84(0.8)*	34(1.3)*	3(0.4)*
2005	Nation (public)	57(0.3)	246(0.2)	11(0.2)	89(0.2)	47(0.3)	7(0.1)
	Idaho	82(1.0)	245(0.8)	10(0.8)	90(0.8)	44(1.9)	5(0.7)
Black							
1992 ¹	Nation (public)	18(0.5)	192(1.4)*	78(2.0)*	22(2.0)*	2(0.6)*	#(***)
	Idaho	#(0.1)*	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
2000 ¹	Nation (public)	17(0.4)	204(1.6)*	64(2.5)*	36(2.5)*	5(0.8)*	#(***)
	Idaho	1(0.3)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
2000	Nation (public)	17(1.2)	203(1.2)*	65(1.9)*	35(1.9)*	4(0.8)*	#(***)
	Idaho	1(0.3)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
2003	Nation (public)	17(0.3)	216(0.4)*	46(0.7)*	54(0.7)*	10(0.3)*	#(0.1)*
	Idaho	1(0.2)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
2005	Nation (public)	17(0.3)	220(0.3)	40(0.5)	60(0.5)	13(0.3)	1(0.1)
	Idaho	1(0.2)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)

See notes at end of table.

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**Table
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Average mathematics scale scores and percentage of students at or above each achievement level, by race/ethnicity, grade 4 public schools: various years, 1992–2005—Continued

Race/ethnicity		Percent of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
Hispanic							
1992 ¹	Nation (public)	7(0.6)*	201(1.7)*	68(2.9)*	32(2.9)*	5(1.2)*	#(***)
	Idaho	6(0.7)*	199(3.2)*	71(5.6)*	29(5.6)*	3(1.5)*	#(***)
2000 ¹	Nation (public)	11(0.5)*	209(1.8)*	55(2.6)*	45(2.6)*	8(1.2)*	#(***)
	Idaho	11(0.9)	208(4.2)*	57(6.9)*	43(6.9)*	6(2.5)*	#(***)
2000	Nation (public)	16(1.2)*	207(1.5)*	59(2.6)*	41(2.6)*	7(1.0)*	#(0.1)*
	Idaho	11(1.0)	207(3.8)*	57(5.1)*	43(5.1)*	6(2.4)*	1(***)
2003	Nation (public)	19(0.4)*	221(0.4)*	38(0.7)*	62(0.7)*	15(0.5)*	1(0.1)*
	Idaho	13(1.2)	217(1.6)*	45(3.2)*	55(3.2)*	11(2.0)	1(0.5)
2005	Nation (public)	20(0.3)	225(0.3)	33(0.5)	67(0.5)	19(0.3)	1(0.1)
	Idaho	13(1.1)	226(1.9)	32(2.9)	68(2.9)	17(2.6)	1(0.6)
Asian/Pacific Islander							
1992 ¹	Nation (public)	3(0.3)*	231(2.3)*	26(3.5)*	74(3.5)*	27(4.0)*	4(2.0)*
	Idaho	1(0.2)*	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
2000 ¹	Nation (public)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
	Idaho	1(0.3)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
2000	Nation (public)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
	Idaho	1(0.3)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
2003	Nation (public)	4(0.2)	246(1.2)*	13(1.0)*	87(1.0)*	48(2.0)*	10(1.2)*
	Idaho	1(0.2)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
2005	Nation (public)	4(0.1)	251(0.7)	11(0.5)	89(0.5)	54(1.1)	14(0.9)
	Idaho	2(0.3)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)

See notes at end of table.

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**Table
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Average mathematics scale scores and percentage of students at or above each achievement level, by race/ethnicity, grade 4 public schools: various years, 1992–2005—Continued

Race/ethnicity		Percent of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
American Indian/Alaska Native							
1992 ¹	Nation (public)	1 (0.2)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
	Idaho	1 (0.3)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
2000 ¹	Nation (public)	1 (0.3)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
	Idaho	1 (0.2)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
2000	Nation (public)	1 (0.3)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
	Idaho	1 (0.4)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
2003	Nation (public)	1 (0.1)	224(1.1)*	35(1.7)	65(1.7)	18(1.3)*	1(0.6)
	Idaho	1 (0.6)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
2005	Nation (public)	1 (0.1)	227(1.0)	31(1.7)	69(1.7)	22(1.2)	2(0.5)
	Idaho	2(0.5)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
Unclassified²							
1992 ¹	Nation (public)	#(0.1)*	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
	Idaho	#(0.1)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
2000 ¹	Nation (public)	1(0.1)*	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
	Idaho	2(***)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
2000	Nation (public)	1(0.1)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
	Idaho	1(***)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
2003	Nation (public)	1(0.0)*	236(1.1)*	20(1.9)	80(1.9)	32(1.7)*	3(0.7)
	Idaho	#(0.1)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
2005	Nation (public)	1(0.0)	240(0.9)	18(1.4)	82(1.4)	38(2.0)	5(1.0)
	Idaho	#(0.1)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)

Estimate rounds to zero.

‡ Reporting standards are not met.

* Value is significantly different from the value for the same jurisdiction in 2005.

¹ Accommodations were not permitted for this assessment.

² "Unclassified" students are those whose school-reported race was "other" or "unavailable," or was missing, and who self-reported more than one race category or none. The six mutually exclusive categories are White, Black, Hispanic, Asian/Pacific Islander, American Indian/Alaska Native, and Unclassified. Black includes African American, Hispanic includes Latino, and Pacific Islander includes Native Hawaiian. Race categories exclude Hispanic origin unless specified.

NOTE: The NAEP mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scale: below *Basic*, 213 or lower; *Basic*, 214–248; *Proficient*, 249–281; and *Advanced*, 282 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

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

Student Eligibility for Free/Reduced-Price School Lunch

NAEP collects data on eligibility for the federal program providing free or reduced-price school lunches. The free/reduced-price lunch component of the National School Lunch Program (NSLP) offered through the U.S. Department of Agriculture (USDA) is designed to ensure that children near or below the poverty line receive nourishing meals. Eligibility is determined through the USDA's Income Eligibility Guidelines, and results for this category of students are included as an indicator of lower family income. NAEP first collected information on participation in this program in 1996; therefore, cross-year comparisons to assessments prior to 1996 cannot be made.

Table 5 shows average scale scores and achievement-level data for public school students at grade 4 in Idaho and the nation by eligibility for free/reduced-price lunch. In 2000 only, results were obtained for student samples for which accommodations were permitted and those for which accommodations were not permitted. However, in the text of this report, comparisons to 2000 results refer only to the sample for which accommodations were permitted.

Grade 4 Achievement-Level Results by Free/Reduced-Price Lunch Eligibility

- In Idaho in 2005, 28 percent of students who were eligible for free/reduced-price lunch and 50 percent of those who were not eligible for this program performed at or above *Proficient*. These percentages were found to be significantly different from one another.
- For students in Idaho in 2005 who were eligible for free/reduced-price lunch, the percentage at or above *Proficient* (28 percent) was greater than the corresponding percentage for their counterparts around the nation (19 percent).
- In Idaho, the percentage of students eligible for free/reduced-price lunch who performed at or above *Proficient* for 2005 (28 percent) was greater than the corresponding percentage (12 percent) for 2000.
- In Idaho, the percentage of students eligible for free/reduced-price lunch who performed at or above *Proficient* for 2005 (28 percent) was greater than the corresponding percentage (20 percent) for 2003.

Grade 4 Scale Score Results by Free/Reduced-Price Lunch Eligibility

- In 2005, students in Idaho eligible for free/reduced-price lunch had an average mathematics scale score of 234. This was lower than that of students in Idaho not eligible for this program (248).
- In 2005, students who were eligible for free/reduced-price school lunch had an average score that was lower than that of students who were not eligible for free/reduced-price school lunch by 14 points. In 2000, the average score for students who were eligible for free/reduced-price school lunch was lower than the score of those not eligible by 17 points.
- Students in Idaho eligible for free/reduced-price lunch had an average scale score (234) in 2005 that was higher than that of students in the nation who were eligible (225).
- In Idaho, students eligible for free/reduced-priced lunch had an average mathematics scale score in 2005 (234) that was higher than that of eligible students in 2000 (214).
- In Idaho, students eligible for free/reduced-priced lunch had an average mathematics scale score in 2005 (234) that was higher than that of eligible students in 2003 (227).

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**Table
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Average mathematics scale scores and percentage of students at or above each achievement level, by eligibility for free/reduced-price school lunch, grade 4 public schools: various years, 2000–2005

Eligibility status		Percent of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
Eligible							
2000 ¹	Nation (public)	35(1.1)*	210(1.0)*	54(1.5)*	46(1.5)*	9(0.8)*	#(0.1)*
	Idaho	41(1.7)	217(1.8)*	41(2.3)*	59(2.3)*	13(1.7)*	#(0.2)*
2000	Nation (public)	40(1.6)*	208(0.9)*	57(1.5)*	43(1.5)*	7(0.8)*	#(0.1)*
	Idaho	42(2.0)	214(2.5)*	45(3.0)*	55(3.0)*	12(1.9)*	1(0.3)
2003	Nation (public)	44(0.5)*	222(0.3)*	38(0.5)*	62(0.5)*	15(0.3)*	1(0.1)*
	Idaho	43(1.5)	227(0.9)*	31(1.6)*	69(1.6)*	20(1.4)*	1(0.5)
2005	Nation (public)	46(0.3)	225(0.2)	33(0.3)	67(0.3)	19(0.3)	1(0.1)
	Idaho	43(1.5)	234(1.0)	21(1.4)	79(1.4)	28(1.5)	2(0.6)
Not eligible							
2000 ¹	Nation (public)	52(2.4)	236(1.3)*	21(1.4)*	79(1.4)*	33(1.6)*	4(0.6)*
	Idaho	52(3.0)	234(1.3)*	20(1.8)*	80(1.8)*	28(2.2)*	2(0.7)*
2000	Nation (public)	49(2.4)	235(1.2)*	23(1.7)*	77(1.7)*	32(1.7)*	4(0.5)*
	Idaho	52(2.9)	232(1.3)*	23(2.0)*	77(2.0)*	26(2.3)*	2(0.4)*
2003	Nation (public)	52(0.5)	244(0.3)*	12(0.3)*	88(0.3)*	45(0.5)*	6(0.2)*
	Idaho	50(1.9)*	241(0.8)*	13(1.1)*	87(1.1)*	38(1.5)*	3(0.6)*
2005	Nation (public)	52(0.3)	248(0.2)	10(0.2)	90(0.2)	50(0.3)	8(0.2)
	Idaho	56(1.6)	248(0.9)	8(0.9)	92(0.9)	50(2.6)	7(0.9)
Information not available							
2000 ¹	Nation (public)	13(2.4)*	235(2.3)	23(3.3)	77(3.3)	35(3.4)	3(0.9)
	Idaho	7(2.9)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
2000	Nation (public)	11(2.1)*	236(2.3)	22(3.1)	78(3.1)	35(3.4)	4(0.9)
	Idaho	6(2.6)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
2003	Nation (public)	4(0.3)*	235(1.5)	23(1.9)	77(1.9)	34(1.9)	4(0.5)
	Idaho	6(1.9)*	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
2005	Nation (public)	2(0.2)	237(1.6)	21(1.8)	79(1.8)	36(2.2)	5(0.9)
	Idaho	1(0.6)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)

Estimate rounds to zero.

‡ Reporting standards are not met.

* Value is significantly different from the value for the same jurisdiction in 2005.

¹ Accommodations were not permitted for this assessment.

NOTE: The NAEP mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scale: below *Basic*, 213 or lower; *Basic*, 214–248; *Proficient*, 249–281; and *Advanced*, 282 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000–2005 Mathematics Assessments.

Type of Location

Schools that participated in the assessment were classified as being located in three mutually exclusive types of community: central city, urban fringe/large town, and rural/small town. These categories indicate the geographic locations of schools. "Central city" is geographical term meaning the largest city of a Metropolitan Statistical Area and is not synonymous with "inner city." The criteria for classifying schools with respect to type of location changed for 2005, therefore comparisons with prior years are not provided.

Table 6 shows average scale scores and achievement-level data for public school students at grade 4 in Idaho and the nation by type of location.

Grade 4 Scale Score Results by Type of Location

- In 2005, in Idaho, the average scale score of students attending schools in central city locations was not found to be significantly different from those of students in urban fringe and rural schools.
- In 2005, students attending public schools in central city locations in Idaho had an average scale score (243) that was higher than the average scale score of students in central city locations in the nation (232).
- In 2005, students attending public schools in urban fringe locations in Idaho had an average scale score (242) that was not significantly different from the average scale score of students in urban fringe locations in the nation (241).
- In 2005, students attending public schools in rural locations in Idaho had an average scale score (240) that was higher than the average scale score of students in rural locations in the nation (238).

Grade 4 Achievement-Level Results by Type of Location

- In 2005, the percentage of students attending schools in central city locations in Idaho who performed at or above *Proficient* was not found to be significantly different from the corresponding percentages of students in urban fringe and rural schools.
- The percentage of students in Idaho's public schools in central city locations who were at or above *Proficient* (43) in 2005 was greater than that of students in central city locations in the nation (29).
- The percentage of students in Idaho's public schools in urban fringe locations who were at or above *Proficient* (41) in 2005 was not significantly different from that of students in urban fringe locations in the nation (40).
- The percentage of students in Idaho's public schools in rural locations who were at or above *Proficient* (38) in 2005 was not significantly different from that of students in rural locations in the nation (35).

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**Table
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Average mathematics scale scores and percentage of students at or above each achievement level, by type of location, grade 4 public schools: 2005

Type of location		Percent of students	Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At <i>Advanced</i>
Central city							
2005	Nation (public)	31(0.3)	232(0.3)*	28(0.4)*	72(0.4)*	29(0.4)*	4(0.2)
	Idaho	32(1.9)	243(1.6)	13(1.8)	87(1.8)	43(3.3)	6(1.0)
Urban fringe							
2005	Nation (public)	44(0.3)*	241(0.2)	17(0.3)*	83(0.3)*	40(0.4)	6(0.2)
	Idaho	26(1.5)	242(1.2)	13(1.3)	87(1.3)	41(1.9)	4(1.1)
Rural							
2005	Nation (public)	25(0.3)*	238(0.3)*	18(0.3)*	82(0.3)*	35(0.4)	4(0.2)
	Idaho	42(1.8)	240(1.1)	15(1.3)	85(1.3)	38(2.1)	5(0.9)

* Value is significantly different from the value for Idaho.

NOTE: The NAEP mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scale: below *Basic*, 213 or lower; *Basic*, 214–248; *Proficient*, 249–281; and *Advanced*, 282 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

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

Toward a More Inclusive NAEP: Students With Disabilities and English Language Learners

It is important to assess all students selected in the randomized sampling process, including students with disabilities (SD) and students who are classified by their schools as English language learners (ELL). Some students sampled for participation in NAEP can be excluded from the sample according to carefully defined criteria. School personnel, guided by the student's Individualized Education Program (IEP), as well as eligibility for Section 504 services, make decisions regarding inclusion of students with disabilities in the assessment. They also make decisions regarding inclusion of English language learners, based on NAEP's guidelines, by evaluating the student's capability of participating in the assessment given the available accommodations, and taking into consideration the number of years the student has been receiving instruction in English. The results displayed in this report and in other publications of the NAEP 2005 mathematics results are based on representative samples that include SD and ELL students who were assessed either with or without accommodations, based on NAEP's guidelines.

Percentages of students excluded from NAEP may vary considerably across states, and, within a state, across years. Comparisons of results across states and within a state across years should be interpreted with caution if the exclusion rates vary widely. The percentages of assessed students classified as SD or ELL, as well as their NAEP performance in each participating state and jurisdiction, are available in an interactive database at the NAEP website (<http://nces.ed.gov/nationsreportcard/>).

Prior to 2000, no testing accommodations were made available to the samples of students with disabilities and the English language learners in state NAEP mathematics assessments that served as the basis for reported results. In the 1996 national and 2000 national and state mathematics assessments, NAEP researchers drew a second representative sample of schools. Accommodations were made available for students in this sample who required them, provided the accommodation did not change the nature of what was tested. For example, students could be assessed one-on-one or in small groups, receive extended time, or use a large-print test book. In mathematics, students had the option of having the test questions read aloud in English, or using a bilingual English-Spanish test book. However, in the mathematics assessment, students were not allowed to use calculators for any questions on which calculators were not permitted. NAEP has used these comparable samples to study the effects of allowing accommodations for students categorized as SD or ELL in the assessments. A series of technical research papers covering various NAEP subject areas has been published with the results of these comparisons (see <http://nces.ed.gov/nationsreportcard/about/inclusion.asp#research>).

Table 7 displays the percentages of students with disabilities and English language learners in Idaho identified, excluded, and assessed under standard and accommodated conditions at grade 4.

Table 8 shows the percentage of students assessed in Idaho by disability status and their performance on the NAEP assessment in terms of average scale scores and percentages performing below *Basic*, at or above *Basic*, at or above *Proficient*, and at *Advanced* for grade 4.

Table 9 presents the percentage of students assessed in Idaho by ELL status, their average scale scores, and their performance in terms of the percentage below *Basic*, the percentages at or above *Basic*, at or above *Proficient*, and at *Advanced*.

Table 10 presents the total number of students assessed, the percentage of students sampled who were excluded, and average scale scores for all participating states and other jurisdictions.

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**Table
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Percentage of students in mathematics assessments identified as SD and ELL, excluded, and assessed, grade 4 public schools: various years, 1992–2005

Year and testing status		SD and/or ELL		SD		ELL	
		Idaho	Nation	Idaho	Nation	Idaho	Nation
1992 ¹	Identified	9	10	8	7	2	3
	Excluded	3	7	3	5	1	2
	Assessed under standard conditions	6	4	5	3	1	1
2000	Identified	16	19	12	13	5	7
	Excluded	2	4	1	3	2	1
	Assessed under standard conditions	7	10	5	5	3	5
	Assessed with accommodations	7	5	6	4	1	1
2003	Identified	18	22	12	14	7	11
	Excluded	2	4	1	3	1	1
	Assessed under standard conditions	9	10	4	4	5	7
	Assessed with accommodations	7	8	7	7	2	2
2005	Identified	18	23	11	14	8	10
	Excluded	1	3	1	3	1	1
	Assessed under standard conditions	9	10	3	4	6	7
	Assessed with accommodations	8	10	7	8	2	3

¹ Accommodations were not permitted for this assessment.

NOTE: SD = students with disabilities. ELL = English language learners. Detail may not sum to totals because of rounding. Some students were identified as both SD and ELL. Such students would be included in both the SD and ELL portions of the table.

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

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**Table
8**

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Average mathematics scale scores and percentage of students at or above each achievement level, by students' disability status, grade 4 public schools: various years, 2000–2005

Student disability status		Percent of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
Yes							
2000 ¹	Nation (public)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
	Idaho	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
2000	Nation (public)	10(0.7)*	198(2.2)*	71(3.0)*	29(3.0)*	6(2.0)*	1(0.5)
	Idaho	11(0.8)	186(4.4)*	83(4.5)*	17(4.5)*	#(***)	#(***)
2003	Nation (public)	11(0.2)*	214(0.4)*	50(0.6)*	50(0.6)*	12(0.4)*	1(0.1)*
	Idaho	11(0.6)	208(1.9)*	59(3.3)*	41(3.3)*	7(1.7)	#(***)
2005	Nation (public)	12(0.1)	218(0.4)	44(0.7)	56(0.7)	16(0.4)	2(0.2)
	Idaho	10(0.5)	215(1.8)	47(3.4)	53(3.4)	10(1.9)	1(0.7)
No							
2000 ¹	Nation (public)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
	Idaho	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
2000	Nation (public)	90(0.7)*	227(1.0)*	33(1.4)*	67(1.4)*	24(1.1)*	3(0.3)*
	Idaho	89(0.8)	229(1.2)*	26(1.6)*	74(1.6)*	22(1.7)*	1(0.4)*
2003	Nation (public)	89(0.2)*	236(0.2)*	21(0.3)*	79(0.3)*	34(0.3)*	4(0.1)*
	Idaho	89(0.6)	238(0.6)*	16(0.9)*	84(0.9)*	33(1.2)*	3(0.4)*
2005	Nation (public)	88(0.1)	240(0.2)	17(0.2)	83(0.2)	38(0.3)	5(0.1)
	Idaho	90(0.5)	245(0.7)	10(0.7)	90(0.7)	44(1.8)	5(0.7)

Estimate rounds to zero.

‡ Reporting standards are not met.

* Value is significantly different from the value for the same jurisdiction in 2005.

¹ Accommodations were not permitted for this assessment.

NOTE: The NAEP mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scale: below *Basic*, 213 or lower; *Basic*, 214–248; *Proficient*, 249–281; and *Advanced*, 282 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000–2005 Mathematics Assessments.

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**Table
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Average mathematics scale scores and percentage of students at or above each achievement level, by students' classification as English language learners (ELL), grade 4 public schools: various years, 2000–2005

ELL status		Percent of students	Average scale score	Below Basic	At or above Basic	At or above Proficient	At Advanced
Yes							
2000 ¹	Nation (public)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
	Idaho	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
2000	Nation (public)	6(0.9)*	199(2.0)*	70(3.3)*	30(3.3)*	4(1.6)*	#(***)
	Idaho	4(0.9)*	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
2003	Nation (public)	9(0.3)	214(0.6)*	51(1.1)*	49(1.1)*	9(0.6)*	#(0.1)*
	Idaho	6(0.9)	211(2.2)*	56(3.8)*	44(3.8)*	7(1.9)	#(***)
2005	Nation (public)	10(0.2)	216(0.5)	46(0.8)	54(0.8)	11(0.4)	1(0.1)
	Idaho	8(0.8)	221(2.0)	37(3.8)	63(3.8)	10(2.3)	#(***)
No							
2000 ¹	Nation (public)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
	Idaho	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)	‡(‡)
2000	Nation (public)	94(0.9)*	226(0.9)*	34(1.3)*	66(1.3)*	24(1.1)*	3(0.3)*
	Idaho	96(0.9)*	226(1.3)*	31(1.9)*	69(1.9)*	20(1.7)*	1(0.4)*
2003	Nation (public)	91(0.3)	236(0.2)*	21(0.3)*	79(0.3)*	34(0.3)*	4(0.1)*
	Idaho	94(0.9)	237(0.7)*	18(1.0)*	82(1.0)*	32(1.1)*	2(0.4)*
2005	Nation (public)	90(0.2)	239(0.2)	18(0.2)	82(0.2)	38(0.3)	5(0.1)
	Idaho	92(0.8)	243(0.7)	12(0.8)	88(0.8)	43(1.8)	5(0.7)

Estimate rounds to zero.

‡ Reporting standards are not met.

* Value is significantly different from the value for the same jurisdiction in 2005.

¹ Accommodations were not permitted for this assessment.

NOTE: The NAEP mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scale: below *Basic*, 213 or lower; *Basic*, 214–248; *Proficient*, 249–281; and *Advanced*, 282 and above. All differences were tested for statistical significance at the 0.05 level using unrounded numbers. Detail may not sum to totals because of rounding. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and English language learners in the NAEP samples and by changes in sample sizes.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000–2005 Mathematics Assessments.

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**Table
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Total number of students assessed, percentage of students sampled who were excluded, and average mathematics scale scores, grade 4 public schools: By state, 2005

State/jurisdiction	Grade 4		
	Number assessed	Percentage excluded	Average scale score
Alabama	2,600	1	225
Alaska	2,800	2	236
Arizona	2,900	4	230
Arkansas	2,800	3	236
California	10,700	4	230
Colorado	2,800	3	239
Connecticut	2,800	2	242
Delaware	2,500	8	240
Florida	4,300	3	239
Georgia	4,300	2	234
Hawaii	2,700	3	230
Idaho	2,900	1	242
Illinois	4,100	3	233
Indiana	2,700	2	240
Iowa	3,200	2	240
Kansas	3,300	3	246
Kentucky	2,800	3	231
Louisiana	2,700	4	230
Maine	2,600	4	241
Maryland	2,700	4	238
Massachusetts	3,900	4	247
Michigan	2,500	4	238
Minnesota	2,600	2	246
Mississippi	2,800	2	227
Missouri	2,800	2	235
Montana	2,700	2	241
Nebraska	3,100	2	238
Nevada	2,900	3	230
New Hampshire	2,600	2	246
New Jersey	2,800	3	244
New Mexico	2,800	3	224
New York	5,000	4	238
North Carolina	4,100	2	241
North Dakota	2,200	3	243
Ohio	3,500	3	242
Oklahoma	2,700	4	234
Oregon	2,700	4	238
Pennsylvania	3,500	3	241
Rhode Island	2,700	3	233
South Carolina	2,800	4	238
South Dakota	2,800	2	242
Tennessee	2,900	3	232
Texas	8,400	6	242
Utah	2,900	2	239
Vermont	2,100	3	244
Virginia	2,700	5	240
Washington	2,800	3	242
West Virginia	2,700	2	231
Wisconsin	2,600	2	241
Wyoming	1,800	2	243
Other jurisdictions			
District of Columbia	2,200	6	211
DoDEA ¹	2,400	2	239

¹ Department of Defense Education Activity Schools (domestic and overseas).

NOTE: The NAEP mathematics scale ranges from 0 to 500. Sample sizes are rounded to the nearest hundred, or indicated as <50 when the value is

between 1 and 49.

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

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