South Dakota

Grade 4 and 8 Public Schools State Mathematics 2015

This report provides selected results for South Dakota's public school students at grades 4 and 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 11 assessment years (at grade 8 in 1990; and at both grades 4 and 8 in 1992, 1996, 2000, 2003, 2005, 2007, 2009, 2011, 2013, and 2015), although not all states may have participated or met the criteria for reporting in every year. All 50 states, the District of Columbia, and the Department of Defense Education Activity schools (DoDEA) participated in the 2015 mathematics assessment at grades 4 and 8.

For more information about the assessment, visit the NAEP website at <u>http://nces.ed.gov/nationsreportcard/</u> which contains

- The Nation's Report Card[™], Mathematics 2015
- 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.

KEY FINDINGS FOR 2015

Grade 4:

- In 2015, the average mathematics score for fourth-grade students in South Dakota was 240. This was not significantly different from that for the nation's public schools (240).
- The average score for students in South Dakota in 2015 (240) was higher than that in 2003 (237) and was not significantly different from that in 2013 (241).
- In 2015, the percentage of students in South Dakota who performed at or above *Proficient* was 40 percent. This was not significantly different from that for the nation's public schools (39 percent).
- The percentage of students in South Dakota who performed at or above *Proficient* in 2015 (40 percent) was greater than that in 2003 (34 percent) and was not significantly different from that in 2013 (40 percent).
- In 2015, the percentage of students in South Dakota who performed at or above *Basic* was 83 percent. This was not significantly different from that for the nation's public schools (81 percent).
- The percentage of students in South Dakota who performed at or above *Basic* in 2015 (83 percent) was not significantly different from that in 2003 (82 percent) and in 2013 (84 percent).

Grade 8:

- In 2015, the average mathematics score for eighth-grade students in South Dakota was 285. This was higher than that for the nation's public schools (281).
- The average score for students in South Dakota in 2015 (285) was not significantly different from that in 2003 (285) and was lower than that in 2013 (287).
- In 2015, the percentage of students in South Dakota who performed at or above *Proficient* was 34 percent. This was not significantly different from that for the nation's public schools (32 percent).
- The percentage of students in South Dakota who performed at or above *Proficient* in 2015 (34 percent) was not significantly different from that in 2003 (35 percent) and was smaller than that in 2013 (38 percent).
- In 2015, the percentage of students in South Dakota who performed at or above *Basic* was 77 percent. This was greater than that for the nation's public schools (70 percent).
- The percentage of students in South Dakota who performed at or above *Basic* in 2015 (77 percent) was not significantly different from that in 2003 (78 percent) and in 2013 (79 percent).

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

Introduction

What Was Assessed?

The content for each NAEP assessment is determined by the National Assessment Governing Board. 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 https://www.nagb.org/content /nagb/assets/documents/publications/frameworks/mathematics/2015-mathematics-framework.pdf.

For grades 4 and 8, the mathematics framework for the 2015 assessment is similar to earlier versions that guided the 1990, 1992, 1996, 2000, 2003, 2005, 2007, 2009, 2011, and 2013 mathematics assessments. Although the frameworks are updated periodically, the mathematics content objectives for grades 4 and 8 have not changed substantially, allowing students' performance in 2015 to be compared with previous years.

Content Areas and Mathematical Complexity

The 2015 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 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, estimate with numbers, and the ability to deal with proportions (including percent).
- **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 students' 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.

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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/itmrlsx/.

Some questions in the 2015 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 Education Activity schools (DoDEA) participated in the 2015 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 2015 mathematics assessment are available on the NAEP website at http://www.nationsreportcard.gov /reading_math_2015/#mathematics/about#participation.

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 DoDEA or Bureau of Indian Education schools.

How Is Student Mathematics Performance Reported?

The 2015 state results are compared to results from 9 earlier assessments at grade 4 and from 10 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 National Assessment 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 analytic skills appropriate to the subject matter.
- *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 Figures 1-A and 1-B.

Figure	The Nation's Report Card 2015 State Assessment
1-A	Descriptions of fourth-grade achievement levels for 2015 NAEP mathematics assessment

Basic	Fourth-grade students performing at the <i>Basic</i> level should show some evidence of understanding the
Level	mathematical concepts and procedures in the five NAEP content areas.
(214)	

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

Proficient Fourth-grade students performing at the *Proficient* level should consistently apply integrated procedural knowledge and conceptual understanding to problem solving in the five NAEP content areas.
(249)

Fourth-graders performing at the *Proficient* level should be able to use whole numbers to estimate, compute, and determine whether results are reasonable. They should have a conceptual understanding of fractions and decimals; be able to solve real-world problems in 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 apply integrated procedural knowledge and conceptual understanding to complex and nonroutine real-world problem solving in the five NAEP (282) content areas.

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

NOTE: The scores in parentheses 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. (2014). *Mathematics Framework for the 2015 National Assessment of Educational Progress*. Washington, DC.

Figure 1-B	The Nation's Report Card 2015 State Assessment
	Descriptions of eighth-grade achievement levels for 2015 NAEP mathematics assessment

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

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 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. (2014). *Mathematics Framework for the 2015 National Assessment of Educational Progress*. Washington, DC.

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) and/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 and/or ELL students. In 2000, NAEP was administered using a split sample of schools—one sample in which accommodations were permitted for SD and/or ELL 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. Please note that bullet statements only reference the results from the 2000 assessment where accommodations were permitted. 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, 2013, and 2015).

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/or 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 2015 NAEP mathematics assessment are available on the NAEP website at http://www.nationsreportcard.gov /reading_math_2015/#mathematics/about#inclusion.

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 percentages are discussed in this report only when they are significant from a statistical perspective. Significant differences between 2015 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 2015 Mathematics Overall Average Score and Achievement-Level Results for Public School Students

Overall mathematics results for public school students from South Dakota 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 (<u>http://nces.ed.gov/nationsreportcard/hsts/tabulations/regions.asp</u>). Trend data by region are not provided for assessment years prior to 2003.

Prior to 2000, testing accommodations were not provided for SD and/or ELL students 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.

Tables 1-A and 1-B show the overall performance results of grades 4 and 8 public school students in South Dakota, the nation, 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, 2011, 2013, and 2015. 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 defines the cut point for the lowest 25 percent of students within the distribution of scale scores.

Grade 4 Scale Score Results

- In 2015, the average scale score for students in South Dakota was 240. This was not significantly different from that for students across the nation (240).
- In South Dakota, the average scale score for students in 2015 was not significantly different from that in 2013 (241). However, the average scale score for students in public schools across the nation in 2015 was lower than that in 2013 (241).
- In South Dakota, the average scale score for students in 2015 was higher than the score in 2003. However, it was lower than the scores in 2005 and 2009.

Grade 8 Scale Score Results

- In 2015, the average scale score for students in South Dakota was 285. This was higher than that for students across the nation (281).
- In South Dakota, the average scale score for students in 2015 was lower than that in 2013 (287). Similarly, the average scale score for students in public schools across the nation in 2015 was lower than that in 2013 (284).
- In South Dakota, the average scale score for students in 2015 was lower than the scores in 2005, 2007, 2009, 2011, and 2013. However, it was not significantly different from the score in 2003.

Table 1-A

The Nation's Report Card 2015 State Assessment

Average scale scores and selected percentile scores in NAEP mathematics for fourth-grade public school students, by year and jurisdiction: Various years, 2003–2015

Year and jurisdiction		Average scale score	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
2003	Nation (public)	234*	196*	215*	235*	254*	270*
	Midwest ¹	237*	199*	218*	238*	256*	272*
	South Dakota	237*	204	221	239*	255*	269*
2005	Nation (public)	237*	199*	219*	239*	257*	272*
	Midwest ¹	239*	201	221*	241*	259*	274*
	South Dakota	242*	208	226*	243	259	272
2007	Nation (public)	239*	201	221	241	259*	274*
	Midwest ¹	242	204*	224*	244	261*	276*
	South Dakota	241	207	226	243	259	272
2009	Nation (public)	239*	201	221	241	259*	275*
	Midwest ¹	241	204	223	243	261	277*
	South Dakota	242*	208	227*	244	260	274
2011	Nation (public)	240	202*	222*	242	260	276
	Midwest ¹	242	204	224	244	262	277*
	South Dakota	241	207	225	243	259	273
2013	Nation (public)	241*	202*	222*	243*	262*	278
	Midwest ¹	243*	203	224*	245*	264*	280*
	South Dakota	241	205	224	243	260	274
2015	Nation (public)	240	201	221	241	260	277
	Midwest ¹	242	202	222	243	262	279
* Value is significantly differen	South Dakota	240	203	223	242	259	273

* Value is significantly different (p < .05) from the value for the same jurisdiction in 2015.

¹ Region in which jurisdiction is located.

NOTE: The NAEP grade 4 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, 2003–2015 Mathematics Assessments.

Table 1-B

The Nation's Report Card 2015 State Assessment

Average scale scores and selected percentile scores in NAEP mathematics for eighth-grade public school students, by year and jurisdiction: Various years, 2003–2015

Year and jurisdiction		Average scale score	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
2003	Nation (public)	276*	228*	253*	278*	301*	321*
	Midwest ¹	281*	235	259*	283*	305*	324*
	South Dakota	285	244	266	287	307	323
2005	Nation (public)	278*	230*	254*	279*	303*	323*
	Midwest ¹	281*	235	259*	283*	306*	325*
	South Dakota	287*	246	268*	289	309	326
2007	Nation (public)	280*	234	257	281	305*	325*
	Midwest ¹	283	238	261	285	308*	327*
	South Dakota	288*	247	269*	290*	311*	328
2009	Nation (public)	282	235	258*	283*	307	328
	Midwest ¹	285	240	262	287	309	329
	South Dakota	291*	250*	271*	293*	312*	328
2011	Nation (public)	283*	236*	259*	284*	308*	329
	Midwest ¹	286	241*	263*	287	309	329
	South Dakota	291*	248	270*	292*	313*	330*
2013	Nation (public)	284*	236*	260*	285*	309*	330*
	Midwest ¹	286*	240*	263*	288*	311*	332*
	South Dakota	287*	242	267	290*	311*	328*
2015	Nation (public)	281	234	257	282	307	328
	Midwest ¹	284	237	261	286	309	330
+ \/_	South Dakota	285	243	265	286	307	325

* Value is significantly different (p < .05) from the value for the same jurisdiction in 2015.

¹ Region in which jurisdiction is located.

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, 2003–2015 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.

Tables 2-A and 2-B show the percentage of students at grades 4 and 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 4 Achievement-Level Results

- In 2015, the percentage of South Dakota's students who performed at or above *Proficient* was 40 percent. This was not significantly different from the percentage of the nation's public school students who performed at or above *Proficient* (39 percent).
- In South Dakota, the percentage of students who performed at or above *Proficient* in 2015 was greater than the percentage in 2003, but was not significantly different from the percentages in 2005, 2007, 2009, 2011, and 2013.
- In 2015, the percentage of South Dakota's students who performed at or above *Basic* was 83 percent. This was not significantly different from the percentage of the nation's public school students who performed at or above *Basic* (81 percent).
- In South Dakota, the percentage of students who performed at or above *Basic* in 2015 was smaller than the percentages in 2005, 2007, 2009, and 2011, but was not significantly different from the percentages in 2003 and 2013.

Grade 8 Achievement-Level Results

- In 2015, the percentage of South Dakota's students who performed at or above *Proficient* was 34 percent. This was not significantly different from the percentage of the nation's public school students who performed at or above *Proficient* (32 percent).
- In South Dakota, the percentage of students who performed at or above *Proficient* in 2015 was smaller than the percentages in 2007, 2009, 2011, and 2013, but was not significantly different from the percentages in 2003 and 2005.
- In 2015, the percentage of South Dakota's students who performed at or above *Basic* was 77 percent. This was greater than the percentage of the nation's public school students who performed at or above *Basic* (70 percent).
- In South Dakota, the percentage of students who performed at or above *Basic* in 2015 was smaller than the percentages in 2007, 2009, and 2011, but was not significantly different from the percentages in 2003, 2005, and 2013.



Percentage of fourth-grade public school students at or above NAEP mathematics achievement levels, by year and jurisdiction: Various years, 2003–2015

Year and jurisdiction		Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced
2003	Nation (public)	24*	76*	31*	4*
	Midwest ¹	21*	79*	35*	4*
	South Dakota	18	82	34*	3*
2005	Nation (public)	21*	79*	35*	5*
	Midwest ¹	19*	81*	38*	5*
	South Dakota	14*	86*	41	4
2007	Nation (public)	19	81	39	5*
	Midwest ¹	16*	84*	42	6*
	South Dakota	14*	86*	41	4
2009	Nation (public)	19	81	38	6*
	Midwest ¹	17	83	42	7*
	South Dakota	14*	86*	42	5
2011	Nation (public)	18*	82*	40	6*
	Midwest ¹	16*	84*	42	7*
	South Dakota	14*	86*	40	4
2013	Nation (public)	18*	82*	41*	8
	Midwest ¹	16*	84*	45*	9
	South Dakota	16	84	40	5
2015	Nation (public)	19	81	39	7
	Midwest ¹	18	82	42	8
	South Dakota	17	83	40	4

* Value is significantly different (p < .05) from the value for the same jurisdiction in 2015.

¹ Region in which jurisdiction is located.

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 213 or lower; *Basic*, 214–248; *Proficient*, 249–281; and *Advanced*, 282 or 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, 2003–2015 Mathematics Assessments.

Table 2-B

The Nation's Report Card 2015 State Assessment

Percentage of eighth-grade public school students at or above NAEP mathematics achievement levels, by year and jurisdiction: Various years, 2003–2015

Year and jurisdiction		Below <i>Basic</i>	At or above <i>Basic</i>	At or above Proficient	At Advanced
2003	Nation (public)	33*	67*	27*	5*
	Midwest ¹	28*	72*	32*	6*
	South Dakota	22	78	35	5
2005	Nation (public)	32*	68*	28*	6*
	Midwest ¹	28*	72*	32*	6*
	South Dakota	20	80	36	6
2007	Nation (public)	30	70	31*	7*
	Midwest ¹	26	74	34	7*
	South Dakota	19*	81*	39*	7
2009	Nation (public)	29*	71*	33	7
	Midwest ¹	25	75	36	8
	South Dakota	17*	83*	42*	7
2011	Nation (public)	28*	72*	34*	8
	Midwest ¹	24*	76*	36	8
	South Dakota	18*	82*	42*	8*
2013	Nation (public)	27*	73*	34*	8
	Midwest ¹	24*	76*	37*	9*
	South Dakota	21	79	38*	7
2015	Nation (public)	30	70	32	8
	Midwest ¹	26	74	35	8
	South Dakota	23	77	34	6

* Value is significantly different (p < .05) from the value for the same jurisdiction in 2015.

¹ Region in which jurisdiction is located.

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 or 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, 2003–2015 Mathematics Assessments.

Comparisons Between South Dakota, the Nation, and Participating States and Jurisdictions

All 50 states, the District of Columbia, and Department of Defense Education Activity schools (DoDEA) participated in the 2015 mathematics assessment at grades 4 and 8. References to "jurisdictions" in the results statements may include states, the District of Columbia, and DoDEA schools.

Comparisons by Scale Scores

Figures 2-A and 2-B compare South Dakota's 2015 overall mathematics scale scores at grades 4 and 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 South Dakota in the NAEP 2015 mathematics assessment.

Grade 4 Scale Score Comparison Results

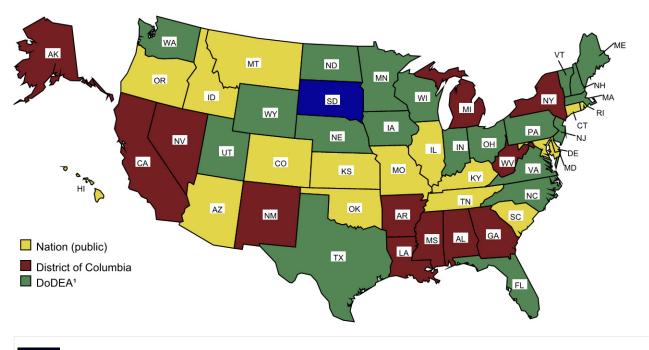
• The average score for students in South Dakota was higher than 13 jurisdictions, not significantly different from 17 jurisdictions, and lower than 21 jurisdictions.

Grade 8 Scale Score Comparison Results

• The average score for students in South Dakota was higher than 22 jurisdictions, not significantly different from 20 jurisdictions, and lower than 9 jurisdictions.



South Dakota's average scale score in NAEP mathematics for fourth-grade public school students compared with scores for the nation and other participating jurisdictions: 2015



☆ Focal state/jurisdiction (South Dakota)

Higher average scale score than South Dakota (21 jurisdictions)

Not significantly different from South Dakota (nation and 17 jurisdictions)

Lower average scale score than South Dakota (13 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.

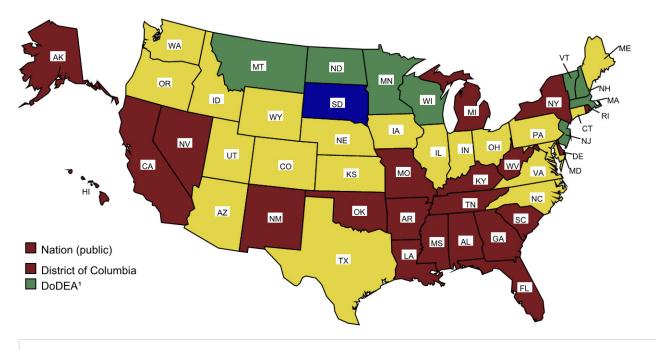
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2015 Mathematics Assessment.



☆

The Nation's Report Card 2015 State Assessment

South Dakota's average scale score in NAEP mathematics for eighth-grade public school students compared with scores for the nation and other participating jurisdictions: 2015



Focal state/jurisdiction (South Dakota)

Higher average scale score than South Dakota (9 jurisdictions)

Not significantly different from South Dakota (20 jurisdictions)

Lower average scale score than South Dakota (nation and 22 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), 2015 Mathematics Assessment.

Comparisons by Achievement Levels

Figures 3-A and 3-B permit comparisons of all jurisdictions (and the nation) participating in the NAEP 2015 mathematics assessment in terms of percentages of grades 4 and 8 students performing at or above *Proficient*. The participating states and jurisdictions are grouped into categories that reflect 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 South Dakota.

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 conducted online by using the NAEP Data Explorer at http://nces.ed.gov/nationsreportcard/naepdata/.

Grade 4 Achievement-Level Comparison Results

- The percentage of students performing at or above the *Proficient* level in South Dakota was greater than the percentage in 13 jurisdictions, not significantly different from those in 24 jurisdictions, and smaller than those in 14 jurisdictions.
- The percentage of students performing at or above the *Basic* level in South Dakota was greater than the percentage in 19 jurisdictions, not significantly different from those in 24 jurisdictions, and smaller than those in 8 jurisdictions (data not shown).

Grade 8 Achievement-Level Comparison Results

- The percentage of students performing at or above the *Proficient* level in South Dakota was greater than the percentage in 17 jurisdictions, not significantly different from those in 21 jurisdictions, and smaller than those in 13 jurisdictions.
- The percentage of students performing at or above the *Basic* level in South Dakota was greater than the percentage in 29 jurisdictions, not significantly different from those in 19 jurisdictions, and smaller than those in 3 jurisdictions (data not shown).

Figure 3-A

The Nation's Report Card 2015 State Assessment

Average scale scores in NAEP mathematics for fourth-grade public school students, percentage within each achievement level, and South Dakota's percentage at or above *Proficient* compared with the nation and other participating jurisdictions: 2015

State/jurisdiction	•	Legend: Below Basic	Basic	Proficient	Advanced	State/jurisdiction
	score	Percentage at or above Proficien	nt is higher that	n South Dakota		
DoDEA ¹	248	10	41	41	8	DoDEA ¹
Indiana		11	40	40	9	Indiana
lowa		16	40	36	9	lowa
Massachusetts Minnesota		10	36 34	<u>41</u> 39	13	Massachusetts Minnesota
Nebraska		14	40	39	7	Nebraska
New Hampshire		9	40	41	10	New Hampshire
New Jersey		14	39	38	9	New Jersey
North Carolina		15	41	36	8	North Carolina
North Dakota		12	43	37	8	North Dakota
Virginia		13	40	37	10	Virginia
Washington		17	36	35	12	Washington
Wisconsin		17	37 40	<u>36</u> 39	9	Wisconsin
Wyoming	247					Wyoming
		Percentage at or above Proficien				
SOUTH DAKOTA		17	43	35	4	SOUTH DAKOTA
NATION (Public)		19	42		7	NATION (Public)
Arizona Colorado		21	41 39	32 6 34	8	Arizona Colorado
Connecticut		19	40		7	Connecticut
Delaware		18	45	34	5	Delaware
Florida		15	43	35	7	Florida
Hawaii		21	40	32 7		Hawaii
Idaho		20	42	32 6	3	Idaho
Illinois	237	23	40	29 8		Illinois
Kansas	241	17	42	34	7	Kansas
Kentucky		16	44	33	7	Kentucky
Maine		15	44	34	7	Maine
Maryland		21	39		8	Maryland
Missouri		18	44	33	5	Missouri
Montana Ohio		16	43 41	35 37	6	Montana Ohio
Oklahoma		16	48	32	5	Oklahoma
Oregon		21	42	31 6		Oregon
Pennsylvania		17	38	35	10	Pennsylvania
Rhode Island		20	43	32 6		Rhode Island
South Carolina	237	21	43	31 6		South Carolina
Tennessee	241	18	42		7	Tennessee
Texas		14	42	36	8	Texas
Utah		16	40	36	7	Utah
Vermont	243	15	41	35	9	Vermont
		Percentage at or above Proficien	nt is lower than	South Dakota		
Alabama		25	49	24 2		Alabama
Alaska		22	43	29 6		Alaska
Arkansas		21	47	28 3		Arkansas
California		28	43	25 5		California
District of Columbia		31	38	24 7	-	District of Columbia
Georgia		22	43		5	Georgia
Louisiana Michigan		22	48 44	26 4 29 5	5	Louisiana Michigan
Mississippi		22	48	26 3	5	Mississippi
Nevada		24	44	28 4		Nevada
New Mexico		27	47	24 3		New Mexico
New York		21	44		5	New York
West Virginia	235	22	45	28 5		West Virginia
					40 50 00 55	-
	1(00 90 80 70 60 50 40 3	30 20 10 0	0 10 20 30	40 50 60 70	80
		Percent below <i>Basic</i> or at <i>I</i>	Basic	Percent at Profi	cient or Advanced	

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 *Proficent* category begins, so that they may be compared at *Proficent* 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), 2015 Mathematics Assessment.

Figure 3-B

The Nation's Report Card 2015 State Assessment

Average scale scores in NAEP mathematics for eighth-grade public school students, percentage within each achievement level, and South Dakota's percentage at or above *Proficient* compared with the nation and other participating jurisdictions: 2015

State/jurisdiction	•	Legend: Below Basic	Basic	Proficient Advanced	State/jurisdiction
\$	score	Percentage at or above Proficien	nt is higher that	n South Dakota	7
DoDEA ¹	291	17	44	31 9	DoDEA ¹
Indiana	287	23	39	30 9	Indiana
Massachusetts	297	19	30	33 18	Massachusetts
Minnesota		18	34	35 13	Minnesota
Montana	287	21	40	31 8	Montana
Nebraska		23	40	30 8	Nebraska
New Hampshire	294	16	37	34 12	New Hampshire
New Jersey		21	32	<u>30</u> 16 32 7	New Jersey
North Dakota		<u>20</u> 24	41 38		North Dakota
Utah Vermont		24	30	<u>30</u> 8 31 11	Utah Vermont
Washington		26	35	28 11	Washington
Wisconsin		20	37	30 11	Wisconsin
VISCOUSII	209				WISCONSIN
				antly different from South Dakota	
SOUTH DAKOTA		23	44	28 6	SOUTH DAKOTA
NATION (Public)		30	38	24 8	NATION (Public)
Alaska		29	39	25 7	Alaska
Arizona	283	28	37	27 8	Arizona
Colorado	286	27	36	27 10	Colorado
Connecticut		28	36	26 10	Connecticut
Idaho		25	41	28 6	Idaho
Illinois		28	40	25 7	Illinois
lowa	286 284	24	39 42	28 9 27 6	lowa
Kansas	285	24	42	<u>27</u> 6 278	Kansas Maine
Maine		29	36	27 8	Maryland
Maryland Missouri	281	29	40	25 7	Missouri
New York		31	39	24 7	New York
North Carolina	280	31	39	24 9	North Carolina
Ohio		25	40	27 9	Ohio
Oregon	283	27	39	27 7	Oregon
Pennsylvania	284	28	36	27 10	Pennsylvania
Rhode Island		28	40	26 6	Rhode Island
Tennessee		32	39	23 6	Tennessee
Texas	284	25	42	25 7	Texas
Virginia	288	24	39	27 10	Virginia
Wyoming	287	22	43	28 7	Wyoming
,		Percentage at or above Proficien	tie lower than		
Alabama	267	44	38	14 3	Alabama
Arkansas	275	34	41	21 4	Arkansas
California		36	37	21 6	California
Delaware	280	31	39	22 7	Delaware
District of Columbia	263	49	32	15 4	District of Columbia
Florida	275	36	38	21 5	Florida
Georgia		33	39	21 7	Georgia
Hawaii	279	30	40	24 6	Hawaii
Kentucky		32	40	22 5	Kentucky
Louisiana		43	39	15 3	Louisiana
Michigan		32	39	22 7	Michigan
Mississippi		40	38	19 3	Mississippi
Nevada		35	39	21 5	Nevada
New Mexico		39	41	17 3	New Mexico
Oklahoma	275	33	44	20 3	Oklahoma
South Carolina	276	35	40	20 5	South Carolina
West Virginia	271	38	41	18 3	West Virginia
					-
	1(00 90 80 70 60 50 40 3	0 20 10	0 10 20 30 40 50 60 70	80
		Percent below <i>Basic</i> or at <i>I</i>	Basic	Percent at Proficient or Advanced	

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 *Proficent* category begins, so that they may be compared at *Proficent* 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), 2015 Mathematics Assessment.

Mathematics Performance of Selected Student Groups

This section of the report presents trend results for public school students in South Dakota 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, 2011, 2013, and 2015)
- 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 2015 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 2015 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, 2013, and 2015 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 were classified as "Two or more races" in 2011, 2013, and 2015.

When comparing the results for racial/ethnic groups prior to 2011, data for Asian and Native Hawaiian/Other Pacific Islander students are combined into a single Asian/Pacific Islander category.

Tables 3-A and 3-B show average scale scores and percentage of students by achievement level for public school students at grades 4 and 8 in South Dakota and the nation, by race/ethnicity.

Grade 4 Scale Score Results by Race/Ethnicity

- In 2015, White students in South Dakota had an average scale score that was higher than the average scores of Black, Hispanic, and American Indian/Alaska Native students.
- In 2015, the average scale score of White students in South Dakota was higher than their respective score in 2003, but not significantly different from their respective scores in 2005, 2007, 2009, 2011, and 2013.
- In 2015, the average scale score of Black students in South Dakota was not significantly different from their respective scores in 2007, 2009, 2011, and 2013.
- In 2015, the average scale score of Hispanic students in South Dakota was not significantly different from their respective scores in 2003, 2007, 2009, 2011, and 2013.
- In 2015, the average scale score of American Indian/Alaska Native students in South Dakota was not significantly different from their respective scores in 2003, 2005, 2007, 2009, 2011, and 2013.
- In 2015, Black students in South Dakota had an average score that was lower than that of White students by 27 points. Data are not reported for Black students in 2003, because reporting standards were not met.
- In 2015, Hispanic students in South Dakota had an average score that was lower than that of White students by 18 points. In 2003, the average score for Hispanic students was lower than that of White students by 18 points.

Grade 4 Achievement-Level Results by Race/Ethnicity

- In 2015 in South Dakota, the percentage of White students performing at or above *Proficient* was greater than the corresponding percentages of Black, Hispanic, and American Indian/Alaska Native students.
- In 2015, the percentage of White students in South Dakota 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, 2009, 2011, and 2013.
- In 2015, the percentage of Black students in South Dakota performing at or above *Proficient* was not significantly different from the percentages of their respective peers in 2007, 2009, 2011, and 2013.
- In 2015, the percentage of Hispanic students in South Dakota performing at or above *Proficient* was not significantly different from the percentages of their respective peers in 2003, 2007, 2009, 2011, and 2013.
- In 2015, the percentage of American Indian/Alaska Native students in South Dakota performing at or above *Proficient* was not significantly different from the percentages of their respective peers in 2003, 2005, 2007, 2009, 2011, and 2013.



Percentage of fourth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 2003–2015

Race/ethnicity, year, and jurisdiction					Percent			
		Percentage of students	Average scale score	Below Basic	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced	
White								
2003	Nation (public)	58*	243*	13*	87*	42*	5*	
	South Dakota	84*	241*	13	87	38*	3*	
2005	Nation (public)	57*	246*	11	89	47*	7*	
	South Dakota	84*	245	10	90	45	5	
2007	Nation (public)	55*	248	9*	91*	51	8*	
	South Dakota	83*	245	9	91	46	4	
2009	Nation (public)	54*	248	10	90	50	8*	
	South Dakota	80*	247	9	91	47	6	
2011	Nation (public)	52*	249	9*	91*	52	9	
	South Dakota	77*	246	9	91	46	5	
2013	Nation (public)	51*	250*	9*	91*	54*	10	
	South Dakota	75	247	9	91	48	6	
2015	Nation (public)	49	248	10	90	51	10	
	South Dakota	75	246	10	90	47	5	



Percentage of fourth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 2003–2015 —Continued

Race/ethnicity, year, and jurisdiction				Percent				
		Percentage of students	Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced	
Black								
2003	Nation (public)	17*	216*	46*	54*	10*	#*	
	South Dakota	1*	+	‡	‡	‡	+	
2005	Nation (public)	17*	220*	40*	60*	13*	1*	
	South Dakota	2*	‡	+	‡	‡	‡	
2007	Nation (public)	17*	222*	37	63	15*	1*	
	South Dakota	2	221	37	63	15	2	
2009	Nation (public)	16*	222*	37	63	15*	1*	
	South Dakota	2	225	35	65	17	#	
2011	Nation (public)	16	224	34	66	17	1	
	South Dakota	3	227	32	68	21	1	
2013	Nation (public)	16	224	34	66	18	1	
	South Dakota	3	221	37	63	14	1	
2015	Nation (public)	15	224	35	65	19	1	
	South Dakota	3	218	44	56	11	2	



Percentage of fourth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 2003–2015 —Continued

				Percent				
Race/ethnicity jurisdiction	Race/ethnicity, year, and jurisdiction		Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced	
Hispanic								
2003	Nation (public)	19*	221*	38*	62*	15*	1*	
	South Dakota	2*	223	37	63	20	2	
2005	Nation (public)	20*	225*	33*	67*	19*	1*	
	South Dakota	2*	+	‡	‡	‡	‡	
2007	Nation (public)	21*	227*	31*	69*	22*	1*	
	South Dakota	2*	228	31	69	21	2	
2009	Nation (public)	22*	227*	30	70	21*	1*	
	South Dakota	3*	233	25	75	27	4	
2011	Nation (public)	24*	229	28	72	24	2	
	South Dakota	3*	226	29	71	18	2	
2013	Nation (public)	25*	230	27	73	26	2	
	South Dakota	4	226	30	70	16	1	
2015	Nation (public)	26	230	27	73	26	3	
	South Dakota	5	227	32	68	21	3	



Percentage of fourth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 2003–2015 —Continued

Race/ethnicity, year, and jurisdiction				Percent				
		Percentage of students	Average scale score	Below Basic	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced	
Asian/Pacific Islander								
2003	Nation (public)	4*	246*	13*	87*	48*	10*	
	South Dakota	1*	‡	‡	‡	‡	‡	
2005	Nation (public)	4*	251*	11	89	54*	14*	
	South Dakota	1*	‡	‡	‡	‡	‡	
2007	Nation (public)	5*	254	9	91	59	16*	
	South Dakota	1*	+	‡	‡	‡	‡	
2009	Nation (public)	5	255	9	91	61	18	
	South Dakota	1	+	‡	‡	‡	+	
2011	Nation (public)	5	256	9	91	62	20	
	South Dakota	1	‡	‡	‡	‡	‡	
2013	Nation (public)	5	258	9	91	64	23	
	South Dakota	2	‡	‡	‡	‡	‡	
2015	Nation (public)	5	256	10	90	61	22	
	South Dakota	2	‡	‡	‡	‡	‡	

Table 3-A

The Nation's Report Card 2015 State Assessment

Percentage of fourth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 2003–2015 —Continued

Race/ethnicity, year, and jurisdiction			Percent					
		Percentage of students	Average scale score	Below Basic	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced	
American Indian/Alaska Native								
2003	Nation (public)	1	224*	35*	65*	18*	1	
	South Dakota	12	217	46	54	9	#	
2005	Nation (public)	1	227	31	69	22	2	
	South Dakota	11	221	38	62	13	1	
2007	Nation (public)	1	229	28	72	26	3	
	South Dakota	12	218	40	60	13	#	
2009	Nation (public)	1	227	32	68	23	2	
	South Dakota	13	220	40	60	15	#	
2011	Nation (public)	1	227	32	68	24	2	
	South Dakota	14	220	40	60	15	#	
2013	Nation (public)	1	228	30	70	24	2	
	South Dakota	14	217	45	55	12	#	
2015	Nation (public)	1	228	30	70	24	2	
". D	South Dakota	13	216	45	55	14	1	

Rounds to zero.‡ Reporting standards not met.

* Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2015.

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 213 or lower; *Basic*, 214–248; *Proficient*, 249–281; and *Advanced*, 282 or 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, 2003–2015 Mathematics Assessments.

Grade 8 Scale Score Results by Race/Ethnicity

- In 2015, White students in South Dakota had an average scale score that was higher than the average scores of Hispanic and American Indian/Alaska Native students.
- In 2015, the average scale score of White students in South Dakota was higher than their respective score in 2003, but lower than their respective scores in 2009, 2011, and 2013, and not significantly different from their respective scores in 2005 and 2007.
- In 2015, the average scale score of Hispanic students in South Dakota was not significantly different from their respective scores in 2007, 2009, 2011, and 2013.
- In 2015, the average scale score of American Indian/Alaska Native students in South Dakota was not significantly different from their respective scores in 2003, 2005, 2007, 2009, 2011, and 2013.
- Data are not reported for Black students in 2015, because reporting standards were not met.
- In 2015, Hispanic students in South Dakota had an average score that was lower than that of White students by 19 points. Data are not reported for Hispanic students in 2003, because reporting standards were not met.

Grade 8 Achievement-Level Results by Race/Ethnicity

- In 2015 in South Dakota, the percentage of White students performing at or above *Proficient* was greater than the corresponding percentages of Hispanic and American Indian/Alaska Native students.
- In 2015, the percentage of White students in South Dakota performing at or above *Proficient* was smaller than the percentages of their respective peers in 2009, 2011, and 2013, but not significantly different from the percentages of their respective peers in 2003, 2005, and 2007.
- In 2015, the percentage of Hispanic students in South Dakota performing at or above *Proficient* was not significantly different from the percentages of their respective peers in 2007, 2009, 2011, and 2013.
- In 2015, the percentage of American Indian/Alaska Native students in South Dakota performing at or above *Proficient* was not significantly different from the percentages of their respective peers in 2003, 2005, 2007, 2009, 2011, and 2013.

The Nation's Report Card 2015 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, 2003–2015

Race/ethnicity, year, and jurisdiction				Percent				
		Percentage of students	Average scale score	Below Basic	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced	
White								
2003	Nation (public)	62*	287*	21*	79*	36*	7*	
	South Dakota	89*	288*	18	82	37	5*	
2005	Nation (public)	60*	288*	21*	79*	37*	7*	
	South Dakota	86*	291	15	85	40	7	
2007	Nation (public)	58*	290	19	81	41	9*	
	South Dakota	86*	292	15	85	43	8	
2009	Nation (public)	56*	292*	18*	82*	43	10	
	South Dakota	84*	295*	13*	87*	46*	8	
2011	Nation (public)	54*	293*	17*	83*	43*	10	
	South Dakota	82	295*	13	87	47*	10*	
2013	Nation (public)	53*	293*	17*	83*	44*	11	
	South Dakota	79	294*	14	86	45*	9	
2015	Nation (public)	51	291	19	81	42	10	
	South Dakota	78	290	16	84	39	7	

The Nation's Report Card 2015 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, 2003–2015 —Continued

Race/ethnicity, year, and jurisdiction				Percent				
		Percentage of students	Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced	
Black								
2003	Nation (public)	17*	252*	61*	39*	7*	#*	
	South Dakota	1*	+	‡	‡	‡	‡	
2005	Nation (public)	17*	254*	59*	41*	8*	1*	
	South Dakota	1*	+	‡	‡	‡	‡	
2007	Nation (public)	17*	259	53	47	11*	1*	
	South Dakota	1*	+	‡	‡	‡	+	
2009	Nation (public)	16	260	51	49	12	1	
	South Dakota	2	+	‡	‡	‡	‡	
2011	Nation (public)	16	262*	50*	50*	13	1	
	South Dakota	2	270	40	60	21	1	
2013	Nation (public)	15	263*	49*	51*	14*	2	
	South Dakota	2	254	55	45	10	#	
2015	Nation (public)	15	260	53	47	12	1	
	South Dakota	3	‡	‡	‡	‡	‡	

The Nation's Report Card 2015 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, 2003–2015 —Continued

Race/ethnicity, year, and jurisdiction				Percent				
		Percentage of students	Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced	
Hispanic								
2003	Nation (public)	15*	258*	53*	47*	11*	1*	
	South Dakota	1*	+	‡	‡	‡	‡	
2005	Nation (public)	17*	261*	50*	50*	13*	1*	
	South Dakota	2*	+	+	‡	‡	+	
2007	Nation (public)	19*	264*	46*	54*	15*	2*	
	South Dakota	2*	269	43	57	18	5	
2009	Nation (public)	21*	266*	44*	56*	17	2*	
	South Dakota	2*	268	38	62	13	1	
2011	Nation (public)	23*	269	40	60	20	3	
	South Dakota	3*	274	34	66	20	3	
2013	Nation (public)	23*	271	38	62	21	3	
	South Dakota	3	274	34	66	27	5	
2015	Nation (public)	25	269	40	60	19	3	
	South Dakota	4	272	38	62	18	3	

The Nation's Report Card 2015 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, 2003–2015 —Continued

Race/ethnicity, year, and jurisdiction				Percent				
		Percentage of students	Average scale score	Below Basic	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced	
Asian/Pacific Islander								
2003	Nation (public)	4*	289*	23*	77*	42*	12*	
	South Dakota	1*	‡	‡	‡	‡	‡	
2005	Nation (public)	5*	294*	19*	81*	46*	16*	
	South Dakota	1*	+	‡	‡	‡	‡	
2007	Nation (public)	5*	296*	18*	82*	49*	17*	
	South Dakota	1*	‡	‡	‡	‡	‡	
2009	Nation (public)	5	300*	16	84	53	20	
	South Dakota	1*	‡	‡	‡	‡	‡	
2011	Nation (public)	6	302	15	85	55	22	
	South Dakota	1*	+	‡	‡	‡	‡	
2013	Nation (public)	5	306	13	87	60	25	
	South Dakota	2	‡	‡	‡	‡	‡	
2015	Nation (public)	6	305	14	86	58	25	
	South Dakota	2	‡	‡	‡	‡	‡	

Table 3-B

The Nation's Report Card 2015 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, 2003–2015 —Continued

				Percent			
Race/ethnicity jurisdiction	, year, and	Percentage of students	Average scale score	Below Basic	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced
American India	an/Alaska Native						
2003	Nation (public)	1	265	46	54	16	2
	South Dakota	8	255	57	43	9	1
2005	Nation (public)	1	266	45	55	14*	2
	South Dakota	10	260	52	48	11	1
2007	Nation (public)	1*	265	44	56	17	2
	South Dakota	10	261	46	54	14	1
2009	Nation (public)	1	267	43	57	20	3
	South Dakota	11	266	45	55	17	1
2011	Nation (public)	1	266	45	55	17	4
	South Dakota	11	263	48	52	14	2
2013	Nation (public)	1	270	40	60	21	3
	South Dakota	12	260	52	48	10	1
2015	Nation (public)	1	267	43	57	19	3
	South Dakota	12	260	52	48	11	1

Rounds to zero.‡ Reporting standards not met.

* Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2015.

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 or 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, 2003–2015 Mathematics Assessments.

NAEP 2015 Mathematics Report for South Dakota

Tables 4-A and 4-B show average scale scores and percentage of students by achievement-level data for the seven racial/ethnic categories used in 2011, 2013, and 2015: White, Black, Hispanic, Asian, American Indian/Alaska Native, Native Hawaiian/Other Pacific Islander, and Two or more races at grades 4 and 8 in South Dakota and the nation.

Table 4-A

The Nation's Report Card 2015 State Assessment

Percentage of fourth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: 2011, 2013 and 2015

	_			Percent				
Race/ethnicity jurisdiction	, year, and	Percentage of students	Average scale score	Below Basic	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced	
White								
2011	Nation (public)	52*	249	9*	91*	52	9	
	South Dakota	77	246	9	91	46	5	
2013	Nation (public)	51*	250*	9*	91*	54*	10	
	South Dakota	75	247	9	91	48	6	
2015	Nation (public)	49	248	10	90	51	10	
	South Dakota	75	246	10	90	47	5	
Black								
2011	Nation (public)	16	224	34	66	17	1	
	South Dakota	3	227	32	68	21	1	
2013	Nation (public)	16	224	34	66	18	1	
	South Dakota	3	221	37	63	14	1	
2015	Nation (public)	15	224	35	65	19	1	
	South Dakota	3	218	44	56	11	2	
Hispanic								
2011	Nation (public)	24*	229	28	72	24	2	
	South Dakota	3*	226	29	71	18	2	
2013	Nation (public)	25*	230	27	73	26	2	
	South Dakota	4	226	30	70	16	1	
2015	Nation (public)	26	230	27	73	26	3	
	South Dakota	5	227	32	68	21	3	
Asian								
2011	Nation (public)	5	257	8	92	64	21	
	South Dakota	1	‡	‡	‡	‡	‡	
2013	Nation (public)	5	260	7	93	67	24	
	South Dakota	2	‡	‡	‡	‡	‡	
2015	Nation (public)	5	259	8	92	64	23	
Cas notes at and a	South Dakota	2	‡	‡	‡	‡	‡	

Table 4-A

The Nation's Report Card 2015 State Assessment

Percentage of fourth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: 2011, 2013 and 2015—Continued

					ent		
Race/ethnicity jurisdiction	/, year, and	Percentage of students	Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced
American Indian/Alaska Native							
2011	Nation (public)	1	227	32	68	24	2
	South Dakota	14	220	40	60	15	#
2013	Nation (public)	1	228	30	70	24	2
	South Dakota	14	217	45	55	12	#
2015	Nation (public)	1	228	30	70	24	2
	South Dakota	13	216	45	55	14	1
Native Hawaii Islander	Native Hawaiian/Other Pacific Islander						
2011	Nation (public)	#	235	24	76	33	7
	South Dakota	#	‡	‡	‡	‡	‡
2013	Nation (public)	#	235*	23	77	32	4
	South Dakota	#	‡	‡	‡	‡	‡
2015	Nation (public)	#	226	35	65	24	3
	South Dakota	#	‡	‡	‡	‡	‡
Two or more	races						
2011	Nation (public)	2*	244	15	85	43	9
	South Dakota	1*	‡	‡	‡	‡	‡
2013	Nation (public)	3*	244	14	86	45	9
	South Dakota	2*	‡	‡	‡	‡	‡
2015	Nation (public)	3	244	15	85	44	9
	South Dakota	3	236	19	81	34	#

Rounds to zero.

‡ Reporting standards not met.

* Value is significantly different (ρ < .05) from the value for the same jurisdiction and student group in 2015. NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 213 or lower; *Basic*, 214–248; *Proficient*, 249–281; and *Advanced*, 282 or 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, 2013 and 2015 Mathematics Assessments.

Table 4-B

The Nation's Report Card 2015 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, 2013 and 2015

				Percent				
Race/ethnicity jurisdiction	, year, and	Percentage of students	Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced	
White								
2011	Nation (public)	54*	293*	17*	83*	43*	10	
	South Dakota	82	295*	13	87	47*	10*	
2013	Nation (public)	53*	293*	17*	83*	44*	11	
	South Dakota	79	294*	14	86	45*	9	
2015	Nation (public)	51	291	19	81	42	10	
	South Dakota	78	290	16	84	39	7	
Black								
2011	Nation (public)	16	262*	50*	50*	13	1	
	South Dakota	2	270	40	60	21	1	
2013	Nation (public)	15	263*	49*	51*	14*	2	
	South Dakota	2	254	55	45	10	#	
2015	Nation (public)	15	260	53	47	12	1	
	South Dakota	3	‡	‡	‡	‡	‡	
Hispanic								
2011	Nation (public)	23*	269	40	60	20	3	
	South Dakota	3*	274	34	66	20	3	
2013	Nation (public)	23*	271	38	62	21	3	
	South Dakota	3	274	34	66	27	5	
2015	Nation (public)	25	269	40	60	19	3	
	South Dakota	4	272	38	62	18	3	
Asian								
2011	Nation (public)	5	305	12	88	58	24	
	South Dakota	1*	‡	‡	‡	‡	‡	
2013	Nation (public)	5	308	12	88	62	27	
	South Dakota	2	‡	‡	‡	‡	‡	
2015	Nation (public)	5	307	12	88	60	26	
	South Dakota	2	‡	‡	‡	‡	‡	

Table 4-B

The Nation's Report Card 2015 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, 2013 and 2015—Continued

					Perc	ent		
Race/ethnicity jurisdiction	/, year, and	Percentage of students	Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced	
American Indian/Alaska Native								
2011	Nation (public)	1	266	45	55	17	4	
	South Dakota	11	263	48	52	14	2	
2013	Nation (public)	1	270	40	60	21	3	
	South Dakota	12	260	52	48	10	1	
2015	Nation (public)	1	267	43	57	19	3	
	South Dakota	12	260	52	48	11	1	
Native Hawaiian/Other Pacific Islander								
2011	Nation (public)	#	265*	45	55	19	3	
	South Dakota	#	+	‡	+	+	+	
2013	Nation (public)	#	274	34	66	24	4	
	South Dakota	#	+	‡	‡	‡	+	
2015	Nation (public)	#	277	35	65	30	6	
	South Dakota	#	‡	‡	‡	‡	‡	
Two or more	races							
2011	Nation (public)	2*	286	24	76	37	10	
	South Dakota	1*	‡	‡	‡	‡	‡	
2013	Nation (public)	2*	286	24	76	37	10	
	South Dakota	1	‡	‡	‡	‡	‡	
2015	Nation (public)	2	283	28	72	35	9	
	South Dakota	2	+	‡	+	+	+	

Rounds to zero.

‡ Reporting standards not met.

* Value is significantly different (ρ < .05) from the value for the same jurisdiction and student group in 2015. 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 or 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, 2013 and 2015 Mathematics Assessments.

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.

Tables 5-A and 5-B show average scale scores and percentage of students by achievement-level data for public school students at grades 4 and 8 in South Dakota and the nation, by gender.

Grade 4 Scale Score Results by Gender

- In 2015, male students in South Dakota had an average score in mathematics (240) that was not significantly different from that of female students (239). In 2003, male students in South Dakota had an average score in mathematics (239) that was higher than that of female students (235).
- In 2015, male students in South Dakota had an average scale score in mathematics (240) that was not significantly different from that of male students in public schools across the nation (241). Similarly, female students in South Dakota had an average scale score (239) that was not significantly different from that of female students across the nation (239).
- In South Dakota, the average scale score of male students in 2015 was lower than the scores of male students in 2005 and 2009, but not significantly different from the scores of male students in 2003, 2007, 2011, and 2013.
- In South Dakota, the average scale score of female students in 2015 was higher than the score of female students in 2003, but not significantly different from the scores of female students in 2005, 2007, 2009, 2011, and 2013.

Grade 4 Achievement-Level Results by Gender

- In the 2015 assessment, 41 percent of male students and 38 percent of female students performed at or above *Proficient* in South Dakota. The difference between these percentages was not statistically significant.
- The percentage of male students in South Dakota's public schools who were at or above *Proficient* in 2015 (41 percent) was not significantly different from that of male students in the nation (41 percent).
- The percentage of female students in South Dakota's public schools who were at or above *Proficient* in 2015 (38 percent) was not significantly different from that of female students in the nation (38 percent).
- In South Dakota, the percentage of male students performing at or above *Proficient* in 2015 was not significantly different from the corresponding percentages of students in 2003, 2005, 2007, 2009, 2011, and 2013.
- In South Dakota, the percentage of female students performing at or above *Proficient* in 2015 was greater than the percentage of students in 2003, but not significantly different from the corresponding percentages of students in 2005, 2007, 2009, 2011, and 2013.

Table 5-A

The Nation's Report Card 2015 State Assessment

Percentage of fourth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by gender, year, and jurisdiction: Various years, 2003–2015

				Percent				
Gender, year,	and jurisdiction	Percentage of students	Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced	
Male								
2003	Nation (public)	51	235*	23*	77*	34*	5*	
	South Dakota	51	239	16	84	37	4	
2005	Nation (public)	51	238*	20*	80*	37*	6*	
	South Dakota	51	243*	13*	87*	43	5	
2007	Nation (public)	51	240	18	82	41	7*	
	South Dakota	51	242	14	86	43	4	
2009	Nation (public)	51	240	19	81	40	7*	
	South Dakota	52	243*	13	87	44	6	
2011	Nation (public)	51	241	18	82	41	7*	
	South Dakota	51	242	14	86	42	5	
2013	Nation (public)	51	242*	18*	82*	42*	8	
	South Dakota	51	241	16	84	40	6	
2015	Nation (public)	51	241	19	81	41	8	
	South Dakota	51	240	17	83	41	5	

Table 5-A

The Nation's Report Card 2015 State Assessment

Percentage of fourth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by gender, year, and jurisdiction: Various years, 2003–2015—Continued

				Percent			
Gender, year,	Gender, year, and jurisdiction		Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced
Female							
2003	Nation (public)	49	233*	25*	75*	29*	3*
	South Dakota	49	235*	20	80	31*	2
2005	Nation (public)	49	236*	21*	79*	33*	4*
	South Dakota	49	240	14	86	38	3
2007	Nation (public)	49	238*	19	81	36	4*
	South Dakota	49	240	14	86	38	3
2009	Nation (public)	49	238	19	81	37	5*
	South Dakota	48	241	14	86	39	3
2011	Nation (public)	49	239	18	82	39	6
	South Dakota	49	240	15	85	37	3
2013	Nation (public)	49	241*	18*	82*	40*	7*
	South Dakota	49	241	15	85	40	5
2015	Nation (public)	49	239	19	81	38	6
	South Dakota	49	239	17	83	38	4

* Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2015. NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below Basic, 213 or lower; Basic, 214-248; Proficient, 249-281; and Advanced, 282 or 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, 2003–2015 Mathematics Assessments.

Grade 8 Scale Score Results by Gender

- In 2015, male students in South Dakota had an average score in mathematics (284) that was not significantly different from that of female students (286). In 2003, male students in South Dakota had an average score in mathematics (286) that was not significantly different from that of female students (284).
- In 2015, male students in South Dakota had an average scale score in mathematics (284) that was not significantly different from that of male students in public schools across the nation (281). However, female students in South Dakota had an average scale score (286) that was higher than that of female students across the nation (281).
- In South Dakota, the average scale score of male students in 2015 was lower than the scores of male students in 2005, 2007, 2009, 2011, and 2013, but not significantly different from the score of male students in 2003.
- In South Dakota, the average scale score of female students in 2015 was lower than the scores of female students in 2009 and 2011, but not significantly different from the scores of female students in 2003, 2005, 2007, and 2013.

Grade 8 Achievement-Level Results by Gender

- In the 2015 assessment, 33 percent of male students and 35 percent of female students performed at or above *Proficient* in South Dakota. The difference between these percentages was not statistically significant.
- The percentage of male students in South Dakota's public schools who were at or above *Proficient* in 2015 (33 percent) was not significantly different from that of male students in the nation (32 percent).
- The percentage of female students in South Dakota's public schools who were at or above *Proficient* in 2015 (35 percent) was not significantly different from that of female students in the nation (32 percent).
- In South Dakota, the percentage of male students performing at or above *Proficient* in 2015 was smaller than the corresponding percentages of students in 2007, 2009, 2011, and 2013, but not significantly different from the corresponding percentages of students in 2003 and 2005.
- In South Dakota, the percentage of female students performing at or above *Proficient* in 2015 was smaller than the corresponding percentages of students in 2009 and 2011, but not significantly different from the corresponding percentages of students in 2003, 2005, 2007, and 2013.

Table 5-B

The Nation's Report Card 2015 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, 2003–2015

				Percent				
Gender, year,	and jurisdiction	Percentage of students	Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced	
Male								
2003	Nation (public)	50	277*	33*	67*	29*	6*	
	South Dakota	51	286	21	79	35	5	
2005	Nation (public)	51	278*	32*	68*	30*	6*	
	South Dakota	51	287*	20	80	36	7	
2007	Nation (public)	51	281	29	71	33	8*	
	South Dakota	52	290*	19*	81*	41*	8	
2009	Nation (public)	51*	283*	28*	72*	34*	8	
	South Dakota	51	292*	17*	83*	44*	9	
2011	Nation (public)	51	283*	28*	72*	34*	9	
	South Dakota	51	291*	19*	81*	42*	9	
2013	Nation (public)	51	284*	27*	73*	35*	9	
	South Dakota	51	288*	21	79	39*	8	
2015	Nation (public)	51	281	30	70	32	8	
	South Dakota	51	284	24	76	33	6	

Table 5-B

The Nation's Report Card 2015 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, 2003–2015—Continued

				Percent			
Gender, year,	Gender, year, and jurisdiction		Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced
Female							
2003	Nation (public)	50	275*	34*	66*	26*	4*
	South Dakota	49	284	23	77	34	4
2005	Nation (public)	49	277*	33*	67*	27*	5*
	South Dakota	49	287	20	80	37	6
2007	Nation (public)	49	279*	30	70	29*	6*
	South Dakota	48	287	19	81	37	5
2009	Nation (public)	49*	281	29	71	31	7
	South Dakota	49	289*	18	82	39*	5
2011	Nation (public)	49	282*	28*	72*	33	7
	South Dakota	49	290*	17	83	41*	7
2013	Nation (public)	49	283*	27*	73*	34*	7
	South Dakota	49	287	22	78	38	7
2015	Nation (public)	49	281	29	71	32	7
	South Dakota	49	286	21	79	35	5

* Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2015. 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 or 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, 2003–2015 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.

Tables 6-A and 6-B show average scale scores and percentage of students by achievement-level data for public school students at grades 4 and 8 in South Dakota and the nation, by student eligibility for the NSLP.

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

- In 2015, students in South Dakota eligible for free/reduced-price lunch had an average mathematics scale score of 229. This was lower than that of students in South Dakota not eligible for this program (248).
- In 2015, students in South Dakota 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 20 points. In 2003, the average score for students in South Dakota who were eligible for free/reduced-price school lunch was lower than the score of those not eligible by 16 points.
- Students in South Dakota eligible for free/reduced-price lunch had an average scale score (229) in 2015 that was not significantly different from that of students in the nation who were eligible (229).
- In South Dakota, students eligible for free/reduced-price lunch had an average mathematics scale score in 2015 that was lower than that of eligible students in 2005, but not significantly different from that of eligible students in 2003, 2007, 2009, 2011, and 2013.

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

- In South Dakota, 25 percent of students who were eligible for free/reduced-price lunch and 51 percent of those who were not eligible for this program performed at or above *Proficient* in 2015. These percentages were significantly different from one another.
- For students in South Dakota in 2015 who were eligible for free/reduced-price lunch, the percentage at or above *Proficient* (25 percent) was not significantly different from the corresponding percentage for their counterparts around the nation (24 percent).
- In South Dakota, the percentage of students eligible for free/reduced-price lunch who performed at or above *Proficient* in 2015 was not significantly different from the corresponding percentages in 2003, 2005, 2007, 2009, 2011, and 2013.

Table 6-A

The Nation's Report Card 2015 State Assessment

Percentage of fourth-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, 2003–2015

				Percent				
Eligibility statu jurisdiction	Eligibility status, year, and jurisdiction		Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced	
Eligible								
2003	Nation (public)	44*	222*	38*	62*	15*	1*	
	South Dakota	37*	227	30	70	21	1	
2005	Nation (public)	46*	225*	33*	67*	19*	1*	
	South Dakota	41	232*	23*	77*	26	1	
2007	Nation (public)	46*	227*	30*	70*	22*	1*	
	South Dakota	36*	230	25	75	25	1	
2009	Nation (public)	48*	228*	29*	71*	22*	1*	
	South Dakota	37*	232	25	75	27	2	
2011	Nation (public)	52*	229	27	73	24	2*	
	South Dakota	43	231	25	75	25	2	
2013	Nation (public)	54*	230*	27	73	26*	2	
	South Dakota	42	230	28	72	25	2	
2015	Nation (public)	55	229	28	72	24	2	
	South Dakota	43	229	29	71	25	2	

Table 6-A

The Nation's Report Card 2015 State Assessment

Percentage of fourth-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, 2003–2015—Continued

				Percent				
Eligibility statu jurisdiction	is, year, and	Percentage of students	Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced	
Not eligible								
2003	Nation (public)	52*	244*	12*	88*	45*	6*	
	South Dakota	62*	244*	10	90	42*	4	
2005	Nation (public)	52*	248*	10*	90*	50*	8*	
	South Dakota	59	249	7	93	51	6	
2007	Nation (public)	53*	249*	9*	91*	53*	9*	
	South Dakota	64*	247	8	92	49	5	
2009	Nation (public)	51*	250*	9*	91*	54*	10*	
	South Dakota	63*	248	8	92	50	6	
2011	Nation (public)	47*	252	8	92	57	12*	
	South Dakota	57	249	7	93	51	6	
2013	Nation (public)	46*	254	7	93	60	14	
	South Dakota	58	249	7	93	52	8	
2015	Nation (public)	44	253	8	92	58	13	
	South Dakota	56	248	8	92	51	7	

Table 6-A

The Nation's Report Card 2015 State Assessment

Percentage of fourth-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, 2003–2015—Continued

				Percent			
Eligibility statu jurisdiction	Eligibility status, year, and jurisdiction		Average scale score	Below Basic	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced
Information n	ot available						
2003	Nation (public)	4*	235*	23*	77*	34*	4*
	South Dakota	1	+	‡	‡	+	‡
2005	Nation (public)	2*	237*	21*	79*	36*	5
	South Dakota	#	+	‡	‡	‡	‡
2007	Nation (public)	1	243	17	83	44	8
	South Dakota	#*	+	‡	‡	‡	‡
2009	Nation (public)	1	240	22	78	42	7
	South Dakota	#	‡	‡	‡	‡	‡
2011	Nation (public)	#*	247	12	88	49	10
	South Dakota	#	+	‡	‡	‡	‡
2013	Nation (public)	1	255	9	91	60	18
	South Dakota	#*	+	‡	‡	‡	‡
2015	Nation (public)	1	246	15	85	49	11
"De sala terrar	South Dakota	1	‡	‡	‡	‡	‡

Rounds to zero.

‡ Reporting standards not met.

* Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2015.

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 213 or lower; *Basic*, 214–248; *Proficient*, 249–281; and *Advanced*, 282 or 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, 2003–2015 Mathematics Assessments.

NAEP 2015 Mathematics Report for South Dakota

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

- In 2015, students in South Dakota eligible for free/reduced-price lunch had an average mathematics scale score of 271. This was lower than that of students in South Dakota not eligible for this program (293).
- In 2015, students in South Dakota 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 22 points. In 2003, the average score for students in South Dakota who were eligible for free/reduced-price school lunch was lower than the score of those not eligible by 19 points.
- Students in South Dakota eligible for free/reduced-price lunch had an average scale score (271) in 2015 that was not significantly different from that of students in the nation who were eligible (268).
- In South Dakota, students eligible for free/reduced-price lunch had an average mathematics scale score in 2015 that was lower than that of eligible students in 2005, 2009, and 2011, but not significantly different from that of eligible students in 2003, 2007, and 2013.

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

- In South Dakota, 19 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 2015. These percentages were significantly different from one another.
- For students in South Dakota in 2015 who were eligible for free/reduced-price lunch, the percentage at or above *Proficient* (19 percent) was not significantly different from the corresponding percentage for their counterparts around the nation (18 percent).
- In South Dakota, the percentage of students eligible for free/reduced-price lunch who performed at or above *Proficient* in 2015 was smaller than the corresponding percentages in 2009 and 2011, but not significantly different from the corresponding percentages in 2003, 2005, 2007, and 2013.

Table 6-B

The Nation's Report Card 2015 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, 2003–2015

				Percent				
Eligibility statu jurisdiction	Eligibility status, year, and jurisdiction		Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced	
Eligible								
2003	Nation (public)	36*	258*	53*	47*	11*	1*	
	South Dakota	32	272	37	63	22	2	
2005	Nation (public)	39*	261*	49*	51*	13*	1*	
	South Dakota	36	276*	31	69	24	2	
2007	Nation (public)	41*	265*	45*	55*	15*	2*	
	South Dakota	30*	275	31	69	24	3	
2009	Nation (public)	43*	266*	43	57	17*	2*	
	South Dakota	32*	276*	31	69	24*	3	
2011	Nation (public)	48*	269*	41*	59*	19	2	
	South Dakota	35	277*	30*	70*	25*	3	
2013	Nation (public)	50*	270*	39*	61*	20*	3	
	South Dakota	36	271	38	62	22	3	
2015	Nation (public)	52	268	42	58	18	2	
	South Dakota	36	271	37	63	19	2	

Table 6-B

The Nation's Report Card 2015 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, 2003–2015—Continued

				Percent				
Eligibility statu jurisdiction	ıs, year, and	Percentage of students	Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced	
Not eligible								
2003	Nation (public)	58*	287*	22*	78*	37*	7*	
	South Dakota	68	291	15	85	41	6	
2005	Nation (public)	59*	288*	21*	79*	39*	8*	
	South Dakota	64	294	13	87	44	9	
2007	Nation (public)	58*	291*	19*	81*	42*	10*	
	South Dakota	70*	294	13	87	46	9	
2009	Nation (public)	56*	293*	17*	83*	45*	12*	
	South Dakota	68*	297*	11*	89*	49*	9	
2011	Nation (public)	52*	295	16	84	47	13	
	South Dakota	65	298*	11*	89*	51*	11*	
2013	Nation (public)	50*	297*	14*	86*	49*	14	
	South Dakota	64	297*	12	88	48*	10	
2015	Nation (public)	47	296	16	84	48	13	
	South Dakota	63	293	14	86	42	8	

Table 6-B

The Nation's Report Card 2015 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, 2003–2015—Continued

				Percent			
Eligibility statu jurisdiction	Eligibility status, year, and jurisdiction		Average scale score	Below Basic	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced
Information n	Information not available						
2003	Nation (public)	6*	278*	32*	68*	29*	6*
	South Dakota	1	+	‡	‡	+	‡
2005	Nation (public)	3*	277*	34*	66*	28*	6*
	South Dakota	#	‡	‡	‡	‡	‡
2007	Nation (public)	1	274*	36*	64*	28*	6*
	South Dakota	#*	+	‡	‡	+	‡
2009	Nation (public)	1	284*	28	72	35	10
	South Dakota	#	+	‡	‡	‡	‡
2011	Nation (public)	#*	275*	37*	63*	26*	6*
	South Dakota	#	+	‡	‡	‡	‡
2013	Nation (public)	1*	285	29	71	39	13
	South Dakota	#	+	‡	‡	+	‡
2015	Nation (public)	1	293	21	79	45	17
"De sala terrar	South Dakota	1	‡	‡	‡	‡	‡

Rounds to zero.

‡ Reporting standards not met.

* Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2015.

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 or 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, 2003–2015 Mathematics Assessments.

Type of Location

Schools that participated in the assessment were classified as being located in four mutually exclusive types of communities: city, suburb, town, and rural. These categories indicate the geographic locations of schools. "City" is a geographical term meaning the principal city of a U.S. Census Bureau-defined Core-Based Statistical Area and is not synonymous with "inner city." The criteria for classifying schools with respect to type of location changed for 2007; therefore, only results for 2007, 2009, 2011, 2013, and 2015 are available. More detail on the changes for the classification of type of location is available at http://nces.ed.gov/ccd/Rural_Locales.asp.

Tables 7-A and 7-B show average scale scores and percentage of students by achievement-level data for public school students at grades 4 and 8 in South Dakota and the nation, by type of location (for 2007, 2009, 2011, 2013, and 2015 only).

Grade 4 Scale Score Results by Type of Location

- In 2015, the average scale score of students in South Dakota attending public schools in city locations was not significantly different from the scores of students in town and rural schools.
- In 2015, students attending public schools in city and town locations in South Dakota had average scale scores that were higher than the average scale scores of students in city and town locations in the nation.
- In 2015, students attending public schools in rural locations in South Dakota had an average scale score that was lower than the average scale score of students in rural locations in the nation.
- In 2015, students attending public schools in city and town locations in South Dakota had average scale scores that were not significantly different from the average scale scores of students in city and town locations in 2007, 2009, 2011, and 2013 in South Dakota.
- In 2015, students attending public schools in rural locations in South Dakota had an average scale score that was lower than the average scale score of students in rural locations in 2009 in South Dakota, but not significantly different from the average scale score of students in rural locations in 2007, 2011, and 2013 in South Dakota.

Grade 4 Achievement-Level Results by Type of Location

- In 2015, the percentage of students in South Dakota's public schools in city locations who performed at or above *Proficient* was not significantly different from the corresponding percentages of students in town and rural schools.
- The percentages of students in South Dakota's public schools in city and town locations who performed at or above *Proficient* in 2015 were greater than those of students in city and town locations in the nation.
- The percentage of students in South Dakota's public schools in rural locations who performed at or above *Proficient* in 2015 was not significantly different from those of students in rural locations in the nation.
- The percentages of students in South Dakota's public schools in city, town, and rural locations who performed at or above *Proficient* in 2015 were not significantly different from those of students in city, town, and rural locations in 2007, 2009, 2011, and 2013 in South Dakota.



The Nation's Report Card 2015 State Assessment

Percentage of fourth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by type of location, year, and jurisdiction: Various years, 2007–2015

				Percent				
Type of location	on, year, and	Percentage of students	Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced	
City								
2007	Nation (public)	29	233*	26*	74*	32*	5*	
	South Dakota	27	242	14	86	43	5	
2009	Nation (public)	30	234	25	75	32	5*	
	South Dakota	25	242	15	85	41	5	
2011	Nation (public)	29*	235	24	76	33	5	
	South Dakota	25	242	15	85	42	6	
2013	Nation (public)	30	236	24	76	35	7	
	South Dakota	25	242	16	84	41	7	
2015	Nation (public)	31	236	24	76	35	7	
	South Dakota	29	240	18	82	40	6	
Suburb								
2007	Nation (public)	37*	243	15	85	44	7*	
	South Dakota	2	229	23	77	20	2	
2009	Nation (public)	36*	243	16	84	44	7*	
	South Dakota	3	238	15	85	36	3	
2011	Nation (public)	36*	244	15	85	45	8	
	South Dakota	4	239	14	86	35	4	
2013	Nation (public)	35*	244	15	85	46	9	
	South Dakota	2	240	17	83	42	2	
2015	Nation (public)	41	243	16	84	44	9	
	South Dakota	3	‡	‡	‡	+	‡	
Town								
2007	Nation (public)	12	238	18	82	36	4*	
	South Dakota	28	243	11	89	43	3	
2009	Nation (public)	12	237	19	81	35	4*	
	South Dakota	31	243	12	88	43	6	
2011	Nation (public)	13*	237	19	81	35	4	
	South Dakota	29	244	11	89	43	4	
2013	Nation (public)	11	240*	17	83	39*	6	
	South Dakota	28	241	14	86	39	5	
2015	Nation (public)	11	237	20	80	35	5	
	South Dakota	28	243	13	87	43	5	

Table 7-A

The Nation's Report Card 2015 State Assessment

Percentage of fourth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by type of location, year, and jurisdiction: Various years, 2007–2015 —Continued

				Percent				
Type of location, year, and jurisdiction		Percentage of students	Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced	
Rural								
2007	Nation (public)	22*	240	16	84	39	5*	
	South Dakota	42	240	15	85	38	3	
2009	Nation (public)	22*	240	16	84	39	5*	
	South Dakota	42	242*	15	85	42	4	
2011	Nation (public)	23*	243	15	85	42	6	
	South Dakota	42	239	16	84	37	4	
2013	Nation (public)	25*	243*	14	86	44*	7*	
	South Dakota	46*	241	16	84	41	5	
2015	Nation (public)	18	241	16	84	40	6	
	South Dakota	39	237	19	81	37	3	

‡ Reporting standards not met.

* Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2015.

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 213 or lower; *Basic*, 214–248; *Proficient*, 249–281; and *Advanced*, 282 or 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, 2007–2015 Mathematics Assessments.

Grade 8 Scale Score Results by Type of Location

- In 2015, the average scale score of students in South Dakota attending public schools in city locations was higher than the score of students in rural schools, but was not significantly different from the score of students in town schools.
- In 2015, students attending public schools in city and town locations in South Dakota had average scale scores that were higher than the average scale scores of students in city and town locations in the nation.
- In 2015, students attending public schools in rural locations in South Dakota had an average scale score that was not significantly different from the average scale score of students in rural locations in the nation.
- In 2015, students attending public schools in city locations in South Dakota had an average scale score that was not significantly different from the average scale score of students in city locations in 2007, 2009, 2011, and 2013 in South Dakota.
- In 2015, students attending public schools in town locations in South Dakota had an average scale score that was lower than the average scale score of students in town locations in 2009 and 2011 in South Dakota, but not significantly different from the average scale score of students in town locations in 2007 and 2013 in South Dakota.
- In 2015, students attending public schools in rural locations in South Dakota had an average scale score that was lower than the average scale score of students in rural locations in 2007, 2009, 2011, and 2013 in South Dakota.

Grade 8 Achievement-Level Results by Type of Location

- In 2015, the percentage of students in South Dakota's public schools in city locations who performed at or above *Proficient* was not significantly different from the corresponding percentages of students in town and rural schools.
- The percentages of students in South Dakota's public schools in city and town locations who performed at or above *Proficient* in 2015 were greater than those of students in city and town locations in the nation.
- The percentage of students in South Dakota's public schools in rural locations who performed at or above *Proficient* in 2015 was not significantly different from those of students in rural locations in the nation.
- The percentage of students in South Dakota's public schools in city locations who performed at or above *Proficient* in 2015 was not significantly different from that of students in city locations in 2007, 2009, 2011, and 2013 in South Dakota.
- The percentage of students in South Dakota's public schools in town locations who performed at or above *Proficient* in 2015 was smaller than that of students in town locations in 2009 and 2011 in South Dakota, but not significantly different from that of students in town locations in 2007 and 2013 in South Dakota.
- The percentage of students in South Dakota's public schools in rural locations who performed at or above *Proficient* in 2015 was smaller than that of students in rural locations in 2007, 2009, 2011, and 2013 in South Dakota.

Table 7-B

The Nation's Report Card 2015 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by type of location, year, and jurisdiction: Various years, 2007–2015

					Perc	ent	
Type of location	on, year, and	Percentage of students	Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced
City							
2007	Nation (public)	28*	273*	38*	62*	25*	5*
	South Dakota	21*	284	24	76	34	6
2009	Nation (public)	27*	276	36	64	28	6
	South Dakota	22	289	20	80	41	7
2011	Nation (public)	29	277	34	66	29	7
	South Dakota	26	290	19	81	41	8
2013	Nation (public)	28*	278	34	66	29	7
	South Dakota	23	284	24	76	33	7
2015	Nation (public)	29	276	35	65	28	7
	South Dakota	27	287	21	79	37	7
Suburb							
2007	Nation (public)	36*	285	26	74	36	9*
	South Dakota	#	‡	‡	‡	‡	‡
2009	Nation (public)	36*	286	25	75	37	10
	South Dakota	#	‡	‡	‡	‡	‡
2011	Nation (public)	36*	286	25	75	37	9
	South Dakota	#	‡	‡	‡	‡	‡
2013	Nation (public)	35*	288*	24*	76*	39*	10
	South Dakota	#	‡	‡	‡	‡	‡
2015	Nation (public)	41	285	26	74	37	10
	South Dakota	1	‡	‡	‡	‡	‡
Town							
2007	Nation (public)	13*	280	29	71	29	5
	South Dakota	31	292	16	84	43	8
2009	Nation (public)	14*	279	30	70	29	5
	South Dakota	30	294*	14	86	46*	8
2011	Nation (public)	13*	281*	28	72	31*	6
	South Dakota	26*	295*	15	85	47*	11
2013	Nation (public)	13*	281*	28	72	32*	6
	South Dakota	28*	289	19	81	40	8
2015	Nation (public)	12	279	30	70	28	5
	South Dakota	32	286	22	78	35	7

Table 7-B

The Nation's Report Card 2015 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by type of location, year, and jurisdiction: Various years, 2007–2015 —Continued

				Percent				
Type of location, year, and jurisdiction		Percentage	Average	Below	At or above	At or above	At	
Jurisdiction		of students	scale score	Basic	Basic	Proficient	Advanced	
Rural								
2007	Nation (public)	22*	282	26	74	32	6	
	South Dakota	48*	288*	19*	81*	39*	6	
2009	Nation (public)	23*	284*	25*	75*	33	7	
	South Dakota	48*	289*	18*	82*	39*	6	
2011	Nation (public)	23*	286*	23*	77*	35*	7	
	South Dakota	47*	289*	19*	81*	39*	7*	
2013	Nation (public)	24*	286*	24*	76*	36*	8*	
	South Dakota	49*	288*	21	79	40*	7	
2015	Nation (public)	19	282	27	73	31	6	
	South Dakota	40	282	25	75	31	4	

Rounds to zero.

‡ Reporting standards not met.

* Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2015.

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 or 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, 2007–2015 Mathematics Assessments.

Parents' Highest Level of Education

Eighth- and twelfth-grade students who participated in the NAEP 2015 assessment were asked to indicate the highest level of education they thought their father and their mother had completed. Five response options—did not finish high school, graduated from high school, some education after high school, graduated from college, and "I don't know"—were offered. The highest level of education reported for either parent was used in the analysis. Fourth-graders were not asked about their parents' education level because their responses in previous NAEP assessments were not reliable, and a large percentage of them chose the "I don't know" don't know" option.

The results by highest level of parental education are shown in Table 8.

Grade 8 Scale Score Results by Parents' Highest Level of Education

- In 2015, students in South Dakota who reported that a parent had graduated from college had an average scale score that was higher than the average scores of students with a parent in any of the following education categories: some education after high school, graduated from high school, and did not finish high school.
- In 2015, the average scale scores for students in South Dakota who reported that a parent had graduated from college, had graduated from high school, or had not finished high school were not significantly different from the corresponding scores of students in the nation.
- In 2015, the average scale score for students in South Dakota who reported that a parent had some education after high school was higher than the score of students in the nation.
- In 2015, the average scale score for students in South Dakota who reported that a parent had graduated from college was lower than the score of students in 2009, 2011, and 2013, but not significantly different from the score of students in 2003, 2005, and 2007.
- In 2015, the average scale scores for students in South Dakota who reported that a parent had some education after high school or had not finished high school were not significantly different from the corresponding scores of students in 2003, 2005, 2007, 2009, 2011, and 2013.
- In 2015, the average scale score for students in South Dakota who reported that a parent had graduated from high school was lower than the score of students in 2003, 2007, 2009, and 2011, but not significantly different from the score of students in 2005 and 2013.

Grade 8 Achievement-Level Results by Parents' Highest Level of Education

- In 2015, the percentage of students performing at or above *Proficient* in South Dakota who reported that a parent had graduated from college was greater than the percentage for students whose parents' highest level of education was in any of the following education categories: some education after high school, graduated from high school, and did not finish high school.
- In 2015, the percentages of students in South Dakota reporting that a parent had graduated from college, had some education after high school, had graduated from high school, or had not finished high school and who performed at or above *Proficient* were not significantly different from the corresponding percentages of students in the nation.
- In 2015 in South Dakota, the percentage of students reporting that a parent had graduated from college and who performed at or above *Proficient* was smaller than the percentage of students in 2009, 2011, and 2013, but was not significantly different from the percentage of students in 2003, 2005, and 2007.
- In 2015 in South Dakota, the respective percentages of students reporting that a parent had some education after high school or had not finished high school and who performed at or above *Proficient* were not significantly different from the corresponding percentages of students in 2003, 2005, 2007, 2009, 2011, and 2013.
- In 2015 in South Dakota, the percentage of students reporting that a parent had graduated from high school and who performed at or above *Proficient* was smaller than the percentage of students in 2003, 2007, 2009, and 2011, but was not significantly different from the percentage of students in 2005 and 2013.

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Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by highest parental education level, year, and jurisdiction: Various years, 2003–2015

				Percent				
Highest paren year, and juris	Highest parental education level, year, and jurisdiction		Average scale score	Below Basic	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced	
Did not finish high school								
2003	Nation (public)	7*	256*	56*	44*	9*	1	
	South Dakota	4	267	42	58	16	#	
2005	Nation (public)	8*	259*	52*	48*	11*	1	
	South Dakota	5	267	42	58	13	2	
2007	Nation (public)	8	263*	48	52	12	1	
	South Dakota	4	267	40	60	12	2	
2009	Nation (public)	8	265	45	55	14	1	
	South Dakota	4	271	35	65	18	3	
2011	Nation (public)	8	265	44	56	15	2	
	South Dakota	4	269	39	61	15	1	
2013	Nation (public)	8	267*	42	58	16	2	
	South Dakota	5	265	42	58	13	1	
2015	Nation (public)	8	265	44	56	14	1	
	South Dakota	4	265	43	57	11	1	

The Nation's Report Card 2015 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by highest parental education level, year, and jurisdiction: Various years, 2003–2015—Continued

				Percent				
Highest paren year, and juris	Highest parental education level, year, and jurisdiction		Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced	
Graduated from high school								
2003	Nation (public)	18*	267	42	58	16	2*	
	South Dakota	18*	277*	31	69	25*	3	
2005	Nation (public)	18*	267	42	58	17	2	
	South Dakota	15	276	28	72	21	2	
2007	Nation (public)	18*	270*	40*	60*	19	2	
	South Dakota	16*	278*	28	72	25*	4	
2009	Nation (public)	17*	270*	38*	62*	19	2	
	South Dakota	15	280*	27	73	28*	3	
2011	Nation (public)	17*	271*	38*	62*	20*	2	
	South Dakota	14	275*	31	69	23*	2	
2013	Nation (public)	17	270*	39*	61*	19*	2	
	South Dakota	15	272	36	64	21	3	
2015	Nation (public)	16	268	42	58	17	2	
	South Dakota	13	269	37	63	15	#	

The Nation's Report Card 2015 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by highest parental education level, year, and jurisdiction: Various years, 2003–2015—Continued

				Percent				
Highest parental education level, year, and jurisdiction		Percentage of students	Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced	
Some education after high school								
2003	Nation (public)	18*	280*	27*	73*	28*	4	
	South Dakota	19*	285	20	80	33	4	
2005	Nation (public)	18*	280*	27	73	28*	4*	
	South Dakota	19*	287	19	81	36	5	
2007	Nation (public)	17*	283	24	76	32	5	
	South Dakota	17*	291	15	85	42	5	
2009	Nation (public)	17*	283*	24	76	32	5	
	South Dakota	15	292	14	86	41	6	
2011	Nation (public)	16*	285*	22*	78*	33*	5	
	South Dakota	15	291	15	85	40	7	
2013	Nation (public)	15	285*	22*	78*	33*	6	
	South Dakota	13	288	20	80	38	6	
2015	Nation (public)	15	282	25	75	30	5	
	South Dakota	13	287	17	83	34	4	

The Nation's Report Card 2015 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by highest parental education level, year, and jurisdiction: Various years, 2003–2015—Continued

				Percent				
Highest paren year, and juris	Highest parental education level, year, and jurisdiction		Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced	
Graduated from college								
2003	Nation (public)	45*	287*	23*	77*	39*	8*	
	South Dakota	51*	293	13	87	44	7	
2005	Nation (public)	45*	289*	22*	78*	41*	10*	
	South Dakota	54*	295	13	87	46	9	
2007	Nation (public)	46*	291*	20	80	43*	11*	
	South Dakota	56*	295	13	87	47	9	
2009	Nation (public)	46*	294	18	82	46	13	
	South Dakota	55*	298*	10*	90*	52*	10	
2011	Nation (public)	47*	294	18	82	46	13	
	South Dakota	57	298*	11*	89*	52*	12	
2013	Nation (public)	49	295*	17*	83*	47*	14	
	South Dakota	58	297*	11	89	49*	10	
2015	Nation (public)	49	293	19	81	45	13	
	South Dakota	60	292	15	85	42	9	

The Nation's Report Card 2015 State Assessment

Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by highest parental education level, year, and jurisdiction: Various years, 2003–2015—Continued

					Perc	ent	
Highest parenta year, and jurisd	al education level, liction	Percentage of students	Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced
Unknown							
2003	Nation (public)	11*	258*	53*	47*	12*	1*
	South Dakota	9	264	46	54	13	1
2005	Nation (public)	11*	260*	51	49	13*	1*
	South Dakota	8*	271	37	63	18	2
2007	Nation (public)	12	263	48	52	15	2
	South Dakota	7*	266	42	58	19	2
2009	Nation (public)	12	264	47	53	16	2
	South Dakota	10	272	37	63	20	3
2011	Nation (public)	12	265*	46*	54*	16	2
	South Dakota	8	273	35	65	23	3
2013	Nation (public)	12	266*	45*	55*	17*	2
	South Dakota	10	263	49	51	15	2
2015	Nation (public)	12	263	49	51	15	2
	South Dakota	10	265	45	55	18	2

Rounds to zero.

* Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2015.

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 or 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, 2003–2015 Mathematics Assessments.

A More Inclusive NAEP: Students With Disabilities and/or 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 SD and/or ELL students 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.

Tables 9-A and 9-B display data for grades 4 and 8 grade students in South Dakota 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 grades 4 and 8 students in the state.

Tables 10-A and 10-B show the percentages of students assessed in South Dakota by disability status and their performance on the NAEP assessment in terms of average scores and percentages performing below *Basic*, at or above *Proficient*, and at *Advanced* for grades 4 and 8.

Tables 11-A and 11-B present the percentages of students assessed in South Dakota 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 grades 4 and 8.

Tables 12-A and 12-B present the total number of grades 4 and 8 students assessed in each of the participating states and the percentage of students sampled who were excluded.

Table 9-A

The Nation's Report Card 2015 State Assessment

Percentage of fourth-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, 2003-2015

Year and testing status		SD and/or ELL		SD		ELL	
		South Dakota	Nation (public)	South Dakota	Nation (public)	South Dakota	Nation (public)
2003	Identified	18	22	15	14	4	11
	Excluded	1	4	1	3	#	1
	Assessed without accommodations	9	10	7	4	2	7
	Assessed with accommodations	7	8	6	7	2	2
2005	Identified	19	23	16	14	4	10
	Excluded	2	3	1	3	#	1
	Assessed without accommodations	9	10	7	4	2	7
	Assessed with accommodations	8	10	7	8	2	3
2007	Identified	19	23	15	14	4	11
	Excluded	1	3	1	3	#	1
	Assessed without accommodations	9	10	7	3	3	7
	Assessed with accommodations	8	10	7	8	1	3
2009	Identified	16	23	15	13	2	10
	Excluded	2	2	2	2	#	1
	Assessed without accommodations	6	9	5	3	1	6
	Assessed with accommodations	8	11	8	8	1	4
2011	Identified	19	23	16	13	5	11
	Excluded	2	2	2	2	#	#
	Assessed without accommodations	9	9	7	3	2	6
	Assessed with accommodations	9	12	7	9	2	4
2013	Identified	19	23	16	14	4	11
	Excluded	1	2	1	1	#	#
	Assessed without accommodations	7	7	6	2	1	5
	Assessed with accommodations	11	14	9	10	3	5
2015	Identified	19	24	16	14	3	12
	Excluded	1	2	1	1	#	1
	Assessed without accommodations	7	8	6	3	1	6
	Assessed with accommodations	11	14	10	11	2	5

Rounds to zero.

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 ELC 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, 2003–2015 Mathematics Assessments.

Table 9-B

The Nation's Report Card 2015 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, 2003-2015

Year and testing status		SD and/or ELL		SD		ELL	
		South Dakota	Nation (public)	South Dakota	Nation (public)	South Dakota	Nation (public)
2003	Identified	13	19	11	14	3	6
	Excluded	2	4	2	3	#	1
	Assessed without accommodations	6	8	4	5	2	4
	Assessed with accommodations	6	7	5	6	1	1
2005	Identified	14	19	12	13	2	6
	Excluded	2	4	2	3	#	1
	Assessed without accommodations	4	7	3	3	1	4
	Assessed with accommodations	7	8	6	7	1	1
2007	Identified	12	18	11	13	1	7
	Excluded	2	4	2	4	#	1
	Assessed without accommodations	3	6	2	2	#	4
	Assessed with accommodations	6	8	6	6	#	2
2009	Identified	12	18	10	13	2	6
	Excluded	2	3	2	3	#	#
	Assessed without accommodations	3	5	2	2	1	3
	Assessed with accommodations	7	10	6	8	#	2
2011	Identified	13	18	11	13	2	6
	Excluded	2	3	1	2	#	#
	Assessed without accommodations	4	5	3	2	1	3
	Assessed with accommodations	7	10	7	9	1	2
2013	Identified	13	17	11	13	3	6
	Excluded	1	2	1	1	#	#
	Assessed without accommodations	3	3	2	1	1	2
	Assessed with accommodations	9	12	8	10	1	3
2015	Identified	14	19	12	13	3	7
	Excluded	1	2	1	1	#	#
	Assessed without accommodations	5	5	3	1	2	3
	Assessed with accommodations	8	13	7	11	1	3

Rounds to zero.

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, 2003–2015 Mathematics Assessments.

Table 10-A

The Nation's Report Card 2015 State Assessment

Percentage of fourth-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, 2003–2015

					Perc	ent	
SD status, year, and jurisdiction		Percentage of students	Average scale score	Below Basic	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced
SD							
2003	Nation (public)	11*	214*	50*	50*	12*	1*
	South Dakota	13*	219	44	56	15	1
2005	Nation (public)	12*	218	44	56	16	2*
	South Dakota	15	225*	34*	66*	19	2
2007	Nation (public)	11*	220*	40*	60*	19*	2
	South Dakota	14	225	34	66	22	2
2009	Nation (public)	12*	220*	41*	59*	19*	2
	South Dakota	13*	226*	35	65	22	3
2011	Nation (public)	12*	218	45	55	17	2
	South Dakota	15	223	36	64	17	1
2013	Nation (public)	13*	218	45	55	18*	2
	South Dakota	15	220	41	59	15	1
2015	Nation (public)	13	217	46	54	16	2
	South Dakota	16	219	44	56	18	2

Table 10-A

The Nation's Report Card 2015 State Assessment

Percentage of fourth-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, 2003–2015—Continued

				Percent			
SD status, year, and jurisdiction		Percentage of students	Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced
Not SD							
2003	Nation (public)	89*	236*	21*	79*	34*	4*
	South Dakota	87*	240*	14	86	37*	3*
2005	Nation (public)	88*	240*	17*	83*	38*	5*
	South Dakota	85	244	10	90	44	5
2007	Nation (public)	89*	241*	16*	84*	41*	6*
	South Dakota	86	244	11	89	44	4
2009	Nation (public)	88*	242*	16*	84*	41*	6*
	South Dakota	87*	245	11	89	45	5
2011	Nation (public)	88*	243	15	85	43	7*
	South Dakota	85	244	11	89	44	5
2013	Nation (public)	87*	244*	14*	86*	45*	8
	South Dakota	85	245	11	89	45	6
2015	Nation (public)	87	243	15	85	43	8
	South Dakota	84	244	12	88	44	5

 $\overline{}$ Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2015.

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 213 or lower; *Basic*, 214–248; *Proficient*, 249–281; and *Advanced*, 282 or 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, 2003–2015 Mathematics Assessments.

Table 10-B

The Nation's Report Card 2015 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, 2003–2015

					Perc	ent	
SD status, yea	ar, and jurisdiction	Percentage of students	Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced
SD							
2003	Nation (public)	11*	242*	71*	29*	6*	1*
	South Dakota	9*	246	69	31	5	#
2005	Nation (public)	11*	244*	69	31	7	1*
	South Dakota	10	250	65	35	6	#
2007	Nation (public)	9*	246	67	33	8	1
	South Dakota	9*	251	62	38	8	1
2009	Nation (public)	10*	249*	64*	36*	9*	1
	South Dakota	9*	255	60	40	8	2
2011	Nation (public)	11*	249*	65*	35*	9	2
	South Dakota	10	255*	60	40	8	1
2013	Nation (public)	12*	248*	66*	34*	8	1
	South Dakota	10	243*	73	27	5	#
2015	Nation (public)	12	246	68	32	8	1
	South Dakota	10	249	66	34	6	1

Table 10-B

The Nation's Report Card 2015 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, 2003–2015—Continued

					Perc	ent	
SD status, year, and jurisdiction		Percentage of students	Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced
Not SD							
2003	Nation (public)	89*	280*	29*	71*	30*	5*
	South Dakota	91*	289	17	83	38	5
2005	Nation (public)	89*	281*	28*	72*	31*	6*
	South Dakota	90	291	15	85	40	7
2007	Nation (public)	91*	284*	26*	74*	33*	7*
	South Dakota	91*	292*	15	85	42*	7
2009	Nation (public)	90*	285	24	76	35	8
	South Dakota	91*	294*	13*	87*	45*	8
2011	Nation (public)	89*	287	23	77	36	9
	South Dakota	90	294*	14*	86*	45*	9*
2013	Nation (public)	88*	288*	22*	78*	38*	9
	South Dakota	90	292*	15	85	42*	8
2015	Nation (public)	88	286	24	76	36	9
	South Dakota	90	289	18	82	37	7

Rounds to zero.

* Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2015.

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 or 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, 2003–2015 Mathematics Assessments.

Table 11-A

The Nation's Report Card 2015 State Assessment

Percentage of fourth-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, 2003–2015

					Perc	ent	
ELL status, year, and jurisdiction		Percentage of students	Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced
ELL							
2003	Nation (public)	9*	214*	51*	49*	9*	#*
	South Dakota	4	206	66	34	5	1
2005	Nation (public)	10*	216*	46*	54*	11*	1
	South Dakota	4	204	63	37	2	#
2007	Nation (public)	10*	217	44	56	13	1
	South Dakota	4	212	47	53	5	#
2009	Nation (public)	10*	218	43	57	12*	1*
	South Dakota	2*	‡	‡	‡	‡	‡
2011	Nation (public)	11	219	42	58	14	1
	South Dakota	4*	208	56	44	6	#
2013	Nation (public)	11	219	41	59	14	1
	South Dakota	4	213	54	46	10	1
2015	Nation (public)	11	218	43	57	15	1
	South Dakota	3	‡	‡	‡	‡	‡

Table 11-A

The Nation's Report Card 2015 State Assessment

Percentage of fourth-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, 2003–2015—Continued

				Percent			
ELL status, year, and jurisdiction		Percentage of students	Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced
Not ELL							
2003	Nation (public)	91*	236*	21*	79*	34*	4*
	South Dakota	96	238*	16	84	35*	3*
2005	Nation (public)	90*	239*	18*	82*	38*	5*
	South Dakota	96	243*	12*	88*	42	4
2007	Nation (public)	90*	242*	16	84	42	6*
	South Dakota	96	242	12*	88*	42	4
2009	Nation (public)	90*	242*	16	84	41*	6*
	South Dakota	98*	243*	13	87	43	5
2011	Nation (public)	89	243	15	85	43	7
	South Dakota	96*	242	12*	88*	42	5
2013	Nation (public)	89	244*	15*	85*	45*	8
	South Dakota	96	242	14	86	42	5
2015	Nation (public)	89	243	16	84	43	8
	South Dakota	97	241	16	84	41	5

Rounds to zero.

‡ Reporting standards not met.

* Value is significantly different (p < .05) from the value for the same jurisdiction and student group in 2015.

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below *Basic*, 213 or lower; *Basic*, 214–248; *Proficient*, 249–281; and *Advanced*, 282 or 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, 2003–2015 Mathematics Assessments.

Table 11-B

The Nation's Report Card 2015 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, 2003–2015

					Perc	ent	
ELL status, yea	ar, and jurisdiction	Percentage of students	Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced
ELL							
2003	Nation (public)	5*	241*	74*	26*	5	1
	South Dakota	3	239	75	25	4	#
2005	Nation (public)	6*	244	71	29	6	1
	South Dakota	2	‡	‡	‡	‡	‡
2007	Nation (public)	6	245	70	30	6	1
	South Dakota	1*	+	‡	‡	‡	‡
2009	Nation (public)	6*	243*	72	28	5	1
	South Dakota	1*	+	‡	‡	‡	‡
2011	Nation (public)	6*	244	72	28	5	1
	South Dakota	2*	+	‡	‡	‡	+
2013	Nation (public)	5*	245	69	31	5	1
	South Dakota	2	241	72	28	2	#
2015	Nation (public)	6	246	69	31	5	1
	South Dakota	2	‡	‡	‡	‡	‡

Table 11-B

The Nation's Report Card 2015 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, 2003–2015—Continued

				Percent			
ELL status, year, and jurisdiction		Percentage of students	Average scale score	Below <i>Basic</i>	At or above <i>Basic</i>	At or above <i>Proficient</i>	At Advanced
Not ELL							
2003	Nation (public)	95*	278*	31*	69*	29*	5*
	South Dakota	97	286	20	80	36	5
2005	Nation (public)	94*	280*	30*	70*	30*	6*
	South Dakota	98	288	19	81	37	7
2007	Nation (public)	94	282*	27	73	33*	7*
	South Dakota	99*	289*	18	82	39*	7
2009	Nation (public)	94*	284	26*	74*	34	8
	South Dakota	99*	291*	17*	83*	42*	7
2011	Nation (public)	94*	285*	25*	75*	35*	8
	South Dakota	98*	292*	17*	83*	42*	8*
2013	Nation (public)	95*	286*	25*	75*	36*	9
	South Dakota	98	288*	20	80	39*	8
2015	Nation (public)	94	284	27	73	34	8
	South Dakota	98	286	21	79	35	6

Rounds to zero.

Reporting standards not met.
Yalue is significantly different (p < .05) from the value for the same jurisdiction and student group in 2015.

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 or 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, 2003–2015 Mathematics Assessments.

Table 12-A

The Nation's Report Card 2015 State Assessment

Number of fourth-grade public school students assessed in NAEP mathematics and weighted percentage excluded, by state/jurisdiction: 2015

State/jurisdiction	Number assessed	Weighted percentage excluded
Nation (public)	134,700	2
Alabama	2,100	1
Alaska	2,100	1
Arizona	2,400	1
Arkansas	2,200	1
California	5,900	2
Colorado	2,200	2
Connecticut	2,400	1
Delaware	2,400	2
Florida	5,500	
Georgia	3,300	2
Hawaii	2,300	2
Idaho	2,300	2
Illinois	3,500	1
Indiana		1
	2,200	
lowa	2,400	1
Kansas	2,200	1
Kentucky	3,000	2
Louisiana	2,300	2
Maine	2,200	2
Maryland	3,100	1
Massachusetts	3,200	2
Michigan	3,000	3
Minnesota	2,500	2
Mississippi	2,300	1
Missouri	2,200	1
Montana	2,300	1
Nebraska	2,400	1
Nevada	2,200	2
New Hampshire	2,200	1
New Jersey	2,000	2
New Mexico	2,700	2
New York	2,900	- 1
North Carolina	3,300	1
North Dakota	2,500	2
Ohio	2,900	2
Oklahoma	2,300	2
	2,300	
Oregon		2
Pennsylvania	2,900	
Rhode Island	2,300	2
South Carolina	2,300	1
South Dakota	2,400	1
Tennessee	2,200	2
Texas	5,700	3
Utah	2,200	1
Vermont	1,900	2
Virginia	2,300	2
Washington	2,500	1
West Virginia	2,200	1
Wisconsin	2,500	1
Wyoming	2,200	1
Other jurisdictions		
District of Columbia	2,200	2
DoDEA ¹	1,900	1
DODEA '		I

¹ Department of Defense Education Activity (overseas and domestic 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), 2015 Mathematics Assessment.

Table 12-B

The Nation's Report Card 2015 State Assessment

Number of eighth-grade public school students assessed in NAEP mathematics and weighted percentage excluded, by state/jurisdiction: 2015

State/jurisdiction	Number assessed	Weighted percentage excluded
Nation (public)	132,500	2
Alabama	2,100	1
Alaska	2,000	2
Arizona	2,400	1
Arkansas	2,300	2
California	6,000	1
Colorado	2,300	1
Connecticut	2,300	1
Delaware	2,200	2
Florida	5,400	2
Georgia	3,400	1
Hawaii	2,300	2
Idaho	2,300	2
Illinois	3,300	1
Indiana	2,100	1
lowa	2,300	1
Kansas	2,300	1
Kentucky	3,100	1
Louisiana	2,300	2
Maine	2,200	1
Maryland	2,900	2
Massachusetts	3,100	2
Michigan	3,200	2
Minnesota	2,400	
Mississippi	2,400	2
Missouri	2,200	2
Montana	2,300	1
Nebraska	2,300	2
Nevada	2,300	1
New Hampshire	2,300	1
New Jersey	2,000	1
New Mexico	2,600	2
New York	2,800	1
North Carolina	3,300	1
North Dakota	2,300	2
Ohio	3,000	2
Oklahoma	2,100	2
Oregon	2,200	
Pennsylvania	2,900	2
Rhode Island	2,300	2
South Carolina	2,200	1
South Dakota	2,200	
		1
Tennessee	2,000	
Texas	5,800	2
Utah	2,400	1
Vermont	1,800	1
Virginia	2,200	2
Washington	2,500	1
West Virginia	2,100	2
Wisconsin	2,300	1
Wyoming	2,000	1
Other jurisdictions		
District of Columbia	1,800	3
DoDEA ¹	1,400	1
DODEA -		•

¹ Department of Defense Education Activity (overseas and domestic 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), 2015 Mathematics Assessment.

Where to Find More Information

The NAEP Mathematics Assessment

The latest news about the NAEP 2015 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/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 *Mathematics Framework for the 2015 National Assessment of Educational Progress*, on which this assessment is based, is available at the National Assessment Governing Board website at https://www.nagb.org/content /nagb/assets/documents/publications/frameworks/mathematics/2015-mathematics-framework.pdf.

The NAEP Data Explorer (NDE)

The interactive database at <u>http://nces.ed.gov/nationsreportcard/naepdata/</u> includes student, teacher, and school variables for all participating districts, states, and the nation. 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 Instuments 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 SD and/or ELL students 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: 1-703-605-6794 Order online at: http://www.edpubs.gov.

The NAEP State Report Generator was developed for the NAEP 2015 reports by Phillip Leung, Bobby Rampey, 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.

U.S. Department of Education

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