Florida

Grade 8 Public Schools

The Nation's Report Card

State
Mathematics 2011

This report provides selected results for Florida's public school students at grade 8 from the National Assessment of Educational Progress (NAEP) assessment in mathematics. Results are reported by average scale scores and by achievement levels (*Basic, Proficient, and Advanced).*

State-level results in mathematics are available for nine assessment years (1990, 1992, 1996, 2000, 2003, 2005, 2007, 2009, and 2011), although not all states may have participated or met the criteria for reporting in every years. All 50 states, the District of Columbia, and the Department of Defense schools participated in the 2011 mathematics assessment at grade and 8.

For more information about the assessment, see the NAEP website http://nces.ed.gov/nationsreportcard/ which contains

- *The Nation's Report Card, Mathematics 2011*
- The full set of national and state results in an interactive database
- Released test questions, scoring guides, and question-level performance data

NAEP is a project of the National Center for Education Statistics (NCES), reporting on the academic achievement of elementary and secondary students in the United States.

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KEY FINDINGS FOR 2011

Grade 8:

- In 2011, the average mathematics score for eighth-grade students in Florida was 278. This was lower than that of the nation's public schools (283).
- The average score for students in Florida in 2011 (278) was higher than that in 1990 (255) and was not significantly different from that in 2009 (279).
- In 2011, the percentage of students in Florida who performed at or above *Proficient* was 28 percent. This was smaller than that for the nation's public schools (34 percent).
- The percentage of students in Florida who performed at or above *Proficient* in 2011 (28 percent) was greater than that in 1990 (12 percent) and was not significantly different from that in 2009 (29 percent).
- In 2011, the percentage of students in Florida who performed at or above *Basic* was 68 percent. This was smaller than that for the nation's public schools (72 percent).
- The percentage of students in Florida who performed at or above *Basic* in 2011 (68 percent) was greater than that in 1990 (43 percent) and was not significantly different from that in 2009 (70 percent).

Introduction

What Was Assessed?

The content for each NAEP assessment is determined by the National Assessment Governing Board. The framework for each assessment documents the content and process areas to be measured and sets guidelines for the types of questions to be used. The mathematics frameworks were developed with the guidance of the Council of Chief State School Officers (CCSSO) and under the direction of the Governing Board. The current framework is available at the Governing Board's website http://www.nagb.org/publications/frameworks/math-2011-framework.pdf.

For grades 4 and 8, the mathematics framework for the 2011 assessment is similar to earlier versions that guided the 1990, 1992, 1996, 2000, 2003, 2005, 2007, and 2009 mathematics assessments. Although the frameworks are updated periodically, the mathematics content objectives for grades 4 and 8 have not changed, allowing students' performance in 2011 to be compared with previous years.

Content Areas and Mathematical Complexity

The 2011 mathematics framework classifies assessment questions in two dimensions, *content area* and *mathematical complexity*, that are used to guide the assessment. Each question is designed to measure one of the five content areas. However, certain aspects of mathematics, such as computation, occur in all content areas. Although the names of the content areas (as well as some topics in those areas) have changed from one framework to the next, a consistent focus has remained on measuring student performance in all five content areas. The distribution of questions among each content area differs by grade to reflect the knowledge and skills appropriate for each grade level.

- **Number properties and operations** measures students' understanding of ways to represent, calculate, and estimate with numbers.
- **Measurement** measures students' knowledge of measurement attributes, such as capacity and temperature, and geometric attributes, such as length, area, and volume.
- **Geometry** measures students' knowledge and understanding of shapes in a plane and in space.
- **Data analysis, statistics, and probability** measures students' understanding of data representation, characteristics of data sets, experiments and samples, and probability.
- **Algebra** measures students' understanding of patterns, using variables, algebraic representation, and functions.

The mathematical complexity of a question refers to the level of cognitive demand it places on students. Each level of complexity includes aspects of knowing and doing mathematics, such as performing procedures, understanding concepts, or solving problems.

- **Low complexity** questions typically specify what a student is to do, which is often to carry out a routine mathematical procedure.
- **Moderate complexity** questions involve more flexibility of thinking and often require a response with multiple steps.
- **High complexity** questions make heavier demands and often require abstract reasoning or analysis in a novel situation.

Assessment Design

Because of the breadth of the content covered in the NAEP mathematics assessment, each student took just a portion of the test, consisting of two 25-minute sections. Most student's testing time was divided evenly between multiple-choice and constructed-response questions. Short constructed-response questions asked students to provide the answer for a numerical problem or to briefly describe the solution to a problem. Longer constructed-response questions required students to write both a solution and its justification, explanation, or interpretation. Released test questions, along with student performance data by state, are available on the NAEP website at http://nces.ed.gov/nationsreportcard/itmrls/.

Some questions in the 2011 assessment incorporated the use of calculators (four-function calculators at grade 4 and scientific or graphing calculators at grade 8), rulers, protractors (at grade 8), or manipulatives such as spinners and geometric shapes. Calculator use at all grades was permitted on approximately one-third of the assessment.

Who Was Assessed?

All 50 states, the District of Columbia, and the Department of Defense Schools participated in the 2011 mathematics assessment at grades 4 and 8. The overall participation rates for schools and students must meet guidelines established by the National Center for Education Statistics (NCES) and the National Assessment Governing Board for assessment results to be reported publicly. A participation rate of at least 85 percent for schools in each subject and grade was required. Participation rates for the 2011 mathematics assessment are available on the NAEP website at http://nationsreportcard.gov/math_2011/participation.asp.

The schools and students participating in NAEP assessments are selected to be representative both nationally and for public schools at the state level. The comparisons between national and state results in this report present the performance of public school students only. In NAEP reports, the category "nation (public)" does not include Department of Defense or Bureau of Indian Education schools.

How Is Student Mathematics Performance Reported?

The 2011 state results are compared to results from seven earlier assessments at grade 4 and from eight earlier assessments at grade 8.

Scale Scores: Student performance is reported as an average score based on the NAEP mathematics scale, which ranges from 0 to 500 for grades 4 and 8. Because NAEP scales are developed independently for each subject and for each content area within a subject, the scores cannot be compared across subjects or across content areas within the same subject. Results are also reported at five percentiles (10th, 25th, 50th, 75th, and 90th) to show trends in performance for lower-, middle-, and higher-performing students.

Achievement Levels: Based on recommendations from policymakers, educators, and members of the general public, the Governing Board has set specific achievement levels for each subject area and grade. Achievement levels are performance standards indicating what students should know and be able to do. They provide another perspective with which to interpret student performance. NAEP results are reported in terms of three achievement levels—*Basic*, *Proficient*, and *Advanced*—and are expressed in terms of the percentage of students who attained each level. The three achievement levels are defined as follows:

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

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

As provided by law, 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. The NAEP achievement levels have been widely used by national and state officials. The mathematics achievement-level descriptions are summarized in figure 1.

Figure 1	The Nation's Report Card 2011 State Assessment
	Descriptions of eighth-grade achievement levels for 2011 NAEP mathematics assessment

Basic Level (262)	Eighth-grade students performing at the *Basic* level should exhibit evidence of conceptual and procedural understanding in the five NAEP content areas. This level of performance signifies an understanding of arithmetic operations—including estimation—on whole numbers, decimals, fractions, and percents.

Eighth-graders 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.

As they approach the *Proficient* level, students at the *Basic* level should be able to determine which of the available data are necessary and sufficient for correct solutions and use them in problem solving. However, these eighth-graders show limited skill in communicating mathematically.

Proficient Level (299)	Eighth-grade students performing at the *Proficient* level should apply mathematical concepts and procedures consistently to complex problems in the five NAEP content areas.

Eighth-graders performing at the *Proficient* level should be able to conjecture, defend their ideas, and give supporting examples. They should understand the connections among 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.

Quantity and spatial relationships in problem solving and reasoning should be familiar to them, and they should be able to convey underlying reasoning skills beyond the level of arithmetic. They should be able to compare and contrast mathematical ideas and generate their own examples. These students should make inferences from data and graphs, apply properties of informal geometry, and accurately use the tools of technology. Students at this level should understand the process of gathering and organizing data and be able to calculate, evaluate, and communicate results within the domain of statistics and probability.

Advanced Level (333)	Eighth-grade students performing at the *Advanced* level should be able to reach beyond the recognition, identification, and application of mathematical rules in order to generalize and synthesize concepts and principles in the five NAEP content areas.

Eighth-graders 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.

NOTE: The scores in parentheses in the shaded boxes indicate the lowest point on the 0-500 scale at which the achievement-level range begins.
SOURCE: National Assessment Governing Board. (2010). *Mathematics Framework for the 2011 National Assessment of Educational Progress*. Washington, DC: Author.

Assessing Students With Disabilities and/or English Language Learners

Testing accommodations, such as extra testing time or individual (rather than group) administration, are provided for students with disabilities (SD) or English language learners (ELL) who could not fairly and accurately demonstrate their abilities without modified test administration procedures. In 1996, administration procedures were introduced at the national level allowing certain accommodations for students requiring such accommodations to participate.

In state NAEP mathematics assessments prior to 2000, no testing accommodations or adaptations were permitted for SD or ELL students. In 2000, NAEP was administered using a split sample of schools—one sample in which accommodations were permitted for special-needs students who normally received them and another sample in which accommodations were not permitted. Therefore, there were two different sets of results available for 2000, and both are shown in the tables in this report. Results for the assessment years when accommodations were not permitted in state NAEP assessments (1990, 1992, 1996) are reported in the same tables as the results when accommodations were permitted (2000, 2003, 2005, 2007, 2009, 2011).

Even with the availability of accommodations, however, some students may still be excluded from the NAEP assessment. Due to differences in policies and practices regarding the identification and inclusion of SD and ELL students, variations in exclusion and accommodation rates should be considered when comparing students' performance over time and across states. The types of accommodations used in the 2011 NAEP mathematics assessment are available on the NAEP website at http://nationsreportcard.gov/math_2011/type_accomm.asp

Interpreting Results

The scores and percentages in this report are estimates based on samples of students rather than on entire populations. In addition, the collection of questions used at each grade level is only a sample of the many questions that could have been asked to assess the skills and abilities described in the NAEP framework. 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 assessed students are of the entire population. Statistical tests that factor in these standard errors are used to determine whether the differences between average scores or percentages are significant. All differences were tested for statistical significance at the .05 level using unrounded numbers.

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

Differences between scores or between percentages are discussed in this report only when they are significant from a statistical perspective. Significant differences between 2011 and prior assessments are marked with a notation (*) in the tables. Any differences in scores within a year or across years that are mentioned in the text as "higher," "lower," "greater," or "smaller" are statistically significant.

Score or percentage differences or gaps cited in this report are calculated based on differences between unrounded numbers. Therefore, the reader may find that the score or percentage difference cited in the text or tables may not be identical to the difference obtained from subtracting the rounded values shown in the accompanying tables or figures.

The reader is cautioned against making simple causal inferences between student performance and the other variables (e.g., race/ethnicity, gender, and type of school location) discussed in this report. A statistically significant relationship between a variable and measures of student performance does not imply that the variable causes differences in how well students perform. The relationship may be influenced by a number of other variables not accounted for in this report, such as family income, parental involvement, or student attitudes.

NAEP 2011 Mathematics Overall Average Score and Achievement-Level Results for Public School Students

Overall mathematics results for public school students from Florida are reported in this section, as well as regional and national results. The regions defined by the U.S. Census Bureau are Northeast, South, Midwest, and West (http://nces.ed.gov/nationsreportcard/hsts/tabulations/regions.asp).Therefore, trend data by region are not provided for assessment years prior to 2003.

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

Overall Scale Score Results

Student performance is reported as an average score based on the NAEP mathematics scale, which ranges from 0 to 500 for grades 4 and 8.

Table 1 shows the overall performance results of grade 8 public school students in Florida, the nation (public), and the region. Prior to 2003, the list of states that comprise a given region for NAEP differed from the list used by the U.S. Census Bureau, which has been used in NAEP from 2003 onward. Therefore, the data for the state's region are given only for 2003, 2005, 2007, 2009, and 2011. The first column of results presents the average score on the NAEP mathematics scale. The remaining columns show the scores at selected percentiles. Percentiles indicate the percentages of students whose scores fell at or below a particular score. For example, the 25th percentile demarks the cut point for the lowest 25 percent of students within the distribution of scale scores.

Grade 8 Scale Score Results

- In 2011, the average scale score for students in Florida was 278. This was lower than that of students across the nation (283).
- In Florida, the average scale score for students in 2011 was not significantly different from that in 2009 (279). However, the average scale score for students in public schools across the nation in 2011 was higher than that in 2009 (282).
- In Florida, the average scale score for students in 2011 was higher than the scores in 1990, 1992, 1996, 2003, and 2005. However, it was not significantly different from the scores in 2007 and 2009.

Table 1

The Nation's Report Card 2011 State Assessment

Average scale scores and selected percentile scores in NAEP mathematics for eighth-grade public school students, by year and jurisdiction: Various years, 1990–2011

Year and jurisdiction		Average scale score	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
1990[1]	Nation (public)	262 *	214 *	237 *	263 *	288 *	307 *
	Florida	255 *	209 *	231 *	255 *	280 *	303 *
1992[1]	Nation (public)	267 *	219 *	242 *	268 *	293 *	314 *
	Florida	260 *	212 *	235 *	261 *	285 *	307 *
1996[1]	Nation (public)	271 *	222 *	247 *	272 *	296 *	316 *
	Florida	264 *	216 *	240 *	265 *	289 *	310 *
2003	Nation (public)	276 *	228 *	253 *	278 *	301 *	321 *
	South[2]	274 *	228 *	251 *	275 *	298 *	318 *
	Florida	271 *	223 *	248 *	273 *	297 *	318 *
2005	Nation (public)	278 *	230 *	254 *	279 *	303 *	323 *
	South[2]	276 *	230 *	253 *	277 *	300 *	321 *
	Florida	274 *	225 *	251 *	276	300	320 *
2007	Nation (public)	280 *	234 *	257 *	281 *	305 *	325 *
	South[2]	279 *	235 *	256 *	280 *	303 *	323 *
	Florida	277	231	255	279	301	321
2009	Nation (public)	282 *	235 *	258 *	283 *	307 *	328
	South[2]	281 *	236	257 *	281 *	305 *	325
	Florida	279	235	256	280	303	322
2011	Nation (public)	283	236	259	284	308	329
	South[2]	282	237	259	283	306	327
	Florida	278	232	254	278	302	323

* Value is significantly different ($p < .05$) from the value for the same jurisdiction in 2011.

[1] Accommodations were not permitted for this assessment.

[2] Region in which jurisdiction is located. Regional data are not provided for years prior to 2003 to be consistent with the U.S. Census Bureau defined regions.

NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500. All differences were calculated and tested using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2011 Mathematics Assessments.

Overall Achievement-Level Results

Student results are reported as the percentages of students performing relative to performance standards set by the National Assessment Governing Board. These performance standards for what students should know and be able to do were based on the recommendations of broadly representative panels of educators and members of the public.

Table 2 shows the percentage of students at grade 8 who performed below *Basic*, at or above *Basic*, at or above *Proficient*, and at *Advanced*. Because the percentages are cumulative from *Basic* to *Proficient* to *Advanced*, they may sum to more than 100 percent. Only the percentage of students performing at or above *Basic* (which includes the students at *Proficient* and *Advanced)* plus the students below *Basic* will sum to 100 percent.

Grade 8 Achievement-Level Results

- In 2011, the percentage of Florida's students who performed at or above *Proficient* was 28 percent. This was smaller than the percentage of the nation's public school students who performed at or above *Proficient* (34 percent).
- In Florida, the percentage of students who performed at or above *Proficient* in 2011 was greater than the percentages in 1990, 1992, 1996, and 2003, but was not significantly different from the percentages in 2005, 2007, and 2009.
- In 2011, the percentage of Florida's students who performed at or above *Basic* was 68 percent. This was smaller than the percentage of the nation's public school students who performed at or above *Basic* (72 percent).
- In Florida, the percentage of students who performed at or above *Basic* in 2011 was greater than the percentages in 1990, 1992, 1996, and 2003, but was not significantly different from the percentages in 2005, 2007, and 2009.

Table 2

The Nation's Report Card 2011 State Assessment

Percentage of eighth-grade public school students at or above NAEP mathematics achievement levels, by year and jurisdiction: Various years, 1990–2011

Year and jurisdiction		Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
1990[1]	Nation (public)	49 *	51 *	15 *	2 *
	Florida	57 *	43 *	12 *	1 *
1992[1]	Nation (public)	44 *	56 *	20 *	3 *
	Florida	51 *	49 *	15 *	1 *
1996[1]	Nation (public)	39 *	61 *	23 *	4 *
	Florida	46 *	54 *	17 *	2 *
2003	Nation (public)	33 *	67 *	27 *	5 *
	South[2]	36 *	64 *	24 *	4 *
	Florida	38 *	62 *	23 *	4
2005	Nation (public)	32 *	68 *	28 *	6 *
	South[2]	34 *	66 *	26 *	5 *
	Florida	35	65	26	5
2007	Nation (public)	30 *	70 *	31 *	7 *
	South[2]	30 *	70 *	29 *	6 *
	Florida	32	68	27	5
2009	Nation (public)	29 *	71 *	33 *	7
	South[2]	29 *	71 *	30 *	7
	Florida	30	70	29	6
2011	Nation (public)	28	72	34	8
	South[2]	28	72	32	7
	Florida	32	68	28	6

* Value is significantly different ($p < .05$) from the value for the same jurisdiction in 2011.

[1] Accommodations were not permitted for this assessment.

[2] Region in which jurisdiction is located. Regional data are not provided for years prior to 2003 to be consistent with the U.S. Census Bureau defined regions.

NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 261 or lower; *Basic*, 262–298; *Proficient*, 299–332; and *Advanced*, 333 and above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2011 Mathematics Assessments.

Comparisons Between Florida, the Nation, and Participating States and Jurisdictions

All 50 states, the District of Columbia, and the Department of Defense Schools participated in the 2011 mathematics assessment at grades 4 and 8. References to "jurisdictions" in the results statements may include states, the District of Columbia, and Department of Defense Schools.

Comparisons by Scale Scores

Figure 2 compares Florida's 2011 overall mathematics scale scores at grade 8 with those of public schools in the nation and all other participating states and jurisdictions. The different shadings indicate whether the average score of the nation (public), a state, or a jurisdiction was found to be higher than, lower than, or not significantly different from that of Florida in the NAEP 2011 mathematics assessment.

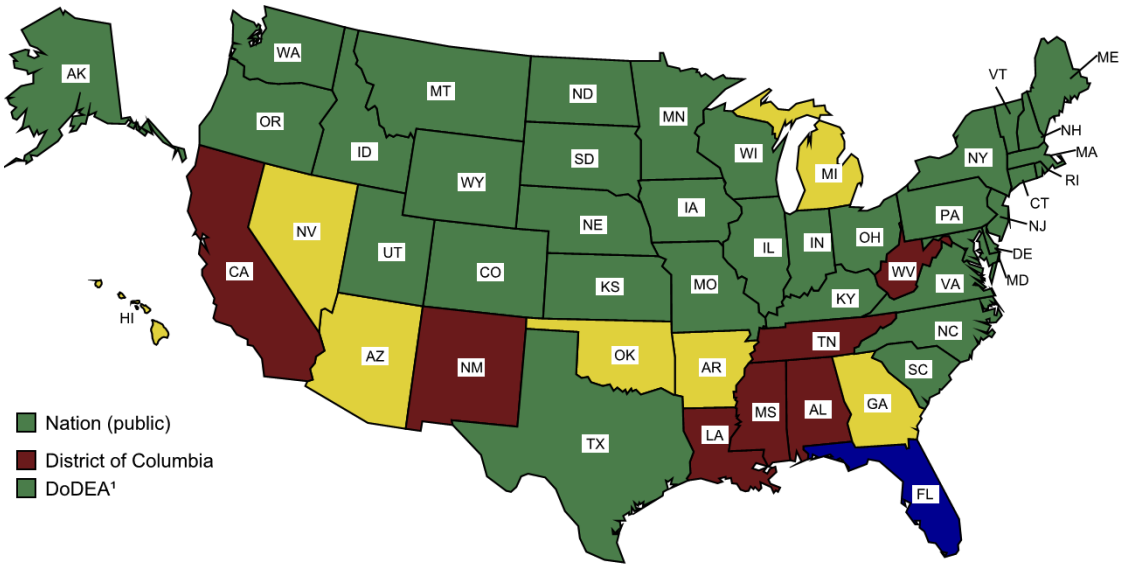
Grade 8 Scale Score Comparison Results

- The average score for students in Florida was higher than the scores in 8 jurisdictions, not significantly different from those in 7 jurisdictions, and lower than those in 36 jurisdictions.

Figure 2

The Nation's Report Card 2011 State Assessment

Florida's average scale score in NAEP mathematics for eighth-grade public school students compared with scores for the nation and other participating jurisdictions: 2011



★	Focal state/jurisdiction (Florida)
	Higher average scale score than Florida (nation and 36 jurisdictions)
	Not significantly different from Florida (7 jurisdictions)
	Lower average scale score than Florida (8 jurisdictions)

¹ Department of Defense Education Activity (overseas and domestic schools).
NOTE: Significance tests used a multiple-comparison procedure based on all jurisdictions that participated.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2011 Mathematics Assessment.

Comparisons by Achievement Levels

Figure 3 permits comparisons of all jurisdictions (and the nation) participating in the NAEP 2011 mathematics assessment in terms of percentages of grade 8 students performing at or above *Proficient*. The participating states and jurisdictions are grouped into categories reflecting whether the percentage of their students performing at or above *Proficient* (including *Advanced*) was found to be higher than, not significantly different from, or lower than the percentage in Florida.

Note that the selected state is listed first in its category, and the other states and jurisdictions within each category are listed alphabetically; statistical comparisons among jurisdictions in each of the three categories are not included in this report. However, statistical comparisons among states by achievement level can be calculated online by using the NAEP Data Explorer at http://nces.ed.gov/nationsreportcard/naepdata/.

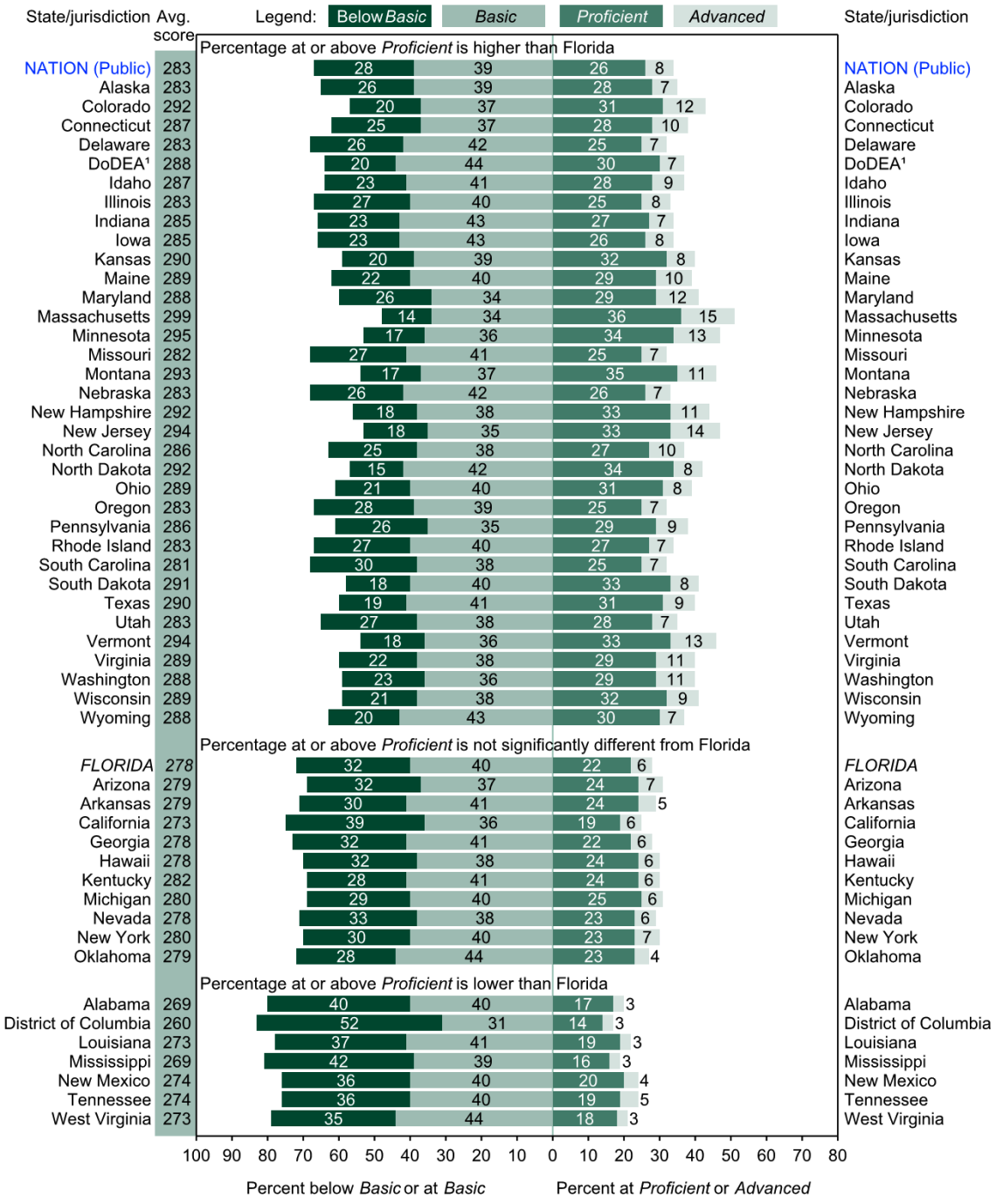
Grade 8 Achievement-Level Comparison Results

- The percentage of students performing at or above the *Proficient* level in Florida was greater than the percentage in 7 jurisdictions, not significantly different from those in 10 jurisdictions, and smaller than those in 34 jurisdictions.
- The percentage of students performing at or above the *Basic* level in Florida was greater than the percentage in 7 jurisdictions, not significantly different from those in 9 jurisdictions, and smaller than those in 35 jurisdictions (data not shown).

Figure 3

The Nation's Report Card 2011 State Assessment

Average scale scores in NAEP mathematics for eighth-grade public school students, percentage within each achievement level, and Florida's percentage at or above *Proficient* compared with the nation and other participating states/jurisdictions: 2011



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

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

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2011 Mathematics Assessment.

Mathematics Performance of Selected Student Groups

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

- race/ethnicity
- gender
- student eligibility for the National School Lunch Program
- type of school location (for 2007, 2009, and 2011)
- parents' highest level of education

Results for each of the variables are reported in tables that include the percentage of students in each group in the first column, and the average scale score in the second column. The columns to the right show the percentage of students below *Basic* and at or above each achievement level.

Results by students' race/ethnicity and gender include statements about score point differences between student groups (e.g., between White and Black or White and Hispanic students, or between male and female students) in 2011 and in the first assessment year. Because these differences are calculated using unrounded values, they may differ slightly from what would be obtained by subtracting the rounded values that appear in the tables. Statements indicating a narrowing or widening of the gap in students' scores are only made if the change in the gap from the first assessment year to 2011 was found to be statistically significant.

The reader is cautioned against making simple causal inferences about group differences, as a complex mix of educational and socioeconomic factors may affect student performance. NAEP collects information on many additional variables, including school and home factors related to achievement. This information is in an interactive database available on the NAEP website http://nces.ed.gov/nationsreportcard/naepdata/.

Race/Ethnicity

Prior to 2011, student race/ethnicity was obtained from school records and reported for the six mutually exclusive categories shown below:

- White
- Black
- Hispanic
- Asian/Pacific Islander
- American Indian/Alaska Native
- Unclassified (not shown in tables)

Students who identified with more than one of the other five categories were classified as "Other" and were included as part of the "Unclassified" category along with students who had a background other than the ones listed or whose race/ethnicity could not be determined.

In compliance with new standards from the U.S. Office of Management and Budget for collecting and reporting data on race/ethnicity, additional information was collected in 2011 so that results could be reported separately for Asian students, Native Hawaiian/Other Pacific Islander students, and students identifying with two or more races. Beginning in 2011, all of the students participating in NAEP were identified as one of the seven racial/ethnic categories listed below:

- White
- Black or African American
- Hispanic
- Asian
- American Indian/Alaska Native
- Native Hawaiian/Other Pacific Islander
- Two or more races

As in earlier years, students identified as Hispanic were classified as Hispanic in 2011 even if they were also identified with another racial/ethnic group. Students who identified with two or more of the other racial/ethnic groups (e.g., White and Black) would have been classified as "Other" and reported as part of the "Unclassified" category prior to 2011, and classified as "Two or more races" in 2011.

When comparing the results for racial/ethnic groups from 2011 to earlier assessment years, the 2011 data for Asian and Native Hawaiian/Other Pacific Islander students were combined into a single Asian/Pacific Islander category.

Table 3 shows average scale scores and percentage of students by achievement-level data for public school students at grade 8 in Florida and the nation, by race/ethnicity.

Grade 8 Scale Score Results by Race/Ethnicity

- In 2011, White students in Florida had an average scale score that was higher than the average scores of Black and Hispanic students, but lower than the average score of Asian/Pacific Islander students.
- In 2011, the average scale score of Asian/Pacific Islander students in Florida was higher than their respective scores in 2003 and 2007, but not significantly different from their respective scores in 2005 and 2009.
- In 2011, the average scale scores of Black and Hispanic students in Florida were higher than their respective scores in 1990, 1992, 1996, 2003, and 2005, but not significantly different from their respective scores in 2007 and 2009.
- In 2011, the average scale score of White students in Florida was higher than their respective scores in 1990, 1992, and 1996, but not significantly different from their respective scores in 2003, 2005, 2007, and 2009.
- In 2011, Black students in Florida had an average score that was lower than that of White students by 29 points. In 1990, the average score for Black students was lower than that of White students by 34 points.
- In 2011, Hispanic students in Florida had an average score that was lower than that of White students by 14 points. In 1990, the average score for Hispanic students was lower than that of White students by 19 points.

Grade 8 Achievement-Level Results by Race/Ethnicity

- In 2011 in Florida, the percentage of White students performing at or above *Proficient* was greater than the corresponding percentages of Black and Hispanic students, but smaller than the percentage of Asian/Pacific Islander students.
- In 2011, the percentage of Asian/Pacific Islander students in Florida performing at or above *Proficient* was greater than the percentage in 2003, but not significantly different from the percentages of their respective peers in 2005, 2007, and 2009.
- In 2011, the percentages of Black and Hispanic students in Florida performing at or above *Proficient* were greater than the percentages of their respective peers in 1990, 1992, 1996, and 2003, but not significantly different from the percentages of their respective peers in 2005, 2007, and 2009.
- In 2011, the percentage of White students in Florida performing at or above *Proficient* was greater than the percentages of their respective peers in 1990, 1992, and 1996, but not significantly different from the percentages of their respective peers in 2003, 2005, 2007, and 2009.

Table 3

The Nation's Report Card 2011 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 1990–2011

Race/ethnicity, year, and jurisdiction		Percentage of students	Average scale score	Percent			
				Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
White							
1990[1]	Nation (public)	73*	269*	41*	59*	18*	3*
	Florida	64*	265*	47*	53*	16*	2*
1992[1]	Nation (public)	72*	276*	34*	66*	25*	3*
	Florida	59*	272*	37*	63*	21*	2*
1996[1]	Nation (public)	70*	280*	28*	72*	29*	5*
	Florida	57*	277*	30*	70*	25*	3*
2003	Nation (public)	62*	287*	21*	79*	36*	7*
	Florida	50	286	22	78	34	7
2005	Nation (public)	60*	288*	21*	79*	37*	7*
	Florida	52*	286	22	78	36	7
2007	Nation (public)	58*	290*	19*	81*	41*	9*
	Florida	48	289	20	80	37	8
2009	Nation (public)	56*	292	18	82	43	10
	Florida	46	289	20	80	39	9
2011	Nation (public)	54	293	17	83	43	10
	Florida	45	287	21	79	37	8
Black							
1990[1]	Nation (public)	16	236*	79*	21*	5*	#
	Florida	22	231*	83*	17*	2*	#
1992[1]	Nation (public)	17*	236*	81*	19*	2*	#
	Florida	25	236*	79*	21*	3*	#
1996[1]	Nation (public)	16	241*	74*	26*	4*	#
	Florida	24	235*	80*	20*	2*	#
2003	Nation (public)	17*	252*	61*	39*	7*	#*
	Florida	27	249*	64*	36*	7*	1
2005	Nation (public)	17*	254*	59*	41*	8*	1*
	Florida	22	251*	61	39	8	#
2007	Nation (public)	17*	259*	53*	47*	11*	1*
	Florida	23	259	52	48	11	1
2009	Nation (public)	16	260	51	49	12	1
	Florida	22	264	47	53	13	1
2011	Nation (public)	16	262	50	50	13	1
	Florida	22	258	54	46	11	1

See notes at end of table.

Table 3

The Nation's Report Card 2011 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 1990–2011—Continued

Race/ethnicity, year, and jurisdiction		Percentage of students	Average scale score	Percent			
				Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
Hispanic							
1990[1]	Nation (public)	7*	245*	67*	33*	7*	1*
	Florida	12*	246*	70*	30*	7*	1*
1992[1]	Nation (public)	8*	247*	67*	33*	6*	#*
	Florida	14*	246*	67*	33*	5*	#
1996[1]	Nation (public)	9*	250*	62*	38*	8*	1
	Florida	16*	254*	60*	40*	8*	1*
2003	Nation (public)	15*	258*	53*	47*	11*	1*
	Florida	19*	264*	47*	53*	16*	3
2005	Nation (public)	17*	261*	50*	50*	13*	1*
	Florida	22*	265*	44*	56*	16	1*
2007	Nation (public)	19*	264*	46*	54*	15*	2*
	Florida	24	270	39	61	21	3
2009	Nation (public)	21*	266*	44*	56*	17*	2
	Florida	26	274	34	66	22	3
2011	Nation (public)	23	269	40	60	20	3
	Florida	27	274	35	65	22	3
Asian/Pacific Islander							
1990[1]	Nation (public)	2*	275*	36*	64*	30*	6*
	Florida	2	‡	‡	‡	‡	‡
1992[1]	Nation (public)	2*	290	25	75	43	14
	Florida	2*	‡	‡	‡	‡	‡
1996[1]	Nation (public)	‡	‡	‡	‡	‡	‡
	Florida	2*	‡	‡	‡	‡	‡
2003	Nation (public)	4*	289*	23*	77*	42*	12*
	Florida	2	287*	25	75	41*	5
2005	Nation (public)	5*	294*	19*	81*	46*	16*
	Florida	2	299	13	87	51	16
2007	Nation (public)	5*	296*	18*	82*	49*	17*
	Florida	2	293*	20	80	48	14
2009	Nation (public)	5	300	16	84	53	20
	Florida	2	302	13	87	55	19
2011	Nation (public)	6	302	15	85	55	22
	Florida	3	312	8	92	65	25

See notes at end of table.

Table 3

The Nation's Report Card 2011 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 1990–2011—Continued

Race/ethnicity, year, and jurisdiction		Percentage of students	Average scale score	Percent			
				Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
American Indian/Alaska Native							
1990[1]	Nation (public)	1	‡	‡	‡	‡	‡
	Florida	#	‡	‡	‡	‡	‡
1992[1]	Nation (public)	1	‡	‡	‡	‡	‡
	Florida	#	‡	‡	‡	‡	‡
1996[1]	Nation (public)	1	‡	‡	‡	‡	‡
	Florida	1	‡	‡	‡	‡	‡
2003	Nation (public)	1*	265	46	54	16	2
	Florida	#	‡	‡	‡	‡	‡
2005	Nation (public)	1*	266	45	55	14	2*
	Florida	#	‡	‡	‡	‡	‡
2007	Nation (public)	1*	265	44	56	17	2
	Florida	#	‡	‡	‡	‡	‡
2009	Nation (public)	1	267	43	57	20	3
	Florida	#	‡	‡	‡	‡	‡
2011	Nation (public)	1	266	45	55	17	4
	Florida	#	‡	‡	‡	‡	‡

Rounds to zero.

‡ Reporting standards not met.

* Value is significantly different ($p < .05$) from the value for the same jurisdiction and student group in 2011.

[1] Accommodations were not permitted for this assessment.

NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 261 or lower; *Basic*, 262–298; *Proficient*, 299–332; and *Advanced*, 333 and above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. Black includes African American, Hispanic includes Latino, and Pacific Islander includes Native Hawaiian. Race categories exclude Hispanic origin. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2011 Mathematics Assessments.

Table 4 shows average scale scores and percentage of students by achievement-level data for the seven racial/ethnic categories used in 2011: White, Black, Hispanic, Asian, American Indian/Alaska Native, Native Hawaiian/Other Pacific Islander, and Two or more races at grade 8 in Florida and the nation, by race/ethnicity.

Table 4

The Nation's Report Card 2011 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: 2011

Race/ethnicity, year, and jurisdiction		Percentage of students	Average scale score	Percent			
				Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
White							
2011	Nation (public)	54*	293*	17*	83*	43*	10*
	Florida	45	287	21	79	37	8
Black							
2011	Nation (public)	16*	262*	50*	50*	13	1*
	Florida	22	258	54	46	11	1
Hispanic							
2011	Nation (public)	23*	269*	40*	60*	20	3
	Florida	27	274	35	65	22	3
Asian							
2011	Nation (public)	5*	305	12	88	58	24
	Florida	3	314	6	94	66	26
American Indian/Alaska Native							
2011	Nation (public)	1*	266	45	55	17	4
	Florida	#	‡	‡	‡	‡	‡
Native Hawaiian/Other Pacific Islander							
2011	Nation (public)	#*	265	45	55	19	3
	Florida	#	‡	‡	‡	‡	‡
Two or more races							
2011	Nation (public)	2*	286	24	76	37	10
	Florida	3	283	24	76	32	5

Rounds to zero.

‡ Reporting standards not met.

* Value is significantly different ($p < .05$) from the value for the same group in Florida.

NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 261 or lower; *Basic*, 262–298; *Proficient*, 299–332; and *Advanced*, 333 and above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. Black includes African American and Hispanic includes Latino. Race categories exclude Hispanic origin. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2011 Mathematics Assessment.

Gender

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

Table 5 shows average scale scores and percentage of students by achievement-level data for public school students at grade 8 in Florida and the nation, by gender.

Grade 8 Scale Score Results by Gender

- In 2011, male students in Florida had an average score in mathematics (278) that was not significantly different from that of female students (277). In 1990, male students in Florida had an average score in mathematics (257) that was not significantly different from that of female students (254).
- In 2011, male students in Florida had an average scale score in mathematics (278) that was lower than that of male students in public schools across the nation (283). Similarly, female students in Florida had an average scale score (277) that was lower than that of female students across the nation (282).
- In Florida, the average scale score of male students in 2011 was higher than the scores of male students in 1990, 1992, 1996, and 2003, but not significantly different from the scores of male students in 2005, 2007, and 2009.
- In Florida, the average scale score of female students in 2011 was higher than the scores of female students in 1990, 1992, 1996, 2003, and 2005, but not significantly different from the scores of female students in 2007 and 2009.

Grade 8 Achievement-Level Results by Gender

- In the 2011 assessment, 29 percent of male students and 27 percent of female students performed at or above *Proficient* in Florida. The difference between these percentages was not statistically significant.
- The percentage of male students in Florida's public schools who were at or above *Proficient* in 2011 (29 percent) was smaller than that of male students in the nation (34 percent).
- The percentage of female students in Florida's public schools who were at or above *Proficient* in 2011 (27 percent) was smaller than that of female students in the nation (33 percent).
- In Florida, the percentage of male students performing at or above *Proficient* in 2011 was greater than the corresponding percentages of students in 1990, 1992, and 1996, but not significantly different from the corresponding percentages of students in 2003, 2005, 2007, and 2009.
- In Florida, the percentage of female students performing at or above *Proficient* in 2011 was greater than the corresponding percentages of students in 1990, 1992, 1996, and 2003, but not significantly different from the corresponding percentages of students in 2005, 2007, and 2009.

Table 5

The Nation's Report Card 2011 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by gender, year, and jurisdiction: Various years, 1990–2011

Gender, year, and jurisdiction		Percentage of students	Average scale score	Percent			
				Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
Male							
1990[1]	Nation (public)	51	262*	49*	51*	17*	2*
	Florida	51	257*	56*	44*	14*	2*
1992[1]	Nation (public)	52	266*	45*	55*	20*	3*
	Florida	49	260*	52*	48*	15*	2*
1996[1]	Nation (public)	52	270*	40*	60*	24*	4*
	Florida	47*	265*	45*	55*	18*	2*
2003	Nation (public)	50	277*	33*	67*	29*	6*
	Florida	51	273*	36	64	26	5
2005	Nation (public)	51	278*	32*	68*	30*	6*
	Florida	52	276	33	67	28	5
2007	Nation (public)	51	281*	29*	71*	33*	8*
	Florida	49	278	32	68	29	6
2009	Nation (public)	51	283	28	72	34	8
	Florida	50	281	29	71	31	7
2011	Nation (public)	51	283	28	72	34	9
	Florida	51	278	32	68	29	6
Female							
1990[1]	Nation (public)	49	261*	49*	51*	14*	2*
	Florida	49	254*	59*	41*	10*	1*
1992[1]	Nation (public)	48	267*	44*	56*	20*	3*
	Florida	51	260*	51*	49*	14*	1*
1996[1]	Nation (public)	48	271*	39*	61*	21*	3*
	Florida	53*	262*	48*	52*	16*	1*
2003	Nation (public)	50	275*	34*	66*	26*	4*
	Florida	49	269*	41*	59*	21*	3
2005	Nation (public)	49	277*	33*	67*	27*	5*
	Florida	48	272*	37*	63*	23	4
2007	Nation (public)	49	279*	30*	70*	29*	6*
	Florida	51	277	32	68	26	5
2009	Nation (public)	49	281*	29*	71*	31*	7
	Florida	50	278	31	69	27	5
2011	Nation (public)	49	282	28	72	33	7
	Florida	49	277	32	68	27	5

* Value is significantly different ($p < .05$) from the value for the same jurisdiction and student group in 2011.

[1] Accommodations were not permitted for this assessment.

NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 261 or lower; *Basic*, 262–298; *Proficient*, 299–332; and *Advanced*, 333 and above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2011 Mathematics Assessments.

Student Eligibility for the National School Lunch Program

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

Table 6 shows average scale scores and percentage of students by achievement-level data for public school students at grade 8 in Florida and the nation, by student eligibility for the NSLP.

Grade 8 Scale Score Results by Free/Reduced-Price School Lunch Eligibility

- In 2011, students in Florida eligible for free/reduced-price lunch had an average mathematics scale score of 267. This was lower than that of students in Florida not eligible for this program (291).
- In 2011, students in Florida who were eligible for free/reduced-price school lunch had an average score that was lower than that of students who were not eligible by 24 points. In 1996, the average score for students in Florida who were eligible for free/reduced-price school lunch was lower than the score of those not eligible by 27 points.
- Students in Florida eligible for free/reduced-price lunch had an average scale score (267) in 2011 that was lower than that of students in the nation who were eligible (269).
- In Florida, students eligible for free/reduced-price lunch had an average mathematics scale score in 2011 that was higher than that of eligible students in 1996, 2003, and 2005, but not significantly different from that of eligible students in 2007 and 2009.

Grade 8 Achievement-Level Results by Free/Reduced-Price School Lunch Eligibility

- In Florida, 16 percent of students who were eligible for free/reduced-price lunch and 42 percent of those who were not eligible for this program performed at or above *Proficient* in 2011. These percentages were significantly different from one another.
- For students in Florida in 2011 who were eligible for free/reduced-price lunch, the percentage at or above *Proficient* (16 percent) was smaller than the corresponding percentage for their counterparts around the nation (19 percent).
- In Florida, the percentage of students eligible for free/reduced-price lunch who performed at or above *Proficient* in 2011 was greater than the corresponding percentages in 1996, 2003, and 2005, but not significantly different from the corresponding percentages in 2007 and 2009.

Table 6

The Nation's Report Card 2011 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by National School Lunch Program eligibility status, year, and jurisdiction: Various years, 1996–2011

Eligibility status, year, and jurisdiction		Percentage of students	Average scale score	Percent			
				Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
Eligible							
1996[1]	Nation (public)	30*	252*	61*	39*	8*	1*
	Florida	39*	248*	65*	35*	6*	#
2003	Nation (public)	36*	258*	53*	47*	11*	1*
	Florida	43*	256*	55*	45*	11*	1
2005	Nation (public)	39*	261*	49*	51*	13*	1*
	Florida	44*	260*	50*	50*	13*	1
2007	Nation (public)	41*	265*	45*	55*	15*	2*
	Florida	44*	265	45	55	16	1
2009	Nation (public)	43*	266*	43*	57*	17*	2*
	Florida	48*	269	41	59	18	2
2011	Nation (public)	48	269	41	59	19	2
	Florida	55	267	43	57	16	2
Not eligible							
1996[1]	Nation (public)	56	279*	29*	71*	29*	5*
	Florida	53*	275*	33*	67*	25*	3*
2003	Nation (public)	58*	287*	22*	78*	37*	7*
	Florida	52*	284*	25*	75*	34*	7
2005	Nation (public)	59*	288*	21*	79*	39*	8*
	Florida	55*	285*	23*	77*	36*	7
2007	Nation (public)	58*	291*	19*	81*	42*	10*
	Florida	56*	287	22	78	37*	9
2009	Nation (public)	56*	293*	17*	83*	45*	12*
	Florida	52*	289	20	80	40	9
2011	Nation (public)	52	295	16	84	47	13
	Florida	45	291	19	81	42	10

See notes at end of table.

A More Inclusive NAEP: Students With Disabilities and English Language Learners

To ensure that the samples are representative, NAEP has established policies and procedures to maximize the inclusion of all students in the assessment. Every effort is made to ensure that all selected students who are capable of participating meaningfully in the assessment are assessed. While some students with disabilities (SD) and/or English language learners (ELL) can be assessed without any special procedures, others require accommodations to participate in NAEP. Still other SD and/or ELL students selected by NAEP may not be able to participate. Local school staff who are familiar with these students are asked a series of questions to help them decide whether each student should participate in the assessment and whether the student needs accommodations.

Within any assessment year, exclusion and accommodation rates may vary across jurisdictions. In addition, exclusion and accommodation rates may increase or decrease between assessment administrations, making it difficult to interpret comparisons over time within jurisdictions. Since SD and/or ELL students tend to score below average on assessments, the exclusion of students from these groups may result in a higher average score than if those students had taken the assessment. On the other hand, providing appropriate testing accommodations (e.g., providing extended time for some SD and/or ELL students to take the assessment) removes barriers that would otherwise prevent them from demonstrating their knowledge and skills.

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

Table 9 displays data for 8th grade students in Florida who were identified as SD and/or ELL, by whether they were excluded, assessed with accommodations, or assessed under standard conditions, as a percent of all 8th grade students in the state.

Table 10 shows the percentages of students assessed in Florida by disability status and their performance on the NAEP assessment in terms of average scores and percentages performing below *Basic*, at or above *Basic*, at or above *Proficient*, and at *Advanced* for grade 8.

Table 11 presents the percentages of students assessed in Florida by ELL status, their average scores, and their performance in terms of the percentages below *Basic*, at or above *Basic*, at or above *Proficient*, and at *Advanced* for grade 8.

Table 12 presents the total number of grade 8 students assessed in each of the participating states and the percentage of students sampled who were excluded.

Table 9

The Nation's Report Card 2011 State Assessment

Percentage of eighth-grade public school students identified as students with disabilities (SD) and/or English language learners (ELL) excluded and assessed in NAEP mathematics as a percentage of all students, by assessment year and testing status: Various years, 1990–2011

Year and testing status		SD and/or ELL		SD		ELL	
		Florida	Nation (public)	Florida	Nation (public)	Florida	Nation (public)
1990[1]	**Identified**	**11**	**—**	**8**	**—**	**2**	**—**
	Excluded	6	—	5	—	2	—
	Assessed without accommodations	5	—	4	—	1	—
1992[1]	**Identified**	**13**	**10**	**9**	**8**	**4**	**2**
	Excluded	6	6	5	5	2	2
	Assessed without accommodations	7	4	4	3	2	1
1996[1]	**Identified**	**16**	**11**	**12**	**9**	**4**	**3**
	Excluded	10	5	7	4	3	1
	Assessed without accommodations	6	7	5	5	1	2
2003	**Identified**	**19**	**19**	**14**	**14**	**7**	**6**
	Excluded	3	4	2	3	1	1
	Assessed without accommodations	5	8	3	5	3	4
	Assessed with accommodations	11	7	9	6	3	1
2005	**Identified**	**21**	**19**	**16**	**13**	**6**	**6**
	Excluded	3	4	2	3	1	1
	Assessed without accommodations	4	7	3	3	1	4
	Assessed with accommodations	13	8	11	7	3	1
2007	**Identified**	**19**	**18**	**13**	**13**	**6**	**7**
	Excluded	3	4	2	4	1	1
	Assessed without accommodations	2	6	1	2	1	4
	Assessed with accommodations	13	8	10	6	4	2
2009	**Identified**	**19**	**18**	**15**	**13**	**5**	**6**
	Excluded	2	3	2	3	#	#
	Assessed without accommodations	1	5	1	2	#	3
	Assessed with accommodations	16	10	12	8	4	2
2011	**Identified**	**19**	**18**	**14**	**13**	**5**	**6**
	Excluded	2	3	2	2	#	#
	Assessed without accommodations	1	5	1	2	#	3
	Assessed with accommodations	16	10	12	9	4	2

— Not available.

Rounds to zero.

[1] Accommodations were not permitted for this assessment year.

NOTE: 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), various years, 1990–2011 Mathematics Assessments.

Table 10

The Nation's Report Card 2011 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by students with disabilities (SD) status, year, and jurisdiction: Various years, 2003–2011

SD status, year, and jurisdiction		Percentage of students	Average scale score	Percent			
				Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
SD							
2003	Nation (public)	11*	242*	71*	29*	6*	1*
	Florida	12	235*	76*	24*	5	#
2005	Nation (public)	11	244*	69*	31*	7*	1*
	Florida	14	248	63	37	13	3
2007	Nation (public)	9*	246*	67	33	8	1
	Florida	12	246	66	34	8	1
2009	Nation (public)	10	249	64	36	9	1
	Florida	13	252	61	39	8	1
2011	Nation (public)	11	249	65	35	9	2
	Florida	13	250	66	34	9	1
Not SD							
2003	Nation (public)	89*	280*	29*	71*	30*	5*
	Florida	88	277*	33*	67*	26*	5
2005	Nation (public)	89	281*	28*	72*	31*	6*
	Florida	86	278*	31	69	28	5
2007	Nation (public)	91*	284*	26*	74*	33*	7*
	Florida	88	281	27	73	30	6
2009	Nation (public)	90	285*	24*	76*	35*	8
	Florida	87	284	25	75	32	6
2011	Nation (public)	89	287	23	77	36	9
	Florida	87	282	27	73	30	6

Rounds to zero.

* Value is significantly different ($p < .05$) from the value for the same jurisdiction and student group in 2011.

NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 261 or lower; *Basic*, 262–298; *Proficient*, 299–332; and *Advanced*, 333 and above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. Performance comparisons may be affected by differences in exclusion rates for students with disabilities in the NAEP samples and by differences in sample sizes. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2003–2011 Mathematics Assessments.

Table 11

The Nation's Report Card 2011 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by English language learner (ELL) status, year, and jurisdiction: Various years, 2003–2011

ELL status, year, and jurisdiction		Percentage of students	Average scale score	Percent			
				Below *Basic*	At or above *Basic*	At or above *Proficient*	At *Advanced*
ELL							
2003	Nation (public)	5	241	74	26	5	1
	Florida	6	236 *	78	22	2	#
2005	Nation (public)	6	244	71	29	6	1
	Florida	5	243	70	30	4	#
2007	Nation (public)	6	245	70	30	6	1
	Florida	5	243	72	28	6	1
2009	Nation (public)	6	243	72	28	5	1
	Florida	5	241	70	30	4	1
2011	Nation (public)	6	244	72	28	5	1
	Florida	5	246	67	33	5	#
Not ELL							
2003	Nation (public)	95	278 *	31 *	69 *	29 *	5 *
	Florida	94	273 *	36 *	64 *	25 *	4
2005	Nation (public)	94	280 *	30 *	70 *	30 *	6 *
	Florida	95	276 *	33	67	27	5
2007	Nation (public)	94	282 *	27 *	73 *	33 *	7 *
	Florida	95	279	30	70	28	6
2009	Nation (public)	94	284 *	26 *	74 *	34 *	8
	Florida	95	281	28	72	30	6
2011	Nation (public)	94	285	25	75	35	8
	Florida	95	279	30	70	29	6

Rounds to zero.

* Value is significantly different ($p < .05$) from the value for the same jurisdiction and student group in 2011.

NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 261 or lower; *Basic*, 262–298; *Proficient*, 299–332; and *Advanced*, 333 and above. At or above *Basic* includes *Basic*, *Proficient*, and *Advanced*. At or above *Proficient* includes *Proficient* and *Advanced*. Performance comparisons may be affected by differences in exclusion rates for English language learners in the NAEP samples and by differences in sample sizes. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2003–2011 Mathematics Assessments.

Table 12

The Nation's Report Card 2011 State Assessment

Number of eighth-grade public school students assessed in NAEP mathematics and weighted percentage excluded, by state/jurisdiction: 2011

State/jurisdiction	Number assessed	Weighted percentage excluded
Nation (public)	**164,400**	**3**
Alabama	2,800	1
Alaska	2,400	3
Arizona	2,800	1
Arkansas	2,800	1
California	7,300	1
Colorado	2,800	1
Connecticut	2,800	1
Delaware	2,800	3
Florida	6,200	2
Georgia	4,100	3
Hawaii	2,900	2
Idaho	3,000	1
Illinois	4,200	2
Indiana	2,700	3
Iowa	2,700	1
Kansas	2,800	1
Kentucky	3,900	3
Louisiana	2,600	1
Maine	2,700	2
Maryland	3,500	6
Massachusetts	3,800	4
Michigan	4,000	4
Minnesota	3,000	2
Mississippi	2,700	1
Missouri	2,600	1
Montana	2,600	2
Nebraska	2,600	4
Nevada	2,800	3
New Hampshire	2,700	2
New Jersey	2,600	4
New Mexico	3,400	2
New York	4,200	1
North Carolina	4,400	2
North Dakota	2,300	4
Ohio	3,500	5
Oklahoma	2,400	10
Oregon	2,900	1
Pennsylvania	3,800	2
Rhode Island	2,700	1
South Carolina	2,700	4
South Dakota	3,100	2
Tennessee	2,800	4
Texas	7,500	5
Utah	2,900	3
Vermont	2,100	1
Virginia	2,700	3
Washington	3,200	2
West Virginia	2,800	2
Wisconsin	3,600	2
Wyoming	2,100	1
Other jurisdictions		
District of Columbia	2,400	4
DoDEA[1]	1,700	3

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

NOTE: The number of students assessed is rounded to the nearest hundred.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2011 Mathematics Assessment.

Where to Find More Information

The NAEP Mathematics Assessment
The latest news about the NAEP 2011 mathematics assessment and the results can be found on the NAEP website at http://nces.ed.gov/nationsreportcard/mathematics. The individual snapshot reports for each participating state and other jurisdictions are also available in the state results section of the website at http://nces.ed.gov/nationsreportcard/states/.

The Nation's Report Card: Mathematics 2011 may be ordered or downloaded at the NAEP website.

The *Mathematics Framework for the 2011 National Assessment of Educational Progress*, on which this assessment is based, is available at the National Assessment Governing Board website at http://www.nagb.org/publications/math-2011-framework.pdf.

The NAEP Data Explorer (NDE)
The interactive database at http://nces.ed.gov/nationsreportcard/naepdata/ includes student, teacher, and school variables for all participating districts, the nation, and public schools in large cities. Data tables are also available for districts, with all contextual questions cross-tabulated with the major demographic variables. Users can design and create tables and can perform tests of statistical significance at this website.

Technical Documentation on the Web (TDW)
Technical documentation section of the NAEP website http://nces.ed.gov/nationsreportcard/tdw/ contains information about the technical procedures and methods of NAEP. The TDW site is organized by topic (from Item Development through Analysis and Scaling) with subtopics, including information specific to a particular assessment. The content is written for researchers and assumes knowledge of educational measurement and testing.

Publications on the inclusion of students with disabilities and English language learners
References for a variety of research publications related to the assessment of students with special needs may be found at http://nces.ed.gov/nationsreportcard/about/inclusion.asp#research.

To order publications
Recent NAEP publications related to mathematics are listed on the mathematics page of the NAEP website and are available electronically. Publications can also be ordered from

Education Publications Center (ED Pubs)
U.S. Department of Education
P.O. Box 22207
Alexandria, VA 22304

Call toll free: 1-877-4ED-Pubs (1-877-433-7827)
TTY/TDD: 1-877-576-7734
FAX: 1-301-470-1244
Order online at: http://www.edpubs.gov.

The NAEP State Report Generator was developed for the NAEP 2011 reports by Phillip Leung, Bobby Rampey, Rebecca Moran, Rick Hasney, and Ming Kuang.

What is the Nation's Report Card™?

The Nation's Report Card™ informs the public about the academic achievement of elementary and secondary students in the United States. Report cards communicate the findings of the National Assessment of Educational Progress (NAEP), a continuing and nationally representative measure of achievement in various subjects over time.

Since 1969, NAEP assessments have been conducted periodically in reading, mathematics, science, writing, U.S. history, civics, geography, and other subjects. NAEP collects and reports information on student performance at the national, state, and local levels, making the assessment an integral part of our nation's evaluation of the condition and progress of education. Only academic achievement data and related background information are collected. The privacy of individual students and their families is protected.

NAEP is a congressionally authorized project of the National Center for Education Statistics (NCES) within the Institute of Education Sciences of the U.S. Department of Education. The Commissioner of Education Statistics is responsible for carrying out the NAEP project. The National Assessment Governing Board oversees and sets policy for NAEP.