

WISCONSIN STATE  
LEGISLATURE  
COMMITTEE HEARING  
RECORDS

2005-06

(session year)

Senate

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Committee on  
Education  
(SC-Ed)

File Naming Example:

Record of Comm. Proceedings ... RCP

- 05hr\_AC-Ed\_RCP\_pt01a
- 05hr\_AC-Ed\_RCP\_pt01b
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*Published Documents*

➤ Committee Hearings ... CH (Public Hearing Announcements)

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➤ \*\*

*Information Collected For Or  
Against Proposal*

➤ Appointments ... Appt

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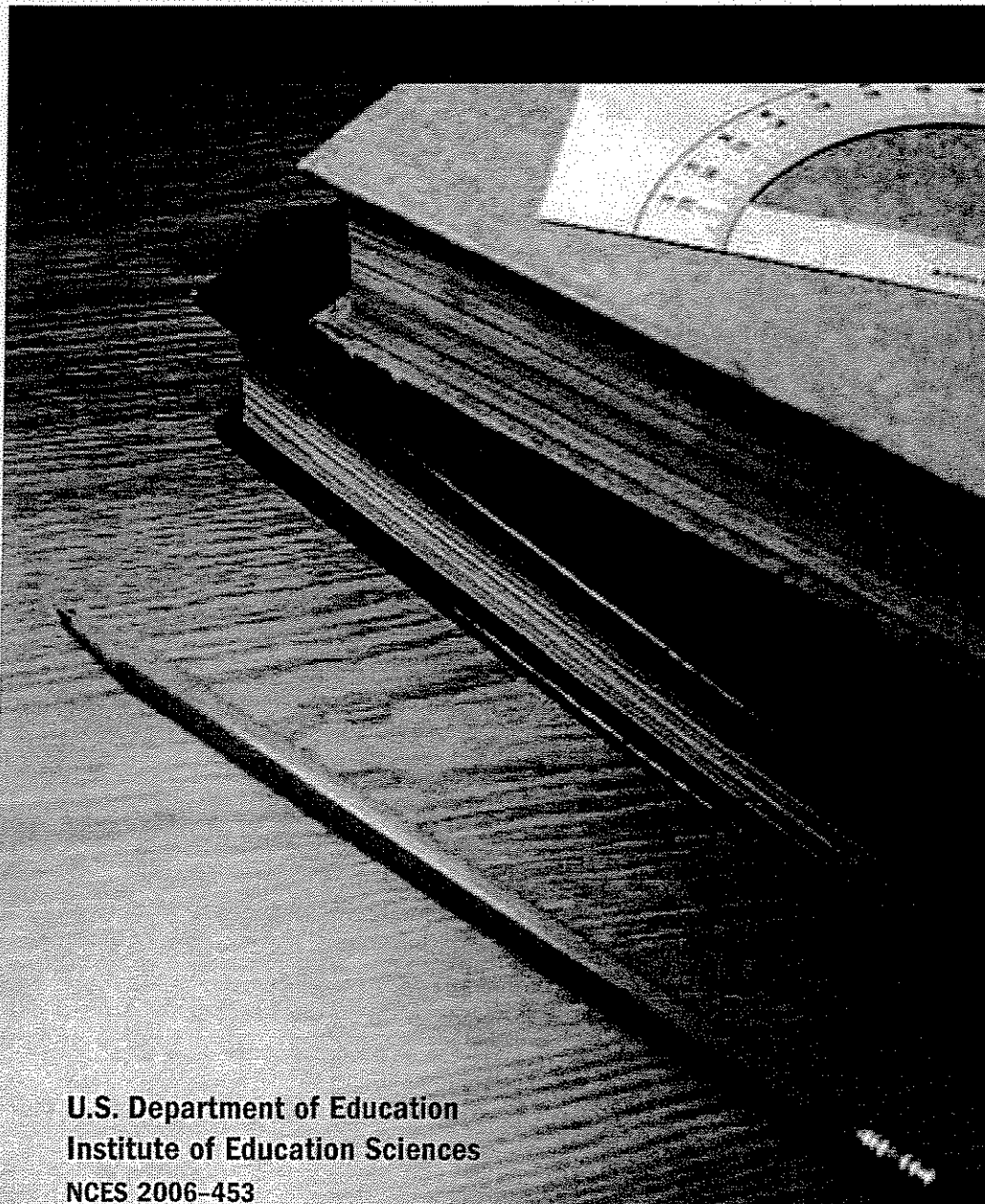
➤ Hearing Records ... HR (bills and resolutions)

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➤ Miscellaneous ... Misc

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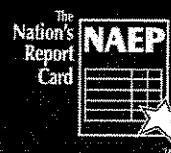
National Assessment of Educational Progress  
The Nation's Report Card™  
**Mathematics**  
**2005**



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



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## What is The Nation's Report Card™?

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

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

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

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

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Secretary

INSTITUTE OF EDUCATION SCIENCES  
**Grover J. Whitehurst**  
Director

NATIONAL CENTER FOR  
EDUCATION STATISTICS  
**Grover J. Whitehurst**  
Acting Commissioner

OCTOBER 2005

## Executive Summary

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

### National Mathematics Results

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

Between 1990 and 2005, the percentage of fourth-graders performing at or above *Basic* increased by 30

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

or above *Basic* was 17 percentage points higher in 2005 (69 percent) than in 1990 (52 percent), and the percentage performing at or above *Proficient* increased from 15 to 30 percent.

### Mathematics Results for Student Groups at Grade 4

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

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

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

### Mathematics Results for Student Groups at Grade 8

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

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

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

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

### Mathematics Results for the States

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

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

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

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

## For More Information...

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

## Understanding NAEP Results

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

### Scale Scores

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

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

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

### Achievement Levels

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

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

### Interpreting Results

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

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

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

## NAEP Achievement-Level Descriptions

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

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

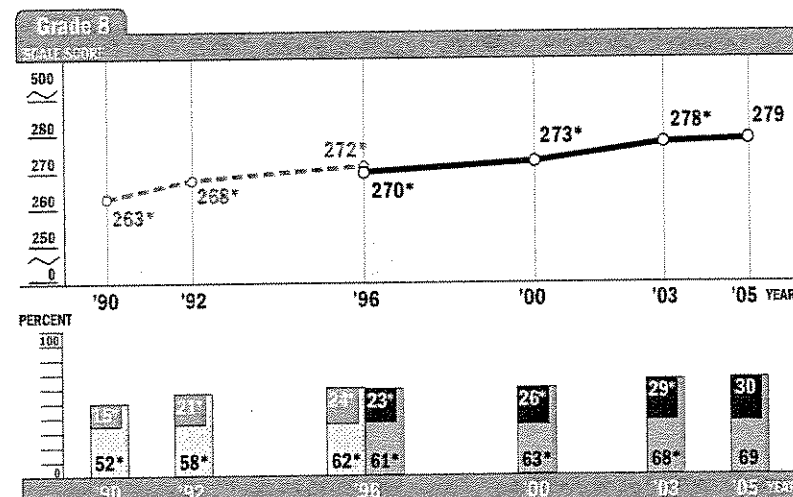
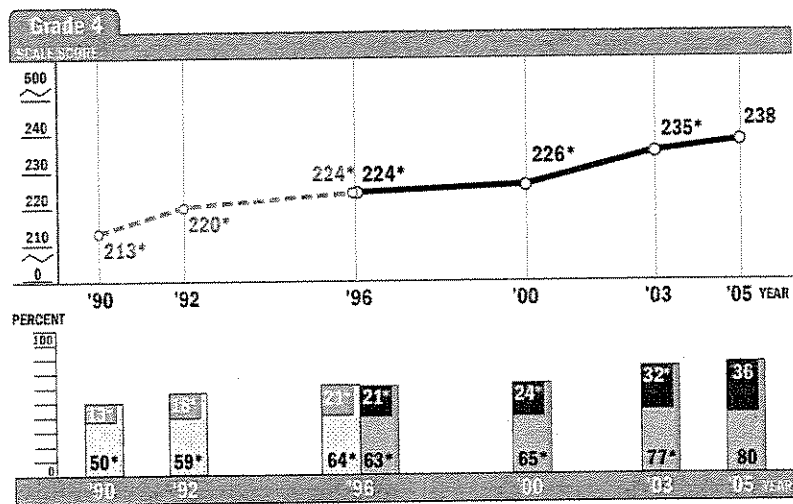
**Proficient**—represents solid academic performance. Students reaching this level have demonstrated competency over challenging subject matter.

**Advanced**—signifies superior performance.

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



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



\* Significantly different from 2005.

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

NATIONAL RESULTS

**KEY FINDINGS**

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

**GRADE 4**

► The national average mathematics scale score increased by 3 points from 2003 to 2005 and by 25 points from 1990 to 2005.

► In 2005, the percentages of students performing at or above *Basic* (80 percent) and at or above *Proficient* (36 percent) were higher than in any previous assessment year.

**GRADE 8**

► The national average mathematics score was 16 points higher in 2005 than in 1990 and showed a 1-point increase between 2003 and 2005.

► Higher percentages of students performed at or above *Basic* (69 percent) and at or above *Proficient* (30 percent) in 2005 than in any previous assessment year.

**Reporting Student Groups**

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

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

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

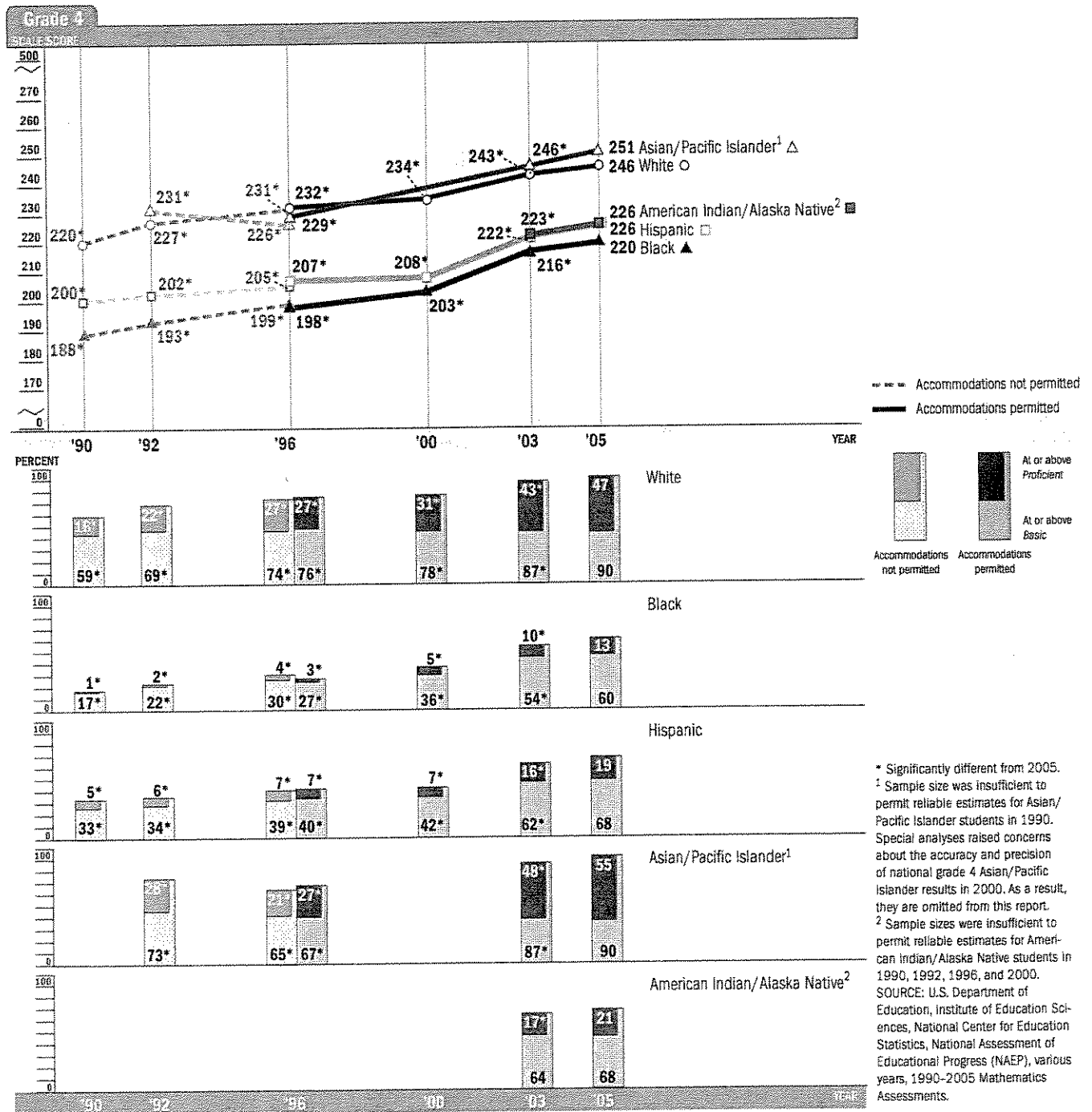
## Results for Groups of Students

### Results by Race/Ethnicity

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

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

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



KEY FINDINGS

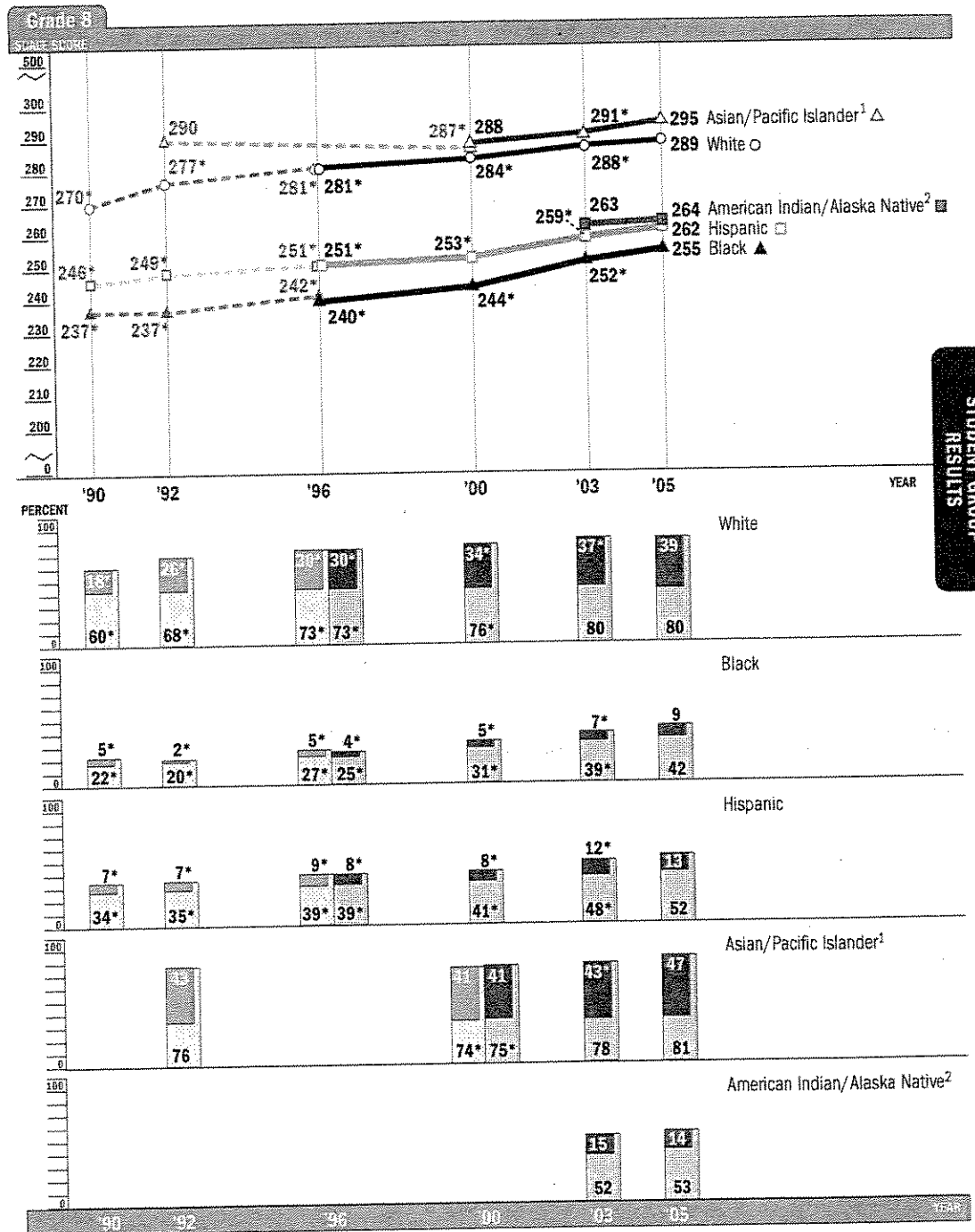
GRADE 4

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

GRADE 8

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

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



\* Significantly different from 2005.

<sup>1</sup> Sample size was insufficient to permit reliable estimates for Asian/Pacific Islander students in 1990. Special analyses raised concerns about the accuracy and precision of national grade 8 Asian/Pacific Islander results in 1996. As a result, they are omitted from this report.

<sup>2</sup> Sample sizes were insufficient to permit reliable estimates for American Indian/Alaska Native students in 1990, 1992, 1996, and 2000.

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

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At or above Proficient  
 At or above Basic

Accommodations not permitted  
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STUDENT GROUP RESULTS

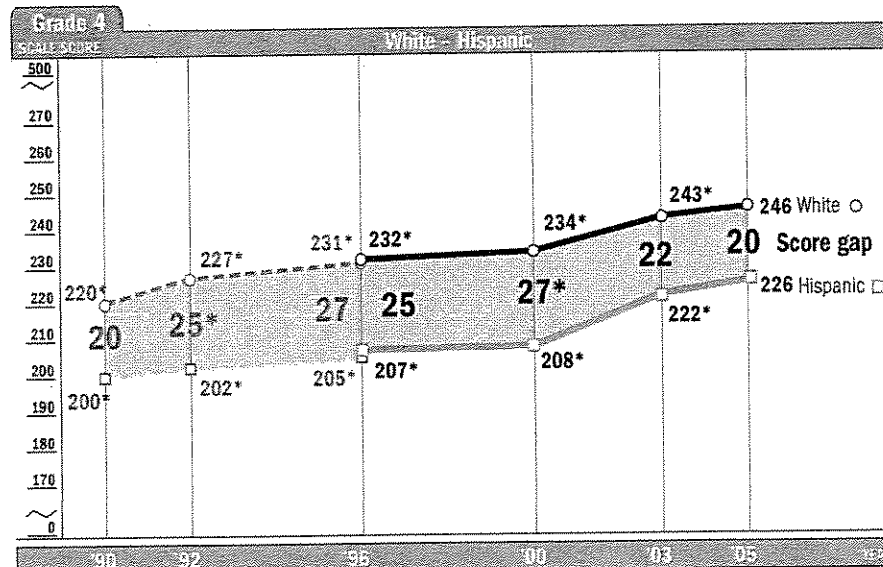
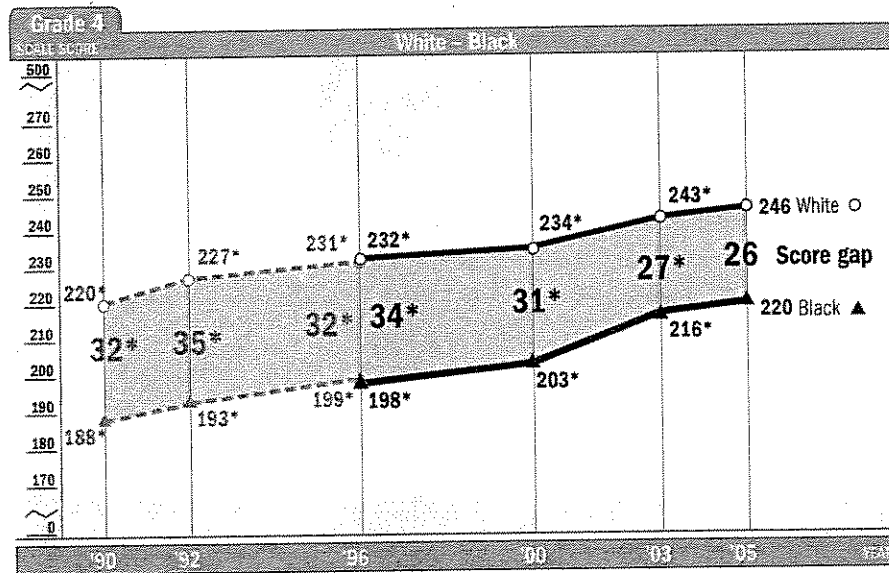


## White - Black and White - Hispanic Score Gaps

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

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

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



\* Significantly different from 2005.

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

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

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**KEY FINDINGS**

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

**GRADE 4**

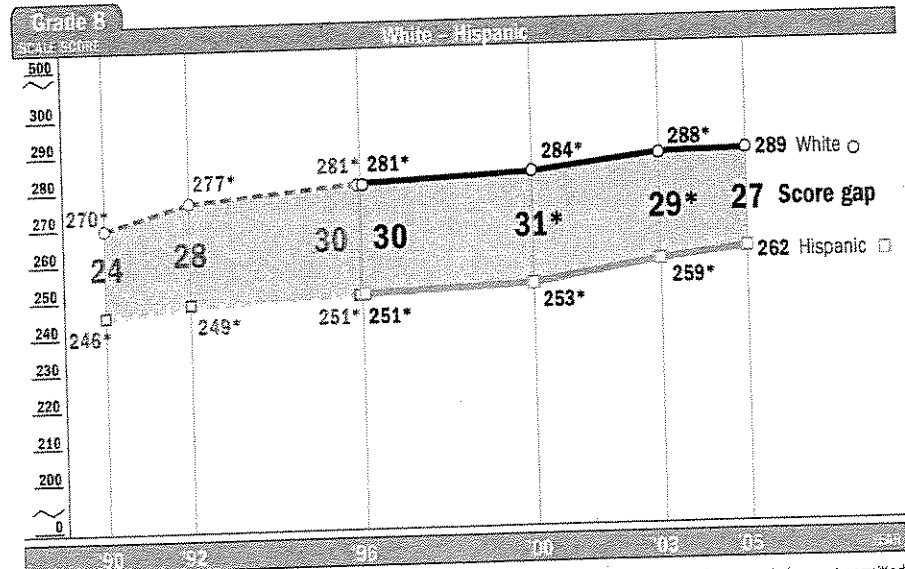
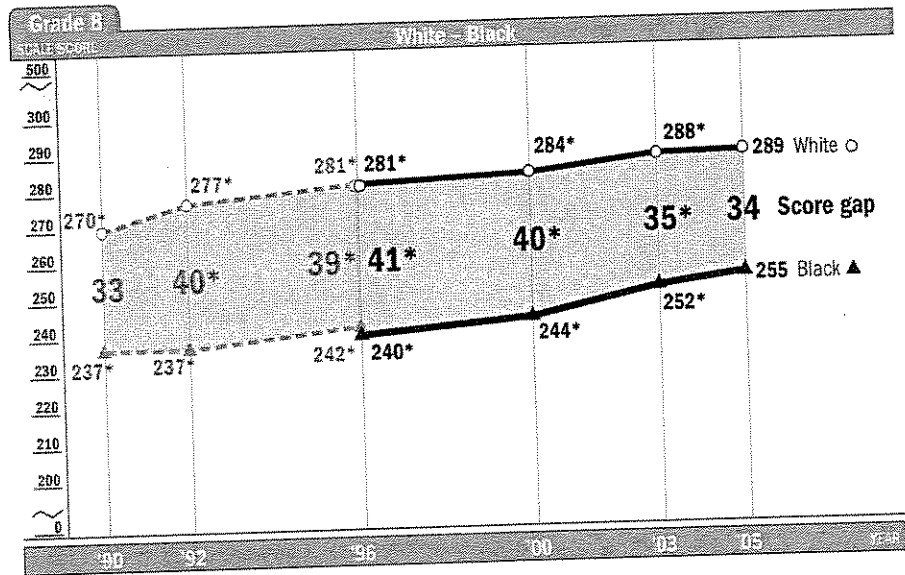
- ▶ The White - Black score gap was narrower in 2005 than in any previous assessment year.
- ▶ The apparent change between 2005 and 2003 in the White - Hispanic score gap was not statistically significant.

**GRADE 8**

- ▶ There was no significant change in the White - Black gap between 1990 and 2005, but the gap narrowed from 35 to 34 between 2003 and 2005.
- ▶ The White - Hispanic score gap narrowed from 29 to 27 between 2003 and 2005, but was not statistically different between 1990 and 2005.



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



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

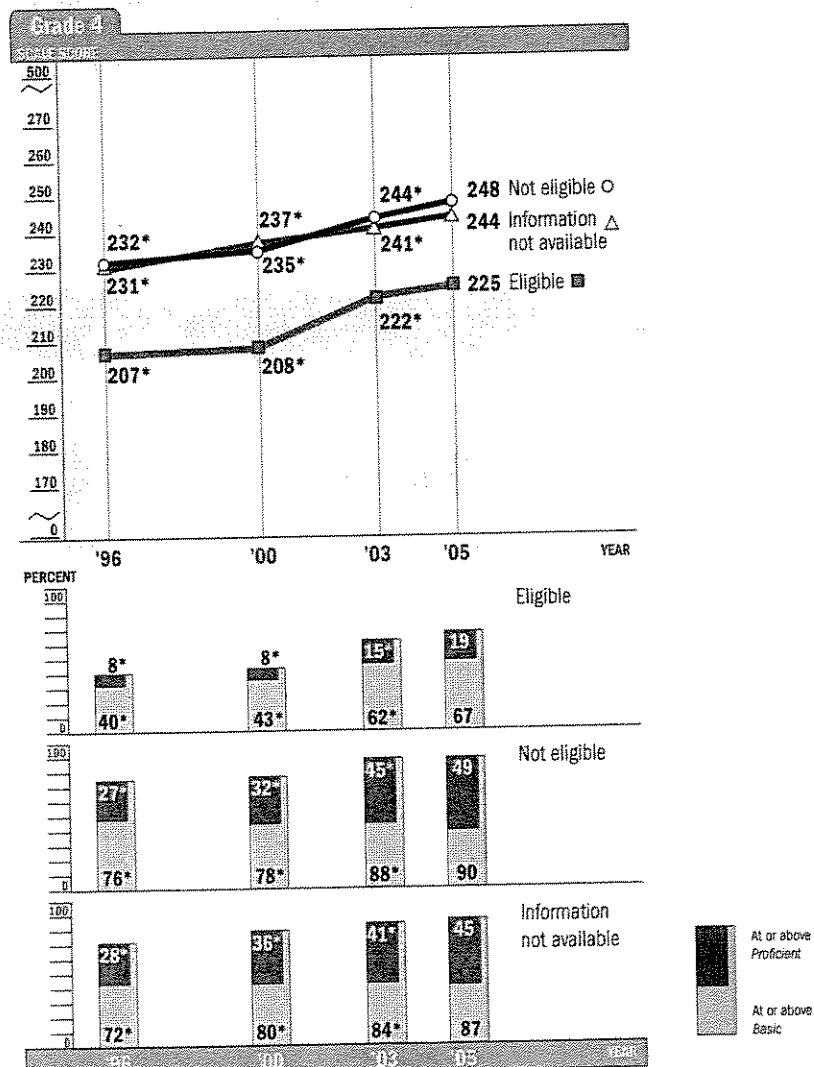
### Results by Eligibility for Free/Reduced-Price School Lunch

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

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

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

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



\* Significantly different from 2005.

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



**KEY FINDINGS**

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

**GRADE 4**

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

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

**GRADE 8**

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

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

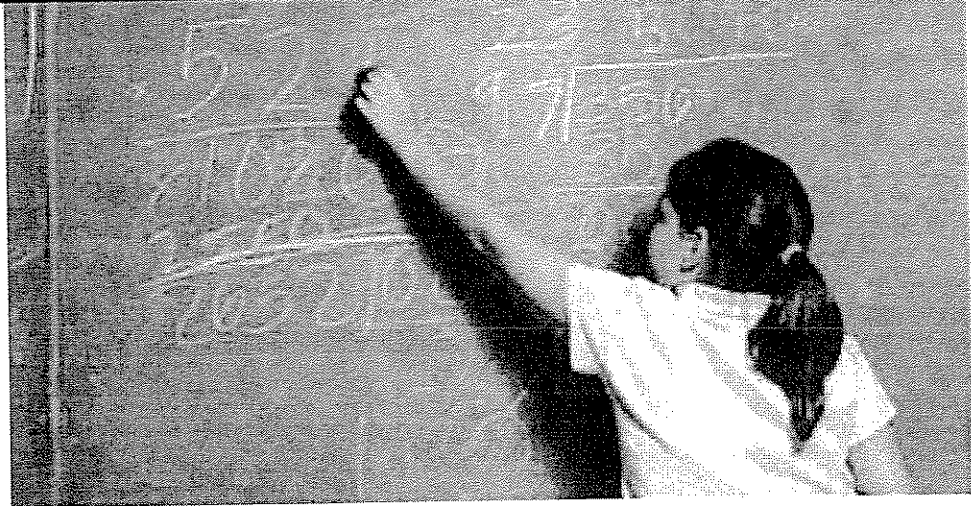
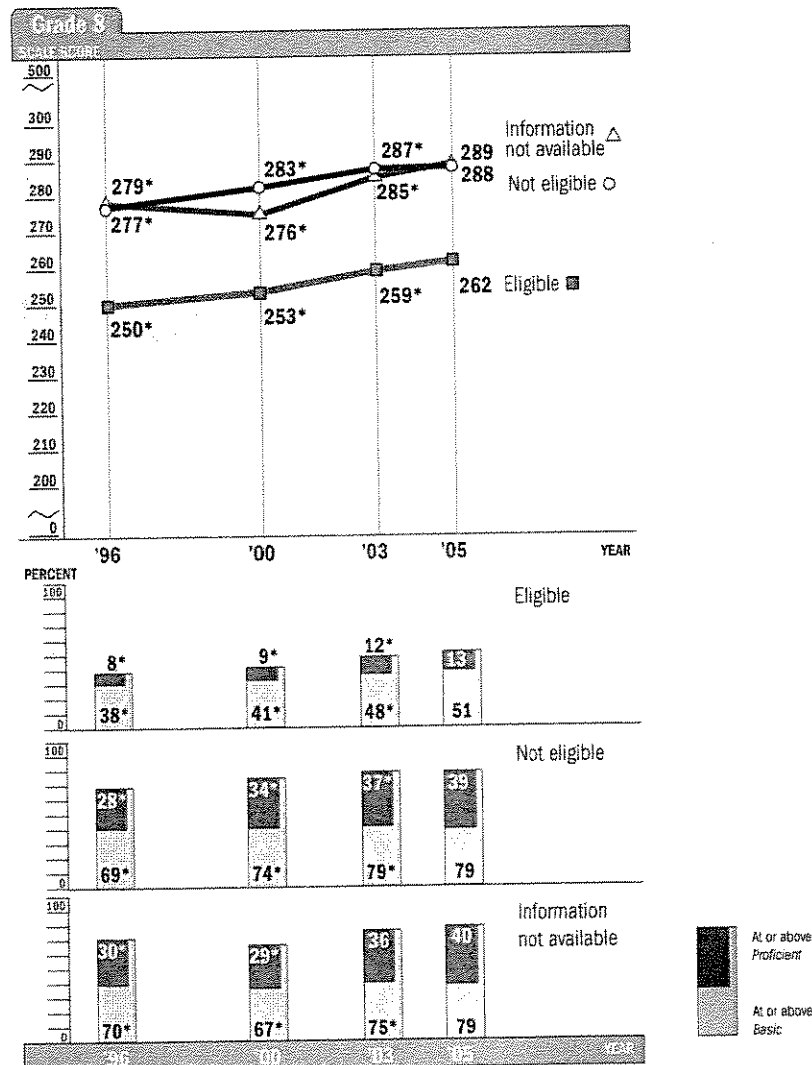


Figure 7. Average scale scores and achievement-level results in mathematics, by students' eligibility for free/reduced-price lunch, grade 8: Various years, 1996-2005



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

STUDENT GROUP RESULTS

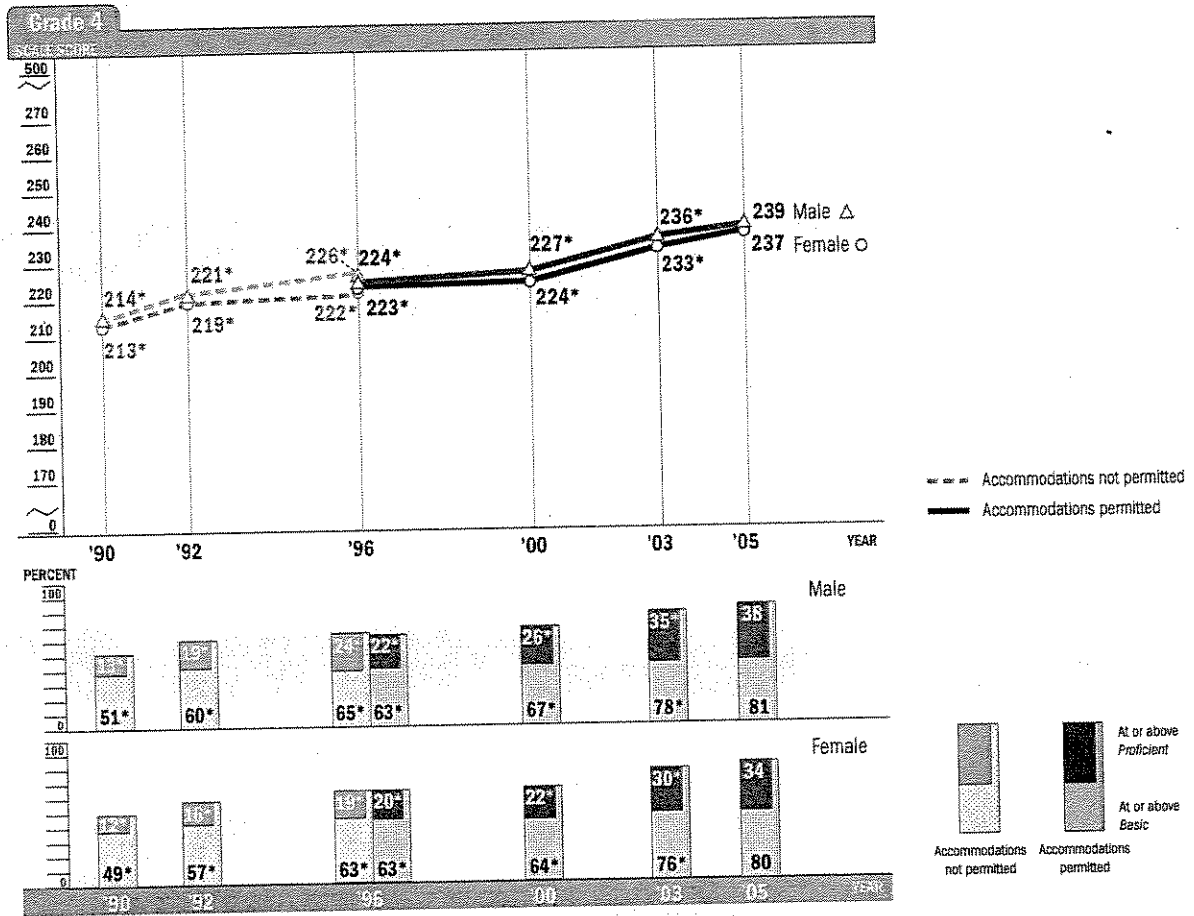


### Results by Gender

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

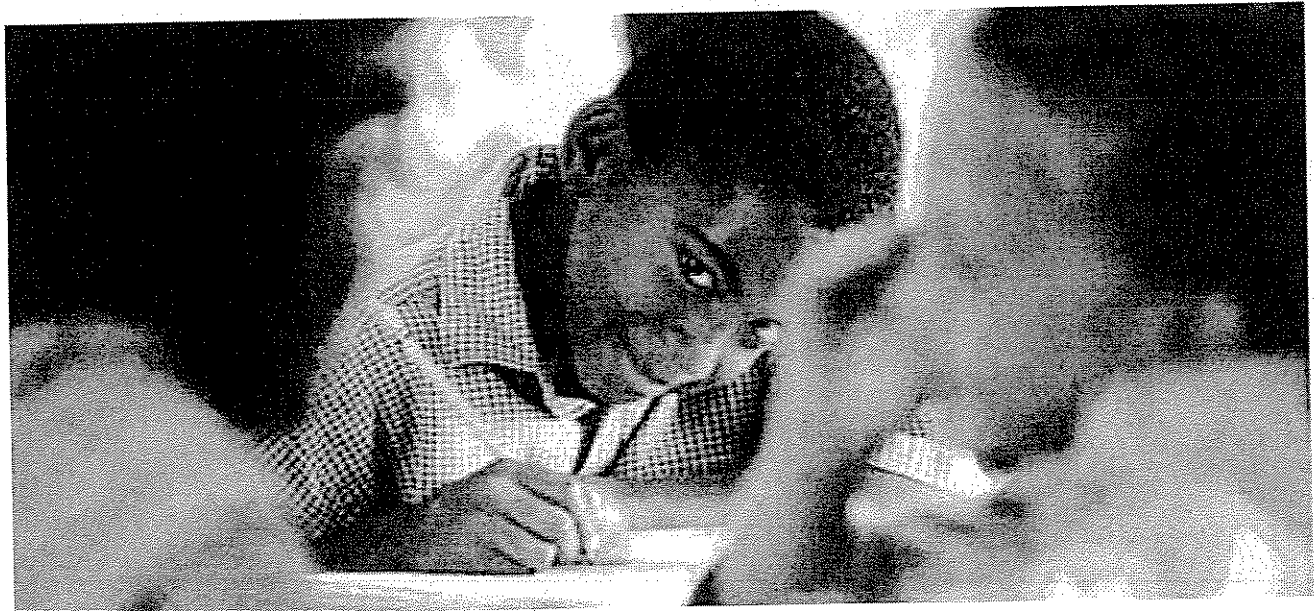
shown by gender at grade 4 in figure 8 and at grade 8 in figure 9.

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



\* Significantly different from 2005.

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





**KEY FINDINGS**

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

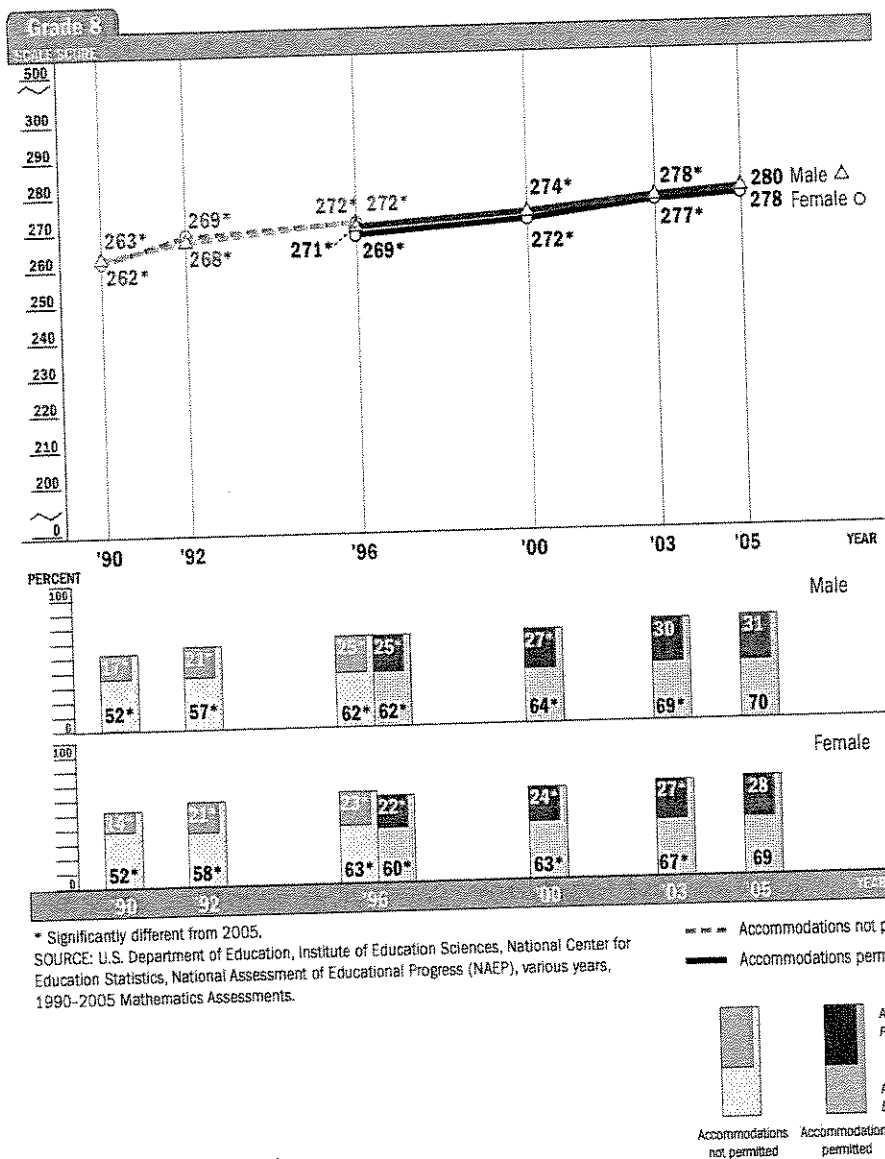
**GRADE 4**

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

**GRADE 8**

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

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



STUDENT GROUP RESULTS

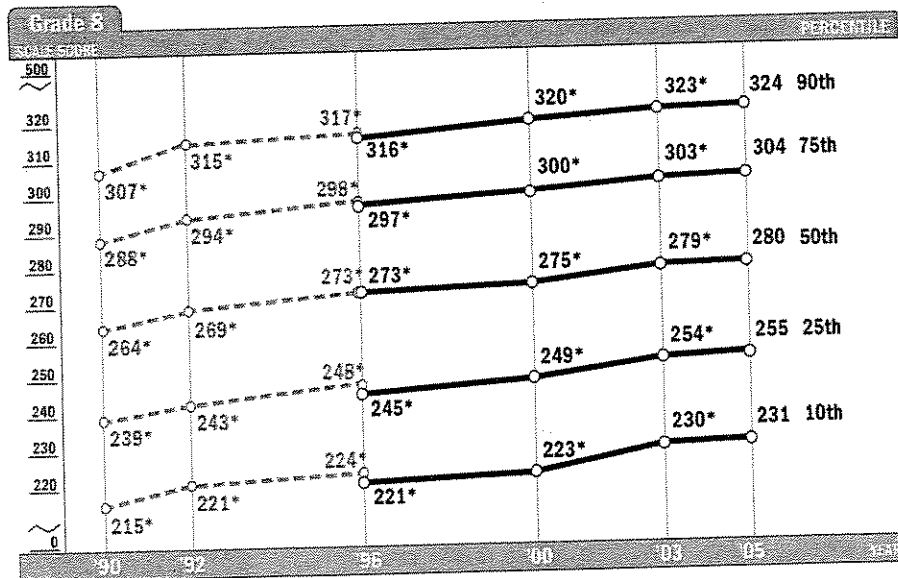
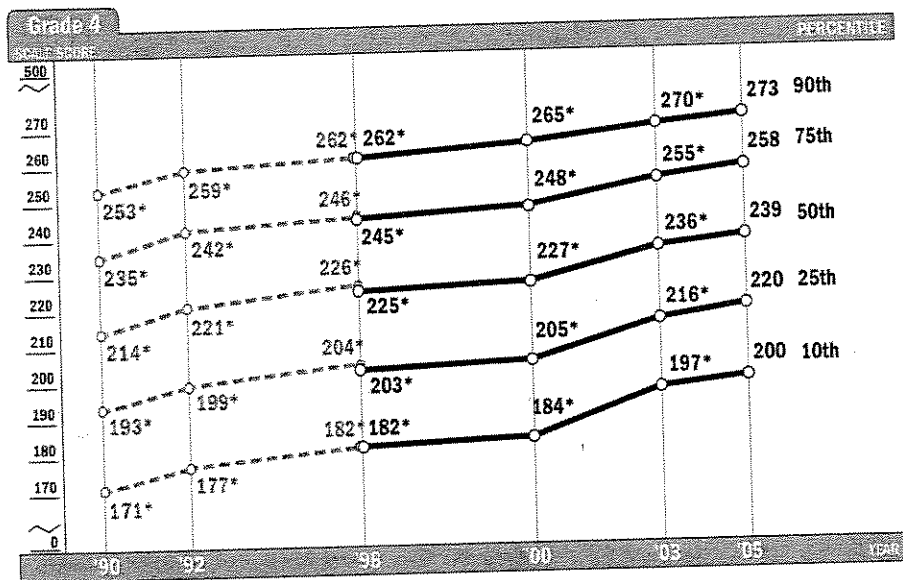


## Comparing Scores Among Lower-, Middle-, and Higher-Performing Students

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

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

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



--- Accommodations not permitted  
 — Accommodations permitted

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


**KEY FINDINGS**
**GRADE 4 (pages 14–15, 18)**

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

**GRADE 8 (pages 16–17, 19)**

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

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

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

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

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

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

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

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

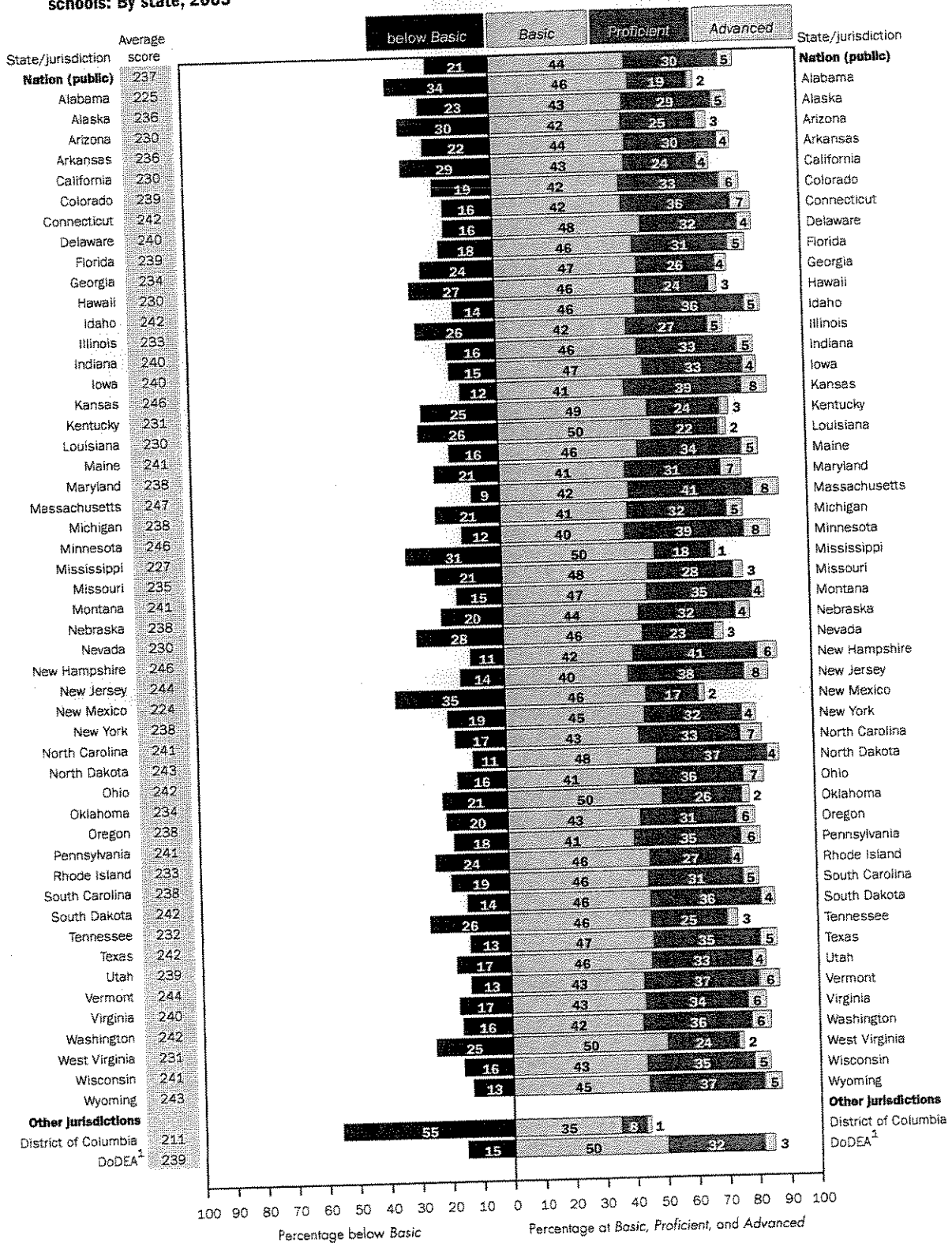
More information on performance for a particular state is available at <http://nces.ed.gov/nationsreportcard/states>.

### Student Samples

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

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

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



<sup>1</sup> Department of Defense Education Activity.  
 NOTE: The NAEP mathematics scale ranges from 0 to 500. Detail may not sum to totals because of rounding. The shaded bars are graphed using unrounded numbers.  
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.

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

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

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

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

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

<sup>2</sup> Department of Defense Education Activity (overseas and domestic schools). Before 2005, DoDEA overseas and domestic schools were separate jurisdictions in NAEP.

Pre-2005 data presented here were recalculated for comparability.

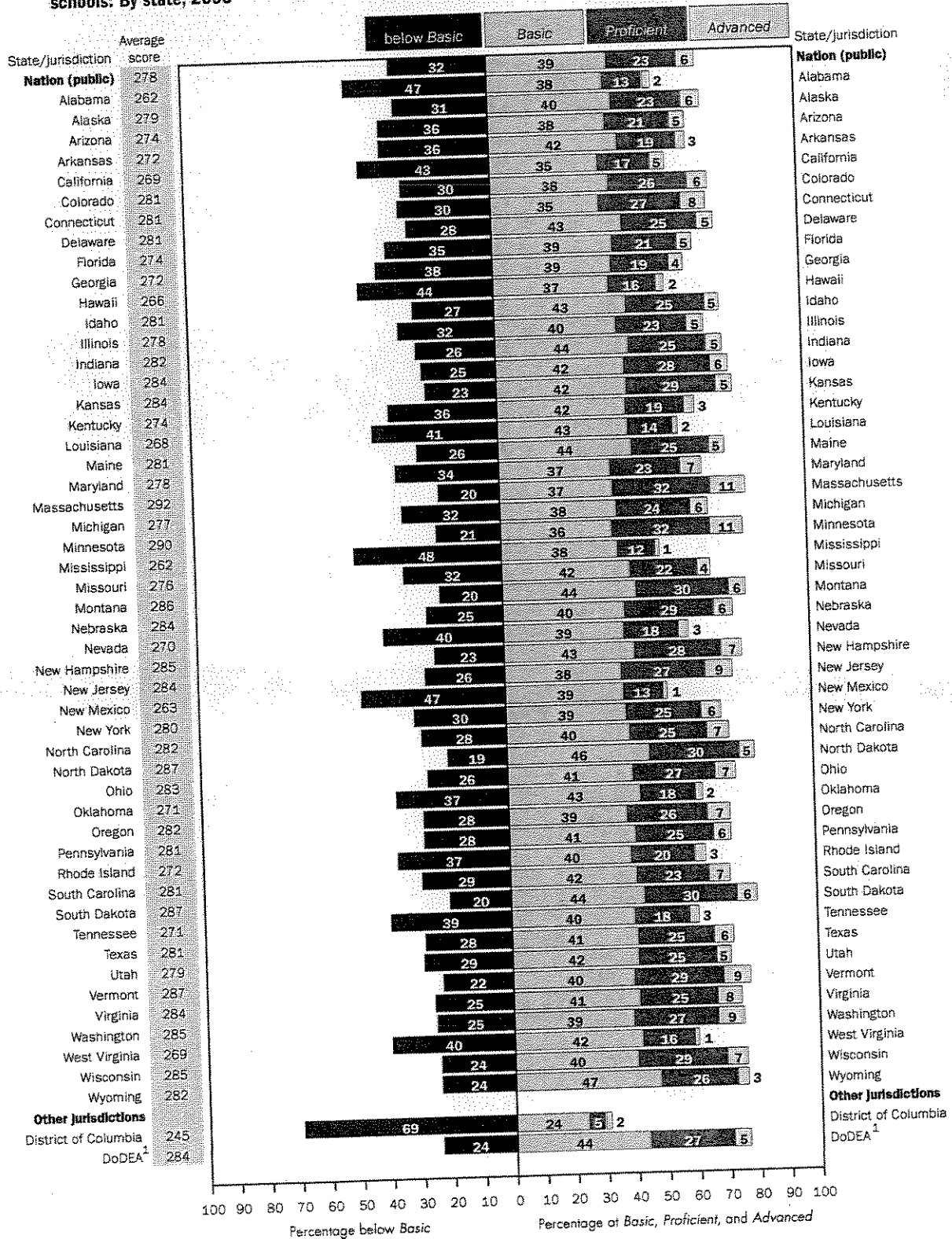
NOTE: State-level data were not collected in 1990.

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

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



<sup>1</sup> Department of Defense Education Activity.

NOTE: The NAEP mathematics scale ranges from 0 to 500. Detail may not sum to totals because of rounding. The shaded bars are graphed using unrounded numbers.  
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.

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

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

— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.  
\* Significantly different from 2005 when only one jurisdiction or the nation is being examined.

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

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

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

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

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

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

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

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

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

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

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

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

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

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— Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.  
 \* Significantly different from 2005 when only one jurisdiction or the nation is being examined.

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

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

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

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

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

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

<sup>1</sup> Department of Defense Education Activity.

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

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



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

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

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

<sup>1</sup> Department of Defense Education Activity.

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

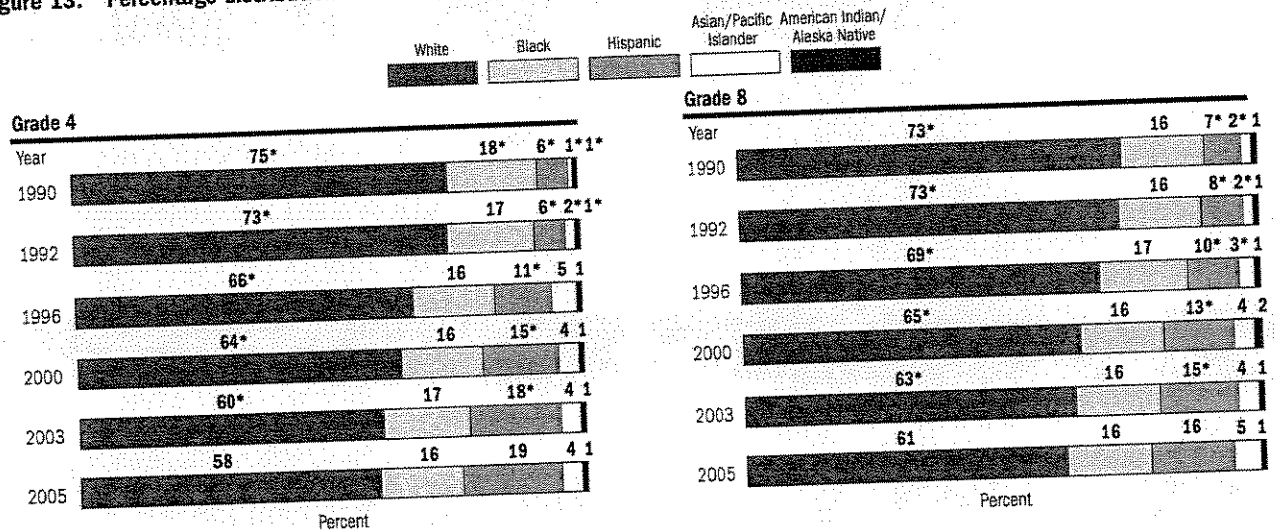
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.

## Changing Demographics of Students at Grades 4 and 8

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

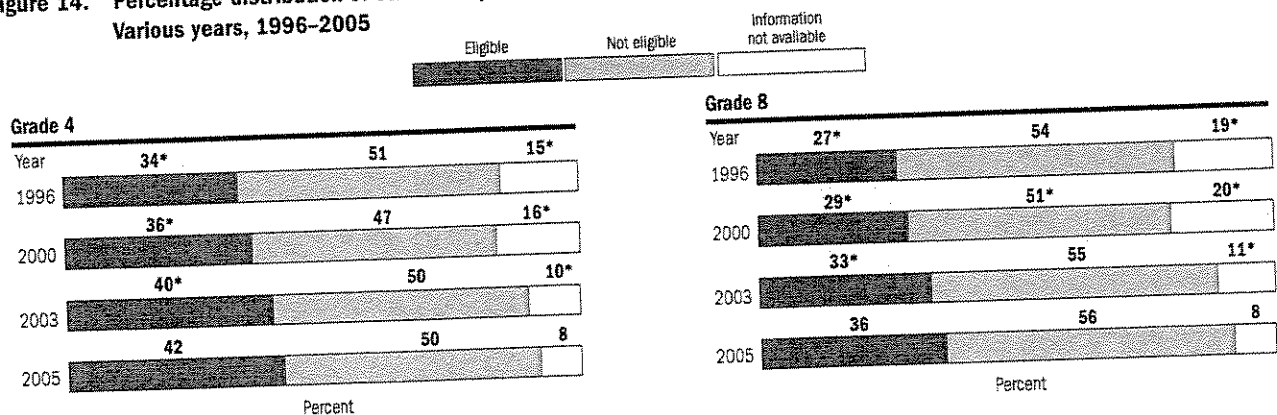
Figure 14 shows the distribution of students by eligibility for free or reduced-price school lunch. Here, differences could reflect a change in reporting practices associated with changing regulations and definitions of free lunch eligibility. Alternatively, the differences could be associated with changing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

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



\* Significantly different from 2005.  
 NOTE: The "unclassified" race/ethnicity category is not shown in this figure. Special analyses raised concerns about the accuracy and precision of national grade 4 Asian/Pacific Islander results in 2000 and grade 8 Asian/Pacific Islander results in 1996, so their performance results are omitted from this report.  
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2005 Mathematics Assessments.

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



\* Significantly different from 2005.  
 NOTE: Detail may not sum to totals because of rounding.  
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1996–2005 Mathematics Assessments.

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

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

- Not available. The jurisdiction did not participate or did not meet the minimum participation guidelines for reporting.  
# The estimate rounds to zero.

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

<sup>1</sup> Department of Defense Education Activity.

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

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

## Grade 4 Mathematics Framework

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

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

<b>Number properties and operations</b>	<b>Measurement</b>	<b>Geometry</b>
40%	20%	15%
<b>Data analysis and probability</b>	<b>Algebra</b>	
10%	15%	

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

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

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

## Item Maps

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

## Achievement-Level Descriptions for Grade 4

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

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

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

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

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

## Cut Scores

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

	Grade 4	Grade 8
<i>Basic</i>	214	262
<i>Proficient</i>	249	299
<i>Advanced</i>	282	333



# Grade 4 Item Map

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

## NAEP Mathematics Scale

### Advanced

**282**

### Proficient

**249**

### Basic

**214**

500

300

290

280

270

260

250

240

230

220

210

200

190

0

294 *Identify equation to describe pattern given in table*

286 *Identify given measurements on a ruler*

284 *Subtract fractions with common denominators*

276 *Approximate fraction of an hour given minutes*

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

272 *Determine missing numbers in number sentence*

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

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

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

254 *Identify which figure on grid has greatest area*

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

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

232 *Determine next number in given pattern*

228 *Classify numbers as even or odd*

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

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

211 *Identify which shapes are cylinders*

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

203 *Identify a number given in expanded notation*

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

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

NOTE: Regular type denotes a constructed-response question. *Italic* type denotes a multiple-choice question.  
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.

**Sample Grade 4 Multiple-Choice Question**

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

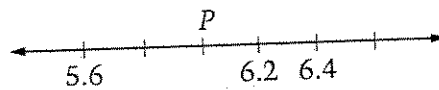
1.  $N$  stands for the number of hours of sleep Ken gets each night. Which of the following represents the number of hours of sleep Ken gets in 1 week?

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

61 percent of fourth-graders answered this question correctly.

**Sample Grade 4 Short Constructed-Response Question**

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



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

Answer: 6.0

56 percent of fourth-graders wrote correct responses.

## Grade 8 Mathematics Framework

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

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

<b>Number properties and operations</b>	<b>Measurement</b>	<b>Geometry</b>
20%	15%	20%
<b>Data analysis and probability</b>	<b>Algebra</b>	
15%	30%	

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

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

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

### For More Information...

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

## Achievement-Level Descriptions for Grade 8

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

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

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

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

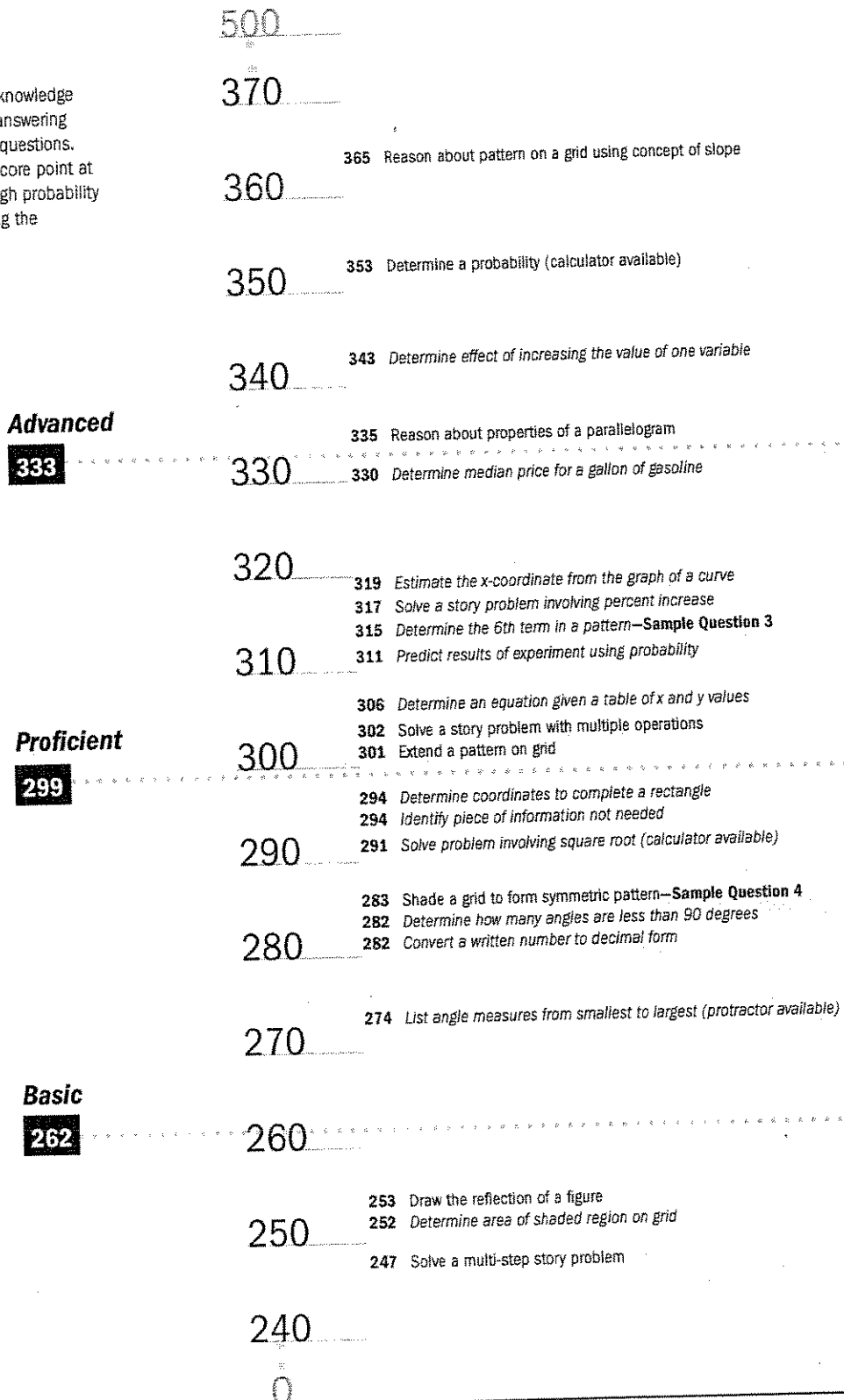
**Advanced:** Eighth-grade students performing at the *Advanced* level should be able to probe examples and counterexamples in order to shape generalizations from which they can develop models. Eighth-graders performing at the *Advanced* level should use number sense and geometric awareness to consider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



## Grade 8 Item Map

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

### NAEP Mathematics Scale



<sup>1</sup> Each grade 8 mathematics question in the 2005 mathematics assessment was mapped onto the NAEP 0-500 mathematics scale. The position of a question on the scale represents the average scale score attained by students who had a 65 percent probability of successfully answering a constructed-response question, a 74 percent probability of correctly answering a four-option multiple-choice question, or a 72 percent probability of correctly answering a five-option multiple-choice question. Only selected questions are presented. Scale score ranges for mathematics achievement levels are referenced on the map. For constructed-response questions, the question description represents students' performance rated as completely correct.  
NOTE: Regular type denotes a constructed-response question. *Italic* type denotes a multiple-choice question.  
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.



**Sample Grade 8 Multiple-Choice Question**

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

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

3. The same rule is applied to each number in the pattern above. What is the 6th number in the pattern?

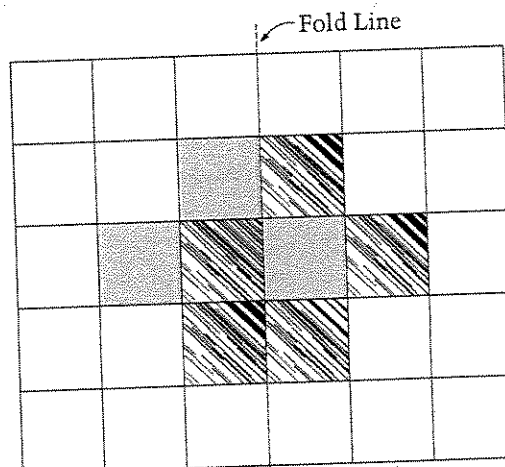
- Ⓐ 40
- Ⓑ 100
- Ⓒ 121
- Ⓓ 144
- Ⓔ 169

60 percent of eighth-graders answered this question correctly.

**Sample Grade 8 Short Constructed-Response Question**

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

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



58 percent of eighth-graders gave correct responses.

## Technical Notes

### NAEP Sampling Procedures

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

### Accommodations

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

### School and Student Participation Rates

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

### Private School Results

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

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

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

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

### Interpreting Statistical Significance

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

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

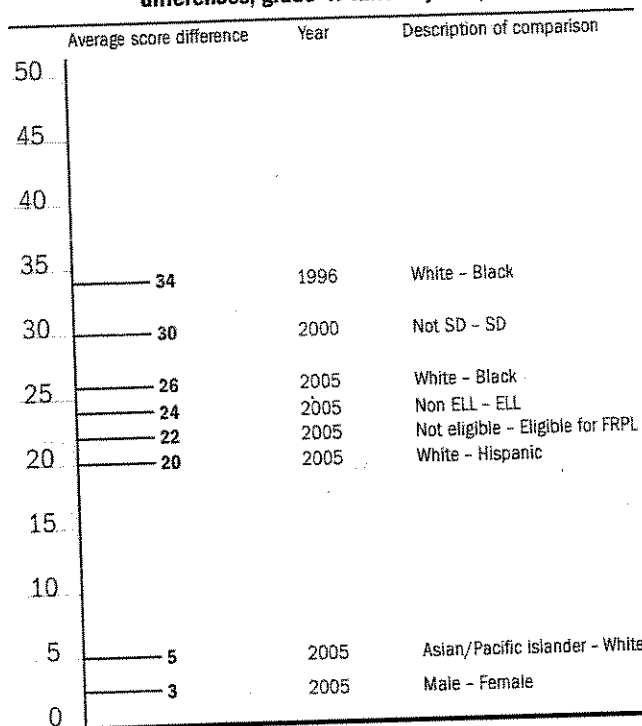
In the tables and charts of this report, the symbol (\*) is used to indicate that a score or percentage in a previous assessment year is significantly different from the comparable measure in 2005. Statistically significant differences between groups of students—for example, between White students and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

### Interpreting Score Differences

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

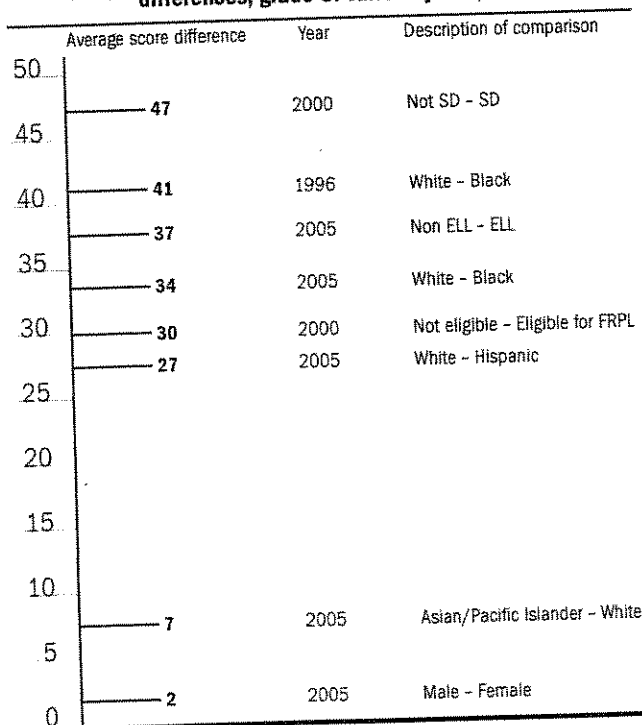
To get a sense of the magnitude of score differences, figures A-1 and A-2 provide examples of score gaps of different sizes. For instance, in figure A-1, the score gaps range in size from 3 points (between male and female grade 4 students in 2005) to 34 points (between White and Black grade 4 students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

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



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

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



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

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

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

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

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

# The estimate rounds to zero.

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

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

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

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

# The estimate rounds to zero.  
 NOTE: SD = students with disabilities. ELL = English language learners. Students identified as both SD and ELL were counted only once under the combined SD and/or ELL category, but were counted separately under the SD and ELL categories. Detail may not sum to totals because of rounding.  
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.



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

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

# The estimate rounds to zero.

<sup>1</sup> Department of Defense Education Activity.

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

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

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

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

See notes at end of table.

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

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

# The estimate rounds to zero.

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

<sup>1</sup> Department of Defense Education Activity.

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

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

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

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

<sup>1</sup> Department of Defense Education Activity.

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

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

Table A-6. Average mathematics scale scores and achievement-level results, by eligibility for free/reduced-price school lunch, grade 4 public schools: By state, 2005

State/jurisdiction	Eligible					Not eligible					Information not available				
	Percentage of students					Percentage of students					Percentage of students				
	Percentage of all students	Average scale score	Below Basic	At or above Basic	At or above Proficient	Percentage of all students	Average scale score	Below Basic	At or above Basic	At or above Proficient	Percentage of all students	Average scale score	Below Basic	At or above Basic	At or above Proficient
Nation (public)	46	225	33	67	19	52	248	10	90	50	2	237	21	79	36
Alabama	55	214	47	53	10	42	238	17	83	34	3	†	†	†	†
Alaska	39	223	38	62	18	60	243	14	86	44	1	†	†	†	†
Arizona	47	220	42	58	16	38	242	15	85	42	15	†	†	†	†
Arkansas	54	226	31	69	22	45	247	11	89	49	#	†	†	†	†
California	55	219	41	59	15	41	244	14	86	45	4	†	†	†	†
Colorado	37	224	35	65	20	63	248	10	90	50	#	†	†	†	†
Connecticut	27	223	37	63	16	73	249	8	92	52	5	237	19	81	32
Delaware	38	229	26	74	19	57	247	9	91	48	1	†	†	†	†
Florida	52	229	26	74	22	47	250	9	91	53	1	†	†	†	†
Georgia	53	224	35	65	16	46	245	11	89	45	#	†	†	†	†
Hawaii	46	220	40	60	17	53	239	17	83	35	1	†	†	†	†
Idaho	43	234	21	79	28	56	248	8	92	50	#	†	†	†	†
Illinois	45	218	44	56	15	55	245	12	88	45	2	†	†	†	†
Indiana	43	231	25	75	24	56	247	10	90	49	2	†	†	†	†
Iowa	33	231	25	75	24	67	244	11	89	44	#	†	†	†	†
Kansas	42	235	20	80	30	58	254	6	94	59	1	†	†	†	†
Kentucky	52	224	35	65	16	47	240	14	86	37	1	†	†	†	†
Louisiana	65	224	34	66	15	34	244	11	89	41	2	†	†	†	†
Maine	32	230	26	74	25	65	245	11	89	45	2	†	†	†	†
Maryland	32	221	38	62	16	65	247	12	88	49	2	†	†	†	†
Massachusetts	29	231	22	78	22	71	254	4	96	60	#	†	†	†	†
Michigan	34	223	36	64	19	65	246	12	88	48	1	†	†	†	†
Minnesota	29	231	26	74	27	71	252	7	93	56	#	†	†	†	†
Mississippi	69	221	39	61	12	30	241	12	88	36	1	†	†	†	†
Missouri	43	225	33	67	17	55	243	12	88	42	2	†	†	†	†
Montana	37	231	26	74	25	61	247	8	92	47	3	†	†	†	†
Nebraska	40	225	33	67	18	60	246	11	89	48	#	†	†	†	†
Nevada	45	219	43	57	14	54	239	17	83	36	1	†	†	†	†
New Hampshire	21	232	24	76	25	77	249	7	93	53	2	†	†	†	†
New Jersey	29	227	31	69	23	65	252	7	93	56	6	†	†	†	†
New Mexico	69	217	43	57	12	27	238	18	82	35	4	†	†	†	†
New York	48	228	30	70	21	49	248	8	92	50	3	†	†	†	†
North Carolina	44	229	27	73	22	54	251	8	92	54	1	†	†	†	†
North Dakota	32	234	20	80	28	68	247	7	93	46	#	†	†	†	†
Ohio	38	227	31	69	21	59	252	7	93	56	3	†	†	†	†
Oklahoma	56	227	28	72	19	44	243	12	88	41	#	†	†	†	†
Oregon	39	230	28	72	25	57	244	14	86	45	4	†	†	†	†
Pennsylvania	37	225	34	66	21	62	250	8	92	54	1	†	†	†	†
Rhode Island	38	218	43	57	13	62	243	12	88	41	#	†	†	†	†
South Carolina	53	227	29	71	19	47	250	7	93	54	#	†	†	†	†
South Dakota	41	232	23	77	26	59	249	7	93	51	#	†	†	†	†
Tennessee	46	220	40	60	14	53	242	14	86	40	#	†	†	†	†
Texas	57	233	20	80	26	43	253	5	95	59	1	†	†	†	†
Utah	37	229	28	72	23	59	244	11	89	45	4	†	†	†	†
Vermont	31	230	25	75	23	68	250	8	92	53	1	†	†	†	†
Virginia	34	225	33	67	16	66	249	9	91	52	#	†	†	†	†
Washington	39	231	26	74	26	56	250	8	92	53	5	†	†	†	†
West Virginia	56	225	31	69	18	44	238	16	84	34	#	†	†	†	†
Wisconsin	34	225	32	68	19	65	249	8	92	51	#	†	†	†	†
Wyoming	36	236	19	81	32	60	247	9	91	49	3	244	18	82	51
Other jurisdictions															
District of Columbia	76	206	62	38	5	22	229	32	68	27	2	†	†	†	†
DoDEA <sup>1</sup>	#	†	†	†	†	#	†	†	†	†	100	239	15	85	35

# The estimate rounds to zero.  
 † Reporting standards not met. Sample size is insufficient to permit a reliable estimate.  
<sup>1</sup> Department of Defense Education Activity.  
 NOTE: Detail may not sum to totals because of rounding.  
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.



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

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

<sup>1</sup> Department of Defense Education Activity.

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

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

Table A-8. Average mathematics scale scores and achievement-level results, by English language learners (ELL), grade 4 public schools: By state, 2005

State/jurisdiction	ELL					Non-ELL					Formerly ELL				
	Percentage of students					Percentage of students					Percentage of students				
	Percentage of all students	Average scale score	Below Basic	At or above Basic	At or above Proficient	Percentage of all students	Average scale score	Below Basic	At or above Basic	At or above Proficient	Percentage of all students	Average scale score	Below Basic	At or above Basic	At or above Proficient
Nation (public)	10	216	46	54	11	89	239	18	82	38	1	240	15	85	35
Alabama	2	†	†	†	†	98	225	33	67	21	#	†	†	†	†
Alaska	19	218	47	53	15	81	240	17	83	38	#	†	†	†	†
Arizona	19	208	60	40	7	81	235	23	77	33	#	†	†	†	†
Arkansas	3	229	28	72	24	97	236	22	78	34	2	246	8	92	45
California	31	214	50	50	10	66	238	20	80	36	1	†	†	†	†
Colorado	11	208	58	42	6	88	243	15	85	43	#	†	†	†	†
Connecticut	4	215	50	50	10	96	243	14	86	44	#	†	†	†	†
Delaware	4	229	30	70	22	96	240	15	85	37	4	230	25	75	21
Florida	7	219	43	57	15	90	241	16	84	39	#	†	†	†	†
Georgia	2	208	58	42	4	98	234	23	77	30	#	†	†	†	†
Hawaii	7	204	64	36	4	93	232	25	75	28	#	†	†	†	†
Idaho	8	221	37	63	10	92	244	12	88	43	1	†	†	†	†
Illinois	9	204	64	36	5	91	236	22	78	34	#	†	†	†	†
Indiana	3	†	†	†	†	97	240	16	84	39	#	†	†	†	†
Iowa	4	†	†	†	†	96	241	14	86	38	#	†	†	†	†
Kansas	5	†	†	†	†	94	247	11	89	48	#	†	†	†	†
Kentucky	1	†	†	†	†	99	232	25	75	26	#	†	†	†	†
Louisiana	1	†	†	†	†	99	230	26	74	24	#	†	†	†	†
Maine	1	†	†	†	†	99	241	16	84	39	#	†	†	†	†
Maryland	3	226	34	66	20	96	239	21	79	39	#	†	†	†	†
Massachusetts	6	226	32	68	19	93	249	8	92	51	2	†	†	†	†
Michigan	3	†	†	†	†	97	238	20	80	38	#	†	†	†	†
Minnesota	7	222	38	62	14	93	248	10	90	50	#	†	†	†	†
Mississippi	1	†	†	†	†	99	227	31	69	19	#	†	†	†	†
Missouri	2	†	†	†	†	98	235	21	79	31	#	†	†	†	†
Montana	3	†	†	†	†	97	242	13	87	39	#	†	†	†	†
Nebraska	7	211	56	44	5	92	240	17	83	39	1	†	†	†	†
Nevada	16	209	59	41	7	84	234	23	77	30	#	†	†	†	†
New Hampshire	2	†	†	†	†	98	246	10	90	47	#	†	†	†	†
New Jersey	3	†	†	†	†	97	245	14	86	46	#	†	†	†	†
New Mexico	25	208	58	42	5	75	229	28	72	24	#	†	†	†	†
New York	5	213	50	50	6	89	240	17	83	38	6	240	15	85	36
North Carolina	6	228	26	74	18	93	242	16	84	41	1	249	10	90	55
North Dakota	1	†	†	†	†	99	243	11	89	41	#	†	†	†	†
Ohio	1	†	†	†	†	99	242	16	84	43	#	†	†	†	†
Oklahoma	5	222	35	65	11	94	235	20	80	30	#	†	†	†	†
Oregon	13	215	50	50	12	87	242	15	85	41	#	†	†	†	†
Pennsylvania	2	218	46	54	17	98	241	17	83	42	#	†	†	†	†
Rhode Island	6	199	71	29	5	93	236	20	80	32	#	†	†	†	†
South Carolina	2	†	†	†	†	98	238	19	81	36	#	†	†	†	†
South Dakota	4	204	63	37	2	96	243	12	88	42	#	†	†	†	†
Tennessee	2	†	†	†	†	98	232	26	74	28	#	†	†	†	†
Texas	14	226	31	69	15	84	245	10	90	44	2	244	8	92	39
Utah	11	219	42	58	13	89	241	14	86	40	1	†	†	†	†
Vermont	2	†	†	†	†	98	243	13	87	43	#	†	†	†	†
Virginia	7	232	28	72	25	92	241	16	84	40	#	†	†	†	†
Washington	8	215	46	54	8	92	244	13	87	45	#	†	†	†	†
West Virginia	#	†	†	†	†	100	231	25	75	25	#	†	†	†	†
Wisconsin	6	225	33	67	19	94	242	15	85	42	#	†	†	†	†
Wyoming	4	223	34	66	15	96	244	12	88	44	#	†	†	†	†
Other jurisdictions															
District of Columbia	4	206	64	36	7	96	211	55	45	10	#	†	†	†	†
DoDEA <sup>1</sup>	7	224	32	68	15	93	240	14	86	36	#	†	†	†	†

# The estimate rounds to zero.  
 † Reporting standards not met. Sample size is insufficient to permit a reliable estimate.

<sup>1</sup> Department of Defense Education Activity.

NOTE: ELL = English language learners. Formerly ELL = students who passed their state's English-language proficiency examination within the past 2 years. The results for English language learners are based on students who were assessed and cannot be generalized to the total population of such students. Detail may not sum to totals because of rounding.  
 SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Mathematics Assessment.

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

State/Jurisdiction	White					Black					Hispanic				
	Percentage of students					Percentage of students					Percentage of students				
	Percentage of all students	Average scale score	Below Basic	At or above Basic	At or above Proficient	Percentage of all students	Average scale score	Below Basic	At or above Basic	At or above Proficient	Percentage of all students	Average scale score	Below Basic	At or above Basic	At or above Proficient
Nation (public)	60	288	21	79	37	17	254	59	41	8	17	261	50	50	13
Alabama	59	276	32	68	22	37	240	73	27	3	2	†	†	†	†
Alaska	57	288	21	79	38	5	266	48	52	19	4	272	36	64	21
Arizona	50	288	21	79	38	5	261	50	50	15	38	260	52	48	13
Arkansas	71	281	25	75	28	23	243	70	30	4	4	266	44	56	15
California	33	284	26	74	34	8	248	65	35	7	45	254	58	42	9
Colorado	64	292	18	82	43	7	256	56	44	11	25	260	52	48	10
Connecticut	66	293	17	83	46	15	249	63	37	6	14	254	59	41	10
Delaware	56	291	15	85	40	33	264	47	53	13	7	268	43	57	16
Florida	52	286	22	78	36	22	251	61	39	8	22	265	44	56	16
Georgia	51	284	24	76	34	37	255	57	43	8	6	258	52	48	12
Hawaii	15	277	31	69	25	2	†	†	†	†	3	257	53	47	9
Idaho	85	284	23	77	33	1	†	†	†	†	12	261	52	48	11
Illinois	61	289	18	82	39	21	249	66	34	6	14	265	45	55	13
Indiana	81	286	20	80	34	12	257	56	44	9	4	261	51	49	14
Iowa	88	286	22	78	36	4	256	59	41	8	5	264	46	54	9
Kansas	77	289	17	83	39	8	256	56	44	12	9	266	44	56	14
Kentucky	86	276	33	67	24	10	255	57	43	9	1	†	†	†	†
Louisiana	53	281	23	77	25	44	252	63	37	5	2	†	†	†	†
Maine	96	281	26	74	30	2	†	†	†	†	1	†	†	†	†
Maryland	50	292	18	82	43	40	258	54	46	11	4	262	53	47	19
Massachusetts	76	297	14	86	49	8	263	50	50	15	10	265	45	55	15
Michigan	73	285	23	77	36	20	247	66	34	6	4	265	48	52	16
Minnesota	81	296	15	85	49	8	251	63	37	9	4	263	47	53	10
Mississippi	46	279	26	74	24	51	247	69	31	4	1	†	†	†	†
Missouri	77	284	23	77	32	19	247	68	32	4	2	†	†	†	†
Montana	86	290	16	84	39	†	†	†	†	†	2	†	†	†	†
Nebraska	83	289	19	81	40	5	243	75	25	2	9	261	52	48	10
Nevada	55	280	27	73	29	10	247	66	34	7	29	256	56	44	10
New Hampshire	94	286	22	78	35	1	†	†	†	†	2	†	†	†	†
New Jersey	57	295	15	85	47	20	260	50	50	11	15	264	42	58	15
New Mexico	34	279	28	72	26	2	257	56	44	13	51	255	57	43	8
New York	55	290	17	83	41	19	259	54	46	11	18	262	49	51	14
North Carolina	60	292	18	82	42	29	263	47	53	12	6	265	41	59	16
North Dakota	88	290	16	84	37	1	†	†	†	†	1	†	†	†	†
Ohio	80	289	19	81	38	15	255	58	42	7	1	259	47	53	11
Oklahoma	62	278	29	71	26	11	249	65	35	4	7	257	55	45	11
Oregon	76	287	23	77	38	3	258	50	50	9	13	257	56	44	10
Pennsylvania	78	287	20	80	36	15	250	65	35	7	5	267	40	60	13
Rhode Island	73	281	27	73	30	8	249	66	34	5	15	244	71	29	4
South Carolina	57	294	14	86	44	39	263	49	51	10	3	269	42	58	19
South Dakota	86	291	15	85	40	1	†	†	†	†	2	†	†	†	†
Tennessee	75	278	30	70	26	22	246	70	30	3	2	†	†	†	†
Texas	43	295	14	86	46	15	264	47	53	13	39	271	37	63	19
Utah	84	283	25	75	33	1	†	†	†	†	10	255	55	45	9
Vermont	96	288	21	79	39	2	†	†	†	†	1	†	†	†	†
Virginia	61	293	16	84	43	26	263	48	52	9	6	270	37	63	20
Washington	74	289	20	80	39	4	265	44	56	15	10	262	50	50	15
West Virginia	95	270	39	61	18	4	251	64	36	6	1	†	†	†	†
Wisconsin	79	291	16	84	42	11	246	70	30	5	6	265	44	56	16
Wyoming	87	284	21	79	32	1	†	†	†	†	7	265	43	57	11
Other jurisdictions															
District of Columbia	4	317	6	94	69	88	241	73	27	4	7	252	61	39	9
DoDEA <sup>1</sup>	45	292	15	85	41	20	267	42	58	16	13	280	28	72	28

See notes at end of table.

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

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

# The estimate rounds to zero.

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

<sup>1</sup> Department of Defense Education Activity.

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

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

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

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

<sup>1</sup> Department of Defense Education Activity.

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

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

**Table A-11. Average mathematics scale scores and achievement-level results, by eligibility for free/reduced-price school lunch, grade 8 public schools: By state, 2005**

State/jurisdiction	Eligible					Not eligible					Information not available				
	Percentage of students					Percentage of students					Percentage of students				
	Percentage of all students	Average scale score	Below Basic	At or above Basic	At or above Proficient	Percentage of all students	Average scale score	Below Basic	At or above Basic	At or above Proficient	Percentage of all students	Average scale score	Below Basic	At or above Basic	At or above Proficient
Nation (public)	39	261	49	51	13	59	288	21	79	39	3	277	34	66	28
Alabama	50	248	63	37	5	48	276	31	69	24	2	†	†	†	†
Alaska	34	264	46	54	14	64	287	23	77	37	2	†	†	†	†
Arizona	40	260	52	48	12	45	285	25	75	35	15	†	†	†	†
Arkansas	47	260	49	51	13	53	282	24	76	30	#	†	†	†	†
California	45	254	58	42	10	50	282	29	71	33	5	†	†	†	†
Colorado	31	261	51	49	13	68	290	19	81	41	1	†	†	†	†
Connecticut	29	255	57	43	10	71	292	19	81	44	#	†	†	†	†
Delaware	32	265	48	52	13	65	288	19	81	36	3	305	13	87	61
Florida	44	260	50	50	13	55	285	23	77	36	#	†	†	†	†
Georgia	45	257	56	44	9	52	285	23	77	35	3	†	†	†	†
Hawaii	41	251	60	40	7	58	276	33	67	26	#	†	†	†	†
Idaho	36	272	37	63	20	63	286	21	79	36	1	†	†	†	†
Illinois	38	258	54	46	10	62	290	18	82	40	1	†	†	†	†
Indiana	37	268	41	59	16	62	290	17	83	39	2	†	†	†	†
Iowa	29	269	39	61	17	71	290	18	82	40	#	†	†	†	†
Kansas	37	270	39	61	19	63	293	14	86	43	#	†	†	†	†
Kentucky	46	264	48	52	14	53	283	25	75	31	1	†	†	†	†
Louisiana	56	258	53	47	8	42	280	26	74	27	2	†	†	†	†
Maine	30	269	39	61	18	68	286	21	79	35	2	†	†	†	†
Maryland	28	258	55	45	10	67	287	24	76	39	5	†	†	†	†
Massachusetts	29	273	36	64	22	69	299	13	87	52	2	†	†	†	†
Michigan	27	258	53	47	13	72	285	24	76	36	1	†	†	†	†
Minnesota	27	270	39	61	22	73	297	14	86	50	#	†	†	†	†
Mississippi	63	253	61	39	7	37	279	27	73	25	#	†	†	†	†
Missouri	38	262	48	52	13	60	286	21	79	35	2	†	†	†	†
Montana	31	272	36	64	21	67	293	13	87	43	2	†	†	†	†
Nebraska	31	268	43	57	17	68	291	17	83	43	1	†	†	†	†
Nevada	32	256	56	44	10	65	277	32	68	27	3	†	†	†	†
New Hampshire	16	271	35	65	17	83	288	20	80	38	1	†	†	†	†
New Jersey	27	262	46	54	14	68	292	19	81	44	6	†	†	†	†
New Mexico	61	254	59	41	7	35	278	28	72	25	5	†	†	†	†
New York	45	267	44	56	19	50	291	17	83	41	5	†	†	†	†
North Carolina	39	266	43	57	15	60	293	17	83	43	1	†	†	†	†
North Dakota	28	274	33	67	20	71	292	14	86	40	1	†	†	†	†
Ohio	30	265	45	55	16	64	290	18	82	39	7	†	†	†	†
Oklahoma	50	260	50	50	10	50	283	23	77	31	#	†	†	†	†
Oregon	33	270	40	60	20	63	289	21	79	41	3	†	†	†	†
Pennsylvania	30	262	47	53	12	69	289	19	81	39	2	†	†	†	†
Rhode Island	31	252	61	39	7	69	282	25	75	31	#	†	†	†	†
South Carolina	47	267	43	57	15	53	294	16	84	43	#	†	†	†	†
South Dakota	36	276	31	69	24	64	294	13	87	44	#	†	†	†	†
Tennessee	45	256	56	44	9	55	282	25	75	30	#	†	†	†	†
Texas	46	268	41	59	17	53	293	17	83	43	1	†	†	†	†
Utah	31	268	42	58	20	69	284	23	77	34	#	†	†	†	†
Vermont	27	272	36	64	21	72	293	17	83	44	1	†	†	†	†
Virginia	27	263	48	52	11	73	292	17	83	41	#	†	†	†	†
Washington	31	269	40	60	20	62	294	16	84	44	7	†	†	†	†
West Virginia	48	259	54	46	10	52	278	28	72	25	#	†	†	†	†
Wisconsin	27	263	46	54	15	73	292	16	84	43	#	†	†	†	†
Wyoming	30	272	35	65	17	70	287	19	81	34	#	†	†	†	†
Other jurisdictions															
District of Columbia	72	241	74	26	4	25	261	54	46	16	3	†	†	†	†
DoDEA <sup>1</sup>	#	†	†	†	†	#	†	†	†	†	100	284	24	76	33

# The estimate rounds to zero.

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

<sup>1</sup> Department of Defense Education Activity.

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

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



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

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

# The estimate rounds to zero.

<sup>1</sup> Department of Defense Education Activity.

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

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

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

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

# The estimate rounds to zero.

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

<sup>1</sup> Department of Defense Education Activity.

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

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

**National Assessment of  
Educational Progress**  
The Nation's Report Card™  
**Mathematics 2005**

October 2005

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**CONTENT CONTACT**

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The table below lists 13 reservations for Tuesday.  
Use the spinner provided to generate the data for 13 reservations for  
Wednesday. After each spin, record the outcome in the table.

Spin	Show	Not Show	Spin	Show	Not Show
1	1				
2	1				
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13		1			

b) For which day do the 13 outcomes more closely match the expectations for the number of persons who do not keep the advance reservations?

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