## Wyoming

## Grades 4 and 8 Public Schools State Report Mathematics 2019

This report provides selected results for Wyoming's public school students at grades 4 and 8 from the 2019 National Assessment of Educational Progress (NAEP) assessment in mathematics. Results are reported by average scale scores and by NAEP achievement levels (NAEP Basic, NAEP Proficient, and NAEP Advanced).

State-level results in mathematics are available for 13 assessment years (at grade 8 in 1990; and at both grades 4 and 8 in 1992, 1996, 2000, 2003, 2005, 2007, 2009, 2011, 2013, 2015, 2017, and 2019), although not all states may have participated or met the criteria for reporting in every assessment year. All 50 states, the District of Columbia, Department of Defense Education Activity (DoDEA) schools, and Puerto Rico participated in the 2019 mathematics assessment at grades 4 and 8 .

For more information about the assessment, visit the NAEP page of the NCES website at: https://nces.ed.gov/nationsreportcard/, which contains

- The Nation's Report Card ${ }^{\text {TM }}$, Mathematics 2019,
- The full set of national, state, and district results in an interactive database, and
- Released test questions, scoring guides, and item-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 2019

## Grade 4:

- In 2019, the average mathematics scale score for fourth-grade students in Wyoming was 246. This was higher than that for the nation's public schools (240).
- The average scale score for students in Wyoming in 2019 (246) was higher than that in 1992 (225) and was lower than that in 2017 (248).
- In 2019, the percentage of students in Wyoming who performed at or above NAEP Proficient was 48 percent. This was greater than that for the nation's public schools (40 percent).
- The percentage of students in Wyoming who performed at or above NAEP Proficient in 2019 (48 percent) was greater than that in 1992 (19 percent) and was not significantly different from that in 2017 (51 percent).
- In 2019, the percentage of students in Wyoming who performed at or above NAEP Basic was 87 percent. This was greater than that for the nation's public schools (80 percent).
- The percentage of students in Wyoming who performed at or above NAEP Basic in 2019 (87 percent) was greater than that in 1992 (69 percent) and was not significantly different from that in 2017 (89 percent).


## Grade 8:

- In 2019, the average mathematics scale score for eighth-grade students in Wyoming was 286. This was higher than that for the nation's public schools (281).
- The average scale score for students in Wyoming in 2019 (286) was higher than that in 1990 (272) and was lower than that in 2017 (289).
- In 2019, the percentage of students in Wyoming who performed at or above NAEP Proficient was 37 percent. This was greater than that for the nation's public schools (33 percent).
- The percentage of students in Wyoming who performed at or above NAEP Proficient in 2019 (37 percent) was greater than that in 1990 (19 percent) and was not significantly different from that in 2017 (38 percent).
- In 2019, the percentage of students in Wyoming who performed at or above NAEP Basic was 76 percent. This was greater than that for the nation's public schools (68 percent).
- The percentage of students in Wyoming who performed at or above NAEP Basic in 2019 (76 percent) was greater than that in 1990 (64 percent) and was smaller than that in 2017 (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 National Assessment of Educational Progress (NAEP) mathematics assessment measures students' knowledge and skills in mathematics and their ability to solve problems in mathematical and real-world contexts. Performance results are reported for the nation overall, for states and jurisdictions, and for 27 districts participating in the Trial Urban District Assessment (TUDA). The 2019 NAEP mathematics assessment was the second digitally based assessment. In 2017, the NAEP mathematics assessment transitioned from a paper-based assessment (PBA) to a digitally based assessment (DBA) at grades 4 and 8 . A multi-step process was used for the transition from PBA to DBA, with the careful intent to preserve trend lines that show student performance over time. The process involved administering the assessment in both the DBA and PBA formats to randomly equivalent groups of students and ensured that the results from the 2017 and 2019 mathematics assessments could be compared to results from previous years. The 2019 mathematics DBA continues the mathematics trend line that extends back to 1990 at grade 8 and 1992 at both grades 4 and 8.

## The NAEP Mathematics Assessment Framework

The National Assessment Governing Board oversees the development of NAEP frameworks that describe the subject-specific knowledge and thinking skills to be assessed in each subject and how the assessment questions should be designed and scored. The NAEP mathematics assessment framework specifies five broad content areas and three levels of mathematical complexity.

## Mathematics Content Areas

To ensure a balance of content and to allow students to demonstrate a variety of ways of knowing and doing mathematics, the framework specifies assessing fourth- and eighth-grade students in five broad areas of mathematical content. This division into content areas is not intended to separate mathematics into discrete elements, but to provide a helpful classification scheme that describes the full spectrum of mathematical content assessed by NAEP.

- Number properties and operations measures students' understanding of ways to represent, calculate, and estimate with numbers.
- Measurement assesses students' knowledge, including the use of instruments and the application of processes for attributes such as capacity, length, area, volume, time, angles, and rates.
- Geometry measures students' knowledge and understanding of shapes in two and three dimensions and relationships between shapes such as symmetry and transformations.
- 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.


## Levels of Mathematical Complexity

Each NAEP question assesses an objective that can be associated with one of the mathematics content areas. Each question also makes certain demands on students' thinking. These demands determine the mathematical complexity of an item. Mathematical complexity deals with what the students are asked to do in a question. Incorporating levels of complexity in assessment design allows for a balanced testing of mathematical thinking. The framework describes three levels of mathematical complexity.

- Low complexity questions typically specify what a student is to do, which usually involves carrying 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 on students' thinking 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. Longer constructedresponse 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 https://nces.ed.gov/nationsreportcard/data/.

Some questions in the 2019 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, Department of Defense Education Activity (DoDEA) schools, and Puerto Rico participated in the 2019 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 (Governing Board) for assessment results to be reported to the public. A minimum of 85 percent participation is required for schools in each subject and grade combination in NAEP state-level assessment since 2003. Participation rates for the 2019 mathematics assessment are available on the NAEP website at https://www.nationsreportcard.gov/mathematics/about/samples?anchor=footer\&grade=4.

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 (BIE) schools.

## How Is Student Mathematics Performance Reported?

The 2019 state results are compared to results from 11 earlier assessments at grade 4 and from 12 earlier assessments at grade 8.

Scale Scores: Student performance is reported as an average scale 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, 75 th, and 90th) to show trends in performance for lower-, middle-, and higher-performing students.

NAEP Achievement Levels: NAEP achievement levels are performance standards that describe what students should know and be able to do. Results are reported as percentages of students performing at or above three achievement levels (NAEP Basic, NAEP Proficient, and NAEP Advanced). Students performing at or above the NAEP Proficient level on NAEP assessments demonstrate solid academic performance and competency over challenging subject matter. It should be noted that the NAEP Proficient achievement level does not represent gradelevel proficiency as determined by other assessment standards (e.g., state or district assessments).

## Interpreting the Results

NAEP achievement-level setting is based on the judgments of a broadly representative panel of teachers, education specialists, and members of the general public. The authorizing legislation for NAEP requires that the achievement levels be used on a trial basis until the Commissioner of the National Center for Education Statistics (NCES) determines that the achievement levels are reasonable, valid, and informative to the public (20 USC § 9622(e)(2) (C)). The NCES Commissioner's determination is to be based on a congressionally mandated, rigorous, and independent evaluation. The latest evaluation of the achievement levels was conducted by a committee convened by the National Academies of Sciences, Engineering, and Medicine in 2016. The evaluation concluded that further evidence should be gathered to determine whether the achievement levels are reasonable, valid, and informative. Accordingly, the NCES Commissioner determined that the trial status of the achievement levels should be maintained at this time. Read more about how NAEP achievement levels are set. In 2018, the National Assessment Governing Board issued a revised Policy Statement clarifying that the NAEP Proficient level is not intended to reflect grade-level performance expectations but is specific to performance on NAEP assessments. Read the Governing Board Policy Statement here.

- NAEP Basic, one of the three NAEP achievement levels, denoting partial mastery of prerequisite knowledge and skills that are fundamental for performance at the NAEP Proficient level. NAEP also reports the proportion of students whose scores place them below the NAEP Basic achievement level.
- NAEP Proficient, one of the three NAEP achievement levels, representing solid academic performance for each NAEP assessment. Students reaching this level have demonstrated competency over challenging subject matter, including subject-matter knowledge, application of such knowledge to real-world situations, and analytical skills appropriate to the subject matter.
- NAEP Advanced, one of the three NAEP achievement levels, denoting superior performance beyond NAEP Proficient.

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

As provided by law, NCES, upon review of congressionally mandated evaluations of NAEP, has determined that NAEP 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 NAEP achievementlevel descriptions are summarized in Figures 1-A and 1-B .

> NAEP Fourth-grade students performing at the NAEP Basic level should show some evidence of understanding the Basic mathematical concepts and procedures in the five NAEP content areas.

Fourth-graders performing at the NAEP 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.

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

> Level
> (249)

Fourth-graders performing at the NAEP 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 NAEP 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.

NAEP Fourth-grade students performing at the NAEP Advanced level should apply integrated procedural knowledge and Advanced conceptual understanding to complex and nonroutine real-world problem solving in the five NAEP content areas. Level
(282)

Fourth-graders performing at the NAEP 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 to 500 scale at which the NAEP achievement-level range begins. SOURCE: National Assessment Governing Board. (2018). Mathematics Framework for the 2019 National Assessment of Educational Progress. Washington, DC.

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$$
\begin{array}{ll}
\text { NAEP } & \text { Eighth-grade students performing at the NAEP Basic level should exhibit evidence of conceptual and procedural } \\
\text { Basic } & \text { understanding in the five NAEP content areas. This level of performance signifies an understanding of arithmetic } \\
\text { Level } & \text { operations-including estimation-on whole numbers, decimals, fractions, and percents. }
\end{array}
$$

(262)

Eighth-graders performing at the NAEP 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 NAEP Proficient level, students at the NAEP 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.

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

Level
(299)

Eighth-graders performing at the NAEP 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 NAEP 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.

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

Eighth-graders performing at the NAEP 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 NAEP 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 to 500 scale at which the NAEP achievement-level range begins. SOURCE: National Assessment Governing Board. (2018). Mathematics Framework for the 2019 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, 2015, 2017 and 2019).

## 2019 NAEP Digitally Based Mathematics Assessment

The 2019 NAEP digitally based mathematics assessment was designed to continue reporting trends in student performance dating back to 1990, while keeping pace with the new generation of classroom environments in which digital technology has become an increasing part of students' learning. The 2019 assessment content was developed with the same mathematics framework used to develop the 2009 through 2015 paper-based assessments and the 2017 digitally based assessment.

At grades 4 and 8, approximately two-thirds of the questions from the 2015 paper-based assessment were adapted to the 2017 digitally based assessment. The previously used paper-based assessment questions were adapted to fit a tablet screen but the mathematical content was not changed. The goal of adapting questions was to retain the same measurement targets as the original version of the question. At each grade, six of the ten assessment blocks used only questions that had been adapted from the 2015 paper-based assessment and were assembled to be as similar as possible to corresponding paper-based blocks. Four of the ten blocks consisted of new questions developed for digital administration.

The assessment was administered on tablet computers supplied by NAEP using a secure, local NAEP network. This allowed the NAEP administrators to create a stable administration environment that would not be influenced by school-based equipment or school internet connectivity, thereby maintaining consistency across the assessed schools. Students were able to interact with the tablets via touchscreen, with an attached keyboard, or using a stylus provided by NAEP. The digitally based mathematics assessment provided students with a variety of onscreen tools, including an equation editor for entering numbers and expressions using the correct mathematical symbols; a scratchwork tool for annotating figures, performing computations, drawing diagrams, and highlighting portions of a question; and a calculator. At the beginning of the assessment session, students viewed an interactive tutorial that provided the information needed to take the assessment on tablet; for example, it explains how to progress through questions, how to indicate answers for multiple choice questions, and how to use onscreen tools effectively when answering questions. The interactive nature of the tutorial allowed students to familiarize themselves with the digital delivery system before beginning the actual assessment. See how the mathematics digitally based assessment was presented to students.

In addition to the digitally based assessment, a random subsample of students was administered the complete 2015 paper-based version of the assessment in 2017. NAEP administered the assessment in both modes-paper-based and digitally based-in all the sampled schools to investigate potential differences in performance between students taking the assessment on a tablet and students taking the paper-based assessment. However, in schools with fewer than 21 students, all students were assigned to either the digitally or paper-based assessment. Each participating student, however, took the assessment in only one mode. See how mathematics questions looked in the paperbased version of the grade 4 and grade 8 assessments and how the same questions appeared in the digitally based
version.

After the administration of the assessment, the National Center for Education Statistics (NCES) conducted rigorous analyses of the data and aligned the 2017 results to previous assessment years using a two-step process.

- First, common item linking was used to calculate the trend line from 2015 to 2017 based on the paper-based assessment results. This kind of linking was possible because the majority of 2017 assessment questions were also administered in 2015 and showed the same statistical properties.
- Second, common population linking was used to align the 2017 paper-based assessment results with the 2017 digital assessment results. This kind of linking was possible because the samples of students for each assessment mode were randomly equivalent; that is, each random sample included students from the same school, ensuring that the students' educational experiences and characteristics were equivalent.

Once the common population linking aligned the digital results to the paper results on the national level, the analyses evaluated whether the linking allowed for fair and meaningful comparisons for national student groups as well as for states and districts. These evaluations supported making trend comparisons between the digital assessment and previous paper-based assessments for subgroups, states, and districts.

These analyses-common item linking based on paper results and common population linking of paper results to digital results-enabled NCES to successfully maintain the mathematics trend line while transitioning to digital assessment in 2017 and to continue the trend line for the 2019 and subsequent digital assessments.

## Interpreting the 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 scale 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 2019 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 2019 Mathematics Overall Average Score and NAEP Achievement-Level Results for Public School Students

Overall mathematics results for public school students from Wyoming 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 (https://nces.ed.gov/nationsreportcard/hsts/tabulations/regions.asp). 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 Average Scale Score Results

Student performance is reported as an average scale 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 Wyoming, 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 since 2003. The first column of results presents the average scale 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 Average Scale Score Results

- In 2019, the average scale score for students in Wyoming was 246 . This was higher than that for students across the nation (240).
- In Wyoming, the average scale score for students in 2019 was lower than that in 2017 (248). However, the average scale score for students in public schools across the nation in 2019 was higher than that in 2017 (239).
- In Wyoming, the average scale score for students in 2019 was higher than the scores in 1992, 1996, 2000, 2003, 2005, 2007, 2009, and 2011. However, it was lower than the score in 2017.


## Grade 8 Average Scale Score Results

- In 2019, the average scale score for students in Wyoming was 286 . This was higher than that for students across the nation (281).
- In Wyoming, the average scale score for students in 2019 was lower than that in 2017 (289). Similarly, the average scale score for students in public schools across the nation in 2019 was lower than that in 2017 (282).
- In Wyoming, the average scale score for students in 2019 was higher than the scores in 1990, 1992, 1996, 2000, 2003, and 2005. However, it was lower than the score in 2017.

Table
The Nation's Report Card 2019 State Assessment
Average scale scores and selected percentile scores in NAEP mathematics for fourth-grade public school students, by year and jurisdiction: Various years, 1992-2019

| Year and jurisdiction |  | Average scale score | $\begin{array}{r} \text { 10th } \\ \text { percentile } \end{array}$ | $\begin{array}{r} \text { 25th } \\ \text { percentile } \end{array}$ | $\begin{array}{r} \text { 50th } \\ \text { percentile } \end{array}$ | 75th percentile | $\begin{array}{r} \text { 90th } \\ \text { percentile } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1992{ }^{1}$ | Nation (public) | 219* | 176* | 197* | 220* | 241* | 259* |
|  | Wyoming | 225* | 191* | 209* | 226* | 244* | 258* |
| $1996{ }^{1}$ | Nation (public) | 222* | 180* | 201* | 224* | 244* | 261* |
|  | Wyoming | 223* | 186* | 205* | 225* | 243* | 259* |
| $2000^{1}$ | Nation (public) | 226* | 185* | 206* | 228* | 249* | 265* |
|  | Wyoming | 229* | 193* | 212* | 231* | 249* | 264* |
| 2000 | Nation (public) | 224* | 183* | 203* | 225* | 247* | 264* |
|  | Wyoming | 229* | 192* | 211* | 231* | 249* | 264* |
| 2003 | Nation (public) | 234* | 196* | 215* | 235* | 254* | 270* |
|  | West ${ }^{2}$ | $230 *$ | 191 | 210* | 231* | 251* | 267* |
|  | Wyoming | 241* | 210 | 226 | 242* | 257* | 271* |
| 2005 | Nation (public) | 237* | 199 | 219* | 239* | 257* | 272* |
|  | West ${ }^{2}$ | 233* | 193 | 213* | 235* | 254* | 270* |
|  | Wyoming | 243* | 210 | 227 | 244* | 260* | 274* |
| 2007 | Nation (public) | 239* | 201* | 221* | 241 | 259* | 274* |
|  | West ${ }^{2}$ | 233* | 191 | 213* | 236* | 256* | 272* |
|  | Wyoming | 244* | 211 | 228 | 246 | 261* | 274* |
| 2009 | Nation (public) | 239* | 201* | 221 | 241* | 259* | 275* |
|  | West ${ }^{2}$ | 235* | 193 | 214 | 236* | 256* | 273* |
|  | Wyoming | 242* | 210 | 226 | 243* | 259* | 272* |
| 2011 | Nation (public) | 240 | 202* | 222* | 242 | 260* | 276* |
|  | West ${ }^{2}$ | 237 | 196 | 216 | 239 | 259 | 276 |
|  | Wyoming | 244* | 211 | 228 | 245 | 261* | 275* |
| 2013 | Nation (public) | 241* | 202* | 222* | 243* | 262 | 278* |
|  | West ${ }^{2}$ | 238 | 197* | 218 | 239 | 259 | 276 |
|  | Wyoming | 247 | 214* | 231 | 248 | 263 | 277* |
| 2015 | Nation (public) | 240 | 201* | 221 | 241 | 260* | 277* |
|  | West ${ }^{2}$ | 235 | 195 | 215 | 237 | 257 | 274* |
|  | Wyoming | 247 | 211 | 230 | 248 | 265 | 280 |
| 2017 | Nation (public) | 239* | 197 | 219* | 241* | 261 | 279 |
|  | West ${ }^{2}$ | 235* | 192 | 213* | 236* | 258 | 276 |
|  | Wyoming | 248* | 212 | 230 | 250 | 267 | 282 |
| 2019 | Nation (public) | 240 | 198 | 220 | 242 | 262 | 279 |
|  | West ${ }^{2}$ | 237 | 193 | 216 | 239 | 259 | 278 |
|  | Wyoming | 246 | 209 | 228 | 247 | 265 | 280 |

*Value is significantly different ( $p<.05$ ) from the value for the same jurisdiction in 2019.
${ }^{1}$ Accommodations were not permitted for this assessment.
${ }^{2}$ Region in which jurisdiction is located. Regional data are not provided for years prior to 2003 to be consistent with the U.S. Census Bureau defined regions.
NOTE: The NAEP grade 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, 1992-2019 Mathematics Assessments.

Table

## The Nation's Report Card 2019 State Assessment

1-B
Average scale scores and selected percentile scores in NAEP mathematics for eighth-grade public school students, by year and jurisdiction: Various years, 1990-2019

| Year and jurisdiction |  | Average scale score | $\begin{array}{r} \text { 10th } \\ \text { percentile } \end{array}$ | $\begin{array}{r} 25 \text { th } \\ \text { percentile } \end{array}$ | $\begin{array}{r} \text { 50th } \\ \text { percentile } \end{array}$ | $\begin{array}{r} \text { 75th } \\ \text { percentile } \end{array}$ | $\begin{array}{r} \text { 90th } \\ \text { percentile } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1990 ${ }^{1}$ | Nation (public) | 262* | 214* | 237* | 263* | 288* | $307 *$ |
|  | Wyoming | 272* | 235 | 253* | 272* | 293* | 309* |
| $1992{ }^{1}$ | Nation (public) | 267* | 219* | 242* | 268* | 293* | 314* |
|  | Wyoming | 275* | 238 | 255* | 276* | 295* | 312* |
| $1996{ }^{1}$ | Nation (public) | 271* | 222* | 247* | 272* | 296* | 316* |
|  | Wyoming | 275* | 234 | 256* | 276* | 296* | 313* |
| $2000^{1}$ | Nation (public) | 274* | 225* | 250* | 276* | $300 *$ | 321* |
|  | Wyoming | 277* | 235 | 257* | 279* | 299* | $317^{*}$ |
| 2000 | Nation (public) | 272* | 221* | 247* | 274* | 299* | 320* |
|  | Wyoming | 276* | 232* | 255* | 278* | 297* | 316* |
| 2003 | Nation (public) | 276* | 228 | 253 | 278* | 301* | 321* |
|  | West ${ }^{2}$ | 272* | 222* | 247* | 273* | 299* | 320* |
|  | Wyoming | 284* | 243 | 264 | 285 | 305* | 322* |
| 2005 | Nation (public) | 278* | 230 | 254 | 279* | 303* | 323* |
|  | West ${ }^{2}$ | 273* | 224 | 248 | 274* | 299* | 321* |
|  | Wyoming | 282* | 243 | 263 | 283* | 303* | 319* |
| 2007 | Nation (public) | 280 | 234* | 257* | 281 | 305* | 325* |
|  | West ${ }^{2}$ | 275* | 226 | 250 | 276 | 302* | 323* |
|  | Wyoming | 287 | 246 | 267 | 288 | 309 | 326 |
| 2009 | Nation (public) | 282 | 235* | 258* | 283* | 307* | 328* |
|  | West ${ }^{2}$ | 276* | 226 | 251 | 277 | 303* | 325* |
|  | Wyoming | 286 | 245 | 266 | 287 | 308 | 326 |
| 2011 | Nation (public) | 283* | 236* | 259* | 284* | 308 | 329* |
|  | West ${ }^{2}$ | 278 | 228 | 253 | 279 | 304 | $327 *$ |
|  | Wyoming | 288 | 246 | 268 | 289 | 309 | 328 |
| 2013 | Nation (public) | 284* | $236 *$ | 260* | 285* | 309 | $330 *$ |
|  | West ${ }^{2}$ | 280 | 231* | 255* | 281* | 306 | $327 *$ |
|  | Wyoming | 288 | 249* | 268* | 289 | 310 | 327 |
| 2015 | Nation (public) | 281 | 234* | 257* | 282 | 307* | 328* |
|  | West ${ }^{2}$ | 279 | 230* | 254* | 280 | 305 | $327 *$ |
|  | Wyoming | 287 | 245 | 266 | 287 | 308 | 328 |
| 2017 | Nation (public) | 282* | 232* | 255* | 282 | 309 | 332 |
|  | West ${ }^{2}$ | 280 | 228 | 252 | 280 | 308 | 332 |
|  | Wyoming | 289* | 246 | 267 | 289 | 312 | 332 |
| 2019 | Nation (public) | 281 | 230 | 254 | 281 | 308 | 332 |
|  | West ${ }^{2}$ | 278 | 226 | 250 | 278 | 307 | 332 |
|  | Wyoming | 286 | 240 | 264 | 287 | 311 | 330 |

* Value is significantly different ( $p<.05$ ) from the value for the same jurisdiction in 2019.
${ }^{1}$ Accommodations were not permitted for this assessment.
${ }^{2}$ Region in which jurisdiction is located. Regional data are not provided for years prior to 2003 to be consistent with the U.S. Census Bureau defined regions.
NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500 . All differences were calculated and tested using unrounded numbers.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990-2019 Mathematics Assessments.


## Overall NAEP Achievement-Level Results

Student results are reported as the percentages of students performing relative to performance standards set by the 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 NAEP Basic, at or above NAEP Basic, at or above NAEP Proficient, and at NAEP Advanced. Because the percentages are cumulative from NAEP Basic to NAEP Proficient to NAEP Advanced, they may sum to more than 100 percent. Only the percentage of students performing at or above NAEP Basic (which includes the students at NAEP Proficient and NAEP Advanced) plus the students below NAEP Basic will sum to 100 percent.

## Grade 4 NAEP Achievement-Level Results

- In 2019, the percentage of Wyoming's students who performed at or above NAEP Proficient was 48 percent. This was greater than the percentage of the nation's public school students who performed at or above NAEP Proficient (40 percent).
- In Wyoming, the percentage of students who performed at or above NAEP Proficient in 2019 was greater than the percentages in 1992, 1996, 2000, 2003, 2005, 2007, 2009, and 2011, but was not significantly different from the percentages in 2013, 2015, and 2017.
- In 2019, the percentage of Wyoming's students who performed at or above NAEP Basic was 87 percent. This was greater than the percentage of the nation's public school students who performed at or above NAEP Basic (80 percent).
- In Wyoming, the percentage of students who performed at or above NAEP Basic in 2019 was greater than the percentages in 1992, 1996, and 2000, but was smaller than the percentage in 2013.


## Grade 8 NAEP Achievement-Level Results

- In 2019, the percentage of Wyoming's students who performed at or above NAEP Proficient was 37 percent. This was greater than the percentage of the nation's public school students who performed at or above NAEP Proficient (33 percent).
- In Wyoming, the percentage of students who performed at or above NAEP Proficient in 2019 was greater than the percentages in 1990, 1992, 1996, 2000, 2003, and 2005, but was not significantly different from the percentages in 2007, 2009, 2011, 2013, 2015, and 2017.
- In 2019, the percentage of Wyoming's students who performed at or above NAEP Basic was 76 percent. This was greater than the percentage of the nation's public school students who performed at or above NAEP Basic (68 percent).
- In Wyoming, the percentage of students who performed at or above NAEP Basic in 2019 was greater than the percentages in 1990, 1992, 1996, and 2000, but was smaller than the percentages in 2007, 2011, 2013, and 2017.

Table
The Nation's Report Card 2019 State Assessment
Percentage of fourth-grade public school students at or above NAEP mathematics achievement levels, by year and jurisdiction: Various years, 1992-2019

| Year and jurisdiction |  | Below <br> NAEP Basic | At or above NAEP Basic | At or above NAEP Proficient | $\begin{array}{r} \text { At } \\ \text { NAEP } \\ \text { Advanced } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1992{ }^{1}$ | Nation (public) | 43* | 57* | $17^{*}$ | 2* |
|  | Wyoming | 31* | 69* | 19* | 1* |
| $1996{ }^{1}$ | Nation (public) | 38* | 62* | 20* | 2* |
|  | Wyoming | $36 *$ | $64 *$ | 19* | 1* |
| $2000{ }^{1}$ | Nation (public) | 33* | 67* | 25* | 2* |
|  | Wyoming | $27 *$ | 73* | 25* | 2* |
| 2000 | Nation (public) | 36* | 64* | 22* | 2* |
|  | Wyoming | 29* | 71* | 25* | 2* |
| 2003 | Nation (public) | 24* | 76* | 31* | 4* |
|  | West ${ }^{2}$ | 29* | 71* | $27^{*}$ | 3* |
|  | Wyoming | 13 | 87 | 39* | 4* |
| 2005 | Nation (public) | 21 | 79 | $35^{*}$ | 5* |
|  | West ${ }^{2}$ | 26* | 74* | 31* | 4* |
|  | Wyoming | 13 | 87 | $43^{*}$ | 5* |
| 2007 | Nation (public) | 19* | 81* | 39* | 5* |
|  | West ${ }^{2}$ | $26^{*}$ | 74* | $33^{*}$ | 5* |
|  | Wyoming | 12 | 88 | 44* | 5* |
| 2009 | Nation (public) | 19* | 81* | 38* | $6 *$ |
|  | West ${ }^{2}$ | 25 | 75 | $34 *$ | 5* |
|  | Wyoming | 13 | 87 | 40* | 4* |
| 2011 | Nation (public) | 18* | 82* | 40 | 6 * |
|  | West ${ }^{2}$ | 23 | 77 | 37 | 6 |
|  | Wyoming | 12 | 88 | 44* | 5* |
| 2013 | Nation (public) | 18* | 82* | 41 | 8* |
|  | West $^{2}$ | 22 | 78 | 38 | 7 |
|  | Wyoming | 10* | 90* | 48 | 7* |
| 2015 | Nation (public) | 19 | 81 | 39 | 7* |
|  | West ${ }^{2}$ | 24 | 76 | 34 | $6 *$ |
|  | Wyoming | 12 | 88 | 48 | 9 |
| 2017 | Nation (public) | $21^{*}$ | 79* | 40 | 8 |
|  | West ${ }^{2}$ | 26* | 74* | 35 | 7 |
|  | Wyoming | 11 | 89 | 51 | 10 |
| 2019 | Nation (public) | 20 | 80 | 40 | 9 |
|  | West ${ }^{2}$ | 23 | 77 | 37 | 8 |
|  | Wyoming | 13 | 87 | 48 | 9 |

* Value is significantly different ( $p<.05$ ) from the value for the same jurisdiction in 2019.
${ }^{1}$ Accommodations were not permitted for this assessment.
${ }^{2}$ Region in which jurisdiction is located. Regional data are not provided for years prior to 2003 to be consistent with the U.S. Census Bureau defined regions. NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500 . Achievement levels correspond to the following points on the NAEP mathematics scales: below NAEP Basic, 213 or lower; NAEP Basic, 214-248; NAEP Proficient, 249-281; and NAEP Advanced, 282 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP 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, 1992-2019 Mathematics Assessments.

Table
The Nation's Report Card 2019 State Assessment
Percentage of eighth-grade public school students at or above NAEP mathematics achievement levels, by year and jurisdiction: Various years, 1990-2019

| Year and jurisdiction |  | Below <br> NAEP Basic | At or above NAEP Basic | At or above NAEP Proficient | $\begin{array}{r} \text { At } \\ \text { NAEP } \\ \text { Advanced } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $1990{ }^{1}$ | Nation (public) | 49* | 51* | 15* | 2* |
| $1992{ }^{1}$ | Wyoming | 36* | $64 *$ | 19* | 2* |
|  | Nation (public) | 44* | $56^{*}$ | 20* | 3* |
|  | Wyoming | $33^{*}$ | $67^{*}$ | 21* | 2* |
| $1996{ }^{1}$ | Nation (public) | 39* | $61^{*}$ | 23* | 4* |
| $2000{ }^{1}$ | Wyoming | 32* | 68* | 22* | 2* |
|  | Nation (public) | 35* | $65^{*}$ | 26* | 5* |
|  | Wyoming | 30* | 70* | 25* | 4* |
| 2000 | Nation (public) | 38* | 62* | 25* | 5* |
|  | Wyoming | 31* | 69* | $23 *$ | 3 * |
| 2003 | Nation (public) | 33* | 67* | 27* | 5* |
|  | West ${ }^{2}$ | 39* | $61^{*}$ | 25* | 5* |
|  | Wyoming | 23 | 77 | 32* | 4* |
| 2005 | Nation (public) | 32 | 68 | 28* | $6 *$ |
|  | West ${ }^{2}$ | 38* | 62* | 25* | 5* |
|  | Wyoming | 24 | 76 | 29* | 3* |
| 2007 | Nation (public) | 30* | 70* | 31* | $7 *$ |
|  | West ${ }^{2}$ | 36 | 64 | $27^{*}$ | 6 * |
|  | Wyoming | 20* | 80* | 36 | 7 |
| 2009 | Nation (public) | 29* | 71* | 33 | 7* |
|  | West ${ }^{2}$ | 35 | 65 | 28* | $6 *$ |
|  | Wyoming | 22 | 78 | 35 | 7 |
| 2011 | Nation (public) | 28* | 72* | 34 | 8* |
|  | West ${ }^{2}$ | 33 | 67 | 30 | 7* |
|  | Wyoming | 20* | 80* | 37 | 7 |
| 2013 | Nation (public) | $27 *$ | 73* | $34 *$ | 8* |
|  | West ${ }^{2}$ | $31^{*}$ | 69* | 31 | 7* |
|  | Wyoming | 19* | 81* | 38 | 7 |
| 2015 | Nation (public) | 30* | 70* | 32 | 8* |
|  | West ${ }^{2}$ | 32* | 68* | 31 | 7* |
|  | Wyoming | 22 | 78 | 35 | 7 |
| 2017 | Nation (public) | 31* | 69* | 33 | 10 |
|  | West ${ }^{2}$ | 33 | 67 | 32 | 10 |
|  | Wyoming | 21* | 79* | 38 | 9 |
| 2019 | Nation (public) | 32 | 68 | 33 | 10 |
|  | West ${ }^{2}$ | 35 | 65 | 31 | 10 |
|  | Wyoming | 24 | 76 | 37 | 8 |

* Value is significantly different ( $p<.05$ ) from the value for the same jurisdiction in 2019.
${ }^{1}$ Accommodations were not permitted for this assessment.
${ }^{2}$ Region in which jurisdiction is located. Regional data are not provided for years prior to 2003 to be consistent with the U.S. Census Bureau defined regions.
NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500 . Achievement levels correspond to the following points on the NAEP mathematics scales: below NAEP Basic, 261 or lower; NAEP Basic, 262-298; NAEP Proficient, 299-332; and NAEP Advanced, 333 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP Advanced. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990-2019 Mathematics Assessments.


## Comparisons Between Wyoming, the Nation, and Participating States and Jurisdictions

All 50 states, the District of Columbia, Department of Defense Education Activity schools (DoDEA), and Puerto Rico participated in the 2019 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 Average Scale Scores

Figures 2-A and 2-B compare Wyoming's 2019 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 scale 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 Wyoming in the NAEP 2019 mathematics assessment.

## Grade 4 Average Scale Score Comparison Results

- The average scale score for students in Wyoming was higher than 39 jurisdictions, not significantly different from 11 jurisdictions, and lower than 1 jurisdiction.


## Grade 8 Average Scale Score Comparison Results

- The average scale score for students in Wyoming was higher than 30 jurisdictions, not significantly different from 17 jurisdictions, and lower than 4 jurisdictions.

The Nation's Report Card 2019 State Assessment
Wyoming's average scale score in NAEP mathematics for fourth-grade public school students compared with scores for the nation and other participating jurisdictions: 2019

$\Delta$ Focal state/jurisdiction (Wyoming)
Higher average scale score than Wyoming (1 jurisdiction)

$\square$
Not significantly different from Wyoming (11 jurisdictions)
Lower average scale score than Wyoming (nation and 39 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), 2019 Mathematics Assessment.

The Nation's Report Card 2019 State Assessment
Wyoming's average scale score in NAEP mathematics for eighth-grade public school students compared with scores for the nation and other participating jurisdictions: 2019

$\Delta$ Focal state/jurisdiction (Wyoming)
Higher average scale score than Wyoming (4 jurisdictions)

$\square$
Not significantly different from Wyoming (17 jurisdictions)
Lower average scale score than Wyoming (nation and 30 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), 2019 Mathematics Assessment.

## Comparisons by NAEP Achievement Levels

Figures 3-A and 3-B permit comparisons of all jurisdictions (and the nation) participating in the 2019 NAEP mathematics assessment in terms of percentages of grades 4 and 8 students performing at or above NAEP Proficient. The participating states and jurisdictions are grouped into categories that reflect whether the percentage of their students performing at or above NAEP Proficient (including NAEP Advanced) was found to be higher than, not significantly different from, or lower than the percentage in Wyoming.

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 NAEP achievement level can be conducted online by using the NAEP Data Explorer at https://nces.ed.gov/nationsreportcard/naepdata/.

## Grade 4 NAEP Achievement-Level Comparison Results

- The percentage of students performing at or above the NAEP Proficient level in Wyoming was greater than the percentages in 35 jurisdictions, not significantly different from those in 14 jurisdictions, and smaller than those in 2 jurisdictions.
- The percentage of students performing at or above the NAEP Basic level in Wyoming was greater than the percentages in 41 jurisdictions, not significantly different from those in 9 jurisdictions, and smaller than those in 1 jurisdiction (data not shown).


## Grade 8 NAEP Achievement-Level Comparison Results

- The percentage of students performing at or above the NAEP Proficient level in Wyoming was greater than the percentages in 27 jurisdictions, not significantly different from those in 19 jurisdictions, and smaller than those in 5 jurisdictions.
- The percentage of students performing at or above the NAEP Basic level in Wyoming was greater than the percentages in 37 jurisdictions, not significantly different from those in 13 jurisdictions, and smaller than those in 1 jurisdiction (data not shown).


## The Nation's Report Card 2019 State Assessment

Average scale scores in NAEP mathematics for fourth-grade public school students, percentage within each achievement level, and Wyoming's percentage at or above NAEP Proficient compared with the nation and other participating jurisdictions: 2019

${ }^{1}$ 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 NAEP Proficient category begins, so that they may be compared at NAEP Proficient and above. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers. The shaded bars are graphed using unrounded numbers.

## Mathematics Performance of Selected Student Groups

This section of the report presents trend results for public school students in Wyoming 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, 2015, 2017 and 2019)

NAEP collects information on race/ethnicity, gender, and student eligibility for the National School Lunch Program eligibility from school records. Type of school location is based on standard definitions established by the Federal Office of Management and Budget using population and geographic information from the U.S. Census Bureau. Schools are assigned to these categories in the NCES Common Core of Data based on their physical address. The parent's highest level of education for grade 8 is derived from student questionnaires.

Results for each of the student groups are reported in tables that include the percentage of students in each group in the second column, and the average scale score in the third column. The columns to the right show the percentage of students below NAEP Basic and at or above each NAEP 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 2019 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 2019 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 https://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 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 beginning in 2011 so 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
- Native Hawaiian or other Pacific Islander
- American Indian or Alaska Native
- Two or More Races

As in earlier years, students identified as Hispanic were classified as Hispanic in 2011 and subsequent assessment years even if they were also identified with another racial/ethnic group. Students who identified with two or more of the other racial/ethnic groups (e.g., White and Black) would have been classified as "Other" and reported as part of the "Unclassified" category prior to 2011, and classified as "Two or More Races" since 2011. Results for these students are presented under the "Two or More Races" category in the graphics and tables in the reports.

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

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

## Grade 4 Average Scale Score Results by Race/Ethnicity

- In 2019, White students in Wyoming had an average scale score that was higher than the average scale scores of Hispanic and American Indian/Alaska Native students.
- In 2019, the average scale score of White students in Wyoming was higher than their respective scores in 1992, 1996, 2000, 2003, 2005, 2007, and 2009, but not significantly different from their respective scores in 2011, 2013, 2015, and 2017.
- In 2019, the average scale score of Hispanic students in Wyoming was higher than their respective scores in 1992, 1996, 2000, 2003, 2007, and 2009, but not significantly different from their respective scores in 2005, 2011, 2013, 2015, and 2017.
- In 2019, the average scale score of American Indian/Alaska Native students in Wyoming was higher than their respective score in 1992, but lower than their respective score in 2013, and not significantly different from their respective scores in 2003, 2007, 2011, 2015, and 2017.
- Data are not reported for Black students in 2019, because reporting standards were not met.
- In 2019, Hispanic students in Wyoming had an average scale score that was lower than that of White students by 11 points. In 1992, the average scale score for Hispanic students was lower than that of White students by 11 points.


## Grade 4 NAEP Achievement-Level Results by Race/Ethnicity

- In 2019 in Wyoming, the percentage of White students performing at or above NAEP Proficient was greater than the corresponding percentages of Hispanic and American Indian/Alaska Native students.
- In 2019, the percentage of White students in Wyoming performing at or above NAEP Proficient was greater than the percentages of their respective peers in 1992, 1996, 2000, 2003, 2005, 2007, and 2009, but not significantly different from the percentages of their respective peers in 2011, 2013, 2015, and 2017.
- In 2019, the percentage of Hispanic students in Wyoming performing at or above NAEP Proficient was greater than the percentages of their respective peers in 1992, 1996, 2000, 2003, 2007, and 2009, but not significantly different from the percentages of their respective peers in 2005, 2011, 2013, 2015, and 2017.
- In 2019, the percentage of American Indian/Alaska Native students in Wyoming performing at or above NAEP Proficient was not significantly different from the percentages of their respective peers in 1992, 2003, 2007, 2011, 2013, 2015, and 2017.

Table
3-A

The Nation's Report Card 2019 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, 1992-2019

| Race/ethnicity, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | At NAEP Advanced |
| White |  |  |  |  |  |  |  |  |
| $1992{ }^{1}$ | Nation (public) | 72* | 227* | 32* | 68* | 22* | 2* |
|  | Wyoming | 90* | $227 *$ | 29* | 71* | 20* | 1* |
| $1996{ }^{1}$ | Nation (public) | 71* | 230* | $27^{*}$ | 73* | 25* | 3* |
|  | Wyoming | 89* | 225* | $34 *$ | 66 * | 20* | 1* |
| $2000{ }^{1}$ | Nation (public) | 67* | 234* | 22* | 78* | 32* | 3* |
|  | Wyoming | 89* | 231* | $24^{*}$ | 76* | $27^{*}$ | 2* |
| 2000 | Nation (public) | 62* | 233* | 24* | 76* | 30* | 3* |
|  | Wyoming | 89* | 231* | 25* | 75* | $27^{*}$ | 2* |
| 2003 | Nation (public) | 58* | 243* | 13* | $87^{*}$ | 42* | 5* |
|  | Wyoming | 86* | 243* | 11 | 89 | 42* | 4* |
| 2005 | Nation (public) | 57* | 246* | 11 | 89 | $47^{*}$ | 7* |
|  | Wyoming | 85* | 245* | 11 | 89 | 45* | 5* |
| 2007 | Nation (public) | 55* | 248 | 9* | 91* | 51 | 8* |
|  | Wyoming | 84* | 246* | 9 | 91 | 48* | 5* |
| 2009 | Nation (public) | 54* | 248 | 10* | 90* | 50 | 8* |
|  | Wyoming | 84* | 244* | 10 | 90 | 44* | 5* |
| 2011 | Nation (public) | 52* | 249 | 9* | 91* | 52 | 9* |
|  | Wyoming | 80* | 246 | 9 | 91 | 47 | 6* |
| 2013 | Nation (public) | 51* | 250* | 9* | 91* | 54 | 10* |
|  | Wyoming | 79 | 249 | 7 | 93 | 52 | 7 |
| 2015 | Nation (public) | 49* | 248 | 10* | 90* | 51 | 10* |
|  | Wyoming | 78 | 250 | 8 | 92 | 54 | 10 |
| 2017 | Nation (public) | 47* | 248 | 12 | 88 | 51 | 11 |
|  | Wyoming | 80 | 250 | 9 | 91 | 54 | 11 |
| 2019 | Nation (public) | 46 | 249 | 12 | 88 | 52 | 12 |
|  | Wyoming | 78 | 249 | 10 | 90 | 52 | 10 |

See notes at end of table.

Table 3-A

The Nation's Report Card 2019 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, 1992-2019—Continued

| Race/ethnicity, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | $\begin{array}{r} \text { At } \\ \text { NAEP } \\ \text { Advanced } \end{array}$ |
| Black |  |  |  |  |  |  |  |
| $1992{ }^{1}$ | Nation (public) |  | 18* | 192* | 78* | 22* | 2* | \# |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| $1996{ }^{1}$ | Nation (public) | 17 | 199* | 70* | $30^{*}$ | 4* | \# |
|  | Wyoming | 2 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| $2000{ }^{1}$ | Nation (public) | $17^{*}$ | 204* | 64* | $36^{*}$ | 5* | \# |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2000 | Nation (public) | 17 | 203* | 65* | 35* | 4* | \#* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2003 | Nation (public) | 17* | 216* | 46* | 54* | 10* | \#* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2005 | Nation (public) | 17* | 220* | 40* | 60* | 13* | 1* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2007 | Nation (public) | 17* | 222* | 37 | 63 | 15* | 1* |
|  | Wyoming | 2 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2009 | Nation (public) | 16* | 222* | 37 | 63 | 15* | 1* |
|  | Wyoming | 2 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2011 | Nation (public) | 16 | 224 | 34 | 66 | 17* | 1* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2013 | Nation (public) | 16 | 224 | 34 | 66 | 18 | 1* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2015 | Nation (public) | 15 | 224 | 35 | 65 | 19 | 1* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2017 | Nation (public) | 15 | 223 | 37 | 63 | 19 | 2 |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2019 | Nation (public) | 15 | 224 | 35 | 65 | 20 | 2 |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |

See notes at end of table.

Table
3-A

The Nation's Report Card 2019 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, 1992-2019—Continued

| Race/ethnicity, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | $\begin{array}{r} \text { At } \\ \text { NAEP } \\ \text { Advanced } \end{array}$ |
| Hispanic |  |  |  |  |  |  |  |
| $1992{ }^{1}$ | Nation (public) |  | 7* | 201* | 68* | 32* | 5* | \# |
|  | Wyoming | $6 *$ | 216* | 45* | 55* | 10* | \# |
| $1996{ }^{1}$ | Nation (public) | 9* | 204* | 63* | $37^{*}$ | 7* | \# |
|  | Wyoming | $6 *$ | 207* | 59* | 41* | 5* | \# |
| $2000{ }^{1}$ | Nation (public) | 11* | 209* | 55* | 45* | 8* | \# |
|  | Wyoming | 8* | 212* | 49* | 51* | 9* | \# |
| 2000 | Nation (public) | 16* | 207* | 59* | 41* | 7* | \#* |
|  | Wyoming | 7* | 214* | 50* | 50* | 9* | 1 |
| 2003 | Nation (public) | 19* | 221* | 38* | 62* | 15* | $1^{*}$ |
|  | Wyoming | 8* | 229* | 24 | 76 | 20* | 1 |
| 2005 | Nation (public) | 20* | 225* | 33* | $67^{*}$ | 19* | 1* |
|  | Wyoming | 9* | 234 | 22 | 78 | 31 | 3 |
| 2007 | Nation (public) | 21* | $227 *$ | 31* | 69* | 22* | 1* |
|  | Wyoming | 10* | 229* | 27 | 73 | 23* | 1 |
| 2009 | Nation (public) | 22* | 227* | 30 | 70 | 21* | 1* |
|  | Wyoming | 11* | 231* | 23 | 77 | 22* | \# |
| 2011 | Nation (public) | $24 *$ | 229* | 28 | 72 | $24 *$ | 2* |
|  | Wyoming | 14 | 235 | 20 | 80 | 31 | 2 |
| 2013 | Nation (public) | 25* | 230 | 27 | 73 | 26 | 2* |
|  | Wyoming | 13* | 235 | 20 | 80 | 29 | 3 |
| 2015 | Nation (public) | $26^{*}$ | 230 | 27 | 73 | 26 | 3 |
|  | Wyoming | 15 | 234 | 21 | 79 | 28 | 3 |
| 2017 | Nation (public) | 27 | 229 | 30* | 70* | 26 | 3 |
|  | Wyoming | 12* | 237 | 20 | 80 | 36 | 5 |
| 2019 | Nation (public) | 28 | 231 | 27 | 73 | 28 | 3 |
|  | Wyoming | 15 | 238 | 18 | 82 | 36 | 4 |

See notes at end of table.

Table
The Nation's Report Card 2019 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, 1992-2019—Continued

| Race/ethnicity, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{r} \text { Below } \\ \text { NAEP Basic } \end{array}$ |  | At or above NAEP Basic | At or above NAEP Proficient | $\begin{array}{r} \text { At } \\ \text { NAEP } \\ \text { Advanced } \end{array}$ |
| Asian/Pacific Islander |  |  |  |  |  |  |  |  |
| $1992{ }^{1}$ | Nation (public) | 3* | 231* | $26^{*}$ | 74* | 27* | 4* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| $1996{ }^{1}$ | Nation (public) | $3^{*}$ | 225* | 35* | 65* | 20* | 5* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| $2000^{1}$ | Nation (public) | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2000 | Nation (public) | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2003 | Nation (public) | 4* | 246* | 13* | 87* | 48* | 10* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2005 | Nation (public) | 4* | 251* | 11* | 89* | $54 *$ | 14* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2007 | Nation (public) | 5* | 254* | 9 | 91 | 59* | 16* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2009 | Nation (public) | 5 | 255* | 9 | 91 | 61* | 18* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2011 | Nation (public) | 5 | 256* | 9 | 91 | 62* | 20* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2013 | Nation (public) | 5 | 258 | 9 | 91 | 64 | 23 |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2015 | Nation (public) | 5 | 256* | 10 | 90 | 61 | 22 |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2017 | Nation (public) | 6 | 258 | 10 | 90 | 64 | 24 |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2019 | Nation (public) | 5 | 261 | 9 | 91 | 67 | 27 |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |

See notes at end of table.

Table
3-A

The Nation's Report Card 2019 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, 1992-2019—Continued

| Race/ethnicity, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | At NAEP Advanced |
| American Indian/Alaska Native |  |  |  |  |  |  |  |  |
| $1992{ }^{1}$ | Nation (public) | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
|  | Wyoming | 2 | 205* | 63* | 37* | 3 | \# |
| $1996{ }^{1}$ | Nation (public) | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
|  | Wyoming | 2* | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| $2000^{1}$ | Nation (public) | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
|  | Wyoming | 1* | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2000 | Nation (public) | 1 | 207* | 61* | 39* | 8* | \# |
|  | Wyoming | 3 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2003 | Nation (public) | 1* | 224* | 35 | 65 | 18* | 1* |
|  | Wyoming | 3 | 221 | 37 | 63 | 16 | 2 |
| 2005 | Nation (public) | 1* | 227 | 31 | 69 | 22 | 2 |
|  | Wyoming | 3 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2007 | Nation (public) | 1 | 229 | 28 | 72 | 26 | 3 |
|  | Wyoming | 3 | 227 | 26 | 74 | 21 | \# |
| 2009 | Nation (public) | 1* | 227 | 32 | 68 | 23 | 2 |
|  | Wyoming | 3 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2011 | Nation (public) | 1 | 227 | 32 | 68 | 24 | 2 |
|  | Wyoming | 3 | 223 | 38 | 62 | 23 | 2 |
| 2013 | Nation (public) | 1 | 228 | 30 | 70 | 24 | 2 |
|  | Wyoming | 4 | 232* | 23 | 77 | 26 | 2 |
| 2015 | Nation (public) | 1 | 228 | 30 | 70 | 24 | 2 |
|  | Wyoming | 4 | 220 | 41 | 59 | 18 | 3 |
| 2017 | Nation (public) | 1 | 228 | 31 | 69 | 25 | 3 |
|  | Wyoming | 3 | 221 | 35 | 65 | 15 | \# |
| 2019 | Nation (public) | 1 | 228 | 32 | 68 | 25 | 4 |
|  | Wyoming | 3 | 219 | 40 | 60 | 11 | 1 |

\# Rounds to zero.
$\ddagger$ Reporting standards not met.

* Value is significantly different ( $p<.05$ ) from the value for the same jurisdiction and student group in 2019.
${ }^{1}$ Accommodations were not permitted for this assessment.
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 NAEP Basic, 213 or lower; NAEP Basic, 214-248; NAEP Proficient, 249-281; and NAEP Advanced, 282 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP 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, 1992-2019 Mathematics Assessments.


## Grade 8 Average Scale Score Results by Race/Ethnicity

- In 2019, White students in Wyoming had an average scale score that was higher than the average scale scores of Hispanic and American Indian/Alaska Native students.
- In 2019, the average scale scores of White and Hispanic students in Wyoming were higher than their respective scores in 1990, 1992, 1996, 2000, 2003, and 2005, but not significantly different from their respective scores in 2007, 2009, 2011, 2013, 2015, and 2017.
- In 2019, the average scale score of American Indian/Alaska Native students in Wyoming was not significantly different from their respective scores in 1990, 1996, 2000, 2003, 2005, 2013, 2015, and 2017.
- Data are not reported for Black students in 2019, because reporting standards were not met.
- In 2019, Hispanic students in Wyoming had an average scale score that was lower than that of White students by 17 points. In 1990, the average scale score for Hispanic students was lower than that of White students by 16 points.


## Grade 8 NAEP Achievement-Level Results by Race/Ethnicity

- In 2019 in Wyoming, the percentage of White students performing at or above NAEP Proficient was greater than the corresponding percentages of Hispanic and American Indian/Alaska Native students.
- In 2019, the percentage of White students in Wyoming performing at or above NAEP Proficient was greater than the percentages of their respective peers in 1990, 1992, 1996, 2000, 2003, and 2005, but not significantly different from the percentages of their respective peers in 2007, 2009, 2011, 2013, 2015, and 2017.
- In 2019, the percentage of Hispanic students in Wyoming performing at or above NAEP Proficient was greater than the percentages of their respective peers in 1990, 1992, 1996, 2000, 2003, 2005, and 2009, but not significantly different from the percentages of their respective peers in 2007, 2011, 2013, 2015, and 2017.
- In 2019, the percentage of American Indian/Alaska Native students in Wyoming performing at or above NAEP Proficient was not significantly different from the percentages of their respective peers in 1990, 1996, 2003, 2005, 2013, 2015, and 2017.

Table 3-B

The Nation's Report Card 2019 State Assessment
Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 1990-2019

| Race/ethnicity, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | $\begin{array}{r} \text { At } \\ \text { NAEP } \\ \text { Advanced } \end{array}$ |
| White |  |  |  |  |  |  |  |
| $1990{ }^{1}$ | Nation (public) |  | 73* | 269* | 41* | 59* | 18* | 3* |
|  | Wyoming | 86* | 274* | $34 *$ | $66^{*}$ | $20^{*}$ | 2* |
| $1992{ }^{1}$ | Nation (public) | 72* | 276* | $34 *$ | $66^{*}$ | 25* | 3* |
|  | Wyoming | 91* | 277* | 30* | 70* | 22* | 2* |
| $1996{ }^{1}$ | Nation (public) | 70* | 280* | 28* | 72* | 29* | 5* |
|  | Wyoming | 90* | 277* | 29* | 71* | 23* | 3* |
| $2000{ }^{1}$ | Nation (public) | 69* | 284* | 24* | 76* | 33* | $6 *$ |
|  | Wyoming | 91* | 279* | $28^{*}$ | 72* | $26 *$ | 4* |
| 2000 | Nation (public) | $63^{*}$ | 283* | 25* | 75* | 33* | $6 *$ |
|  | Wyoming | 90* | 278* | 28* | 72* | 25* | 4* |
| 2003 | Nation (public) | 62* | 287* | 21 | 79 | $36 *$ | 7* |
|  | Wyoming | 89* | 286* | 20 | 80 | 35* | 5* |
| 2005 | Nation (public) | 60* | 288* | 21 | 79 | 37* | 7* |
|  | Wyoming | 87* | 284* | 21 | 79 | 32* | 4* |
| 2007 | Nation (public) | 58* | 290 | 19* | 81* | 41* | 9* |
|  | Wyoming | 86* | 290 | 17 | 83 | 39 | 7 |
| 2009 | Nation (public) | $56 *$ | 292 | 18* | 82* | 43 | 10* |
|  | Wyoming | 84* | 289 | 18 | 82 | 38 | 8 |
| 2011 | Nation (public) | $54 *$ | 293 | 17* | 83* | 43 | 10* |
|  | Wyoming | 82* | 291 | 16 | 84 | 41 | 8 |
| 2013 | Nation (public) | 53* | 293* | 17* | 83* | 44 | 11* |
|  | Wyoming | 81* | 290 | 17 | 83 | 40 | 7 |
| 2015 | Nation (public) | 51* | 291 | 19* | 81* | 42 | 10* |
|  | Wyoming | 79 | 290 | 18 | 82 | 39 | 8 |
| 2017 | Nation (public) | 50* | 292 | 20 | 80 | 43 | 13 |
|  | Wyoming | 78 | 292 | 18 | 82 | 42 | 11 |
| 2019 | Nation (public) | 48 | 291 | 21 | 79 | 43 | 13 |
|  | Wyoming | 77 | 291 | 19 | 81 | 41 | 10 |

See notes at end of table.

Table
3-B

The Nation's Report Card 2019 State Assessment
Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 1990-2019—Continued

| Race/ethnicity, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | $\begin{array}{r} \text { At } \\ \text { NAEP } \\ \text { Advanced } \end{array}$ |
| Black |  |  |  |  |  |  |  |
| $1990{ }^{1}$ | Nation (public) |  | 16* | 236* | 79* | 21* | 5* | \# |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| $1992{ }^{1}$ | Nation (public) | 17* | 236* | 81* | 19* | 2* | \# |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| $1996{ }^{1}$ | Nation (public) | 16* | 241* | 74* | 26* | 4* | \# |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| $2000{ }^{1}$ | Nation (public) | 14 | 245* | 70* | 30* | 5* | \#* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2000 | Nation (public) | 17* | 243* | 70* | 30* | 5* | \#* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2003 | Nation (public) | 17* | 252* | 61* | 39* | 7* | \#* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2005 | Nation (public) | 17* | 254* | 59* | 41* | 8* | 1* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2007 | Nation (public) | 17* | 259 | 53 | 47 | 11* | 1* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2009 | Nation (public) | 16* | 260 | 51* | 49* | 12* | 1* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2011 | Nation (public) | 16* | 262* | 50* | 50* | 13 | 1* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2013 | Nation (public) | 15 | 263* | 49* | 51* | 14 | 2* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2015 | Nation (public) | 15 | 260 | 53 | 47 | 12 | 1* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2017 | Nation (public) | 15 | 260 | 54 | 46 | 13 | 2 |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2019 | Nation (public) | 15 | 259 | 54 | 46 | 13 | 2 |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |

See notes at end of table.

Table 3-B

The Nation's Report Card 2019 State Assessment
Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 1990-2019—Continued

| Race/ethnicity, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{r} \text { Below } \\ \text { NAEP Basic } \end{array}$ |  | At or above NAEP Basic | At or above NAEP Proficient | $\begin{array}{r} \text { At } \\ \text { NAEP } \\ \text { Advanced } \\ \hline \end{array}$ |
| Hispanic |  |  |  |  |  |  |  |
| $1990{ }^{1}$ | Nation (public) |  | 7* | 245* | 67* | 33* | 7* | 1* |
|  | Wyoming | $6 *$ | 257* | 58* | 42* | 8* | \# |
| $1992{ }^{1}$ | Nation (public) | 8* | 247* | $67^{*}$ | 33* | 6 * | \#* |
|  | Wyoming | 5* | 262* | 51 | 49 | 11* | 1 |
| $1996{ }^{1}$ | Nation (public) | 9* | 250* | 62* | 38* | 8* | 1 |
|  | Wyoming | 5* | 256* | 54* | 46* | 7* | \# |
| $2000{ }^{1}$ | Nation (public) | 11* | 252* | 60* | 40* | 8* | \#* |
|  | Wyoming | $6 *$ | 254* | 58* | 42* | 8* | \# |
| 2000 | Nation (public) | $14 *$ | 252* | 60* | 40* | 8* | \#* |
|  | Wyoming | 5* | 257* | 54* | 46* | 8* | 1 |
| 2003 | Nation (public) | 15* | 258* | 53* | 47* | 11* | 1* |
|  | Wyoming | 7* | 265* | 46 | 54 | 13* | 1 |
| 2005 | Nation (public) | 17* | 261* | 50* | 50* | 13* | 1* |
|  | Wyoming | 7* | 265* | 43 | 57 | 11* | \# |
| 2007 | Nation (public) | 19* | 264* | 46 | 54 | 15* | 2* |
|  | Wyoming | 8* | 274 | 36 | 64 | 22 | 3 |
| 2009 | Nation (public) | 21* | 266 | 44 | 56 | 17* | 2* |
|  | Wyoming | 10* | 269 | 40 | 60 | 15* | 3 |
| 2011 | Nation (public) | 23* | 269 | 40* | 60* | 20 | 3* |
|  | Wyoming | 12* | 271 | 37 | 63 | 20 | 2 |
| 2013 | Nation (public) | 23* | 271* | 38* | 62* | 21 | 3* |
|  | Wyoming | 12* | 278 | 29 | 71 | 26 | 3 |
| 2015 | Nation (public) | 25* | 269 | 40* | 60* | 19 | 3* |
|  | Wyoming | 14 | 273 | 35 | 65 | 18 | 2 |
| 2017 | Nation (public) | 25* | 268 | 43 | 57 | 20 | 3 |
|  | Wyoming | 14 | 275 | 33 | 67 | 23 | 3 |
| 2019 | Nation (public) | 27 | 268 | 43 | 57 | 19 | 3 |
|  | Wyoming | 14 | 274 | 36 | 64 | 25 | 4 |

See notes at end of table.

Table
3-B

The Nation's Report Card 2019 State Assessment
Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 1990-2019—Continued

| Race/ethnicity, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | At NAEP Advanced |
| Asian/Pacific Islander |  |  | 2* | 275* | 36* | 64* | 30* | 6* |
| $1990{ }^{1}$ | Nation (public) |  |  |  |  |  |  |  |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |  |
| $1992{ }^{1}$ | Nation (public) | 2* | 290* | 25 | 75 | 43 | 14* |  |
|  | Wyoming | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |  |
| $1996{ }^{1}$ | Nation (public) | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |  |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |  |
| $2000{ }^{1}$ | Nation (public) | $4^{*}$ | 286* | $27 *$ | 73* | 40* | 12* |  |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |  |
| 2000 | Nation (public) | 4* | 287* | $27^{*}$ | 73* | 40* | 12* |  |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |  |
| 2003 | Nation (public) | 4* | 289* | 23* | 77* | 42* | 12* |  |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |  |
| 2005 | Nation (public) | 5* | 294* | 19* | 81* | 46* | 16* |  |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |  |
| 2007 | Nation (public) | 5* | 296* | 18* | 82* | 49* | 17* |  |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |  |
| 2009 | Nation (public) | 5* | 300* | 16 | 84 | 53* | 20* |  |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |  |
| 2011 | Nation (public) | 6 | 302* | 15 | 85 | 55* | 22* |  |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |  |
| 2013 | Nation (public) | 5* | 306* | 13 | 87 | 60 | 25* |  |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |  |
| 2015 | Nation (public) | 6 | 305 | 14 | 86 | 58 | 25* |  |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |  |
| 2017 | Nation (public) | 6 | 310 | 14 | 86 | 62 | 30 |  |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |  |
| 2019 | Nation (public) | 6 | 309 | 15 | 85 | 61 | 32 |  |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |  |

See notes at end of table.

Table
3-B

The Nation's Report Card 2019 State Assessment
Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by race/ethnicity, year, and jurisdiction: Various years, 1990-2019—Continued

| Race/ethnicity, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | $\begin{array}{r} \text { At } \\ \text { NAEP } \\ \text { Advanced } \end{array}$ |
| American Indian/Alaska Native |  |  |  |  |  |  |  |  |
| $1990{ }^{1}$ | Nation (public) | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
|  | Wyoming | 2* | 256 | 57 | 43 | 7 | \# |
| $1992{ }^{1}$ | Nation (public) | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
|  | Wyoming | 3 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| $1996{ }^{1}$ | Nation (public) | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
|  | Wyoming | 3 | 246 | 70 | 30 | 5 | \# |
| $2000{ }^{1}$ | Nation (public) | 1 | 264 | 47 | 53 | 14 | 2 |
|  | Wyoming | 2 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2000 | Nation (public) | 1 | 263 | 47 | 53 | 13 | 3 |
|  | Wyoming | 3 | 245 | 73 | 27 | 3 | 1 |
| 2003 | Nation (public) | 1* | 265 | 46 | 54 | 16 | 2 |
|  | Wyoming | 3 | 261 | 52 | 48 | 14 | 1 |
| 2005 | Nation (public) | 1* | 266 | 45 | 55 | 14 | 2 |
|  | Wyoming | 3 | 262 | 46 | 54 | 8 | \# |
| 2007 | Nation (public) | 1* | 265 | 44 | 56 | 17 | 2 |
|  | Wyoming | 3 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2009 | Nation (public) | 1* | 267 | 43 | 57 | 20 | 3 |
|  | Wyoming | 3 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2011 | Nation (public) | 1 | 266 | 45 | 55 | 17 | 4 |
|  | Wyoming | 3* | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2013 | Nation (public) | 1* | 270* | 40* | 60* | 21* | 3 |
|  | Wyoming | 3* | 269 | 36* | $64 *$ | 16 | 1 |
| 2015 | Nation (public) | 1 | 267 | 43 | 57 | 19 | 3 |
|  | Wyoming | 3 | 251 | 63 | 37 | 6 | \# |
| 2017 | Nation (public) | 1 | 268 | 43 | 57 | 19 | 4 |
|  | Wyoming | 3 | 268 | 45 | 55 | 18 | 4 |
| 2019 | Nation (public) | 1 | 263 | 48 | 52 | 15 | 3 |
|  | Wyoming | 4 | 258 | 57 | 43 | 12 | 3 |

\# Rounds to zero.
$\ddagger$ Reporting standards not met.

* Value is significantly different $(p<.05)$ from the value for the same jurisdiction and student group in 2019.
${ }^{1}$ Accommodations were not permitted for this assessment.
NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500 . Achievement levels correspond to the following points on the NAEP mathematics scales: below NAEP Basic, 261 or lower; NAEP Basic, 262-298; NAEP Proficient, 299-332; and NAEP Advanced, 333 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP Advanced. Black includes African American, Hispanic includes Latino, and Pacific Islander includes Native Hawaiian. Race categories exclude Hispanic origin. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990-2019 Mathematics Assessments.

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

Table
The Nation's Report Card 2019 State Assessment
4-A
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, 2011-2019

| Race/ethnicity, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | $\begin{array}{r} \text { At } \\ \text { NAEP } \\ \text { Advanced } \end{array}$ |
| White |  |  |  |  |  |  |  |
| 2011 | Nation (public) |  | 52* | 249 | 9* | 91* | 52 | 9* |
|  | Wyoming | $80^{*}$ | 246 | 9 | 91 | 47 | $6{ }^{*}$ |
| 2013 | Nation (public) | $51^{*}$ | 250* | 9* | 91* | 54 | 10 |
|  | Wyoming | 79 | 249 | 7 | 93 | 52 | 7 |
| 2015 | Nation (public) | 49* | 248 | 10 | 90 | 51 | 10* |
|  | Wyoming | 78 | 250 | 8 | 92 | 54 | 10 |
| 2017 | Nation (public) | 47* | 248 | 12 | 88 | 51 | 11 |
|  | Wyoming | 80 | 250 | 9 | 91 | 54 | 11 |
| 2019 | Nation (public) | 46 | 249 | 12 | 88 | 52 | 12 |
|  | Wyoming | 78 | 249 | 10 | 90 | 52 | 10 |
| Black |  |  |  |  |  |  |  |
| 2011 | Nation (public) | 16 | 224 | 34 | 66 | 17* | 1* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2013 | Nation (public) | 16 | 224 | 34 | 66 | 18 | 1* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2015 | Nation (public) | 15 | 224 | 35 | 65 | 19 | 1 |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2017 | Nation (public) | 15 | 223 | 37 | 63 | 19 | 2 |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2019 | Nation (public) | 15 | 224 | 35 | 65 | 20 | 2 |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Hispanic |  |  |  |  |  |  |  |
| 2011 | Nation (public) | 24* | 229* | 28 | 72 | $24^{*}$ | 2* |
|  | Wyoming | 14 | 235 | 20 | 80 | 31 | 2 |
| 2013 | Nation (public) | 25* | 230 | 27 | 73 | 26 | 2* |
|  | Wyoming | 13* | 235 | 20 | 80 | 29 | 3 |
| 2015 | Nation (public) | $26 *$ | 230 | 27 | 73 | 26 | 3 |
|  | Wyoming | 15 | 234 | 21 | 79 | 28 | 3 |
| 2017 | Nation (public) | 27 | 229 | 30* | 70* | 26 | 3 |
|  | Wyoming | 12* | 237 | 20 | 80 | 36 | 5 |
| 2019 | Nation (public) | 28 | 231 | 27 | 73 | 28 | 3 |
|  | Wyoming | 15 | 238 | 18 | 82 | 36 | 4 |
| Asian |  |  |  |  |  |  |  |
| 2011 | Nation (public) | 5 | 257* | 8 | 92 | 64* | 21* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2013 | Nation (public) | 5 | 260 | 7 | 93 | 67 | 24 |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2015 | Nation (public) | 5 | 259 | 8 | 92 | 64 | 23 |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2017 | Nation (public) | 5 | 260 | 8 | 92 | 67 | 26 |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2019 | Nation (public) | 5 | 263 | 7 | 93 | 70 | 29 |

See notes at end of table.

|  |  |  | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Race/ethnicity, year, and jurisdiction | Percentage of students | Average scale score | Below NAEP Basic | At or above NAEP Basic | At or above NAEP Proficient | $\begin{array}{r} \mathrm{At} \\ \text { NAEP } \\ \text { Advanced } \end{array}$ |
| Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |

See notes at end of table.

Table
The Nation's Report Card 2019 State Assessment
4-A
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, 2011-2019—Continued

| Race/ethnicity, year, and jurisdiction | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{array}{r} \text { Below } \\ \text { NAEP Basic } \end{array}$ | At or above NAEP Basic | At or above NAEP Proficient | $\begin{array}{r} \text { At } \\ \text { NAEP } \\ \text { Advanced } \end{array}$ |
| American Indian/Alaska Native |  |  |  |  |  |  |
| 2011 Nation (public) | 1 | 227 | 32 | 68 | 24 | 2 |
| Wyoming | 3 | 223 | 38 | 62 | 23 | 2 |
| 2013 Nation (public) | 1 | 228 | 30 | 70 | 24 | 2 |
| Wyoming | 4 | 232* | 23 | 77 | 26 | 2 |
| 2015 Nation (public) | 1 | 228 | 30 | 70 | 24 | 2 |
| Wyoming | 4 | 220 | 41 | 59 | 18 | 3 |
| 2017 Nation (public) | 1 | 228 | 31 | 69 | 25 | 3 |
| Wyoming | 3 | 221 | 35 | 65 | 15 | \# |
| 2019 Nation (public) | 1 | 228 | 32 | 68 | 25 | 4 |
| Wyoming | 3 | 219 | 40 | 60 | 11 | 1 |
| Native Hawaiian/Other Pacific Islander |  |  |  |  |  |  |
| 2011 Nation (public) | \# | 235 | 24 | 76 | 33 | 7 |
| Wyoming | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2013 Nation (public) | \# | 235 | 23 | 77 | 32 | 4 |
| Wyoming | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2015 Nation (public) | \# | 226 | 35 | 65 | 24 | 3 |
| Wyoming | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2017 Nation (public) | \# | 228 | 30 | 70 | 27 | 4 |
| Wyoming | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2019 Nation (public) | \# | 230 | 30 | 70 | 29 | 5 |
| Wyoming | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Two or More Races |  |  |  |  |  |  |
| 2011 Nation (public) | 2* | 244 | 15 | 85 | 43 | 9 |
| Wyoming | 2* | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2013 Nation (public) | 3* | 244 | 14 | 86 | 45 | 9 |
| Wyoming | 2* | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2015 Nation (public) | 3* | 244 | 15 | 85 | 44 | 9 |
| Wyoming | 2 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2017 Nation (public) | 4* | 244 | 16 | 84 | 44 | 10 |
| Wyoming | 3 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2019 Nation (public) | 4 | 243 | 17 | 83 | 44 | 10 |
| Wyoming | 2 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |

\# Rounds to zero.
$\ddagger$ Reporting standards not met.

* Value is significantly different ( $p<05$ ) from the value for the same jurisdiction and student group in 2019.

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 NAEP Basic, 213 or lower; NAEP Basic, 214-248; NAEP Proficient, 249-281; and NAEP Advanced, 282 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP 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), various years, 2011-2019 Mathematics Assessments.

Table 4-B

The Nation's Report Card 2019 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, 2011-2019

| Race/ethnicity, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | At NAEP Advanced |
| White |  |  |  |  |  |  |  |  |
| 2011 | Nation (public) | 54* | 293 | 17* | 83* | 43 | 10* |
|  | Wyoming | 82* | 291 | 16 | 84 | 41 | 8 |
| 2013 | Nation (public) | $53^{*}$ | 293* | 17* | 83* | 44 | 11* |
|  | Wyoming | 81* | 290 | 17 | 83 | 40 | 7 |
| 2015 | Nation (public) | 51* | 291 | 19* | 81* | 42 | 10* |
|  | Wyoming | 79 | 290 | 18 | 82 | 39 | 8 |
| 2017 | Nation (public) | 50* | 292 | 20 | 80 | 43 | 13 |
|  | Wyoming | 78 | 292 | 18 | 82 | 42 | 11 |
| 2019 | Nation (public) | 48 | 291 | 21 | 79 | 43 | 13 |
|  | Wyoming | 77 | 291 | 19 | 81 | 41 | 10 |
| Black |  |  |  |  |  |  |  |
| 2011 | Nation (public) | 16* | 262* | 50* | 50* | 13 | 1* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2013 | Nation (public) | 15 | 263* | 49* | 51* | 14 | 2* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2015 | Nation (public) | 15 | 260 | 53 | 47 | 12 | 1* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2017 | Nation (public) | 15 | 260 | 54 | 46 | 13 | 2 |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2019 | Nation (public) | 15 | 259 | 54 | 46 | 13 | 2 |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Hispanic |  |  |  |  |  |  |  |
| 2011 | Nation (public) | 23* | 269 | 40* | 60* | 20 | 3* |
|  | Wyoming | 12* | 271 | 37 | 63 | 20 | 2 |
| 2013 | Nation (public) | 23* | 271* | 38* | $62^{*}$ | 21 | 3* |
|  | Wyoming | 12* | 278 | 29 | 71 | 26 | 3 |
| 2015 | Nation (public) | 25* | 269 | 40* | 60* | 19 | 3 |
|  | Wyoming | 14 | 273 | 35 | 65 | 18 | 2 |
| 2017 | Nation (public) | $25^{*}$ | 268 | 43 | 57 | 20 | 3 |
|  | Wyoming | 14 | 275 | 33 | 67 | 23 | 3 |
| 2019 | Nation (public) | 27 | 268 | 43 | 57 | 19 | 3 |
|  | Wyoming | 14 | 274 | 36 | 64 | 25 | 4 |
| Asian |  |  |  |  |  |  |  |
| 2011 | Nation (public) | 5 | 305* | 12 | 88 | 58* | 24* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2013 | Nation (public) | 5* | 308* | 12 | 88 | 62 | $27^{*}$ |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2015 | Nation (public) | 5 | 307* | 12 | 88 | 60 | 26* |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2017 | Nation (public) | 5 | 312 | 12 | 88 | 65 | 32 |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2019 | Nation (public) | 6 | 313 | 12 | 88 | 64 | 33 |

See notes at end of table.

|  |  |  | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Race/ethnicity, year, and jurisdiction | Percentage of students | Average scale score | Below NAEP Basic | At or above NAEP Basic | At or above NAEP Proficient | $\begin{array}{r} \mathrm{At} \\ \text { NAEP } \\ \text { Advanced } \end{array}$ |
| Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |

See notes at end of table.

Table 4-B

The Nation's Report Card 2019 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, 2011-2019—Continued

| Race/ethnicity, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | At NAEP Advanced |
| American Indian/Alaska Native |  |  |  |  |  |  |  |  |
| 2011 | Nation (public) | 1 | 266 | 45 | 55 | 17 | 4 |
|  | Wyoming | 3* | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2013 | Nation (public) | 1* | 270* | 40* | 60* | 21* | 3 |
|  | Wyoming | $3^{*}$ | 269 | $36 *$ | $64 *$ | 16 | 1 |
| 2015 | Nation (public) | 1 | 267 | 43 | 57 | 19 | 3 |
|  | Wyoming | 3 | 251 | 63 | 37 | 6 | \# |
| 2017 | Nation (public) | 1 | 268* | 43 | 57 | 19 | 4 |
|  | Wyoming | 3 | 268 | 45 | 55 | 18 | 4 |
| 2019 | Nation (public) | 1 | 263 | 48 | 52 | 15 | 3 |
|  | Wyoming | 4 | 258 | 57 | 43 | 12 | 3 |
| Native Hawaiian/Other Pacific Islander |  |  |  |  |  |  |  |
| 2011 | Nation (public) | \# | 265 | 45 | 55 | 19 | 3 |
|  | Wyoming | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2013 | Nation (public) | \# | 274* | $34^{*}$ | 66* | 24 | 4 |
|  | Wyoming | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2015 | Nation (public) | \# | 277* | 35* | 65* | 30 | 6 |
|  | Wyoming | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2017 | Nation (public) | \# | 272* | 38 | 62 | 23 | 5 |
|  | Wyoming | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2019 | Nation (public) | \# | 263 | 47 | 53 | 18 | 4 |
|  | Wyoming | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Two or More Races |  |  |  |  |  |  |  |
| 2011 | Nation (public) | 2* | 286 | 24 | 76 | 37 | 10 |
|  | Wyoming | 1* | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2013 | Nation (public) | 2* | 286 | 24 | 76 | 37 | 10 |
|  | Wyoming | 1* | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2015 | Nation (public) | 2* | 283 | 28 | 72 | 35 | 9 |
|  | Wyoming | 2 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2017 | Nation (public) | 3* | 285 | 28 | 72 | 36 | 12 |
|  | Wyoming | 2 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2019 | Nation (public) | 3 | 285 | 28 | 72 | 36 | 11 |
|  | Wyoming | 2 | 274 | 38 | 62 | 28 | 4 |

\# Rounds to zero.
$\ddagger$ Reporting standards not met.

* Value is significantly different ( $p<.05$ ) from the value for the same jurisdiction and student group in 2019.

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 NAEP Basic, 261 or lower; NAEP Basic, 262-298; NAEP Proficient, 299-332; and NAEP Advanced, 333 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP 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), various years, 2011-2019 Mathematics Assessments.

## Grade 8 Average Scale Score Results by Gender

- In 2019, male students in Wyoming had an average scale score in mathematics (285) that was lower than that of female students (288). This performance gap was narrower than that of 1990 ( 5 points in favor of males).
- In 2019, male students in Wyoming had an average scale score in mathematics (285) that was higher than that of male students in public schools across the nation (280). Similarly, female students in Wyoming had an average scale score (288) that was higher than that of female students across the nation (282).
- In Wyoming, the average scale score of male students in 2019 was higher than the scores of male students in 1990, 1992, 1996, and 2000, but lower than the scores of male students in 2009, 2011, 2013, and 2017, and not significantly different from the scores of male students in 2003, 2005, 2007, and 2015.
- In Wyoming, the average scale score of female students in 2019 was higher than the scores of female students in 1990, 1992, 1996, 2000, 2003, 2005, and 2009, but not significantly different from the scores of female students in 2007, 2011, 2013, 2015, and 2017.


## Grade 8 NAEP Achievement-Level Results by Gender

- In the 2019 assessment, 35 percent of male students and 39 percent of female students performed at or above NAEP Proficient in Wyoming. The difference between these percentages was not statistically significant.
- The percentage of male students in Wyoming's public schools who were at or above NAEP Proficient in 2019 ( 35 percent) was not significantly different from that of male students in the nation (33 percent).
- The percentage of female students in Wyoming's public schools who were at or above NAEP Proficient in 2019 (39 percent) was greater than that of female students in the nation (33 percent).
- In Wyoming, the percentage of male students performing at or above NAEP Proficient in 2019 was greater than the corresponding percentages of students in 1990, 1992, 1996, and 2000, but smaller than the percentage of students in 2011, and not significantly different from the corresponding percentages of students in 2003, 2005, 2007, 2009, 2013, 2015, and 2017.
- In Wyoming, the percentage of female students performing at or above NAEP Proficient in 2019 was greater than the corresponding percentages of students in 1990, 1992, 1996, 2000, 2003, 2005, 2009, and 2011, but not significantly different from the corresponding percentages of students in 2007, 2013, 2015, and 2017.

Table 5-A

The Nation's Report Card 2019 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, 1992-2019

| Gender, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | $\begin{array}{r} \text { At } \\ \text { NAEP } \\ \text { Advanced } \\ \hline \end{array}$ |
| Male |  |  |  |  |  |  |  |  |
| $1992{ }^{1}$ | Nation (public) | 50 | 220* | 41* | 59* | 19* | 2* |
|  | Wyoming | 50 | $227 *$ | 30* | 70* | 21* | 1* |
| $1996{ }^{1}$ | Nation (public) | 51 | 224* | 37* | $63^{*}$ | 22* | 3* |
|  | Wyoming | 50 | 224* | 36* | $64 *$ | 20* | 2* |
| $2000{ }^{1}$ | Nation (public) | 51 | $227 *$ | 32* | 68* | $27^{*}$ | 3* |
|  | Wyoming | 53 | 230* | 25* | 75* | $27^{*}$ | 2* |
| 2000 | Nation (public) | 51 | 225* | 35* | 65* | 25* | 3* |
|  | Wyoming | 53 | 230* | $27^{*}$ | 73* | $27^{*}$ | 3* |
| 2003 | Nation (public) | 51 | 235* | $23 *$ | 77* | $34 *$ | 5* |
|  | Wyoming | 52 | 242* | 12 | 88 | 41* | 4* |
| 2005 | Nation (public) | 51 | 238* | 20 | 80 | 37* | $6 *$ |
|  | Wyoming | 51 | 244* | 12 | 88 | 45* | $6 *$ |
| 2007 | Nation (public) | 51 | 240* | 18* | 82* | 41* | 7* |
|  | Wyoming | 51 | 244* | 12 | 88 | $46^{*}$ | 5* |
| 2009 | Nation (public) | 51 | 240* | 19 | 81 | 40* | 7* |
|  | Wyoming | 52 | 243* | 12 | 88 | $43^{*}$ | 4* |
| 2011 | Nation (public) | 51 | 241 | 18* | 82* | 41* | 7* |
|  | Wyoming | 51 | 245 | 12 | 88 | 46 | $6 *$ |
| 2013 | Nation (public) | 51 | 242 | 18* | 82* | 42 | 8* |
|  | Wyoming | 52 | 247 | 10 | 90 | 48 | 7* |
| 2015 | Nation (public) | 51 | 241 | 19 | 81 | 41* | 8* |
|  | Wyoming | 50 | 248 | 12 | 88 | 51 | 10 |
| 2017 | Nation (public) | 51 | 240* | 21* | 79* | 41* | 9* |
|  | Wyoming | 52 | 249 | 11 | 89 | 53 | 12 |
| 2019 | Nation (public) | 51 | 242 | 20 | 80 | 43 | 10 |
|  | Wyoming | 51 | 248 | 12 | 88 | 51 | 10 |

See notes at end of table.

Table 5-A

The Nation's Report Card 2019 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, 1992-2019—Continued

| Gender, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{r} \text { Below } \\ \text { NAEP Basic } \end{array}$ |  | At or above NAEP Basic | At or above NAEP Proficient | $\begin{array}{r} \text { At } \\ \text { NAEP } \\ \text { Advanced } \\ \hline \end{array}$ |
| Female |  |  |  |  |  |  |  |  |
| $1992{ }^{1}$ | Nation (public) | 50 | 218* | 44* | 56* | $16^{*}$ | 1* |
|  | Wyoming | 50 | 224* | 33* | $67^{*}$ | 17* | 1* |
| $1996{ }^{1}$ | Nation (public) | 49 | 221* | 39* | 61* | $17^{*}$ | $1 *$ |
|  | Wyoming | 50 | 223* | 36* | $64 *$ | 18* | 1* |
| $2000{ }^{1}$ | Nation (public) | 49 | 225* | $34 *$ | 66* | 22* | 2* |
|  | Wyoming | 47 | 228* | 29* | 71* | 23* | 2* |
| 2000 | Nation (public) | 49 | 223* | 38* | 62* | 20* | 1* |
|  | Wyoming | 47 | 227* | 30* | 70* | 22* | 1* |
| 2003 | Nation (public) | 49 | 233* | 25* | 75* | 29* | 3* |
|  | Wyoming | 48 | 240* | 14 | 86 | $36 *$ | 2* |
| 2005 | Nation (public) | 49 | 236* | 21 | 79 | 33* | 4* |
|  | Wyoming | 49 | 242 | 13 | 87 | 40 | 4* |
| 2007 | Nation (public) | 49 | 238 | 19* | 81* | 36 | 4* |
|  | Wyoming | 49 | 243 | 11 | 89 | 43 | 4* |
| 2009 | Nation (public) | 49 | 238 | 19 | 81 | 37 | 5* |
|  | Wyoming | 48 | 241 | 14 | 86 | 38* | 4* |
| 2011 | Nation (public) | 49 | 239* | 18* | 82* | 39 | $6 *$ |
|  | Wyoming | 49 | 243 | 13 | 87 | 42 | 5* |
| 2013 | Nation (public) | 49 | 241* | 18* | 82* | 40* | 7 |
|  | Wyoming | 48 | 246 | 9* | 91* | 47 | 6 |
| 2015 | Nation (public) | 49 | 239 | 19* | 81* | 38 | 6* |
|  | Wyoming | 50 | 246 | 11 | 89 | 46 | 8 |
| 2017 | Nation (public) | 49 | 238 | 21 | 79 | 38 | 7 |
|  | Wyoming | 48 | 246 | 11 | 89 | 48 | 8 |
| 2019 | Nation (public) | 49 | 238 | 20 | 80 | 38 | 7 |
|  | Wyoming | 49 | 244 | 13 | 87 | 44 | 7 |

* Value is significantly different ( $p<.05$ ) from the value for the same jurisdiction and student group in 2019.
${ }^{1}$ Accommodations were not permitted for this assessment.
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 NAEP Basic, 213 or lower; NAEP Basic, 214-248; NAEP Proficient, 249-281; and NAEP Advanced, 282 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP 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, 1992-2019 Mathematics Assessments.


## Grade 8 Average Scale Score Results by Gender

- In 2019, male students in Wyoming had an average scale score in mathematics (285) that was lower than that of female students (288). This performance gap was narrower than that of 1990 ( 5 points in favor of males).
- In 2019, male students in Wyoming had an average scale score in mathematics (285) that was higher than that of male students in public schools across the nation (280). Similarly, female students in Wyoming had an average scale score (288) that was higher than that of female students across the nation (282).
- In Wyoming, the average scale score of male students in 2019 was higher than the scores of male students in 1990, 1992, 1996, and 2000, but lower than the scores of male students in 2009, 2011, 2013, and 2017, and not significantly different from the scores of male students in 2003, 2005, 2007, and 2015.
- In Wyoming, the average scale score of female students in 2019 was higher than the scores of female students in 1990, 1992, 1996, 2000, 2003, 2005, and 2009, but not significantly different from the scores of female students in 2007, 2011, 2013, 2015, and 2017.


## Grade 8 NAEP Achievement-Level Results by Gender

- In the 2019 assessment, 35 percent of male students and 39 percent of female students performed at or above NAEP Proficient in Wyoming. The difference between these percentages was not statistically significant.
- The percentage of male students in Wyoming's public schools who were at or above NAEP Proficient in 2019 ( 35 percent) was not significantly different from that of male students in the nation (33 percent).
- The percentage of female students in Wyoming's public schools who were at or above NAEP Proficient in 2019 (39 percent) was greater than that of female students in the nation (33 percent).
- In Wyoming, the percentage of male students performing at or above NAEP Proficient in 2019 was greater than the corresponding percentages of students in 1990, 1992, 1996, and 2000, but smaller than the percentage of students in 2011, and not significantly different from the corresponding percentages of students in 2003, 2005, 2007, 2009, 2013, 2015, and 2017.
- In Wyoming, the percentage of female students performing at or above NAEP Proficient in 2019 was greater than the corresponding percentages of students in 1990, 1992, 1996, 2000, 2003, 2005, 2009, and 2011, but not significantly different from the corresponding percentages of students in 2007, 2013, 2015, and 2017.

Table 5-B

The Nation's Report Card 2019 State Assessment
Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by gender, year, and jurisdiction: Various years, 1990-2019

| Gender, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{r} \text { Below } \\ \text { NAEP Basic } \end{array}$ |  | At or above NAEP Basic | At or above NAEP Proficient | $\begin{array}{r} \text { At } \\ \text { NAEP } \\ \text { Advanced } \\ \hline \end{array}$ |
| Male |  |  |  |  |  |  |  |
| $1990{ }^{1}$ | Nation (public) |  | 51 | 262* | 49* | 51* | 17* | 2* |
|  | Wyoming | 51 | 274* | $34 *$ | 66* | 21* | 2* |
| $1992{ }^{1}$ | Nation (public) | 52 | 266* | 45* | 55* | 20* | 3* |
|  | Wyoming | 50 | 275* | $34 *$ | 66 * | 21* | 2* |
| $1996{ }^{1}$ | Nation (public) | 52 | 270* | 40* | 60* | 24* | 4* |
|  | Wyoming | 51 | 276* | $31^{*}$ | 69* | 24* | 3* |
| $2000{ }^{1}$ | Nation (public) | 50 | 276* | 34 | 66 | 29* | 6 * |
|  | Wyoming | 50 | 277* | 30 | 70 | 26* | 4* |
| 2000 | Nation (public) | 50 | 273* | 38* | 62* | 26* | 5* |
|  | Wyoming | 51 | 276* | 32* | 68* | 24* | 4* |
| 2003 | Nation (public) | 50* | 277* | 33 | 67 | 29* | $6 *$ |
|  | Wyoming | 53* | 284 | 24 | 76 | 34 | 5* |
| 2005 | Nation (public) | 51* | 278* | 32* | 68* | 30* | $6 *$ |
|  | Wyoming | 52 | 283 | 24 | 76 | 31 | 4* |
| 2007 | Nation (public) | 51* | 281 | 29* | 71* | 33 | 8* |
|  | Wyoming | 52 | 288 | 20 | 80 | 37 | 7 |
| 2009 | Nation (public) | 51* | 283* | 28* | $72^{*}$ | $34 *$ | 8* |
|  | Wyoming | 51 | 288* | 20 | 80 | 38 | 8 |
| 2011 | Nation (public) | 51* | 283* | 28* | 72* | 34 | 9* |
|  | Wyoming | 51 | 290* | 18* | 82* | 41* | 9 |
| 2013 | Nation (public) | 51 | 284* | $27^{*}$ | 73* | 35* | 9* |
|  | Wyoming | 52* | 290* | 18* | 82* | 39 | 7 |
| 2015 | Nation (public) | 51 | 281 | 30* | 70* | 32 | 8* |
|  | Wyoming | 52 | 286 | 23 | 77 | 35 | 7 |
| 2017 | Nation (public) | 51 | 282* | $31^{*}$ | 69* | $34 *$ | 11 |
|  | Wyoming | 51 | 289* | 22 | 78 | 39 | 10 |
| 2019 | Nation (public) | 51 | 280 | 33 | 67 | 33 | 10 |
|  | Wyoming | 50 | 285 | 25 | 75 | 35 | 8 |

See notes at end of table.

Table
5-B

The Nation's Report Card 2019 State Assessment
Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by gender, year, and jurisdiction: Various years, 1990-2019—Continued

| Gender, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{r} \text { Below } \\ \text { NAEP Basic } \end{array}$ |  | At or above NAEP Basic | At or above NAEP Proficient | At NAEP Advanced |
| Female |  |  |  |  |  |  |  |
| $1990{ }^{1}$ | Nation (public) |  | 49 | 261* | 49* | 51* | 14* | 2* |
|  | Wyoming | 49 | 270* | 39* | 61* | 16* | 1* |
| $1992{ }^{1}$ | Nation (public) | 48 | 267* | 44* | $56 *$ | $20^{*}$ | 3* |
|  | Wyoming | 50 | 275* | $32^{*}$ | 68* | 21* | 2* |
| $1996{ }^{1}$ | Nation (public) | 48 | 271* | 39* | 61* | 21* | 3* |
|  | Wyoming | 49 | 274* | 32* | 68* | 20* | 2* |
| $2000{ }^{1}$ | Nation (public) | 50 | 273* | $36^{*}$ | 64* | 24* | 4* |
|  | Wyoming | 50 | 276* | 31* | 69* | 24* | 3* |
| 2000 | Nation (public) | 50 | 271* | 38* | 62* | 23* | 4* |
|  | Wyoming | 49 | 276* | 31* | 69* | 23* | 3* |
| 2003 | Nation (public) | 50* | 275* | $34 *$ | 66* | $26^{*}$ | 4* |
|  | Wyoming | 47* | 283* | 22 | 78 | 30* | 3* |
| 2005 | Nation (public) | 49* | 277* | $33^{*}$ | 67* | $27^{*}$ | 5* |
|  | Wyoming | 48 | 281* | 23 | 77 | 27* | 3* |
| 2007 | Nation (public) | 49* | 279* | 30 | 70 | 29* | $6 *$ |
|  | Wyoming | 48 | 286 | 20 | 80 | 34 | 6 |
| 2009 | Nation (public) | 49* | 281 | 29* | 71* | $31^{*}$ | $7{ }^{*}$ |
|  | Wyoming | 49 | 284* | 24 | 76 | 31* | 6 * |
| 2011 | Nation (public) | 49* | 282 | 28* | 72* | 33 | 7* |
|  | Wyoming | 49 | 285 | 21 | 79 | $34 *$ | 5* |
| 2013 | Nation (public) | 49 | 283* | 27* | 73* | 34 | 7* |
|  | Wyoming | 48* | 287 | 21 | 79 | 36 | 6 |
| 2015 | Nation (public) | 49 | 281 | 29* | 71* | 32 | 7* |
|  | Wyoming | 48 | 288 | 20 | 80 | 36 | 8 |
| 2017 | Nation (public) | 49 | 282 | 31 | 69 | 33 | 9 |
|  | Wyoming | 49 | 289 | 20 | 80 | 38 | 8 |
| 2019 | Nation (public) | 49 | 282 | 31 | 69 | 33 | 9 |
|  | Wyoming | 50 | 288 | 22 | 78 | 39 | 9 |
| *Value is significantly different ( $p<.05$ ) from the value for the same jurisdiction and student group in 2019. |  |  |  |  |  |  |  |
| 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 NAEP Basic, 261 or lower; NAEP Basic, 262-298; NAEP Proficient, 299-332; and NAEP Advanced, 333 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP Advanced. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers. <br> SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990-2019 Mathematics Assessments. |  |  |  |  |  |  |  |

## Eligibility for Free/Reduced-Price School Lunch

NAEP collects data on eligibility for the federal program providing free or reduced-price school lunches. The free/reduced-price lunch component of the National School Lunch Program (NSLP) offered through the U.S. Department of Agriculture (USDA) is designed to ensure that children near or below the poverty line receive nourishing meals. Eligibility is determined through the USDA's Income Eligibility Guidelines, and 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.

As a result of the passage of the Healthy, Hunger-Free Kids Act of 2010, schools can use a new universal meal service option, the "Community Eligibility Provision" (CEP). Through CEP, eligible schools can provide meal service to all students at no charge, regardless of economic status and without the need to collect eligibility data through household applications. CEP became available nationwide in the 2014-2015 school year; as a result, the percentage of students in many states categorized as eligible for NSLP may have increased in comparison to 2013. Therefore, readers should interpret NSLP trend results with caution.

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

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

- In 2019, students in Wyoming eligible for free/reduced-price lunch had an average mathematics scale score of 236. This was lower than that of students in Wyoming not eligible for this program (252).
- In 2019, students in Wyoming who were eligible for free/reduced-price school lunch had an average scale score that was lower than that of students who were not eligible by 16 points. In 1996, the average scale score for students in Wyoming who were eligible for free/reduced-price school lunch was lower than the score of those not eligible by 15 points.
- Students in Wyoming eligible for free/reduced-price lunch had an average scale score (236) in 2019 that was higher than that of students in the nation who were eligible (229).
- In Wyoming, students eligible for free/reduced-price lunch had an average mathematics scale score in 2019 that was higher than that of eligible students in 1996, 2000, and 2003, but not significantly different from that of eligible students in 2005, 2007, 2009, 2011, 2013, 2015, and 2017.


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

- In Wyoming, 33 percent of students who were eligible for free/reduced-price lunch and 56 percent of those who were not eligible for this program performed at or above NAEP Proficient in 2019. These percentages were significantly different from one another.
- For students in Wyoming in 2019 who were eligible for free/reduced-price lunch, the percentage at or above NAEP Proficient (33 percent) was greater than the corresponding percentage for their counterparts around the nation (26 percent).
- In Wyoming, the percentage of students eligible for free/reduced-price lunch who performed at or above NAEP Proficient in 2019 was greater than the corresponding percentages in 1996, 2000, and 2003, but not significantly different from the corresponding percentages in 2005, 2007, 2009, 2011, 2013, 2015, and 2017.

Table 6-A

The Nation's Report Card 2019 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, 1996-2019

| Eligibility status, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | At NAEP Advanced |
| Eligible |  |  |  |  |  |  |  |
| $1996{ }^{1}$ | Nation (public) |  | $34 *$ | 207* | 59* | 41* | 8* | \#* |
|  | Wyoming | 33 | 213* | 50* | 50* | 10* | \# |
| $2000{ }^{1}$ | Nation (public) | 35* | 210* | 54* | $46^{*}$ | 9* | \#* |
|  | Wyoming | 32 | 220* | 38* | 62* | $16 *$ | 1* |
| 2000 | Nation (public) | 40* | 208* | 57* | $43^{*}$ | 7* | \#* |
|  | Wyoming | 33 | 219* | 41* | 59* | 15* | 1* |
| 2003 | Nation (public) | 44* | 222* | 38* | 62* | 15* | 1* |
|  | Wyoming | 35 | 233* | 20 | 80 | 25* | 2* |
| 2005 | Nation (public) | $46^{*}$ | 225* | 33* | $67^{*}$ | 19* | 1* |
|  | Wyoming | 36 | 236 | 19 | 81 | 32 | 3 |
| 2007 | Nation (public) | 46* | 227* | 30 | 70 | 22* | 1* |
|  | Wyoming | 36 | 236 | 18 | 82 | 32 | $2^{*}$ |
| 2009 | Nation (public) | 48* | 228* | 29 | 71 | 22* | 1* |
|  | Wyoming | 35 | 234 | 21 | 79 | 29 | 2* |
| 2011 | Nation (public) | 52* | 229 | 27* | 73* | 24* | 2* |
|  | Wyoming | 41* | 236 | 19 | 81 | 32 | 3* |
| 2013 | Nation (public) | 54 | 230* | $27^{*}$ | 73* | 26 | 2* |
|  | Wyoming | 40* | 239 | 16* | 84* | 35 | 3 |
| 2015 | Nation (public) | 55* | 229 | 28 | 72 | 24 | 2* |
|  | Wyoming | 41* | 237 | 19 | 81 | 34 | 4 |
| 2017 | Nation (public) | 54 | 228* | 31* | 69* | 25 | 3 |
|  | Wyoming | 41* | 239 | 18 | 82 | 38 | 6 |
| 2019 | Nation (public) | 54 | 229 | 29 | 71 | 26 | 3 |
|  | Wyoming | 37 | 236 | 22 | 78 | 33 | 5 |

See notes at end of table.

Table 6-A

The Nation's Report Card 2019 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, 1996-2019-Continued

| Eligibility status, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | At NAEP Advanced |
| Not eligible |  |  |  |  |  |  |  |
| $1996{ }^{1}$ | Nation (public) |  | 52* | 231* | $27^{*}$ | 73* | 25* | 3* |
|  | Wyoming | 64 | 228* | 29* | 71* | $23^{*}$ | 2* |
| $2000^{1}$ | Nation (public) | 52* | 236* | 21* | 79* | $33^{*}$ | 4* |
|  | Wyoming | 60 | 234* | 21* | 79* | $30^{*}$ | 2* |
| 2000 | Nation (public) | 49 | 235* | 23* | 77* | $32^{*}$ | 4* |
|  | Wyoming | 59 | 234* | 22* | 78* | 30* | 3* |
| 2003 | Nation (public) | 52* | 244* | 12* | 88* | 45* | $6 *$ |
|  | Wyoming | 63 | 246* | 8 | 92 | 47* | 5* |
| 2005 | Nation (public) | 52* | $248 *$ | 10 | 90 | $50^{*}$ | 8* |
|  | Wyoming | 60 | 247* | 9 | 91 | 49* | 7* |
| 2007 | Nation (public) | $53^{*}$ | 249* | 9 | 91 | $53^{*}$ | 9* |
|  | Wyoming | 64 | 248* | 8 | 92 | 51 | $6 *$ |
| 2009 | Nation (public) | 51* | 250* | 9 | 91 | $54 *$ | 10* |
|  | Wyoming | 65 | 246* | 8 | 92 | 47* | 5* |
| 2011 | Nation (public) | 47* | 252 | 8* | 92* | 57 | 12* |
|  | Wyoming | 59* | 249* | 7 | 93 | 52 | 7* |
| 2013 | Nation (public) | 46 | 254 | 7* | 93* | 60* | $14^{*}$ |
|  | Wyoming | 60* | 252 | 6 | 94 | 56 | 9 |
| 2015 | Nation (public) | 44* | 253 | 8* | 92* | 58 | $13^{*}$ |
|  | Wyoming | 59* | 253 | 7 | 93 | 58 | 12 |
| 2017 | Nation (public) | 45 | 253 | 9 | 91 | 57 | 14 |
|  | Wyoming | 58* | 254 | 7 | 93 | 60 | 13 |
| 2019 | Nation (public) | 45 | 253 | 9 | 91 | 58 | 15 |
|  | Wyoming | 63 | 252 | 8 | 92 | 56 | 11 |

See notes at end of table.

Table 6-A

The Nation's Report Card 2019 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, 1996-2019—Continued

| Eligibility status, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | $\begin{array}{r} \text { At } \\ \text { NAEP } \\ \text { Advanced } \end{array}$ |
| Information not available |  |  |  |  |  |  |  |  |
| $1996{ }^{1}$ | Nation (public) | 13* | 230 | 28 | 72 | 28 | 3* |
|  | Wyoming | 3 | 224 | 35 | 65 | 22 | 2 |
| $2000{ }^{1}$ | Nation (public) | 13* | 235 | 23 | 77 | 35 | 3* |
|  | Wyoming | 8 | 227 | 29 | 71 | 23 | 1 |
| 2000 | Nation (public) | 11* | 236 | 22 | 78 | 35 | 4* |
|  | Wyoming | 8 | 227 | 30 | 70 | 21 | 2 |
| 2003 | Nation (public) | 4* | 235 | 23 | 77 | 34 | 4* |
|  | Wyoming | 2* | 227 | 31 | 69 | 22 | 3 |
| 2005 | Nation (public) | 2* | 237 | 21 | 79 | 36 | 5* |
|  | Wyoming | 3* | 244 | 18 | 82 | 51 | 5 |
| 2007 | Nation (public) | 1 | 243 | 17 | 83 | 44 | 8 |
|  | Wyoming | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2009 | Nation (public) | 1 | 240 | 22 | 78 | 42 | 7 |
|  | Wyoming | \#* | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2011 | Nation (public) | \#* | 247 | 12* | 88* | 49 | 10 |
|  | Wyoming | \#* | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2013 | Nation (public) | 1 | 255 | 9* | 91* | 60* | 18 |
|  | Wyoming | \#* | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2015 | Nation (public) | 1 | 246 | 15 | 85 | 49 | 11 |
|  | Wyoming | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2017 | Nation (public) | 1 | 238 | 22 | 78 | 38 | 8 |
|  | Wyoming | \#* | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2019 | Nation (public) | 1 | 239 | 20 | 80 | 40 | 9 |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |

\# Rounds to zero.
$\ddagger$ Reporting standards not met.

* Value is significantly different ( $p<.05$ ) from the value for the same jurisdiction and student group in 2019.
${ }^{1}$ Accommodations were not permitted for this assessment.
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 NAEP Basic, 213 or lower; NAEP Basic, 214-248; NAEP Proficient, 249-281; and NAEP Advanced, 282 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP 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, 1996-2019 Mathematics Assessments.


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

- In 2019, students in Wyoming eligible for free/reduced-price lunch had an average mathematics scale score of 273. This was lower than that of students in Wyoming not eligible for this program (294).
- In 2019, students in Wyoming who were eligible for free/reduced-price school lunch had an average scale score that was lower than that of students who were not eligible by 21 points. This performance gap was wider than that of 1996 (15 points).
- Students in Wyoming eligible for free/reduced-price lunch had an average scale score (273) in 2019 that was higher than that of students in the nation who were eligible (266).
- In Wyoming, students eligible for free/reduced-price lunch had an average mathematics scale score in 2019 that was higher than that of eligible students in 1996 and 2000, but lower than that of eligible students in 2013, and not significantly different from that of eligible students in 2003, 2005, 2007, 2009, 2011, 2015, and 2017.


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

- In Wyoming, 24 percent of students who were eligible for free/reduced-price lunch and 44 percent of those who were not eligible for this program performed at or above NAEP Proficient in 2019. These percentages were significantly different from one another.
- For students in Wyoming in 2019 who were eligible for free/reduced-price lunch, the percentage at or above NAEP Proficient ( 24 percent) was greater than the corresponding percentage for their counterparts around the nation (18 percent).
- In Wyoming, the percentage of students eligible for free/reduced-price lunch who performed at or above NAEP Proficient in 2019 was greater than the corresponding percentages in 1996, 2000, 2003, and 2005, but not significantly different from the corresponding percentages in 2007, 2009, 2011, 2013, 2015, and 2017.

Table 6-B

The Nation's Report Card 2019 State Assessment
Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by National School Lunch Program eligibility status, year, and jurisdiction: Various years, 1996-2019

| Eligibility status, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | At NAEP Advanced |
| Eligible |  |  |  |  |  |  |  |
| $1996{ }^{1}$ | Nation (public) |  | $30^{*}$ | 252* | 61* | 39* | 8* | 1* |
|  | Wyoming | 21* | 262* | $46^{*}$ | 54* | 11* | 1 |
| $2000^{1}$ | Nation (public) | 28* | 255* | $56^{*}$ | 44* | $10^{*}$ | 1* |
|  | Wyoming | $24 *$ | 265* | 44* | $56^{*}$ | 15* | 1 |
| 2000 | Nation (public) | 31* | 253* | 59* | 41* | 10* | 1* |
|  | Wyoming | $26 *$ | 262* | $46^{*}$ | 54* | 14* | 2 |
| 2003 | Nation (public) | 36* | 258* | $53^{*}$ | 47* | 11* | 1* |
|  | Wyoming | $27^{*}$ | 271 | 38 | 62 | 18* | 1 |
| 2005 | Nation (public) | 39* | 261* | 49* | 51* | $13^{*}$ | 1* |
|  | Wyoming | 30* | 272 | 35 | 65 | 17* | 1 |
| 2007 | Nation (public) | 41* | 265 | 45 | 55 | 15* | 2* |
|  | Wyoming | 28* | 275 | 33 | 67 | 23 | 3 |
| 2009 | Nation (public) | 43* | 266 | 43* | 57* | $17^{*}$ | 2* |
|  | Wyoming | 29* | 274 | 33 | 67 | 20 | 2 |
| 2011 | Nation (public) | 48* | 269* | 41* | 59* | 19 | 2* |
|  | Wyoming | 35 | 277 | 30 | 70 | 26 | 4 |
| 2013 | Nation (public) | 50 | 270* | 39* | $61^{*}$ | 20 | 3* |
|  | Wyoming | 36* | 279* | 28* | 72* | 26 | 3 |
| 2015 | Nation (public) | 52* | 268* | 42* | 58* | 18 | 2* |
|  | Wyoming | 35 | 274 | 35 | 65 | 20 | 3 |
| 2017 | Nation (public) | 49 | 267 | 45 | 55 | 18 | 3 |
|  | Wyoming | 37* | 276 | 32 | 68 | 24 | 3 |
| 2019 | Nation (public) | 50 | 266 | 46 | 54 | 18 | 3 |
|  | Wyoming | 34 | 273 | 36 | 64 | 24 | 3 |

See notes at end of table.

Table 6-B

The Nation's Report Card 2019 State Assessment
Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by National School Lunch Program eligibility status, year, and jurisdiction: Various years, 1996-2019—Continued

| Eligibility status, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | At NAEP Advanced |
| Not eligible |  |  |  |  |  |  |  |
| $1996{ }^{1}$ | Nation (public) |  | 56* | 279* | 29* | 71* | 29* | 5* |
|  | Wyoming | 73* | 277* | 28* | 72* | $24^{*}$ | 3* |
| $2000^{1}$ | Nation (public) | 55* | 285* | $24^{*}$ | 76* | $35^{*}$ | 7* |
|  | Wyoming | 72* | 281* | 25* | 75* | 28* | 4* |
| 2000 | Nation (public) | 54* | 283* | $26^{*}$ | 74* | $34 *$ | 7* |
|  | Wyoming | 70* | 281* | 25* | 75* | $27^{*}$ | 4* |
| 2003 | Nation (public) | 58* | 287* | 22* | 78* | 37* | 7* |
|  | Wyoming | 72* | 288* | 18 | 82 | $37^{*}$ | 5* |
| 2005 | Nation (public) | 59* | 288* | $21^{*}$ | 79* | $39^{*}$ | 8* |
|  | Wyoming | 70* | 287* | 19 | 81 | $34 *$ | 4* |
| 2007 | Nation (public) | 58* | 291* | 19 | 81 | 42* | $10^{*}$ |
|  | Wyoming | 72* | 291 | 15 | 85 | 41 | 8* |
| 2009 | Nation (public) | $56^{*}$ | 293* | 17 | 83 | 45* | 12* |
|  | Wyoming | 71* | 291 | 17 | 83 | 41 | 9 |
| 2011 | Nation (public) | 52* | 295 | 16* | 84* | 47 | 13* |
|  | Wyoming | 65 | 293 | 14 | 86 | 43 | 9 |
| 2013 | Nation (public) | 50 | 297 | $14^{*}$ | 86* | 49 | $14^{*}$ |
|  | Wyoming | 63 | 294 | 14 | 86 | 45 | 9 |
| 2015 | Nation (public) | 47* | 296 | 16* | $84^{*}$ | 48 | $13^{*}$ |
|  | Wyoming | 64 | 294 | 14 | 86 | 44 | 10 |
| 2017 | Nation (public) | 50 | 297 | 17 | 83 | 48 | 16 |
|  | Wyoming | 62* | 296 | 14 | 86 | 47 | 13 |
| 2019 | Nation (public) | 49 | 296 | 18 | 82 | 48 | 16 |
|  | Wyoming | 66 | 294 | 17 | 83 | 44 | 11 |

See notes at end of table.

Table 6-B

The Nation's Report Card 2019 State Assessment
Percentage of eighth-grade public school students, average scale score, and achievement-level results in NAEP mathematics, by National School Lunch Program eligibility status, year, and jurisdiction: Various years, 1996-2019—Continued

\# Rounds to zero.
$\ddagger$ Reporting standards not met.

* Value is significantly different ( $p<.05$ ) from the value for the same jurisdiction and student group in 2019.
${ }^{1}$ Accommodations were not permitted for this assessment.
NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500. Achievement levels correspond to the following points on the NAEP mathematics scales: below NAEP Basic, 261 or lower; NAEP Basic, 262-298; NAEP Proficient, 299-332; and NAEP Advanced, 333 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP 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, 1996-2019 Mathematics Assessments.


## Type of Location

NAEP results are reported for four mutually exclusive categories of school location: city, suburb, town, and rural. The categories are based on standard definitions established by the Federal Office of Management and Budget using population and geographic information from the U.S. Census Bureau. Schools are assigned to these categories in the NCES Common Core of Data based on their physical address.

In 2007, the classification system was revised; therefore, trend comparisons to previous years are not available. The new locale codes are based on an address's proximity to an urbanized area (a densely settled core with densely settled surrounding areas). The original system was based on metropolitan statistical areas. To distinguish the two systems, the new system is referred to as "urban-centric locale codes." The urban-centric locale code system classifies territory into four major types: city, suburban, town, and rural. Each type has three subcategories. For city and suburb, these are gradations of size-large, midsize, and small. Towns and rural areas are further distinguished by their distance from an urbanized area. They can be characterized as fringe, distant, or remote.

Tables 7-A and 7-B show percentage of students and average scale scores by NAEP achievement-level data for public school students at grades 4 and 8 in Wyoming and the nation, by type of location since 2007.

## Grade 4 Average Scale Score Results by Type of Location

- In 2019, the average scale score of students in Wyoming attending public schools in city locations was lower than the scores of students in town and rural schools.
- In 2019, students attending public schools in city, town, and rural locations in Wyoming had average scale scores that were higher than the average scale scores of students in city, town, and rural locations in the nation.
- In 2019, students attending public schools in city locations in Wyoming had an average scale score that was lower than the average scale score of students in city locations in 2011, 2013, 2015, and 2017 in Wyoming, but not significantly different from the average scale score of students in city locations in 2007 and 2009 in Wyoming.
- In 2019, students attending public schools in town locations in Wyoming had an average scale score that was higher than the average scale score of students in town locations in 2007, 2009, and 2011 in Wyoming, but not significantly different from the average scale score of students in town locations in 2013, 2015, and 2017 in Wyoming.
- In 2019, students attending public schools in rural locations in Wyoming had an average scale score that was higher than the average scale score of students in rural locations in 2009 in Wyoming, but not significantly different from the average scale score of students in rural locations in 2007, 2011, 2013, 2015, and 2017 in Wyoming.


## Grade 4 NAEP Achievement-Level Results by Type of Location

- In 2019, the percentage of students in Wyoming's public schools in city locations who performed at or above NAEP Proficient was smaller than the corresponding percentages of students in town and rural schools.
- The percentages of students in Wyoming's public schools in city, town, and rural locations who performed at or above NAEP Proficient in 2019 were greater than those of students in city, town, and rural locations in the nation.
- The percentage of students in Wyoming's public schools in city locations who performed at or above NAEP Proficient in 2019 was smaller than that of students in city locations in 2011, 2013, 2015, and 2017 in Wyoming, but not significantly different from that of students in city locations in 2007 and 2009 in Wyoming.
- The percentage of students in Wyoming's public schools in town locations who performed at or above NAEP Proficient in 2019 was greater than that of students in town locations in 2009 and 2011 in Wyoming, but not significantly different from that of students in town locations in 2007, 2013, 2015, and 2017 in Wyoming.
- The percentage of students in Wyoming's public schools in rural locations who performed at or above NAEP Proficient in 2019 was greater than that of students in rural locations in 2009 in Wyoming, but not significantly different from that of students in rural locations in 2007, 2011, 2013, 2015, and 2017 in Wyoming.

Table 7-A

The Nation's Report Card 2019 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, 2007-2019

| Type of location, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | At NAEP Advanced |
| City |  |  |  |  |  |  |  |
| 2007 | Nation (public) |  | 29 | 233* | 26 | 74 | 32* | 5* |
|  | Wyoming | 24 | 243 | 14 | 86 | 43 | 4 |
| 2009 | Nation (public) | 30 | 234 | 25 | 75 | 32 | 5* |
|  | Wyoming | 23 | 242 | 13 | 87 | 41 | 5 |
| 2011 | Nation (public) | 29* | 235 | 24 | 76 | 33 | 5* |
|  | Wyoming | $21^{*}$ | 246* | 12 | 88 | 48* | 6 |
| 2013 | Nation (public) | 30 | 236 | 24 | 76 | 35 | 7 |
|  | Wyoming | 22 | 247* | 9* | 91* | 49* | 7 |
| 2015 | Nation (public) | 31 | 236 | 24 | 76 | 35 | 7 |
|  | Wyoming | 23 | 249* | 10* | 90* | 52* | 8 |
| 2017 | Nation (public) | 30 | 234 | $27^{*}$ | 73* | 33 | 7 |
|  | Wyoming | 22 | 248* | 11 | 89 | 51* | 10 |
| 2019 | Nation (public) | 30 | 235 | 26 | 74 | 35 | 7 |
|  | Wyoming | 25 | 240 | 17 | 83 | 40 | 7 |
| Suburb |  |  |  |  |  |  |  |
| 2007 | Nation (public) | $37^{*}$ | 243 | 15* | 85* | 44 | 7* |
|  | Wyoming | 3 * | 238 | 19 | 81 | 30 | 5 |
| 2009 | Nation (public) | 36 * | 243 | 16 | 84 | 44 | 7* |
|  | Wyoming | $3^{*}$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2011 | Nation (public) | 36* | 244 | 15 | 85 | 45 | 8* |
|  | Wyoming | 3* | 240 | 15 | 85 | 34 | 6 |
| 2013 | Nation (public) | 35* | 244 | 15 | 85 | 46 | 9 |
|  | Wyoming | 3* | 241 | 14 | 86 | 35 | 9 |
| 2015 | Nation (public) | 41 | 243 | 16 | 84 | 44 | 9* |
|  | Wyoming | 3 * | 243 | 12 | 88 | 39 | 6 |
| 2017 | Nation (public) | 40 | 243 | 18 | 82 | 45 | 10 |
|  | Wyoming | $3 *$ | 246 | 15 | 85 | 47 | 11 |
| 2019 | Nation (public) | 40 | 244 | 16 | 84 | 46 | 11 |
|  | Wyoming | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |

See notes at end of table.

Table
The Nation's Report Card 2019 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, 2007-2019—Continued

| Type of location, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | $\begin{array}{r} \text { At } \\ \text { NAEP } \\ \text { Advanced } \end{array}$ |
| Town |  |  |  |  |  |  |  |  |
| 2007 | Nation (public) | 12* | 238 | 18* | 82* | 36 | 4* |
|  | Wyoming | 40* | 245* | 10 | 90 | 45 | 5* |
| 2009 | Nation (public) | 12* | 237 | 19 | 81 | 35 | 4* |
|  | Wyoming | 41* | 242* | 11 | 89 | 40* | 3* |
| 2011 | Nation (public) | 13* | 237 | 19 | 81 | 35 | 4* |
|  | Wyoming | 41* | 242* | 12 | 88 | 40* | 4* |
| 2013 | Nation (public) | 11 | 240* | 17* | 83* | 39 | 6 |
|  | Wyoming | 37* | 247 | 9 | 91 | 49 | 7 |
| 2015 | Nation (public) | 11 | 237 | 20 | 80 | 35 | 5 |
|  | Wyoming | 45 | 247 | 12 | 88 | 48 | 10 |
| 2017 | Nation (public) | 11 | 237 | 21 | 79 | 36 | 6 |
|  | Wyoming | 46 | 248 | 11 | 89 | 52 | 10 |
| 2019 | Nation (public) | 10 | 237 | 21 | 79 | 37 | 6 |
|  | Wyoming | 45 | 248 | 11 | 89 | 50 | 10 |
| Rural |  |  |  |  |  |  |  |
| 2007 | Nation (public) | 22* | 240 | 16* | 84* | 39 | 5* |
|  | Wyoming | $34 *$ | 244 | 11 | 89 | 45 | 4* |
| 2009 | Nation (public) | 22* | 240 | 16* | 84* | 39 | 5* |
|  | Wyoming | 33* | 242* | 13 | 87 | 41* | 4* |
| 2011 | Nation (public) | 23* | 243* | 15* | 85* | 42 | 6 |
|  | Wyoming | 35* | 245 | 11 | 89 | 46 | 6 |
| 2013 | Nation (public) | 25* | 243* | 14* | 86* | 44* | 7 |
|  | Wyoming | 37* | 246 | 11 | 89 | 47 | 6 |
| 2015 | Nation (public) | 18 | 241 | 16 | 84 | 40 | 6 |
|  | Wyoming | 29 | 246 | 12 | 88 | 47 | 8 |
| 2017 | Nation (public) | 19 | 240 | 18 | 82 | 41 | 7 |
|  | Wyoming | 29 | 247 | 11 | 89 | 48 | 10 |
| 2019 | Nation (public) | 19 | 240 | 18 | 82 | 40 | 7 |
|  | Wyoming | 29 | 248 | 12 | 88 | 51 | 9 |

$\ddagger$ Reporting standards not met.

* Value is significantly different ( $p<.05$ ) from the value for the same jurisdiction and student group in 2019.

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 NAEP Basic,
213 or lower; NAEP Basic, 214-248; NAEP Proficient, 249-281; and NAEP Advanced, 282 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP 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, 2007-2019 Mathematics Assessments.

## Grade 8 Average Scale Score Results by Type of Location

- In 2019, the average scale score of students in Wyoming attending public schools in city locations was lower than the score of students in town schools, but was not significantly different from the score of students in rural schools.
- In 2019, students attending public schools in city and town locations in Wyoming had average scale scores that were higher than the average scale scores of students in city and town locations in the nation.
- In 2019, students attending public schools in rural locations in Wyoming had an average scale score that was not significantly different from the average scale score of students in rural locations in the nation.
- In 2019, students attending public schools in city and town locations in Wyoming 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, 2013, 2015, and 2017 in Wyoming.
- In 2019, students attending public schools in rural locations in Wyoming had an average scale score that was lower than the average scale score of students in rural locations in 2017 in Wyoming, but not significantly different from the average scale score of students in rural locations in 2007, 2009, 2011, 2013, and 2015 in Wyoming.


## Grade 8 NAEP Achievement-Level Results by Type of Location

- In 2019, the percentage of students in Wyoming's public schools in city locations who performed at or above NAEP Proficient was not significantly different from the corresponding percentages of students in town and rural schools.
- The percentages of students in Wyoming's public schools in city and town locations who performed at or above NAEP Proficient in 2019 were greater than those of students in city and town locations in the nation.
- The percentage of students in Wyoming's public schools in rural locations who performed at or above NAEP Proficient in 2019 was not significantly different from those of students in rural locations in the nation.
- The percentages of students in Wyoming's public schools in city, town, and rural locations who performed at or above NAEP Proficient in 2019 were not significantly different from those of students in city, town, and rural locations in 2007, 2009, 2011, 2013, 2015, and 2017 in Wyoming.

Table 7-B

The Nation's Report Card 2019 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, 2007-2019

| Type of location, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{r} \text { Below } \\ \text { NAEP Basic } \end{array}$ |  | At or above NAEP Basic | At or above NAEP Proficient | $\begin{array}{r} \text { At } \\ \text { NAEP } \\ \text { Advanced } \end{array}$ |
| City |  |  |  |  |  |  |  |  |
| 2007 | Nation (public) | 28 | 273* | 38 | 62 | 25* | 5* |
|  | Wyoming | 20* | 285 | 21 | 79 | 33 | 5 |
| 2009 | Nation (public) | $27 *$ | 276 | 36* | $64 *$ | 28 | 6* |
|  | Wyoming | 19* | 285 | 22 | 78 | 35 | 7 |
| 2011 | Nation (public) | 29 | 277 | $34 *$ | 66* | 29 | 7* |
|  | Wyoming | 23* | 286 | $21^{*}$ | 79* | 34 | 7 |
| 2013 | Nation (public) | 28* | 278* | 34* | 66* | 29 | 7* |
|  | Wyoming | 23* | 287 | 20* | 80* | 36 | 5 |
| 2015 | Nation (public) | 29 | 276 | 35* | 65* | 28 | 7* |
|  | Wyoming | 28 | 284 | 24 | 76 | 33 | 5 |
| 2017 | Nation (public) | 29 | 277 | 37 | 63 | 29 | 9 |
|  | Wyoming | 30* | 284 | 25 | 75 | 33 | 6 |
| 2019 | Nation (public) | 29 | 276 | 38 | 62 | 28 | 9 |
|  | Wyoming | 28 | 283 | 28 | 72 | 35 | 8 |
| Suburb |  |  |  |  |  |  |  |
| 2007 | Nation (public) | 36* | 285 | 26* | 74* | 36 | 9* |
|  | Wyoming | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2009 | Nation (public) | 36* | 286 | 25* | 75* | 37 | 10* |
|  | Wyoming | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2011 | Nation (public) | $36^{*}$ | 286 | 25* | 75* | 37 | 9* |
|  | Wyoming | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2013 | Nation (public) | 35* | 288* | 24* | 76* | 39 | 10* |
|  | Wyoming | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2015 | Nation (public) | 41 | 285 | 26 | 74 | 37 | 10* |
|  | Wyoming | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2017 | Nation (public) | 41 | 287 | 27 | 73 | 39 | 12 |
|  | Wyoming | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2019 | Nation (public) | 40 | 286 | 28 | 72 | 38 | 12 |
|  | Wyoming | \# | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |

See notes at end of table.

Table

The Nation's Report Card 2019 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, 2007-2019—Continued

| Type of location, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{r} \text { Below } \\ \text { NAEP Basic } \end{array}$ |  | At or above NAEP Basic | At or above NAEP Proficient | $\begin{array}{r} \text { At } \\ \text { NAEP } \\ \text { Advanced } \end{array}$ |
| Town |  |  |  |  |  |  |  |  |
| 2007 | Nation (public) | 13* | 280* | 29* | 71* | 29 | 5* |
|  | Wyoming | 44* | 290 | 17 | 83 | 39 | 7 |
| 2009 | Nation (public) | $14 *$ | 279 | 30* | 70* | 29 | 5* |
|  | Wyoming | 42* | 286 | 23 | 77 | 35 | 7 |
| 2011 | Nation (public) | 13* | 281* | 28* | 72* | $31^{*}$ | 6 |
|  | Wyoming | 41* | 290 | 18 | 82 | 39 | 8 |
| 2013 | Nation (public) | 13* | 281* | $28^{*}$ | 72* | 32* | 6 |
|  | Wyoming | 48 | 290 | 18 | 82 | 39 | 8 |
| 2015 | Nation (public) | 12 | 279 | 30* | 70* | 28 | 5* |
|  | Wyoming | 51* | 289 | 20 | 80 | 37 | 9 |
| 2017 | Nation (public) | 11 | 278 | 33 | 67 | 28 | 6 |
|  | Wyoming | 48 | 292 | 18 | 82 | 41 | 11 |
| 2019 | Nation (public) | 12 | 276 | 35 | 65 | 28 | 6 |
|  | Wyoming | 49 | 290 | 20 | 80 | 40 | 9 |
| Rural |  |  |  |  |  |  |  |
| 2007 | Nation (public) | 22* | 282 | 26* | 74* | 32 | 6* |
|  | Wyoming | $37^{*}$ | 285 | 23 | 77 | 34 | 7 |
| 2009 | Nation (public) | 23* | 284 | 25* | 75* | 33 | 7* |
|  | Wyoming | 39* | 286 | 21 | 79 | 34 | 6 |
| 2011 | Nation (public) | 23* | 286* | 23* | 77* | 35* | 7 |
|  | Wyoming | $36^{*}$ | 287 | 20* | 80* | 38 | 7 |
| 2013 | Nation (public) | $24 *$ | 286* | 24* | 76* | $36 *$ | 8 |
|  | Wyoming | 29* | 287 | 20 | 80 | 37 | 5 |
| 2015 | Nation (public) | 19 | 282 | 27 | 73 | 31 | 6* |
|  | Wyoming | 22* | 285 | 23 | 77 | 35 | 7 |
| 2017 | Nation (public) | 19 | 282 | 29 | 71 | 32 | 8 |
|  | Wyoming | 22 | 289* | 20 | 80 | 39 | 10 |
| 2019 | Nation (public) | 19 | 282 | 29 | 71 | 33 | 8 |
|  | Wyoming | 23 | 284 | 26 | 74 | 34 | 8 |

\# Rounds to zero.
$\ddagger$ Reporting standards not met.

* Value is significantly different $(p<05)$ from the value for the same jurisdiction and student group in 2019.

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 NAEP Basic, 261 or lower; NAEP Basic, 262-298; NAEP Proficient, 299-332; and NAEP Advanced, 333 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP
Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP 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, 2007-2019 Mathematics Assessments.

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

It is important for NAEP to assess as many students selected to participate as possible. Assessing representative samples of students, including students with disabilities (SD) and English language learners (ELL), helps to ensure that NAEP results accurately reflect the educational performance of all students in the target population, and can continue to serve as a meaningful measure of U.S. students' academic achievement over time.

In March 2010, the National Center for Education Statistics (NCES), working with the National Assessment Governing Board (Governing Board), adopted a new policy to maximize the participation of students with disabilities (SD) and English language learners (ELL).

Today, NAEP continues to explore ways to ensure consistent, inclusive assessment and reporting across all jurisdictions and student populations.

Tables 9-A and 9-B display data for grades 4 and 8 grade students in Wyoming 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 9-A and 9-B show the percentages of students assessed in Wyoming by disability status and their performance on the NAEP assessment in terms of average scale scores and percentages performing below NAEP Basic, at or above NAEP Basic, at or above NAEP Proficient, and at NAEP Advanced for grades 4 and 8.

Tables 10-A and 10-B present the percentages of students assessed in Wyoming by ELL status, their average scale scores, and their performance in terms of the percentages below NAEP Basic, at or above NAEP Basic, at or above NAEP Proficient, and at NAEP Advanced for grades 4 and 8 .

Tables 11-A and 11-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 2019 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, 1992-2019

| Year and testing status |  | SD and/or ELL |  | SD |  | ELL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Wyoming | Nation (public) | Wyoming | Nation (public) | Wyoming | Nation (public) |
| $1992{ }^{1}$ | Identified | 10 | 10 | 9 | 7 | 1 | 3 |
|  | Excluded | 4 | 7 | 3 | 5 | \# | 2 |
|  | Assessed without accommodations | 7 | 4 | 6 | 3 | 1 | 1 |
| $1996{ }^{1}$ | Identified | 13 | 16 | 12 | 12 | 1 | 4 |
|  | Excluded | 4 | 6 | 4 | 5 | \# | 2 |
|  | Assessed without accommodations | 9 | 9 | 8 | 7 | \# | 2 |
| 2000 | Identified | 15 | 19 | 14 | 13 | 2 | 7 |
|  | Excluded | 2 | 4 | 2 | 3 | \# | 1 |
|  | Assessed without accommodations | 8 | 10 | 6 | 5 | 2 | 5 |
|  | Assessed with accommodations | 6 | 5 | 6 | 4 | \# | 1 |
| 2003 | Identified | 18 | 22 | 15 | 14 | 4 | 11 |
|  | Excluded | 1 | 4 | 1 | 3 | \# | 1 |
|  | Assessed without accommodations | 6 | 10 | 3 | 4 | 3 | 7 |
|  | Assessed with accommodations | 11 | 8 | 11 | 7 | 1 | 2 |
| 2005 | Identified | 19 | 23 | 15 | 14 | 5 | 10 |
|  | Excluded | 2 | 3 | 1 | 3 | \# | 1 |
|  | Assessed without accommodations | 6 | 10 | 3 | 4 | 3 | 7 |
|  | Assessed with accommodations | 11 | 10 | 11 | 8 | 1 | 3 |
| 2007 | Identified | 18 | 23 | 15 | 14 | 4 | 11 |
|  | Excluded | 2 | 3 | 2 | 3 | \# | 1 |
|  | Assessed without accommodations | 6 | 10 | 4 | 3 | 2 | 7 |
|  | Assessed with accommodations | 10 | 10 | 9 | 8 | 1 | 3 |
| 2009 | Identified | 18 | 23 | 16 | 13 | 2 | 10 |
|  | Excluded | 1 | 2 | 1 | 2 | \# | 1 |
|  | Assessed without accommodations | 5 | 9 | 4 | 3 | 1 | 6 |
|  | Assessed with accommodations | 12 | 11 | 11 | 8 | 1 | 4 |
| 2011 | Identified | 19 | 23 | 16 | 13 | 4 | 11 |
|  | Excluded | 2 | 2 | 2 | 2 | \# | \# |
|  | Assessed without accommodations | 5 | 9 | 4 | 3 | 2 | 6 |
|  | Assessed with accommodations | 12 | 12 | 11 | 9 | 2 | 4 |
| 2013 | Identified | 18 | 23 | 15 | 14 | 3 | 11 |
|  | Excluded | 1 | 2 | 1 | 1 | \# | \# |
|  | Assessed without accommodations | 4 | 7 | 3 | 2 | 1 | 5 |
|  | Assessed with accommodations | 13 | 14 | 11 | 10 | 2 | 5 |
| 2015 | Identified | 18 | 24 | 15 | 14 | 4 | 12 |
|  | Excluded | 1 | 2 | 1 | 1 | \# | 1 |
|  | Assessed without accommodations | 4 | 8 | 3 | 3 | 2 | 6 |
|  | Assessed with accommodations | 13 | 14 | 12 | 11 | 2 | 5 |
| 2017 | Identified | 17 | 25 | 15 | 15 | 3 | 12 |
|  | Excluded | 1 | 2 | 1 | 2 | \# | 1 |
|  | Assessed without accommodations | 5 | 10 | 4 | 4 | 1 | 7 |
|  | Assessed with accommodations | 10 | 13 | 10 | 9 | 1 | 5 |
| 2019 | Identified | 20 | 27 | 17 | 16 | 4 | 13 |
|  | Excluded | 1 | 2 | 1 | 2 | \# | 1 |
|  | Assessed without accommodations | 5 | 10 | 3 | 3 | 2 | 7 |
|  | Assessed with accommodations | 14 | 15 | 13 | 11 | 2 | 6 |

[^0]${ }^{1}$ Accommodations were not permitted for this assessment year.
NOTE: Students identified as both SD and ELL were counted only once under the combined SD and/or ELL category, but were counted separately under the SD and ELL
categories. Detail may not sum to totals because of rounding
 years, 1992-2019 Mathematics Assessments.

Table
9-B

The Nation's Report Card 2019 State Assessment
Percentage of eighth-grade public school students identified as students with disabilities (SD) and/or English language learners (ELL) excluded and assessed in NAEP mathematics as a percentage of all students, by assessment year and testing status: Various years, 1990-2019

| Year and testing status |  | SD and/or ELL |  | SD |  | ELL |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Wyoming | Nation (public) | Wyoming | Nation (public) | Wyoming | Nation (public) |
| $1990{ }^{1}$ | Identified | 8 | - | 8 | - | 1 | - |
|  | Excluded | 3 | - | 3 | - | \# | - |
|  | Assessed without accommodations | 5 | - | 4 | - | \# | - |
| $1992{ }^{1}$ | Identified | 9 | 10 | 9 | 8 | \# | 2 |
|  | Excluded | 4 | 6 | 4 | 5 | \# | 2 |
|  | Assessed without accommodations | 5 | 4 | 5 | 3 | \# | 1 |
| $1996{ }^{1}$ | Identified | 10 | 11 | 10 | 9 | 1 | 3 |
|  | Excluded | 2 | 5 | 2 | 4 | \# | 1 |
|  | Assessed without accommodations | 8 | 7 | 8 | 5 | 1 | 2 |
| 2000 | Identified | 13 | 14 | 12 | 11 | 2 | 4 |
|  | Excluded | 1 | 4 | 1 | 3 | \# | 1 |
|  | Assessed without accommodations | 9 | 7 | 8 | 5 | 2 | 3 |
|  | Assessed with accommodations | 3 | 3 | 3 | 2 | \# | 1 |
| 2003 | Identified | 17 | 19 | 15 | 14 | 3 | 6 |
|  | Excluded | 1 | 4 | 1 | 3 | \# | 1 |
|  | Assessed without accommodations | 6 | 8 | 4 | 5 | 2 | 4 |
|  | Assessed with accommodations | 10 | 7 | 9 | 6 | 1 | 1 |
| 2005 | Identified | 17 | 19 | 14 | 13 | 4 | 6 |
|  | Excluded | 2 | 4 | 2 | 3 | \# | 1 |
|  | Assessed without accommodations | 5 | 7 | 3 | 3 | 3 | 4 |
|  | Assessed with accommodations | 10 | 8 | 10 | 7 | 1 | 1 |
| 2007 | Identified | 15 | 18 | 13 | 13 | 3 | 7 |
|  | Excluded | 2 | 4 | 2 | 4 | \# | 1 |
|  | Assessed without accommodations | 4 | 6 | 3 | 2 | 1 | 4 |
|  | Assessed with accommodations | 9 | 8 | 9 | 6 | 1 | 2 |
| 2009 | Identified | 15 | 18 | 14 | 13 | 2 | 6 |
|  | Excluded | 2 | 3 | 2 | 3 | \# | \# |
|  | Assessed without accommodations | 3 | 5 | 2 | 2 | 1 | 3 |
|  | Assessed with accommodations | 10 | 10 | 10 | 8 | 1 | 2 |
| 2011 | Identified | 14 | 18 | 13 | 13 | 2 | 6 |
|  | Excluded | 1 | 3 | 1 | 2 | \# | \# |
|  | Assessed without accommodations | 2 | 5 | 1 | 2 | 1 | 3 |
|  | Assessed with accommodations | 11 | 10 | 10 | 9 | 1 | 2 |
| 2013 | Identified | 16 | 17 | 14 | 13 | 2 | 6 |
|  | Excluded | 2 | 2 | 1 | 1 | \# | \# |
|  | Assessed without accommodations | 2 | 3 | 1 | 1 | \# | 2 |
|  | Assessed with accommodations | 13 | 12 | 11 | 10 | 2 | 3 |
| 2015 | Identified | 16 | 19 | 14 | 13 | 3 | 7 |
|  | Excluded | 1 | 2 | 1 | 1 | \# | \# |
|  | Assessed without accommodations | 2 | 5 | 1 | 1 | 1 | 3 |
|  | Assessed with accommodations | 13 | 13 | 12 | 11 | 1 | 3 |
| 2017 | Identified | 15 | 20 | 14 | 14 | 2 | 7 |
|  | Excluded | 1 | 2 | 1 | 1 | \# | 1 |
|  | Assessed without accommodations | 3 | 6 | 2 | 3 | 1 | 3 |
|  | Assessed with accommodations | 11 | 12 | 11 | 10 | 1 | 3 |
| 2019 | Identified | 16 | 21 | 15 | 15 | 2 | 8 |
|  | Excluded | 2 | 2 | 2 | 1 | \# | 1 |
|  | Assessed without accommodations | 3 | 6 | 1 | 2 | 1 | 4 |
|  | Assessed with accommodations | 12 | 13 | 12 | 11 | 1 | 3 |

- Not available.
\# Rounds to zero.
${ }^{1}$ Accommodations were not permitted for this assessment year.
NOTE: Students identified as both SD and ELL were counted only once under the combined SD and/or ELL category, but were counted separately under the SD and ELL categories. Detail may not sum to totals because of rounding
 years, 1990-2019 Mathematics Assessments.

Table 9-A

The Nation's Report Card 2019 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, 20002019

| SD status, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | At NAEP Advanced |
| SD |  |  |  |  |  |  |  |
| 2000 | Nation (public) |  | 10* | 198* | 71* | 29* | 6* | 1* |
|  | Wyoming | 12* | 200* | 65* | 35* | 6* | \# |
| 2003 | Nation (public) | 11* | 214 | 50 | 50 | 12* | 1* |
|  | Wyoming | $14 *$ | 221 | 39 | 61 | 13 | 1 |
| 2005 | Nation (public) | 12* | 218* | 44* | 56* | 16 | 2* |
|  | Wyoming | 14* | 219 | 44 | 56 | 13 | 1 |
| 2007 | Nation (public) | 11* | 220* | 40* | 60* | 19* | 2 |
|  | Wyoming | 14* | 224 | 36 | 64 | 19 | 1 |
| 2009 | Nation (public) | 12* | 220* | 41* | 59* | 19* | 2 |
|  | Wyoming | 15 | 227* | 31* | 69* | 20 | 2 |
| 2011 | Nation (public) | 12* | 218* | 45* | 55* | 17 | 2* |
|  | Wyoming | 15 | 226* | 32* | 68* | 20 | 1 |
| 2013 | Nation (public) | 13* | 218* | 45* | 55* | 18 | 2 |
|  | Wyoming | 15 | 229* | 29* | 71* | 22 | 2 |
| 2015 | Nation (public) | 13* | 217* | 46* | 54* | 16 | 2 |
|  | Wyoming | 15 | 224 | 36 | 64 | 19 | 2 |
| 2017 | Nation (public) | $13^{*}$ | 214 | 52 | 48 | 16 | 2 |
|  | Wyoming | 14* | 222 | 42 | 58 | 21 | 4 |
| 2019 | Nation (public) | 14 | 214 | 51 | 49 | 16 | 3 |
|  | Wyoming | 16 | 220 | 44 | 56 | 18 | 3 |

See notes at end of table.

Table 9-A

The Nation's Report Card 2019 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, 20002019—Continued

| SD status, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | $\begin{array}{r} \text { At } \\ \text { NAEP } \\ \text { Advanced } \end{array}$ |
| Not SD |  |  |  |  |  |  |  |
| 2000 | Nation (public) |  | 90* | 227* | 33* | 67* | 24* | 3* |
|  | Wyoming | 88* | 233* | 24* | 76* | $27^{*}$ | 2* |
| 2003 | Nation (public) | 89* | 236* | 21* | 79* | 34* | 4* |
|  | Wyoming | 86* | 244* | 9 | 91 | 43* | 4* |
| 2005 | Nation (public) | 88* | 240* | 17* | 83* | 38* | 5* |
|  | Wyoming | 86* | 247* | 8 | 92 | 47* | $6 *$ |
| 2007 | Nation (public) | 89* | 241* | 16* | 84* | 41* | $6 *$ |
|  | Wyoming | 86* | 247* | 8 | 92 | 48* | 5* |
| 2009 | Nation (public) | 88* | 242* | $16^{*}$ | $84^{*}$ | 41* | $6 *$ |
|  | Wyoming | 85 | 245* | 9 | 91 | 44* | 4* |
| 2011 | Nation (public) | 88* | 243* | 15 | 85 | $43^{*}$ | 7* |
|  | Wyoming | 85 | 247* | 9 | 91 | 48* | 6 * |
| 2013 | Nation (public) | 87* | 244 | 14 | 86 | 45 | 8* |
|  | Wyoming | 85 | 250 | 6 | 94 | 52 | 7* |
| 2015 | Nation (public) | 87* | 243* | 15 | 85 | 43 | 8* |
|  | Wyoming | 85 | 251 | 7 | 93 | 53 | 10 |
| 2017 | Nation (public) | 87* | 243* | 16* | $84 *$ | 43* | 9 |
|  | Wyoming | 86* | 252 | 7 | 93 | 56 | 11 |
| 2019 | Nation (public) | 86 | 244 | 15 | 85 | 45 | 10 |
|  | Wyoming | 84 | 251 | 7 | 93 | 53 | 10 |

\# Rounds to zero.

* Value is significantly different $(p<.05)$ from the value for the same jurisdiction and student group in 2019.

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 NAEP Basic, 213 or lower; NAEP Basic, 214-248; NAEP Proficient, 249-281; and NAEP Advanced, 282 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP 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, 2000-2019 Mathematics Assessments.

Table 9-B

The Nation's Report Card 2019 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, 20002019

| SD status, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | $\begin{array}{r} \text { At } \\ \text { NAEP } \\ \text { Advanced } \end{array}$ |
| SD |  |  |  |  |  |  |  |  |
| 2000 | Nation (public) | 8* | 229* | 80* | 20* | 4* | \#* |
|  | Wyoming | 11* | 234* | 77 | 23 | 1 | \# |
| 2003 | Nation (public) | 11* | 242* | 71* | 29* | $6 *$ | 1* |
|  | Wyoming | 14 | 248 | 70 | 30 | 4* | \# |
| 2005 | Nation (public) | 11* | 244* | 69 | 31 | 7* | 1* |
|  | Wyoming | 13 | 251 | 64 | 36 | 5 | \# |
| 2007 | Nation (public) | 9* | 246 | 67 | 33 | 8 | $1^{*}$ |
|  | Wyoming | 12 | 252 | 65 | 35 | 6 | \# |
| 2009 | Nation (public) | 10* | 249 | 64* | 36* | 9 | 1* |
|  | Wyoming | 12 | 254 | 61 | 39 | 8 | 1 |
| 2011 | Nation (public) | 11* | 249* | 65* | 35* | 9 | 2 |
|  | Wyoming | 12* | 253 | 60 | 40 | 9 | 1 |
| 2013 | Nation (public) | 12* | 248 | 66* | 34* | 8 | 1* |
|  | Wyoming | 13 | 256* | 58 | 42 | 9 | 1 |
| 2015 | Nation (public) | 12* | 246 | 68 | 32 | 8* | 1* |
|  | Wyoming | 13 | 254 | 62 | 38 | 7 | \# |
| 2017 | Nation (public) | 13* | 246 | 70 | 30 | 8 | 2 |
|  | Wyoming | 13 | 254 | 61 | 39 | 8 | 1 |
| 2019 | Nation (public) | 14 | 247 | 68 | 32 | 9 | 2 |
|  | Wyoming | 13 | 249 | 65 | 35 | 8 | 1 |

See notes at end of table.

Table
9-B

The Nation's Report Card 2019 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, 20002019—Continued

| SD status, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below <br> NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | At NAEP Advanced |
| Not SD |  |  |  |  |  |  |  |
| 2000 | Nation (public) |  | 92* | 275* | 35* | 65* | 26* | 5* |
|  | Wyoming | 89* | 281* | 26* | 74* | $26^{*}$ | 4* |
| 2003 | Nation (public) | 89* | 280* | 29* | 71* | 30* | 5* |
|  | Wyoming | 86 | 289* | 16 | 84 | 37* | 5* |
| 2005 | Nation (public) | 89* | 281* | 28* | 72* | 31* | 6* |
|  | Wyoming | 87 | 287* | 18 | 82 | 33* | 4* |
| 2007 | Nation (public) | 91* | 284* | 26 | 74 | 33* | 7* |
|  | Wyoming | 88 | 292 | 14 | 86 | 40 | 7 |
| 2009 | Nation (public) | 90* | 285 | $24^{*}$ | 76 * | 35 | 8* |
|  | Wyoming | 88 | 291 | 17 | 83 | 38 | 8 |
| 2011 | Nation (public) | 89* | 287 | 23* | $77^{*}$ | 36 | 9* |
|  | Wyoming | 88* | 292 | 14 | 86 | 41 | 8 |
| 2013 | Nation (public) | 88* | 288* | 22* | 78* | 38 | 9* |
|  | Wyoming | 87 | 293 | 14* | 86* | 42 | 7* |
| 2015 | Nation (public) | 88* | 286 | $24 *$ | 76* | 36 | 9* |
|  | Wyoming | 87 | 292 | 15 | 85 | 40 | 8 |
| 2017 | Nation (public) | 87* | 287 | 25 | 75 | 37 | 11 |
|  | Wyoming | 87 | 294 | 15 | 85 | 43 | 11 |
| 2019 | Nation (public) | 86 | 286 | 26 | 74 | 37 | 11 |
|  | Wyoming | 87 | 292 | 17 | 83 | 42 | 10 |

\# Rounds to zero.

* Value is significantly different $(p<05)$ from the value for the same jurisdiction and student group in 2019.

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 NAEP Basic, 261 or lower; NAEP Basic, 262-298; NAEP Proficient, 299-332; and NAEP Advanced, 333 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP 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, 2000-2019 Mathematics Assessments.

Table 10-A

The Nation's Report Card 2019 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, 20002019

| ELL status, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | At NAEP Advanced |
| ELL |  |  |  |  |  |  |  |  |
| 2000 | Nation (public) | 6* | 199* | 70* | 30* | 4* | \# |
|  | Wyoming | 2 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2003 | Nation (public) | 9* | 214* | 51* | 49* | 9* | \#* |
|  | Wyoming | 4 | 215* | 46 | 54 | 10 | 1 |
| 2005 | Nation (public) | 10* | 216* | 46* | 54* | 11* | 1 |
|  | Wyoming | 4 | 223 | 34 | 66 | 15 | \# |
| 2007 | Nation (public) | 10* | 217* | 44* | 56* | 13* | 1 |
|  | Wyoming | 4 | 221 | 39 | 61 | 17 | 1 |
| 2009 | Nation (public) | 10* | 218* | 43 | 57 | 12* | 1* |
|  | Wyoming | 2* | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2011 | Nation (public) | 11* | 219 | 42 | 58 | 14 | 1 |
|  | Wyoming | 3 | 219 | 41 | 59 | 13 | \# |
| 2013 | Nation (public) | 11* | 219 | 41 | 59 | 14 | 1 |
|  | Wyoming | 3* | 216* | 47 | 53 | 8 | \# |
| 2015 | Nation (public) | 11* | 218 | 43 | 57 | 15 | 1 |
|  | Wyoming | 4 | 217 | 45 | 55 | 10 | \# |
| 2017 | Nation (public) | 12* | 217* | 47* | 53* | 14 | 2 |
|  | Wyoming | 3* | 214* | 48 | 52 | 8 | 1 |
| 2019 | Nation (public) | 13 | 219 | 41 | 59 | 16 | 1 |
|  | Wyoming | 4 | 225 | 29 | 71 | 15 | 1 |

See notes at end of table.

Table
10-A

The Nation's Report Card 2019 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, 20002019—Continued

| ELL status, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below <br> NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | $\begin{array}{r} \text { At } \\ \text { NAEP } \\ \text { Advanced } \end{array}$ |
| Not ELL |  |  |  |  |  |  |  |  |
| 2000 | Nation (public) | 94* | 226* | $34 *$ | 66* | 24* | 3* |
|  | Wyoming | 98 | 229* | 28* | 72* | 25* | 2* |
| 2003 | Nation (public) | 91* | 236* | 21* | 79* | $34 *$ | 4* |
|  | Wyoming | 96 | 242* | 11 | 89 | 40* | 4* |
| 2005 | Nation (public) | 90* | 239* | 18* | 82* | 38* | 5* |
|  | Wyoming | 96 | 244* | 12 | 88 | 44* | 5* |
| 2007 | Nation (public) | 90* | 242* | 16* | 84* | 42* | $6 *$ |
|  | Wyoming | 96 | 245 | 11 | 89 | 45 | 5* |
| 2009 | Nation (public) | $90^{*}$ | 242* | 16 | 84 | 41* | $6 *$ |
|  | Wyoming | 98* | 243* | 12 | 88 | 41* | 4* |
| 2011 | Nation (public) | 89* | 243 | 15* | 85* | 43 | 7* |
|  | Wyoming | 97 | 245 | 11 | 89 | 45 | $6 *$ |
| 2013 | Nation (public) | 89* | 244 | 15* | 85* | 45 | 8* |
|  | Wyoming | 97* | 247 | 9* | 91* | 49 | 7* |
| 2015 | Nation (public) | 89* | 243 | 16 | 84 | 43 | 8* |
|  | Wyoming | 96 | 248 | 10 | 90 | 50 | 9 |
| 2017 | Nation (public) | 88* | 242* | 18* | 82* | 43 | 9* |
|  | Wyoming | 97* | 249* | 10 | 90 | 52 | 10 |
| 2019 | Nation (public) | 87 | 243 | 17 | 83 | 44 | 10 |
|  | Wyoming | 96 | 247 | 12 | 88 | 49 | 9 |

\# Rounds to zero.
$\ddagger$ Reporting standards not met.

* Value is significantly different ( $p<.05$ ) from the value for the same jurisdiction and student group in 2019.

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 NAEP Basic, 213 or lower; NAEP Basic, 214-248; NAEP Proficient, 249-281; and NAEP Advanced, 282 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP 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, 2000-2019 Mathematics Assessments.

Table 10-B

The Nation's Report Card 2019 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, 20002019

| ELL status, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Below NAEP Basic |  | At or above NAEP Basic | At or above NAEP Proficient | $\begin{array}{r} \text { At } \\ \text { NAEP } \\ \text { Advanced } \end{array}$ |
| ELL |  |  |  |  |  |  |  |
| 2000 | Nation (public) |  | 3* | 234* | 80 | 20 | 2* | \# |
|  | Wyoming | 2 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2003 | Nation (public) | 5* | 241 | 74 | 26 | 5 | 1 |
|  | Wyoming | 3* | 254 | 64 | 36 | 7 | 1 |
| 2005 | Nation (public) | $6 *$ | 244 | 71 | 29 | 6 | 1 |
|  | Wyoming | 4* | 251 | 61 | 39 | 3 | \# |
| 2007 | Nation (public) | $6 *$ | 245 | 70* | 30* | 6 | 1 |
|  | Wyoming | 3* | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2009 | Nation (public) | $6 *$ | 243 | 72 | 28 | 5 | 1 |
|  | Wyoming | 2 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2011 | Nation (public) | $6 *$ | 244 | 72 | 28 | 5 | 1 |
|  | Wyoming | 2 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2013 | Nation (public) | 5* | 245 | 69 | 31 | 5 | 1 |
|  | Wyoming | 2 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2015 | Nation (public) | $6{ }^{*}$ | 246 | 69* | 31* | 5 | 1 |
|  | Wyoming | 3* | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2017 | Nation (public) | $6 *$ | 245 | 72 | 28 | 6 | 1 |
|  | Wyoming | 2 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| 2019 | Nation (public) | 7 | 243 | 73 | 27 | 5 | 1 |
|  | Wyoming | 2 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |

See notes at end of table.

Table
10-B

The Nation's Report Card 2019 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, 20002019—Continued

| ELL status, year, and jurisdiction |  | Percentage of students | Average scale score | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{r} \text { Below } \\ \text { NAEP Basic } \end{array}$ |  | At or above NAEP Basic | At or above NAEP Proficient | $\begin{array}{r} \text { At } \\ \text { NAEP } \\ \text { Advanced } \end{array}$ |
| Not ELL |  |  |  |  |  |  |  |  |
| 2000 | Nation (public) | 97* | 273* | $37^{*}$ | 63* | 26 * | 5* |
|  | Wyoming | 98 | 276* | 30* | 70* | 24* | 4* |
| 2003 | Nation (public) | 95* | 278* | $31^{*}$ | 69* | 29* | 5* |
|  | Wyoming | 97* | 285* | 22 | 78 | 33* | 5* |
| 2005 | Nation (public) | 94* | 280* | 30 | 70 | 30* | $6 *$ |
|  | Wyoming | 96* | 283* | 22 | 78 | 30* | 4* |
| 2007 | Nation (public) | 94* | 282* | $27^{*}$ | 73* | 33* | 7* |
|  | Wyoming | 97* | 288 | 19* | 81* | 37 | 7 |
| 2009 | Nation (public) | 94* | 284 | $26^{*}$ | 74* | 34 | 8* |
|  | Wyoming | 98 | 287 | 21 | 79 | 35 | 7 |
| 2011 | Nation (public) | 94* | 285 | 25* | 75* | 35 | 8* |
|  | Wyoming | 98 | 288 | 19* | 81* | 38 | 7 |
| 2013 | Nation (public) | 95* | 286* | 25* | 75* | 36 | 9* |
|  | Wyoming | 98 | 289 | 18* | 82* | 38 | 7* |
| 2015 | Nation (public) | 94* | 284 | $27^{*}$ | 73* | 34 | 8* |
|  | Wyoming | 97* | 288 | 20 | 80 | 36 | 7 |
| 2017 | Nation (public) | 94* | 284 | 28 | 72 | 35 | 10 |
|  | Wyoming | 98 | 290* | 20 | 80 | 39 | 9 |
| 2019 | Nation (public) | 93 | 284 | 29 | 71 | 35 | 10 |
|  | Wyoming | 98 | 287 | 23 | 77 | 38 | 9 |

\# Rounds to zero.
$\ddagger$ Reporting standards not met.

* Value is significantly different ( $p<.05$ ) from the value for the same jurisdiction and student group in 2019.

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 NAEP Basic, 261 or lower; NAEP Basic, 262-298; NAEP Proficient, 299-332; and NAEP Advanced, 333 or above. At or above NAEP Basic includes NAEP Basic, NAEP Proficient, and NAEP Advanced. At or above NAEP Proficient includes NAEP Proficient and NAEP 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, 2000-2019 Mathematics Assessments.

Table
11-A

## The Nation's Report Card 2019 State Assessment

Number of fourth-grade public school students assessed in NAEP mathematics and weighted percentage excluded, by state/jurisdiction: 2019

| State/jurisdiction | Number assessed | Weighted percentage excluded |
| :---: | :---: | :---: |
| Nation (public) | 143,600 | 2 |
| Alabama | 2,300 | 2 |
| Alaska | 2,200 | 1 |
| Arizona | 2,400 | 1 |
| Arkansas | 2,300 | 1 |
| California | 6,000 | 3 |
| Colorado | 3,200 | 1 |
| Connecticut | 2,300 | 2 |
| Delaware | 2,300 | 2 |
| Florida | 5,600 | 2 |
| Georgia | 3,400 | 2 |
| Hawaii | 2,200 | 2 |
| Idaho | 2,400 | 1 |
| Illinois | 3,500 | 1 |
| Indiana | 2,300 | 1 |
| lowa | 2,200 | 1 |
| Kansas | 2,200 | 1 |
| Kentucky | 3,100 | 2 |
| Louisiana | 2,200 | 2 |
| Maine | 2,200 | 1 |
| Maryland | 3,100 | 2 |
| Massachusetts | 3,400 | 2 |
| Michigan | 3,200 | 2 |
| Minnesota | 2,400 | 2 |
| Mississippi | 2,400 | 1 |
| Missouri | 2,300 | 1 |
| Montana | 2,300 | 1 |
| Nebraska | 2,500 | 1 |
| Nevada | 2,500 | 2 |
| New Hampshire | 2,200 | 1 |
| New Jersey | 2,200 | 2 |
| New Mexico | 2,600 | 2 |
| New York | 3,100 | 3 |
| North Carolina | 4,400 | 1 |
| North Dakota | 2,300 | 2 |
| Ohio | 3,500 | 3 |
| Oklahoma | 2,200 | 2 |
| Oregon | 2,400 | 1 |
| Pennsylvania | 3,000 | 2 |
| Rhode Island | 2,300 | 2 |
| South Carolina | 2,400 | 1 |
| South Dakota | 2,300 | 1 |
| Tennessee | 3,100 | 2 |
| Texas | 7,200 | 3 |
| Utah | 2,400 | 2 |
| Vermont | 2,400 | 1 |
| Virginia | 2,300 | 1 |
| Washington | 2,400 | 3 |
| West Virginia | 2,300 | 1 |
| Wisconsin | 3,400 | 1 |
| Wyoming | 2,100 | 1 |
| Other jurisdictions |  |  |
| District of Columbia | 2,500 | 2 |
| DoDEA ${ }^{1}$ | 2,400 | 2 |

[^1]Table
11-B

## The Nation's Report Card 2019 State Assessment

Number of eighth-grade public school students assessed in NAEP mathematics and weighted percentage excluded, by state/jurisdiction: 2019

| State/jurisdiction | Number assessed | Weighted percentage excluded |
| :---: | :---: | :---: |
| Nation (public) | 142,200 | 2 |
| Alabama | 2,300 | 1 |
| Alaska | 2,100 | 1 |
| Arizona | 2,400 | 2 |
| Arkansas | 2,300 | 2 |
| California | 5,900 | 2 |
| Colorado | 3,100 | 1 |
| Connecticut | 2,200 | 2 |
| Delaware | 2,300 | 2 |
| Florida | 5,700 | 2 |
| Georgia | 3,600 | 2 |
| Hawaii | 2,200 | 2 |
| Idaho | 2,300 | 1 |
| Illinois | 3,600 | 1 |
| Indiana | 2,200 | 2 |
| lowa | 2,400 | 1 |
| Kansas | 2,300 | 1 |
| Kentucky | 3,100 | 2 |
| Louisiana | 2,100 | 2 |
| Maine | 2,300 | 1 |
| Maryland | 3,100 | 2 |
| Massachusetts | 3,400 | 2 |
| Michigan | 3,300 | 2 |
| Minnesota | 2,400 | 2 |
| Mississippi | 2,300 | 1 |
| Missouri | 2,400 | 1 |
| Montana | 2,300 | 1 |
| Nebraska | 2,400 | 1 |
| Nevada | 2,400 | 1 |
| New Hampshire | 2,100 | 1 |
| New Jersey | 2,200 | 2 |
| New Mexico | 2,800 | 2 |
| New York | 3,000 | 1 |
| North Carolina | 4,400 | 1 |
| North Dakota | 2,200 | 1 |
| Ohio | 3,300 | 2 |
| Oklahoma | 2,200 | 2 |
| Oregon | 2,400 | 1 |
| Pennsylvania | 3,100 | 1 |
| Rhode Island | 2,300 | 1 |
| South Carolina | 2,300 | 1 |
| South Dakota | 2,200 | 1 |
| Tennessee | 3,200 | 2 |
| Texas | 7,100 | 2 |
| Utah | 2,500 | 1 |
| Vermont | 2,500 | 1 |
| Virginia | 2,200 | 2 |
| Washington | 2,300 | 2 |
| West Virginia | 2,200 | 1 |
| Wisconsin | 3,300 | 1 |
| Wyoming | 2,200 | 2 |
| Other jurisdictions |  |  |
| District of Columbia | 1,900 | 2 |
| DoDEA ${ }^{1}$ | 1,800 | 1 |

[^2]
## Where to Find More Information

## The NAEP Mathematics Assessment

More information about the 2019 NAEP mathematics assessment and the results can be found on the NAEP website at https://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 https://nces.ed.gov/nationsreportcard/states/.

The Mathematics Framework for the National Assessment of Educational Progress, on which this assessment is based, is available at the National Assessment Governing Board website at https://www.nagb.gov/naep-frameworks/mathematics.html.

## The NAEP Data Explorer (NDE)

The NAEP Data Explorer (NDE), available at https://nces.ed.gov/nationsreportcard/naepdata/, is an interactive database with which users can design and create tables and perform tests of statistical significance. The NDE includes student, teacher, and school variables for all participating districts, states, and the nation. Data tables are also available for participating districts, with all contextual questions cross-tabulated with the major demographic variables.

## Technical Documentation on the Web (TDW)

The Technical Documentation on the Web (TDW) section of the NAEP website is written for researchers and assumes knowledge of educational measurement and testing. TDW contains information about the technical procedures and methods of NAEP: how the assessment is designed and conducted, and how data are analyzed.

## 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 https://nces.ed.gov/nationsreportcard/about/inclusion.asp\#research.

## To order publications:

Some recent NAEP publications related to mathematics are accessible via the mathematics page of the NAEP website (https://nces.ed.gov/nationsreportcard/mathematics/, under "Mathematics Publications"). These and others are available through the IES Publications and Products Search site at: https://ies.ed.gov/pubsearch/. 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: https://www.ed.gov/edpubs/.

[^3]
## What is the Nation's Report Card ${ }^{\text {TM }}$ ?

The Nation's Report Card ${ }^{\text {TM }}$ 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.

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## Appendix

## Technical Procedures for the NAEP 2019 Mathematics Assessment

This appendix provides an overview of some of the technical procedures for the NAEP 2019 mathematics assessment. Information is included about the content of the assessment, school and student samples and participation, inclusion of students with disabilities and/or English language learners, analysis procedures, and interpretation of results. Additional technical information about NAEP assessments is available on the Web at https://www.nces.ed.gov/nationsreportcard/tdw/.

## Development of the Mathematics Framework

The National Assessment Governing Board oversees the creation of the NAEP frameworks that provide the theoretical basis for the assessment, the direction for what types of items should be included, and how the items should be designed and scored. While the frameworks describe the general content and design of NAEP subject area assessments, the specifications provide the detailed information used by test developers for constructing the assessments. Both the Mathematics Framework for the National Assessment of Educational Progress and Assessment and Item Specifications for the NAEP Mathematics Assessment are available on the Governing Board's website at https://www.nagb.gov/naep-frameworks/mathematics.html.

The frameworks for the main NAEP assessments are periodically updated or changed to reflect current curricula and standards. Whenever changes are made to a subject framework, every effort is made to try to maintain the trend lines that permit the reporting of changes in student achievement over time. If, however, the nature of the changes made to an assessment are such that the results would not be comparable to earlier assessments, a new trend line is started.

The 1990 and 1992 mathematics frameworks reflected a two-dimensional "content by ability" matrix design in which questions were classified according to one of five content areas and one of three types of mathematical abilities (conceptual understanding, procedural knowledge, and problem solving). A third dimension, mathematical power (reasoning, connections, and communication), was introduced in the 1996 framework to form a "content by mathematical ability by mathematical power" matrix design that also guided the development of the 2000 and 2003 assessments.

For the 2005 framework, the dimensions of mathematical ability and power were replaced with the dimension of mathematical complexity, which indicates the level of cognitive demand (low, moderate, or high) of each item. In addition, the proportions of assessment questions by content area were changed for grade 8 to reflect the increasing importance of algebraic concepts, and for grade 12 to correspond more closely to the mathematics that high school students experience in a three-year sequence of courses (the equivalent of one year of geometry and two years of algebra). Because of changes in the framework and in administration procedures for grade 12, results from the 2005 twelfth-grade assessment could not be compared to results from previous years. A new trend line was started for grade 12 in 2005, and new mathematics achievement-level descriptions were applied.

There were no changes to the objectives at grades 4 and 8 . The 2009 framework was unchanged for the 2011, 2013, 2015, 2017, and 2019 assessments. In 2011, 2017 and 2019, only the grade 4 and grade 8 assessments were administered, but in 2013 and 2015 the grade 4, grade 8, and grade 12 assessments were administered.

## Content Areas and Mathematical Complexity

The 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 mathematics content areas.

Content Areas: Although the names of the content areas have changed from one framework to the next, there is a consistent focus across frameworks on collecting information on student performance in five key areas:

- number properties and operations
- measurement
- geometry
- data analysis, statistics, and probability
- algebra

Certain aspects of mathematics, such as computation, occur in all content areas. Although the names of the content areas (as well as some topics in those areas) have changed from one framework to the next, a consistent focus has
remained on measuring student performance in all five content areas. The distribution of questions among each content area differs by grade to reflect the knowledge and skills appropriate for each grade level (table A-1). At grade 12, the measurement and geometry content areas are combined into one for reporting purposes to reflect the fact that the majority of measurement topics suitable for grade 12 students are geometric in nature. Students at grade 12 are provided with a reference sheet containing selected formulas related to geometry, trigonometry, conic sections, interest rates, series, and combinations and permutations.

These divisions are not intended to separate mathematics into discrete elements. Rather, they are intended to provide a helpful classification scheme that describes the full spectrum of mathematical content assessed by NAEP.

Table A-1.
Target percentage distribution of questions in NAEP mathematics, by grade and content area: Various years, 1990-2019

| Grade and content area | 1990 and 1992 | 1996, 2000, and 2003 | 2005-2019 | Content area ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: |
| Grade 4 |  |  |  |  |
| Number sense, properties, and operations | 45 | 40 | 40 | Number properties and operations |
| Measurement | 20 | 20 | 20 | Measurement |
| Geometry and spatial sense | 15 | 15 | 15 | Geometry |
| Data analysis, statistics, and probability | 10 | 10 | 10 | Data analysis, statistics, and probability |
| Algebra and functions | 10 | 15 | 15 | Algebra |
| Grade 8 |  |  |  |  |
| Number sense, properties, and operations | 30 | 25 | 20 | Number properties and operations |
| Measurement | 15 | 15 | 15 | Measurement |
| Geometry and spatial sense | 20 | 20 | 20 | Geometry |
| Data analysis, statistics, and probability | 15 | 15 | 15 | Data analysis, statistics, and probability |
| Algebra and functions | 20 | 25 | 30 | Algebra |

${ }^{1}$ The content area labels were revised in 2005, but test item content remains comparable to previous years.
NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. The data analysis, statistics, and probability content area was called data analysis and probability in the 2005 and 2007 frameworks. 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, 19902019 Mathematics Assessments.

Complexity: Items are also classified by mathematical complexity.

- low complexity,
- moderate complexity, and
- high complexity

Mathematical complexity attempts to focus on the cognitive demands of the assessment question. Each level of complexity includes aspects of knowing and doing mathematics, such as reasoning, performing procedures, understanding concepts, or solving problems. The levels of complexity form an ordered description of the demands an item may make on a student. Items at the low level of complexity, for example, may ask a student to recall a property. At the moderate level, an item may ask the student to make a connection between two properties; at the high level, an item may ask a student to analyze the assumptions made in a mathematical model. This is an example of the distinctions made in item complexity to provide balance in the assessment. The ordering is not intended to imply that mathematics is learned or should be taught in such an ordered way.

The complexity dimension builds on the dimensions of mathematical ability (conceptual understanding, procedural knowledge, and problem solving) and mathematical power (reasoning, connections, and communication) that were used in the mathematics framework for the 1996-2003 NAEP assessments.

The mathematics framework specifies the percentage of questions devoted to each content area by grade.
Sample Questions booklets for the mathematics assessment are available for download.

## Content of the 2019 Mathematics Assessment

Each NAEP assessment contains two major components: subject-specific cognitive items that measure the achievement of students in an academic subject; and noncognitive survey questions that are given to students, teachers, and school administrators who participate in the NAEP assessment. NAEP survey questionnaires collect additional information that helps put student achievement results into context and allows meaningful comparison between student groups. NAEP survey questionnaires collect additional information that helps put student achievement results into context and allows meaningful comparison between student groups. Both the cognitive and noncognitive items are developed through a process that includes reviews by external advisory groups and pilot testing. Results from the cognitive items provide information about what students know and can do in a subject area. Information from the background items gives context to NAEP results and/or allows researchers to track factors associated with academic achievement.

The number of questions in the 2019 mathematics assessment used for reporting results at each grade has remained relatively constant across assessment years. Students spend about one-half of the assessment time responding to multiple-choice questions and one-half responding to two types of constructed-response questions. Short constructed-response questions require students to provide answers to computation problems or to describe solutions in one or two sentences, while extended constructed-response questions require more detailed responses or explanations. Table A-2 shows the approximate percentage distribution of questions administered from 1990 to 2019 by the type of question for each grade level.

Table A-2.
Percentage distribution of administered NAEP mathematics questions, by grade and question type: Various years, 1990-2019

| Grade and question type | 1990 | 1992 | 1996 | 2000 | 2003 | 2005 | 2007 | 2009 | 2011 | 2013 | 2015 | 2017 | 2019 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grade 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Multiple choice | 71 | 61 | 51 | 60 | 63 | 64 | 69 | 68 | 70 | 70 | 70 | 59 | 57 |
| Short constructed response | 29 | 36 | 41 | 34 | 33 | 32 | 27 | 27 | 26 | 27 | 27 | 38 | 41 |
| Extended constructed response | \# | 3 | 8 | 6 | 4 | 4 | 4 | 5 | 4 | 3 | 3 | 3 | 3 |
| Grade 8 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Multiple choice | 78 | 62 | 56 | 63 | 65 | 69 | 74 | 72 | 74 | 75 | 73 | 59 | 51 |
| Short constructed response | 22 | 34 | 38 | 32 | 29 | 28 | 23 | 23 | 23 | 22 | 24 | 39 | 46 |
| Extended constructed response | \# | 3 | 7 | 6 | 5 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 3 |

## \# Rounds to zero.

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. Short constructed-response questions included in the 1990 and 1992 assessments were scored dichotomously (i.e., credit or no credit). Beginning with the 1996 assessment, some of the new short constructed-response questions were scored allowing for partial credit. 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, 19902019 Mathematics Assessments.

Cognitive Blocks: The assessment design allowed for broad coverage of the five mathematics content areas and levels of mathematical complexity at each grade, while minimizing the time burden for any one student. This was accomplished through the use of matrix sampling of items in which each student was required to take only a small portion of the entire pool of assessment questions.

The mathematics item pool for each grade was divided up into subsets or "blocks." In 2019, there were a total of 14 cognitive blocks at fourth grade and 14 blocks at eighth grade. Each mathematics assessment form contained two separately timed 30 -minute blocks. Each block contained between 14 and 12 questions depending on the balance between multiple-choice, selected-response, and constructed-response questions.

The procedure used for distributing blocks across booklets controlled for position and context effects by balancing the positioning of blocks across booklets and balancing the pairing of blocks within booklets. The procedure also cycled the booklets for administration so that no more than a few students in an assessment section received the same test booklet.

Sample released questions at all three grade levels can be viewed at the NAEP website at https://nces.ed.gov/nationsreportcard/itmrls/. Questions released from the 2005, 2007, 2009, 2011, 2013, and 2017 assessments are classified by content area and level of complexity. Those released from assessments administered
in 2003 and earlier are classified by content area and mathematical ability. Items also may be sorted by difficulty and question type.

## NAEP Samples

NAEP assesses representative samples of students rather than the entire student population. The sample selection process utilizes a probability sample design. In this type of sample, each school and each student has a known probability of being selected. Samples are selected according to a multistage design, with students drawn from within sampled public and private schools nationwide. The school probabilities are proportional to the estimated number of students in the grade assessed.

The Common Core of Data (CCD) file serves as the sampling frame for the selection of public schools in each state/jurisdiction. The CCD is a comprehensive list of operating public schools in each jurisdiction that is compiled each school year by the National Center for Education Statistics (NCES). The sample of students in districts participating in TUDA represents an augmentation of the sample of students selected as part of the state samples. All students at more local geographic sampling levels also make up part of the broader samples. For example, the TUDA samples are included as part of the corresponding state samples, just as the state samples are included as part of the national sample.

The Private School Survey (PSS) is a survey of all U.S. private schools carried out biennially by the Census Bureau under contract to NCES. The PSS serves as the sampling frame for private schools. While state and district results are based on samples of public schools only, the national results are based on the combined samples of both public and private schools.

Table A-3 shows the target populations and sample sizes in 2019 for the nation and participating states and jurisdictions at grades 4 and 8. Table A-4 shows the same information for participating urban districts for grades 4 and 8 .

Because the schools and students who participate in the assessment represent only a portion of the larger population of interest, the assessment results are weighted to make appropriate inferences about the populations from the student, school, and district samples. Sampling weights are adjusted to account for the disproportionate representation of some groups in the selected sample. This includes oversampling of schools with high concentrations of students from certain racial/ethnic groups and the lower sampling rates of students who attend very small schools.

Table A-3.
Student sample sizes and target populations in NAEP mathematics at grades 4 and 8, by state/jurisdiction: 2019

|  | Grade 4 |  | Grade 8 |  |
| :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Sample size | Target population | Sample size | Target population |
| Nation | 152,300 | 3,992,000 | 150,100 | 3,909,000 |
| Public | 146,400 | 3,689,000 | 144,800 | 3,603,000 |
| Private | 2,600 | 295,000 | 2,700 | 300,000 |
| Alabama | 2,400 | 58,000 | 2,300 | 51,000 |
| Alaska | 2,200 | 9,000 | 2,100 | 8,000 |
| Arizona | 2,500 | 86,000 | 2,400 | 86,000 |
| Arkansas | 2,400 | 37,000 | 2,300 | 35,000 |
| California | 6,200 | 444,000 | 6,000 | 442,000 |
| Colorado | 3,300 | 68,000 | 3,100 | 64,000 |
| Connecticut | 2,400 | 38,000 | 2,300 | 39,000 |
| Delaware | 2,300 | 10,000 | 2,300 | 10,000 |
| Florida | 5,700 | 204,000 | 5,800 | 205,000 |
| Georgia | 3,400 | 133,000 | 3,700 | 125,000 |
| Hawaii | 2,200 | 12,000 | 2,300 | 13,000 |
| Idaho | 2,400 | 23,000 | 2,400 | 23,000 |
| Illinois | 3,600 | 137,000 | 3,600 | 146,000 |
| Indiana | 2,400 | 78,000 | 2,200 | 73,000 |
| lowa | 2,300 | 35,000 | 2,400 | 37,000 |
| Kansas | 2,200 | 35,000 | 2,400 | 34,000 |
| Kentucky | 3,100 | 49,000 | 3,100 | 49,000 |
| Louisiana | 2,300 | 53,000 | 2,200 | 47,000 |
| Maine | 2,300 | 13,000 | 2,300 | 13,000 |
| Maryland | 3,200 | 70,000 | 3,200 | 64,000 |
| Massachusetts | 3,500 | 69,000 | 3,600 | 70,000 |
| Michigan | 3,300 | 99,000 | 3,400 | 102,000 |
| Minnesota | 2,400 | 63,000 | 2,400 | 64,000 |
| Mississippi | 2,400 | 37,000 | 2,300 | 34,000 |
| Missouri | 2,400 | 68,000 | 2,400 | 68,000 |
| Montana | 2,300 | 12,000 | 2,400 | 11,000 |
| Nebraska | 2,500 | 25,000 | 2,500 | 24,000 |
| Nevada | 2,600 | 35,000 | 2,400 | 35,000 |
| New Hampshire | 2,200 | 13,000 | 2,200 | 14,000 |
| New Jersey | 2,200 | 100,000 | 2,200 | 98,000 |
| New Mexico | 2,700 | 25,000 | 2,800 | 24,000 |
| New York | 3,100 | 192,000 | 3,100 | 191,000 |
| North Carolina | 4,400 | 120,000 | 4,500 | 113,000 |
| North Dakota | 2,300 | 9,000 | 2,300 | 8,000 |
| Ohio | 3,600 | 130,000 | 3,400 | 122,000 |
| Oklahoma | 2,300 | 49,000 | 2,300 | 46,000 |
| Oregon | 2,400 | 41,000 | 2,500 | 42,000 |
| Pennsylvania | 3,200 | 126,000 | 3,200 | 127,000 |
| Rhode Island | 2,300 | 10,000 | 2,300 | 11,000 |
| South Carolina | 2,400 | 60,000 | 2,400 | 54,000 |
| South Dakota | 2,300 | 11,000 | 2,300 | 10,000 |
| Tennessee | 3,200 | 72,000 | 3,200 | 71,000 |
| Texas | 7,400 | 406,000 | 7,200 | 388,000 |
| Utah | 2,400 | 49,000 | 2,500 | 50,000 |
| Vermont | 2,400 | 6,000 | 2,500 | 6,000 |
| Virginia | 2,300 | 95,000 | 2,200 | 90,000 |
| Washington | 2,500 | 83,000 | 2,400 | 75,000 |
| West Virginia | 2,300 | 20,000 | 2,300 | 18,000 |
| Wisconsin | 3,500 | 61,000 | 3,300 | 60,000 |
| Wyoming | 2,200 | 7,000 | 2,300 | 7,000 |
| Other jurisdictions |  |  |  |  |
| BIE ${ }^{1}$ | 900 | 3,000 | 800 | 3,000 |
| District of Columbia | 2,500 | 6,000 | 1,900 | 5,000 |
| DoDEA ${ }^{2}$ | 2,400 | 6,000 | 1,800 | 4,000 |
| Puerto Rico | - | - | - | - |

- Not available.
${ }^{1}$ Bureau of Indian Education.
${ }^{2}$ Department of Defense Education Activity (overseas and domestic schools).
NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. The sample size is rounded to the nearest hundred. The target population is rounded to the nearest thousand. Data for BIE and DoDEA schools are counted in the overall national totals, but not in the public school totals. Data for the District of Columbia public schools are counted, along with the states, in the national public school totals. 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), 2019 Mathematics
Assessment.

Table A-4.
Student sample sizes and target populations for Trial Urban District Assessment (TUDA) in mathematics at grades 4 and 8, by urban district: 2019

|  | Grade 4 |  | Grade 8 |  |
| :---: | :---: | :---: | :---: | :---: |
| Urban district | Sample size | Target population | Sample size | Target population |
| Albuquerque | 1,100 | 7,000 | 1,100 | 6,000 |
| Atlanta | 1,200 | 4,000 | 1,400 | 3,000 |
| Austin | 1,100 | 6,000 | 1,100 | 5,000 |
| Baltimore City | 1,100 | 6,000 | 1,000 | 5,000 |
| Boston | 1,300 | 4,000 | 1,400 | 3,000 |
| Charlotte | 1,100 | 12,000 | 1,100 | 11,000 |
| Chicago | 1,800 | 27,000 | 1,700 | 26,000 |
| Clark County (NV) | 1,800 | 24,000 | 1,700 | 23,000 |
| Cleveland | 1,300 | 3,000 | 1,100 | 3,000 |
| Dallas | 1,200 | 12,000 | 1,200 | 10,000 |
| Denver | 1,200 | 7,000 | 1,000 | 6,000 |
| Detroit | 1,200 | 4,000 | 1,300 | 3,000 |
| District of Columbia (DCPS) | 1,600 | 4,000 | 1,000 | 2,000 |
| Duval County (FL) | 1,200 | 10,000 | 1,200 | 8,000 |
| Fort Worth | 1,200 | 6,000 | 1,200 | 6,000 |
| Fresno | 1,200 | 5,000 | 1,100 | 5,000 |
| Guilford County (NC) | 1,100 | 5,000 | 1,100 | 5,000 |
| Hillsborough County (FL) | 1,100 | 16,000 | 1,200 | 16,000 |
| Houston | 1,700 | 17,000 | 1,600 | 12,000 |
| Jefferson County (KY) | 1,200 | 7,000 | 1,100 | 7,000 |
| Los Angeles | 1,700 | 35,000 | 1,800 | 31,000 |
| Miami-Dade | 1,800 | 25,000 | 1,700 | 25,000 |
| Milwaukee | 1,200 | 6,000 | 1,000 | 5,000 |
| New York City | 1,800 | 71,000 | 1,800 | 69,000 |
| Philadelphia | 1,100 | 11,000 | 1,000 | 8,000 |
| San Diego | 1,100 | 8,000 | 1,200 | 7,000 |
| Shelby County (TN) | 1,100 | 8,000 | 1,200 | 7,000 |

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. DCPS = District of Columbia Public Schools. The sample size is rounded to the nearest hundred. The target population is rounded to the nearest thousand.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 Mathematics Assessment.

## School and Student Participation

## National Participation

To ensure unbiased samples, NAEP requires that participation rates be 70 percent or higher to report national results separately for public and private schools. In instances where participation rates meet the 70 percent criteria but fall below 85 percent, a nonresponse bias analysis is conducted; however, results may still be reported.

National school and student participation rates for the 2019 mathematics assessment are presented in table A-5. Student-weighted school participation rates were 96 percent for grade 4 ( 100 percent for public schools and 53 percent for private schools) and 96 percent for grade 8 ( 99 percent for public schools and 50 percent for private schools).

## State and District Participation

Standards established by the Governing Board require that school participation rates for the original state and district samples need to be at least 85 percent for results to be reported. In 2019, all 52 states and jurisdictions participating in the mathematics assessment at grades 4 and 8 met this participation rate requirement (tables A-6 through A-7). The 27 urban districts participating at grades 4 and 8 also met the criteria for reporting (table A-8).

Table A-5.
National school and student participation rates in NAEP mathematics, by grade and type of school: 2019

| Grade and type of school | School participation |  |  |  |  | Student participation |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Student-weighted |  | School-weighted |  | Number of schools participating after substitution | Student-weighted percent | Number of students assessed |
|  | Percent before substitution | Percent after substitution | Percent before substitution | Percent after substitution |  |  |  |
| Grade 4 |  |  |  |  |  |  |  |
| Nation | 96 | 97 | 88 | 90 | 8,280 | 94 | 149,500 |
| Public | 100 | 100 | 100 | 100 | 7,810 | 93 | 143,600 |
| Private | 53 | 63 | 55 | 62 | 290 | 95 | 2,600 |
| Grade 8 |  |  |  |  |  |  |  |
| Nation | 96 | 96 | 81 | 84 | 6,960 | 92 | 147,400 |
| Public | 99 | 99 | 99 | 99 | 6,560 | 92 | 142,200 |
| Private | 50 | 62 | 51 | 60 | 270 | 94 | 2,700 |

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. The national totals for schools include Department of Defense Education Activity (overseas and domestic schools) and Bureau of Indian Education schools, which are not included in either the public or private school totals. The national totals for students include students in these schools. Columns of percentages have different denominators. The number of schools is rounded to the nearest ten. The number of students 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), 2019 Mathematics Assessment.

Table A-6.
Public school and student participation rates in NAEP mathematics at grade 4, by state/jurisdiction: 2019

|  | School participation |  |  | Student participation |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Student-weighted percent | School-weighted percent | Number of schools participating | Student-weighted percent | Number of students assessed |
| Nation (public) | 100 | 100 | 7,810 | 93 | 143,600 |
| Alabama | 100 | 100 | 120 | 95 | 2,300 |
| Alaska | 98 | 92 | 160 | 91 | 2,200 |
| Arizona | 100 | 100 | 130 | 94 | 2,400 |
| Arkansas | 100 | 100 | 120 | 95 | 2,300 |
| California | 99 | 99 | 300 | 94 | 6,000 |
| Colorado | 100 | 100 | 170 | 93 | 3,200 |
| Connecticut | 100 | 100 | 120 | 93 | 2,300 |
| Delaware | 100 | 100 | 90 | 94 | 2,300 |
| Florida | 99 | 99 | 280 | 93 | 5,600 |
| Georgia | 100 | 100 | 160 | 94 | 3,400 |
| Hawaii | 100 | 100 | 120 | 94 | 2,200 |
| Idaho | 100 | 100 | 130 | 94 | 2,400 |
| Illinois | 100 | 100 | 190 | 94 | 3,500 |
| Indiana | 100 | 100 | 120 | 94 | 2,300 |
| lowa | 99 | 99 | 120 | 95 | 2,200 |
| Kansas | 100 | 100 | 130 | 94 | 2,200 |
| Kentucky | 100 | 100 | 160 | 95 | 3,100 |
| Louisiana | 100 | 100 | 120 | 93 | 2,200 |
| Maine | 100 | 99 | 140 | 92 | 2,200 |
| Maryland | 100 | 100 | 160 | 93 | 3,100 |
| Massachusetts | 100 | 100 | 180 | 93 | 3,400 |
| Michigan | 100 | 100 | 180 | 93 | 3,200 |
| Minnesota | 100 | 100 | 130 | 92 | 2,400 |
| Mississippi | 100 | 100 | 120 | 95 | 2,400 |
| Missouri | 100 | 100 | 130 | 93 | 2,300 |
| Montana | 100 | 98 | 160 | 93 | 2,300 |
| Nebraska | 100 | 100 | 150 | 95 | 2,500 |
| Nevada | 100 | 100 | 130 | 94 | 2,500 |
| New Hampshire | 100 | 100 | 140 | 90 | 2,200 |
| New Jersey | 99 | 99 | 120 | 93 | 2,200 |
| New Mexico | 99 | 99 | 140 | 93 | 2,600 |
| New York | 100 | 100 | 160 | 89 | 3,100 |
| North Carolina | 100 | 100 | 230 | 93 | 4,400 |
| North Dakota | 99 | 99 | 160 | 95 | 2,300 |
| Ohio | 100 | 100 | 200 | 93 | 3,500 |
| Oklahoma | 100 | 100 | 130 | 93 | 2,200 |
| Oregon | 100 | 100 | 140 | 90 | 2,400 |
| Pennsylvania | 100 | 100 | 160 | 93 | 3,000 |
| Rhode Island | 100 | 100 | 110 | 94 | 2,300 |
| South Carolina | 100 | 100 | 120 | 95 | 2,400 |
| South Dakota | 100 | 98 | 150 | 94 | 2,300 |
| Tennessee | 100 | 100 | 160 | 94 | 3,100 |
| Texas | 100 | 100 | 360 | 95 | 7,200 |
| Utah | 100 | 100 | 120 | 92 | 2,400 |
| Vermont | 100 | 100 | 210 | 95 | 2,400 |
| Virginia | 100 | 100 | 120 | 94 | 2,300 |
| Washington | 99 | 99 | 130 | 92 | 2,400 |
| West Virginia | 100 | 100 | 130 | 94 | 2,300 |
| Wisconsin | 99 | 99 | 190 | 92 | 3,400 |
| Wyoming | 100 | 100 | 130 | 93 | 2,100 |
| Other jurisdictions |  |  |  |  |  |
| District of Columbia | 100 | 100 | 120 | 93 | 2,500 |
| DoDEA ${ }^{1}$ | 97 | 95 | 90 | 94 | 2,400 |
| Puerto Rico | - | - | - | - | - |

- Not available.
${ }^{1}$ Department of Defense Education Activity (overseas and domestic schools).
NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. The number of schools is rounded to the nearest ten. The number of students is rounded to the nearest hundred. The school participation rates are student-weighted percentages before substitution. Columns of percentages have different denominators. 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), 2019 Mathematics
Assessment.

Table A-7.
Public school and student participation rates in NAEP mathematics at grade 8, by state/jurisdiction: 2019

|  | School participation |  |  | Student participation |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Student-weighted percent | School-weighted percent | Number of schools participating | Student-weighted percent | Number of students assessed |
| Nation (public) | 99 | 99 | 6,560 | 92 | 142,200 |
| Alabama | 100 | 100 | 110 | 95 | 2,300 |
| Alaska | 98 | 86 | 100 | 88 | 2,100 |
| Arizona | 100 | 100 | 120 | 93 | 2,400 |
| Arkansas | 100 | 100 | 110 | 93 | 2,300 |
| California | 96 | 93 | 230 | 93 | 5,900 |
| Colorado | 100 | 100 | 150 | 90 | 3,100 |
| Connecticut | 100 | 100 | 110 | 91 | 2,200 |
| Delaware | 100 | 100 | 60 | 91 | 2,300 |
| Florida | 99 | 99 | 250 | 92 | 5,700 |
| Georgia | 100 | 100 | 130 | 94 | 3,600 |
| Hawaii | 100 | 100 | 60 | 89 | 2,200 |
| Idaho | 100 | 100 | 100 | 93 | 2,300 |
| Illinois | 100 | 100 | 190 | 91 | 3,600 |
| Indiana | 100 | 100 | 110 | 92 | 2,200 |
| lowa | 100 | 100 | 120 | 93 | 2,400 |
| Kansas | 100 | 100 | 120 | 95 | 2,300 |
| Kentucky | 100 | 100 | 130 | 92 | 3,100 |
| Louisiana | 100 | 100 | 110 | 92 | 2,100 |
| Maine | 100 | 100 | 110 | 88 | 2,300 |
| Maryland | 100 | 100 | 160 | 90 | 3,100 |
| Massachusetts | 99 | 99 | 150 | 90 | 3,400 |
| Michigan | 100 | 100 | 160 | 92 | 3,300 |
| Minnesota | 100 | 96 | 130 | 89 | 2,400 |
| Mississippi | 100 | 100 | 110 | 92 | 2,300 |
| Missouri | 100 | 100 | 130 | 93 | 2,400 |
| Montana | 100 | 100 | 130 | 93 | 2,300 |
| Nebraska | 97 | 99 | 120 | 94 | 2,400 |
| Nevada | 100 | 100 | 90 | 91 | 2,400 |
| New Hampshire | 100 | 100 | 90 | 85 | 2,100 |
| New Jersey | 100 | 100 | 110 | 91 | 2,200 |
| New Mexico | 100 | 100 | 120 | 92 | 2,800 |
| New York | 99 | 97 | 160 | 85 | 3,000 |
| North Carolina | 100 | 100 | 170 | 91 | 4,400 |
| North Dakota | 99 | 99 | 130 | 92 | 2,200 |
| Ohio | 100 | 100 | 190 | 93 | 3,300 |
| Oklahoma | 100 | 100 | 130 | 92 | 2,200 |
| Oregon | 100 | 100 | 130 | 89 | 2,400 |
| Pennsylvania | 99 | 100 | 160 | 91 | 3,100 |
| Rhode Island | 100 | 100 | 60 | 91 | 2,300 |
| South Carolina | 100 | 100 | 120 | 93 | 2,300 |
| South Dakota | 99 | 96 | 120 | 91 | 2,200 |
| Tennessee | 100 | 100 | 150 | 92 | 3,200 |
| Texas | 100 | 100 | 240 | 93 | 7,100 |
| Utah | 100 | 100 | 120 | 90 | 2,500 |
| Vermont | 100 | 100 | 120 | 93 | 2,500 |
| Virginia | 100 | 100 | 110 | 92 | 2,200 |
| Washington | 99 | 100 | 120 | 90 | 2,300 |
| West Virginia | 100 | 100 | 110 | 93 | 2,200 |
| Wisconsin | 100 | 100 | 180 | 90 | 3,300 |
| Wyoming | 100 | 100 | 80 | 91 | 2,200 |
| Other jurisdictions |  |  |  |  |  |
| District of Columbia | 100 | 100 | 70 | 89 | 1,900 |
| DoDEA ${ }^{1}$ | 97 | 91 | 50 | 95 | 1,800 |
| Puerto Rico | - | - | - | - | - |

- Not available.
${ }^{1}$ Department of Defense Education Activity (overseas and domestic schools).
NOTE: The number of schools is rounded to the nearest ten. The number of students is rounded to the nearest hundred. The school participation rates are student-weighted percentages before substitution. Columns of percentages have different denominators. 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), 2019 Mathematics Assessment.

Table A-8.
Public school and student participation rates for Trial Urban District Assessment (TUDA) in mathematics, by grade and urban district: 2019

|  | School participation |  |  | Student participation |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Grade and urban district | Student-weighted percent | School-weighted percent | Number of schools participating | Student-weighted percent | Number of students assessed |
| Grade 4 |  |  |  |  |  |
| Albuquerque | 96 | 94 | 50 | 91 | 1,100 |
| Atlanta | 99 | 98 | 50 | 94 | 1,100 |
| Austin | 100 | 100 | 60 | 93 | 1,100 |
| Baltimore City | 100 | 100 | 60 | 94 | 1,100 |
| Boston | 100 | 100 | 70 | 96 | 1,200 |
| Charlotte | 100 | 100 | 60 | 92 | 1,000 |
| Chicago | 100 | 100 | 100 | 95 | 1,700 |
| Clark County (NV) | 100 | 100 | 90 | 95 | 1,800 |
| Cleveland | 100 | 100 | 80 | 92 | 1,300 |
| Dallas | 100 | 100 | 60 | 95 | 1,200 |
| Denver | 100 | 100 | 60 | 93 | 1,100 |
| Detroit | 100 | 100 | 70 | 94 | 1,200 |
| District of Columbia (DCPS) | 100 | 100 | 80 | 94 | 1,500 |
| Duval County (FL) | 100 | 100 | 60 | 95 | 1,100 |
| Fort Worth | 100 | 100 | 60 | 95 | 1,100 |
| Fresno | 100 | 100 | 60 | 94 | 1,200 |
| Guilford County (NC) | 100 | 100 | 50 | 94 | 1,100 |
| Hillsborough County (FL) | 100 | 100 | 60 | 93 | 1,100 |
| Houston | 100 | 100 | 90 | 96 | 1,600 |
| Jefferson County (KY) | 100 | 100 | 60 | 94 | 1,100 |
| Los Angeles | 100 | 100 | 90 | 95 | 1,700 |
| Miami-Dade | 100 | 100 | 90 | 96 | 1,700 |
| Milwaukee | 100 | 100 | 70 | 92 | 1,200 |
| New York City | 100 | 100 | 90 | 91 | 1,700 |
| Philadelphia | 96 | 98 | 60 | 96 | 1,100 |
| San Diego | 100 | 100 | 60 | 94 | 1,100 |
| Shelby County (TN) | 100 | 100 | 60 | 93 | 1,100 |
| Grade 8 |  |  |  |  |  |
| Albuquerque | 100 | 100 | 40 | 90 | 1,100 |
| Atlanta | 100 | 100 | 20 | 93 | 1,400 |
| Austin | 100 | 100 | 20 | 89 | 1,100 |
| Baltimore City | 100 | 100 | 60 | 87 | 1,000 |
| Boston | 100 | 100 | 40 | 93 | 1,300 |
| Charlotte | 100 | 100 | 40 | 91 | 1,100 |
| Chicago | 100 | 100 | 90 | 93 | 1,700 |
| Clark County (NV) | 100 | 100 | 60 | 91 | 1,700 |
| Cleveland | 100 | 100 | 70 | 92 | 1,000 |
| Dallas | 100 | 100 | 40 | 92 | 1,100 |
| Denver | 96 | 96 | 40 | 91 | 1,000 |
| Detroit | 100 | 100 | 50 | 90 | 1,200 |
| District of Columbia (DCPS) | 100 | 100 | 30 | 88 | 900 |
| Duval County (FL) | 100 | 100 | 40 | 94 | 1,100 |
| Fort Worth | 100 | 100 | 30 | 93 | 1,200 |
| Fresno | 100 | 100 | 20 | 86 | 1,100 |
| Guilford County (NC) | 100 | 100 | 20 | 92 | 1,100 |
| Hillsborough County (FL) | 100 | 100 | 50 | 93 | 1,200 |
| Houston | 100 | 100 | 50 | 92 | 1,600 |
| Jefferson County (KY) | 100 | 100 | 20 | 91 | 1,100 |
| Los Angeles | 100 | 100 | 80 | 92 | 1,700 |
| Miami-Dade | 100 | 100 | 80 | 91 | 1,700 |
| Milwaukee | 100 | 100 | 50 | 88 | 1,000 |
| New York City | 99 | 96 | 90 | 93 | 1,800 |
| Philadelphia | 89 | 97 | 50 | 94 | 1,000 |
| San Diego | 100 | 100 | 40 | 92 | 1,100 |
| Shelby County (TN) | 100 | 100 | 40 | 90 | 1,100 |

NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. DCPS = District of Columbia Public Schools. The number of schools is rounded to the nearest ten. The number of students is rounded to the nearest hundred. The school participation rates are studentweighted percentages before substitution.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 Mathematics
Assessment.

## Inclusion of Students With Disabilities and/or English Language Learners

It is important for NAEP to assess as many students selected to participate as possible. Assessing representative samples of students, including students with disabilities (SD) and English language learners (ELL), helps to ensure that NAEP results accurately reflect the educational performance of all students in the target population, and can continue to serve as a meaningful measure of U.S. students' academic achievement over time.

The National Assessment Governing Board, which sets policy for NAEP, explored ways to ensure that NAEP continues to appropriately include as many students as possible and to do so in a consistent manner for all jurisdictions assessed and reported. In March 2010, the Governing Board adopted a new policy, NAEP Testing and Reporting on Students with Disabilities and English Language Learners. This policy was the culmination of work with experts in testing and curriculum, and those who work with exceptional children and students learning to speak English. The policy aims to

- maximize participation of sampled students in NAEP,
- reduce variation in exclusion rates for SD and ELL students across states and districts,
- develop uniform national rules for including students in NAEP, and
- ensure that NAEP is fully representative of SD and ELL students.

The policy defines specific inclusion goals for NAEP samples. At the national, state, and district levels, the goal is to include 95 percent of all students selected for the NAEP samples, and 85 percent of those in the NAEP sample who are identified as SD or ELL.

Students are selected to participate in NAEP based on a sampling procedure designed to yield a sample of students that is representative of students in all schools nationwide and in public schools within each state. First, schools are selected, and then students are sampled from within those schools without regard to disability or English language proficiency. Once students are selected, those previously identified as SD or ELL may be offered accommodations or excluded.

States and jurisdictions vary in their proportions of special-needs students and in their policies on inclusion and the use of accommodations. While identification of rates SD and ELL students in some states, have leveled off in recent years, NAEP inclusion rates have generally remained steady or increased since 2003. This reflects efforts on the part of states and jurisdictions to include all students who can meaningfully participate in the NAEP assessments. The NAEP inclusion policy is an effort to ensure that this trend continues.

Determining whether each jurisdiction has met the NAEP inclusion goals involves looking at three different inclusion rates-an overall inclusion rate, an inclusion rate for SD students, and an inclusion rate for ELL students. Each inclusion rate is calculated as the percentage of sampled students who were included in the assessment (i.e., were not excluded).

Inclusion rate percentages are estimates because they are based on representative samples of students rather than on the entire population of students. As such, the inclusion rates are associated with a margin of error. The margin of error for each jurisdiction's inclusion rate was taken into account when comparing it to the corresponding inclusion goal. For example, if the point estimate of a state's overall inclusion rate was 93 percent and had a margin of error of plus or minus 3 percentage points, the state was considered to have met the 95 percent inclusion goal because the 95 percent goal falls within the margin of error, which ranges from 90 percent to 96 percent. Refer to the Technical Notes for more details about how the margin of error was used in these calculations.

## Confidence intervals for state inclusion rates

NAEP endeavors to include as many sampled students as possible in the assessment, including students with disabilities (SD) and English language learners (ELL), and has established specific inclusion goals: 95 percent of all sampled students and 85 percent of sampled students identified as SD or ELL. Inclusion rates were computed for each state/jurisdiction participating in the 2019 assessment and compared to NAEP inclusion goals. Three inclusion percentages were computed for each state/jurisdiction. An overall inclusion percentage represents included students as a percentage of all students sampled within the state/jurisdiction. In addition, separate percentages were computed to report included students as a percentage of the state/jurisdiction sample that was identified as SD (not including students having a Section 504 plan) or ELL.

Inclusion percentages are estimates based on a sample, and each estimate has a measure of uncertainty or margin of error. Confidence intervals quantify this uncertainty due to sampling, resulting in interval estimates of the inclusion percentages. Therefore, confidence intervals for inclusion percentages were used to determine upper and lower confidence bounds around the inclusion point estimates.

When determining whether each state/jurisdiction met the NAEP inclusion goals, the confidence intervals were used, rather than just the point estimates. This means that if the inclusion goal of either 95 percent or 85 percent fell within the corresponding confidence interval, the state/jurisdiction was considered as having met the goal. States/jurisdictions for which the upper bound of the confidence interval was less than 95 percent (or 85 percent) did not meet the inclusion goal.

See the National Assessment Governing Board's policy on NAEP Testing and Reporting on Students with Disabilities and English Language Learners at https://www.nagb.org/content/nagb/assets/documents/policies/naep_testandreport_studentswithdisabilities.pdf.

All of the states/jurisdictions participating in the 2019 mathematics assessment met the 95 percent inclusion goal at both grades 4 and 8 . See appendix table A-10 for the inclusion rates as a percentage of all students selected in each state/jurisdiction, and table A-11 for the rates as a percentage of the SD or ELL students.

All of the districts participating in the 2019 mathematics assessment met the 95 percent inclusion goal at both grades 4 and 8 . See appendix table A-12 for the inclusion rates as a percentage of all students selected in each urban district/jurisdiction, and table A-13 for the rates as a percentage of the SD or ELL students.

Table A-9.
Percentage of fourth- and eighth-grade public and nonpublic school students identified as students with disabilities (SD) and/or English language learners (ELL) assessed in NAEP mathematics with accommodations, by SD/ELL category and type of accommodation: 2019

| Type of accommodation | Grade 4 |  |  | Grade 8 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SD and/or ELL | SD | ELL | SD and/or ELL | SD | ELL |
| Bilingual booklet | 0.5 | 0.1 | 0.5 | 0.4 | 0.1 | 0.4 |
| Bilingual dictionary | 1.0 | 0.1 | 1.0 | 0.9 | 0.1 | 0.9 |
| Braille | \# | \# | \# | \# | \# | \# |
| Breaks during test | 4.2 | 3.7 | 0.9 | 2.7 | 2.6 | 0.3 |
| Calculator version of the test | 1.2 | 1.2 | 0.2 | 2.9 | 2.9 | 0.4 |
| Cueing to stay on task | 2.5 | 2.3 | 0.4 | 1.3 | 1.2 | 0.1 |
| Directions only presented in Sign Language | \# | \# | \# | \# | \# | \# |
| Directions translated into Spanish | 0.2 | \# | 0.2 | 0.1 | \# | 0.1 |
| Extended time | 11.7 | 8.3 | 4.5 | 10.3 | 8.7 | 2.5 |
| Hearing impaired version of test | \# | \# | \# | \# | \# | \# |
| High contrast for visually impaired | \# | \# | \# | 0.1 | 0.1 | \# |
| Low mobility version of test | \# | \# | \# | \# | \# | \# |
| Magnification equipment | 0.1 | 0.1 | \# | 0.1 | 0.1 | \# |
| Must be tested in separate session | 5.6 | 5.0 | 1.1 | 4.3 | 4.1 | 0.5 |
| Other | 0.2 | 0.1 | \# | 0.1 | 0.1 | \# |
| Preferential seating | 2.8 | 2.6 | 0.5 | 2.3 | 2.3 | 0.3 |
| Presentation in Sign Language | \# | \# | \# | \# | \# | \# |
| Responds orally to scribe | 0.3 | 0.3 | \# | 0.1 | 0.1 | \# |
| Response in Sign Language | \# | \# | \# | \# | \# | \# |
| School staff administers/Aide present | 1.2 | 1.1 | 0.3 | 0.5 | 0.5 | 0.1 |
| Special equipment | 0.4 | 0.4 | 0.1 | 0.2 | 0.2 | \# |
| Text to speech in Spanish | 0.5 | 0.1 | 0.5 | 0.4 | 0.1 | 0.4 |
| Uses template | 0.2 | 0.2 | \# | 0.1 | 0.1 | \# |

\# Rounds to zero.
NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. 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. SD includes students identified as having either an Individualized Education Program or protection under Section 504 of the Rehabilitation Act of 1973.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 Mathematics Assessment.

Table A-10.
Inclusion rate and confidence interval in NAEP mathematics for fourth- and eighth-grade public school students, as a percentage of all students, by state/jurisdiction: 2019

|  | Grade 4 |  |  |  | Grade 8 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 95\% confide |  |  |  | 95\% confide |  |
| State/jurisdiction | Inclusion rate |  | Lower | Upper | Inclusion rate |  | Lower | Upper |
| Nation (public) | 98 | 1 | 97.9 | 98.2 | 98 | 1 | 98.3 | 98.5 |
| Alabama | 98 | 1 | 97.8 | 98.9 | 99 | 1 | 98.1 | 99.1 |
| Alaska | 99 | 1 | 98.9 | 99.6 | 99 | 1 | 98.2 | 99.1 |
| Arizona | 99 | 1 | 98.4 | 99.4 | 98 | 1 | 97.2 | 99.0 |
| Arkansas | 99 | 1 | 98.0 | 99.3 | 98 | 1 | 97.6 | 98.7 |
| California | 97 | 1 | 96.3 | 97.8 | 98 | 1 | 97.8 | 98.9 |
| Colorado | 99 | 1 | 98.2 | 99.1 | 99 | 1 | 98.2 | 99.3 |
| Connecticut | 98 | 1 | 97.6 | 98.8 | 98 | 1 | 97.4 | 98.7 |
| Delaware | 98 | 1 | 97.9 | 98.8 | 98 | 1 | 97.6 | 98.6 |
| Florida | 98 | 1 | 96.7 | 98.2 | 98 | 1 | 97.3 | 98.6 |
| Georgia | 98 | 1 | 97.9 | 98.9 | 98 | 1 | 97.7 | 98.8 |
| Hawaii | 98 | 1 | 97.3 | 98.7 | 98 | 1 | 97.2 | 98.2 |
| Idaho | 99 | 1 | 98.2 | 99.1 | 99 | 1 | 98.2 | 99.1 |
| Illinois | 99 | 1 | 98.7 | 99.5 | 99 | 1 | 98.6 | 99.3 |
| Indiana | 99 | 1 | 97.9 | 99.0 | 98 | 1 | 97.5 | 98.9 |
| lowa | 99 | 1 | 97.9 | 99.0 | 99 | 1 | 98.3 | 99.3 |
| Kansas | 99 | 1 | 97.9 | 99.1 | 99 | 1 | 98.1 | 99.1 |
| Kentucky | 98 | 1 | 97.8 | 98.6 | 98 | 1 | 97.6 | 98.7 |
| Louisiana | 98 | 1 | 97.3 | 98.7 | 98 | 1 | 96.9 | 98.4 |
| Maine | 99 | 1 | 98.5 | 99.3 | 99 | 1 | 98.2 | 99.2 |
| Maryland | 98 | 1 | 97.8 | 99.0 | 98 | 1 | 97.7 | 98.9 |
| Massachusetts | 98 | 1 | 96.7 | 98.2 | 98 | 1 | 96.9 | 98.2 |
| Michigan | 98 | 1 | 97.6 | 98.8 | 98 | 1 | 96.8 | 98.2 |
| Minnesota | 98 | 1 | 97.7 | 98.8 | 98 | 1 | 97.4 | 98.6 |
| Mississippi | 99 | 1 | 98.5 | 99.4 | 99 | 1 | 98.5 | 99.2 |
| Missouri | 99 | 1 | 98.2 | 99.3 | 99 | 1 | 98.9 | 99.5 |
| Montana | 99 | 1 | 98.2 | 99.1 | 99 | 1 | 98.6 | 99.4 |
| Nebraska | 99 | 1 | 98.1 | 99.1 | 99 | 1 | 98.3 | 99.2 |
| Nevada | 98 | 1 | 97.4 | 98.7 | 99 | 1 | 98.4 | 99.1 |
| New Hampshire | 99 | 1 | 98.1 | 99.1 | 99 | 1 | 98.4 | 99.3 |
| New Jersey | 98 | 1 | 97.4 | 98.9 | 98 | 1 | 97.5 | 98.7 |
| New Mexico | 98 | 1 | 97.9 | 98.9 | 98 | 1 | 97.4 | 98.7 |
| New York | 97 | 1 | 94.2 | 98.6 | 99 | 1 | 97.9 | 99.0 |
| North Carolina | 99 | 1 | 98.0 | 99.0 | 99 | 1 | 98.1 | 99.1 |
| North Dakota | 98 | 1 | 97.8 | 98.9 | 99 | 1 | 98.1 | 99.2 |
| Ohio | 97 | 1 | 96.5 | 98.1 | 98 | 1 | 97.9 | 98.8 |
| Oklahoma | 98 | 1 | 96.9 | 98.7 | 98 | 1 | 97.1 | 98.4 |
| Oregon | 99 | 1 | 98.2 | 99.1 | 99 | 1 | 97.7 | 99.0 |
| Pennsylvania | 98 | 1 | 96.7 | 98.1 | 99 | 1 | 98.0 | 98.9 |
| Rhode Island | 98 | 1 | 97.6 | 98.7 | 99 | 1 | 98.1 | 99.1 |
| South Carolina | 99 | 1 | 98.4 | 99.3 | 99 | 1 | 98.0 | 99.2 |
| South Dakota | 99 | 1 | 98.4 | 99.3 | 99 | 1 | 98.2 | 99.0 |
| Tennessee | 98 | 1 | 97.3 | 98.4 | 98 | 1 | 97.7 | 98.6 |
| Texas | 97 | 1 | 96.8 | 98.0 | 98 | 1 | 97.9 | 98.9 |
| Utah | 98 | 1 | 97.4 | 98.9 | 99 | 1 | 98.6 | 99.4 |
| Vermont | 99 | 1 | 98.3 | 99.2 | 99 | 1 | 97.9 | 99.0 |
| Virginia | 99 | 1 | 98.2 | 99.0 | 98 | 1 | 97.1 | 98.3 |
| Washington | 97 | 1 | 96.4 | 98.0 | 98 | 1 | 97.5 | 98.8 |
| West Virginia | 99 | 1 | 98.3 | 99.3 | 99 | 1 | 98.3 | 99.1 |
| Wisconsin | 99 | 1 | 98.4 | 99.1 | 99 | 1 | 98.2 | 99.1 |
| Wyoming | 99 | 1 | 98.6 | 99.4 | 98 | 1 | 97.7 | 98.8 |
| Other jurisdictions |  |  |  |  |  |  |  |  |
| District of Columbia | 98 | 1 | 98.0 | 98.8 | 98 | 1 | 97.8 | 98.9 |
| DoDEA ${ }^{2}$ | 98 | 1 | 97.9 | 98.8 | 99 | 1 | 98.0 | 99.1 |
| Puerto Rico | - |  | - | - | - |  | - | - |

[^4]${ }^{1}$ The state/jurisdiction's inclusion rate is higher than or not significantly different from the National Assessment Governing Board goal of 95 percent.
${ }^{2}$ Department of Defense Education Activity (overseas and domestic schools).
NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 Mathematics
Assessment.

Table A-11.
Inclusion rate and standard error (SE) in NAEP mathematics for fourth- and eighth-grade public school students with disabilities (SD) and English language learners (ELL), as a percentage of identified SD or ELL students, by state/jurisdiction: 2019

|  | Percentage of identified SD or ELL students |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Grade 4 |  |  |  |  |  | Grade 8 |  |  |  |  |  |
|  | SD |  |  | ELL |  |  | SD |  |  | ELL |  |  |
| State/jurisdiction | Inclusion rate |  | SE | Inclusion rate |  | SE | Inclusion rate |  | SE | Inclusion rate |  | SE |
| Nation (public) | 89 | 1 | 0.5 | 95 | 1 | 0.3 | 91 | 1 | 0.4 | 93 | 1 | 0.4 |
| Alabama | 92 | 1 | 1.4 | 91 | 1 | 2.8 | 90 | 1 | 1.8 | $\ddagger$ |  | $\dagger$ |
| Alaska | 98 | 1 | 0.7 | 98 | 1 | 0.8 | 93 | 1 | 1.4 | 96 | 1 | 1.2 |
| Arizona | 93 | 1 | 1.8 | 99 | 1 | 0.9 | 89 | 1 | 2.9 | 92 | 1 | 2.7 |
| Arkansas | 93 | 1 | 1.7 | 97 | 1 | 2.1 | 88 | 1 | 2.1 | 95 | 1 | 1.6 |
| California | 84 | 1 | 2.1 | 94 | 1 | 1.0 | 91 | 1 | 1.7 | 94 | 1 | 1.2 |
| Colorado | 94 | 1 | 1.5 | 95 | 1 | 0.9 | 92 | 1 | 1.8 | 95 | 1 | 1.9 |
| Connecticut | 93 | 1 | 1.7 | 93 | 1 | 1.5 | 91 | 1 | 1.6 | 86 | 1 | 5.0 |
| Delaware | 93 | 1 | 1.3 | 96 | 1 | 0.8 | 91 | 1 | 1.5 | 91 | 1 | 2.8 |
| Florida | 90 | 1 | 1.8 | 93 | 1 | 1.5 | 90 | 1 | 1.7 | 91 | 1 | 2.0 |
| Georgia | 89 | 1 | 1.8 | 96 | 1 | 1.3 | 88 | 1 | 2.0 | 96 | 1 | 2.1 |
| Hawaii | 89 | 1 | 2.4 | 94 | 1 | 1.7 | 86 | 1 | 2.2 | 83 | 1 | 3.0 |
| Idaho | 89 | 1 | 1.9 | 98 | 1 | 1.0 | 89 | 1 | 2.0 | 96 | 1 | 2.2 |
| Illinois | 95 | 1 | 1.2 | 98 | 1 | 0.7 | 94 | 1 | 1.1 | 95 | 1 | 2.0 |
| Indiana | 92 | 1 | 1.5 | 96 | 1 | 1.2 | 91 | 1 | 1.8 | 93 | 1 | 3.7 |
| lowa | 92 | 1 | 1.8 | 93 | 1 | 2.3 | 92 | 1 | 1.7 | 97 | 1 | 1.7 |
| Kansas | 92 | 1 | 1.9 | 97 | 1 | 1.1 | 92 | 1 | 1.6 | 95 | 1 | 1.7 |
| Kentucky | 90 | 1 | 1.3 | 91 | 1 | 2.1 | 88 | 1 | 2.2 | 87 | 1 | 4.3 |
| Louisiana | 86 |  | 2.7 | 95 | 1 | 2.4 | 83 | 1 | 2.9 | 89 | 1 | 4.9 |
| Maine | 95 | 1 | 1.1 | 96 | 1 | 1.5 | 94 | 1 | 1.3 | $\ddagger$ |  | $\dagger$ |
| Maryland | 92 | 1 | 1.8 | 96 | 1 | 1.1 | 89 | 1 | 2.3 | 92 | 1 | 2.6 |
| Massachusetts | 91 | 1 | 1.5 | 92 | 1 | 1.8 | 91 | 1 | 1.2 | 84 | 1 | 3.2 |
| Michigan | 87 | 1 | 2.3 | 97 | 1 | 1.0 | 82 | 1 | 2.5 | 95 | 1 | 1.8 |
| Minnesota | 90 | 1 | 1.8 | 98 | 1 | 0.8 | 88 | 1 | 1.8 | 93 | 1 | 2.8 |
| Mississippi | 94 | 1 | 1.4 | 95 | 1 | 2.6 | 92 | 1 | 1.2 | $\ddagger$ |  | $\dagger$ |
| Missouri | 93 | 1 | 1.5 | 95 | 1 | 2.2 | 95 | 1 | 1.2 | $\ddagger$ |  | $\dagger$ |
| Montana | 92 | 1 | 1.4 | 96 | 1 | 2.3 | 93 | 1 | 1.4 | $\ddagger$ |  | $\dagger$ |
| Nebraska | 94 | 1 | 1.4 | 96 | 1 | 1.4 | 93 | 1 | 1.4 | 94 | 1 | 2.5 |
| Nevada | 88 | 1 | 2.3 | 97 | 1 | 0.8 | 93 | 1 | 1.4 | 95 | 1 | 1.3 |
| New Hampshire | 93 | 1 | 1.4 | 95 | 1 | 2.3 | 94 | 1 | 1.2 | $\ddagger$ |  | $\dagger$ |
| New Jersey | 92 | 1 | 2.0 | 94 | 1 | 1.9 | 95 | 1 | 1.4 | 81 | 1 | 3.6 |
| New Mexico | 92 | 1 | 1.4 | 98 | 1 | 0.6 | 91 | 1 | 1.7 | 94 | 1 | 1.2 |
| New York | 87 | 1 | 4.5 | 90 | 1 | 2.3 | 94 | 1 | 1.3 | 90 | 1 | 2.2 |
| North Carolina | 89 | 1 | 1.9 | 97 | 1 | 1.0 | 92 | 1 | 1.8 | 90 | 1 | 2.5 |
| North Dakota | 91 | 1 | 1.8 | 94 | 1 | 2.3 | 91 | 1 | 1.9 | $\ddagger$ |  | $\dagger$ |
| Ohio | 85 | 1 | 2.3 | 88 | 1 | 4.1 | 89 | 1 | 1.5 | 95 | 1 | 2.4 |
| Oklahoma | 89 | 1 | 2.0 | 96 | 1 | 1.7 | 88 | 1 | 2.0 | 91 | 1 | 2.5 |
| Oregon | 93 | 1 | 1.3 | 96 | 1 | 1.6 | 91 | 1 | 2.0 | 93 | 1 | 2.1 |
| Pennsylvania | 88 | 1 | 1.8 | 93 | 1 | 1.4 | 92 | 1 | 1.2 | 95 | 1 | 1.8 |
| Rhode Island | 93 |  | 1.5 | 93 | 1 | 1.3 | 95 | 1 | 1.1 | 91 | 1 | 2.2 |
| South Carolina | 94 | 1 | 1.3 | 94 | 1 | 2.1 | 92 | 1 | 1.8 | 97 | 1 | 1.3 |
| South Dakota | 95 | 1 | 1.1 | 96 | 1 | 1.9 | 90 | 1 | 1.6 | $\ddagger$ |  | $\dagger$ |
| Tennessee | 89 | 1 | 1.5 | 92 | 1 | 2.6 | 88 | 1 | 1.6 | 86 | 1 | 3.6 |
| Texas | 79 |  | 2.6 | 97 | 1 | 0.7 | 88 | 1 | 2.3 | 97 | 1 | 0.8 |
| Utah | 90 | 1 | 2.4 | 95 | 1 | 1.4 | 94 | 1 | 1.4 | 95 | 1 | 1.7 |
| Vermont | 95 | 1 | 1.1 | 93 | 1 | 2.5 | 92 | 1 | 1.4 | $\ddagger$ |  | $\dagger$ |
| Virginia | 92 | 1 | 1.5 | 96 | 1 | 1.2 | 86 | 1 | 1.9 | 88 | 1 | 3.2 |
| Washington | 83 | 1 | 2.7 | 94 | 1 | 1.3 | 92 | 1 | 1.5 | 90 | 1 | 2.9 |
| West Virginia | 95 | 1 | 1.2 | $\ddagger$ |  | $\dagger$ | 92 | 1 | 1.3 | $\ddagger$ |  | $\dagger$ |
| Wisconsin | 92 | 1 | 1.3 | 98 | 1 | 0.9 | 92 | 1 | 1.7 | 92 | 1 | 2.2 |
| Wyoming | 95 | 1 | 1.3 | 96 | 1 | 2.1 | 88 | 1 | 1.8 | $\ddagger$ |  | $\dagger$ |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 93 | 1 | 1.1 | 95 | 1 | 1.1 | 94 | 1 | 1.2 | 89 | 1 | 2.6 |
| DoDEA ${ }^{2}$ | 93 | 1 | 1.5 | 92 | 1 | 1.6 | 90 | 1 | 2.1 | 93 | 1 | 2.5 |
| Puerto Rico |  |  |  |  |  |  |  |  |  | - |  |  |

## - Not available

$\dagger$ Not applicable. Standard error estimate cannot be accurately determined.
$\ddagger$ Reporting standards not met. Sample size insufficient to permit a reliable estimate.
${ }^{1}$ The state/jurisdiction's inclusion rate is higher than or not significantly different from the National Assessment Governing Board goal of 85 percent.
${ }^{2}$ Department of Defense Education Activity (overseas and domestic schools).
NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. SD includes students identified as having an Individualized Education Program but excludes other students protected under Section 504 of the Rehabilitation Act of 1973. In Puerto Rico, the English language learner (ELL) category is for the Spanish language learner (SLL).
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 Mathematics Assessment.

Table A-12.
Inclusion rate and confidence interval in NAEP mathematics for fourth- and eighth-grade public school students, as a percentage of all students, by urban district/jurisdiction: 2019

|  | Grade 4 |  |  |  | Grade 8 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 95\% confide |  |  |  | 95\% confid |  |
| Urban district/jurisdiction | Inclusion rate |  | Lower | Upper | Inclusion rate |  | Lower | Upper |
| Nation (public) | 98 | 2 | 97.9 | 98.2 | 98 | 2 | 98.3 | 98.5 |
| Large city ${ }^{1}$ (public) | 97 | 2 | 96.5 | 98.0 | 98 | 2 | 97.9 | 98.5 |
| Albuquerque | 98 | 2 | 97.3 | 99.0 | 98 | 2 | 96.6 | 98.6 |
| Atlanta | 99 | 2 | 98.0 | 99.3 | 99 | 2 | 98.0 | 99.2 |
| Austin | 97 | 2 | 96.2 | 98.3 | 98 | 2 | 97.5 | 99.1 |
| Baltimore City | 98 | 2 | 97.5 | 98.8 | 98 | 2 | 97.5 | 98.9 |
| Boston | 96 | 2 | 95.2 | 97.3 | 95 | 2 | 93.4 | 95.6 |
| Charlotte | 98 | 2 | 96.9 | 98.9 | 98 | 2 | 96.7 | 98.4 |
| Chicago | 98 | 2 | 97.3 | 99.0 | 99 | 2 | 97.5 | 99.2 |
| Clark County (NV) | 98 | 2 | 97.5 | 98.9 | 99 | 2 | 98.1 | 99.2 |
| Cleveland | 96 | 2 | 95.3 | 97.4 | 95 | 2 | 93.6 | 96.3 |
| Dallas | 97 | 2 | 94.9 | 97.8 | 98 | 2 | 96.6 | 98.3 |
| Denver | 98 | 2 | 97.2 | 98.9 | 99 | 2 | 97.9 | 99.1 |
| Detroit | 95 | 2 | 94.1 | 96.6 | 94 |  | 92.3 | 94.7 |
| District of Columbia (DCPS) | 98 | 2 | 96.9 | 98.2 | 98 | 2 | 96.7 | 98.4 |
| Duval County (FL) | 98 | 2 | 96.5 | 98.8 | 97 | 2 | 96.5 | 98.2 |
| Fort Worth | 98 | 2 | 96.8 | 98.5 | 99 | 2 | 97.7 | 99.1 |
| Fresno | 98 | 2 | 96.6 | 98.5 | 99 | 2 | 98.2 | 99.3 |
| Guilford County (NC) | 99 | 2 | 98.0 | 99.3 | 99 | 2 | 98.6 | 99.7 |
| Hillsborough County (FL) | 97 | 2 | 96.0 | 97.8 | 99 | 2 | 97.7 | 99.2 |
| Houston | 98 | 2 | 96.7 | 98.5 | 98 | 2 | 97.1 | 98.3 |
| Jefferson County (KY) | 97 | 2 | 95.8 | 98.2 | 98 | 2 | 97.1 | 98.7 |
| Los Angeles | 98 | 2 | 96.4 | 98.6 | 98 | 2 | 97.3 | 98.4 |
| Miami-Dade | 96 | 2 | 95.1 | 97.5 | 98 | 2 | 96.7 | 98.7 |
| Milwaukee | 98 | 2 | 96.7 | 98.4 | 97 | 2 | 95.8 | 97.9 |
| New York City | 96 | 2 | 85.9 | 98.8 | 99 | 2 | 98.5 | 99.3 |
| Philadelphia | 94 | 2 | 92.5 | 95.5 | 95 | 2 | 92.4 | 96.6 |
| San Diego | 98 | 2 | 96.6 | 98.4 | 98 | 2 | 97.1 | 98.7 |
| Shelby County (TN) | 98 | 2 | 96.5 | 98.8 | 98 | 2 | 97.1 | 98.7 |

${ }^{1}$ Large city includes students from all cities in the nation with populations of 250,000 or more including the participating districts.
${ }^{2}$ The urban districtjurisdiction's inclusion rate is higher than or not significantly different from the National Assessment Governing Board goal of 95 percent.
NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. DCPS = District of Columbia Public Schools.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 Mathematics Assessment.

Table A-13.
Inclusion rate and standard error (SE) in NAEP mathematics for fourth- and eighth-grade public school students with disabilities (SD) and English language learners (ELL), as a percentage of identified SD and ELL students, by urban district/jurisdiction: 2019

|  | Percentage of identified SD or ELL students |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Grade 4 |  |  |  |  |  | Grade 8 |  |  |  |  |  |
|  | SD |  |  | ELL |  |  | SD |  |  | ELL |  |  |
| Urban district/jurisdiction | Inclusion rate |  | SE | Inclusion rate |  | SE | Inclusion rate |  | SE | Inclusion rate |  | SE |
| Nation (public) | 89 | 2 | 0.5 | 95 | 2 | 0.3 | 91 | 2 | 0.4 | 93 | 2 | 0.4 |
| Large city ${ }^{1}$ (public) | 86 | 2 | 1.7 | 94 | 2 | 0.7 | 90 | 2 | 0.9 | 94 | 2 | 0.6 |
| Albuquerque | 94 | 2 | 1.7 | 97 | 2 | 1.2 | 90 | 2 | 2.1 | 97 | 2 | 1.5 |
| Atlanta | 92 | 2 | 2.3 | 92 | 2 | 3.6 | 93 | 2 | 1.8 | $\ddagger$ |  | $\dagger$ |
| Austin | 87 | 2 | 2.6 | 97 | 2 | 1.0 | 93 | 2 | 1.7 | 96 | 2 | 1.3 |
| Baltimore City | 97 | 2 | 1.4 | 85 | 2 | 2.8 | 96 | 2 | 1.5 | $\ddagger$ |  | $\dagger$ |
| Boston | 89 | 2 | 1.7 | 93 | 2 | 1.2 | 85 | 2 | 2.3 | 86 | 2 | 1.8 |
| Charlotte | 83 | 2 | 4.3 | 96 | 2 | 1.3 | 90 | 2 | 3.2 | 84 | 2 | 3.5 |
| Chicago | 91 | 2 | 2.7 | 96 | 2 | 0.9 | 94 | 2 | 2.1 | 94 | 2 | 1.7 |
| Clark County (NV) | 90 | 2 | 2.3 | 97 | 2 | 1.0 | 92 | 2 | 2.0 | 95 | 2 | 1.4 |
| Cleveland | 84 | 2 | 2.2 | 95 | 2 | 1.7 | 81 |  | 2.4 | 92 | 2 | 2.3 |
| Dallas | 77 | 2 | 5.3 | 97 | 2 | 0.8 | 84 | 2 | 3.1 | 96 | 2 | 0.9 |
| Denver | 88 | 2 | 3.0 | 97 | 2 | 0.9 | 93 | 2 | 2.5 | 96 | 2 | 1.0 |
| Detroit | 73 |  | 3.6 | 94 | 2 | 1.8 | 68 |  | 3.0 | 96 | 2 | 1.5 |
| District of Columbia (DCPS) | 90 | 2 | 1.6 | 94 | 2 | 1.4 | 91 | 2 | 2.0 | 87 | 2 | 3.4 |
| Duval County (FL) | 92 | 2 | 2.3 | 92 | 2 | 4.4 | 85 | 2 | 2.7 | $\ddagger$ |  | $\dagger$ |
| Fort Worth | 84 | 2 | 3.2 | 99 | 2 | 0.5 | 84 | 2 | 3.5 | 99 | 2 | 0.4 |
| Fresno | 83 | 2 | 3.3 | 97 | 2 | 0.9 | 94 | 2 | 2.1 | 96 | 2 | 1.6 |
| Guilford County (NC) | 93 | 2 | 2.2 | 98 | 2 | 1.1 | 94 | 2 | 2.1 | $\ddagger$ |  | $\dagger$ |
| Hillsborough County (FL) | 88 | 2 | 1.9 | 92 | 2 | 2.5 | 94 | 2 | 2.3 | 96 | 2 | 2.0 |
| Houston | 78 | 2 | 4.6 | 98 | 2 | 0.6 | 83 | 2 | 3.4 | 96 | 2 | 0.8 |
| Jefferson County (KY) | 86 | 2 | 3.2 | 89 | 2 | 2.8 | 86 | 2 | 3.5 | 90 | 2 | 3.9 |
| Los Angeles | 89 | 2 | 2.6 | 94 | 2 | 1.4 | 90 | 2 | 2.0 | 90 | 2 | 1.7 |
| Miami-Dade | 85 | 2 | 3.3 | 92 | 2 | 1.4 | 86 | 2 | 3.5 | 93 | 2 | 1.6 |
| Milwaukee | 91 | 2 | 1.7 | 96 | 2 | 1.6 | 88 | 2 | 2.3 | 93 | 2 | 2.2 |
| New York City | 87 | 2 | 8.5 | 89 | 2 | 3.6 | 98 | 2 | 0.7 | 94 | 2 | 1.7 |
| Philadelphia | 75 |  | 3.4 | 85 | 2 | 2.4 | 80 | 2 | 3.6 | 83 | 2 | 3.3 |
| San Diego | 88 | 2 | 2.6 | 95 | 2 | 1.2 | 87 | 2 | 3.0 | 95 | 2 | 1.7 |
| Shelby County (TN) | 81 | 2 | 4.8 | 95 |  | 2.1 | 86 | 2 | 2.9 | 91 |  | 3.0 |

$\dagger$ Not applicable. Standard error estimate cannot be accurately determined.
$\ddagger$ Reporting standards not met. Sample size insufficient to permit a reliable estimate.
${ }^{1}$ Large city includes students from all cities in the nation with populations of 250,000 or more including the participating districts.
${ }^{2}$ The urban districtjurisdiction's inclusion rate is higher than or not significantly different from the National Assessment Governing Board goal of 85 percent.
NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. DCPS = District of Columbia Public Schools. SD includes students identified as having an Individualized Education Program but excludes other students protected under Section 504 of the Rehabilitation Act of 1973.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 Mathematics Assessment.

Table A-14.
Percentage of fourth- and eighth-grade public and nonpublic school students identified as students with disabilities (SD) and/or English language learners (ELL) excluded and assessed in NAEP mathematics when accommodations were not permitted: 1992 and 1996


## Accommodations

Prior to 1996, no testing accommodations were provided to students taking the NAEP mathematics assessment, resulting in the exclusion of students who could not be assessed without them. As the number of identified students with disabilities and English language learners increased over the years, the exclusion of those needing accommodations to participate in NAEP threatened the stability of trend lines (excluding more students in one assessment year than in another might lead to apparent rather than real differences), and threatened to compromise NAEP samples as optimally representative of target populations. Therefore, administration procedures allowing for many of the same testing accommodations provided on state and district assessments (e.g., extra testing time or individual rather than group administration) were introduced in 1996 for national NAEP mathematics assessments and in 2000 for NAEP state assessments.

The percentages of SD/ELL students assessed with the available accommodations in 2019 are presented in table A-15. Students assessed with accommodations typically received some combination of accommodations. In contrast to assessment years prior to 2009 in which students were only counted once in the category reflecting the primary accommodation provided, students are counted in the categories for each accommodation they received in 2019. For example, students assessed in small groups (as compared with standard NAEP sessions of about 30 students) were also usually given extended time and are included in counts for both groups in table A-15.

Since providing accommodations represented a change in testing conditions that could potentially affect the measurement of changes over time, split national samples of students were assessed in mathematics in 1996 and 2000, and split state samples were assessed in 2000. In each of these years, one sample permitted accommodations, and the other did not. This eased the transition to single samples in which accommodations were permitted beginning in 2003 while maintaining trends back to 1990.

Table A-15.
Percentage of fourth- and eighth-grade public and nonpublic school students identified as students with disabilities (SD) and/or English language learners (ELL) excluded and assessed in NAEP mathematics when accommodations were permitted: Various years, 1996-2019

| Grade and SD/ELL category | 1996 | 2000 | 2003 | 2005 | 2007 | 2009 | 2011 | 2013 | 2015 | 2017 | 2019 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grade 4 |  |  |  |  |  |  |  |  |  |  |  |
| SD and/or ELL |  |  |  |  |  |  |  |  |  |  |  |
| Identified | 15 | 18 | 21 | 21 | 21 | 21 | 22 | 22 | 23 | 24 | 25 |
| Excluded | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 1 | 2 | 2 | 2 |
| Assessed | 11 | 14 | 17 | 18 | 19 | 19 | 20 | 20 | 22 | 22 | 24 |
| Without accommodations | 7 | 9 | 9 | 9 | 9 | 8 | 8 | 7 | 8 | 10 | 9 |
| With accommodations | 5 | 5 | 8 | 9 | 10 | 10 | 12 | 13 | 14 | 12 | 14 |
| SD |  |  |  |  |  |  |  |  |  |  |  |
| Identified | 10 | 12 | 13 | 13 | 13 | 13 | 13 | 13 | 14 | 14 | 15 |
| Excluded | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 |
| Assessed | 7 | 9 | 10 | 10 | 10 | 11 | 11 | 12 | 13 | 12 | 14 |
| Without accommodations | 4 | 5 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 3 |
| With accommodations | 4 | 4 | 6 | 7 | 7 | 8 | 8 | 10 | 10 | 9 | 10 |
| ELL |  |  |  |  |  |  |  |  |  |  |  |
| Identified | 6 | 7 | 10 | 10 | 10 | 10 | 11 | 10 | 11 | 11 | 12 |
| Excluded | 1 | 1 | 1 | 1 | 1 | 1 | \# | \# | 1 | 1 | 1 |
| Assessed | 5 | 6 | 8 | 8 | 9 | 9 | 10 | 10 | 10 | 11 | 12 |
| Without accommodations | 3 | 4 | 6 | 6 | 6 | 6 | 6 | 5 | 6 | 6 | 7 |
| With accommodations | 2 | 1 | 2 | 2 | 3 | 3 | 4 | 5 | 5 | 4 | 5 |
| Grade 8 |  |  |  |  |  |  |  |  |  |  |  |
| SD and/or ELL |  |  |  |  |  |  |  |  |  |  |  |
| Identified | 12 | 13 | 17 | 17 | 17 | 17 | 17 | 16 | 18 | 19 | 20 |
| Excluded | 3 | 4 | 3 | 3 | 4 | 3 | 2 | 1 | 2 | 2 | 1 |
| Assessed | 8 | 10 | 14 | 14 | 13 | 14 | 14 | 15 | 16 | 17 | 18 |
| Without accommodations | 6 | 7 | 7 | 6 | 6 | 5 | 4 | 3 | 4 | 5 | 6 |
| With accommodations | 3 | 3 | 6 | 8 | 7 | 9 | 10 | 12 | 12 | 12 | 13 |
| SD |  |  |  |  |  |  |  |  |  |  |  |
| Identified | 9 | 10 | 13 | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 14 |
| Excluded | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 1 |
| Assessed | 6 | 7 | 10 | 10 | 8 | 9 | 10 | 11 | 12 | 12 | 13 |
| Without accommodations | 4 | 5 | 4 | 3 | 2 | 2 | 2 | 1 | 1 | 2 | 2 |
| With accommodations | 2 | 2 | 6 | 7 | 6 | 8 | 8 | 10 | 10 | 10 | 11 |
| ELL |  |  |  |  |  |  |  |  |  |  |  |
| Identified | 3 | 4 | 6 | 6 | 6 | 5 | 6 | 5 | 6 | 7 | 7 |
| Excluded | 1 | 1 | 1 | 1 | 1 | \# | \# | \# | \# | 1 | \# |
| Assessed | 2 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 7 |
| Without accommodations | 2 | 2 | 4 | 4 | 4 | 3 | 3 | 2 | 3 | 3 | 4 |
| With accommodations | \# | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 | 3 | 3 |

\# Rounds to zero.
NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. 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. SD includes students identified as having either an Individualized Education Program or protection under Section 504 of the Rehabilitation Act of 1973. 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, 19962019 Mathematics Assessments.

## Exclusion Rates

Even with the availability of accommodations, some students are excluded from the NAEP assessments by their schools. The decision to exclude any student is made by school staff, who, using NAEP guidelines and each student's Individualized Education Program (IEP), decide whether the student can meaningfully be assessed.

In 2013, the method used by school staff to determine whether or not a student should be excluded from the NAEP assessment was revised. Previously, a student who required an accommodation specified in their IEP that was not allowed by NAEP was excluded. Beginning in 2013, SD students could be excluded only if they took an alternate assessment with alternate achievement standards, and ELL students could be excluded only if they had been enrolled in U.S. schools for less than one year. All other students were encouraged to take the assessment, even if their accommodation was not allowed by NAEP. Schools, students, or parents could, however, refuse to allow such a student to be assessed. For weighting and reporting purposes, these refusals were counted as exclusions.

Jurisdictions vary in their proportions of SD and/or ELL students. These variations, as well as differences in policies and practices regarding the identification and inclusion of SD and/or ELL students, lead to differences in exclusion and accommodation rates. These differences should be considered when comparing student performance over time and across jurisdictions. While the effect of exclusion is not precisely known, the validity of comparisons of performance results could be affected if exclusion rates are comparatively high or vary widely over time.

National Exclusion Rates (public and nonpublic school students): The percentage of SD and/or ELL students excluded and assessed with and without accommodations as a percentage of students identified are provided in table A-16. (Note that the denominator for these percentages includes assessed students plus excluded students; it does not include sampled students who were absent or refused to participate).

State Exclusion Rates (public school students only): The states/jurisdictions that participated in the 1992, 1996, and 2000 mathematics assessments at grade 4 when accommodations were not permitted are provided in table A-17. The states/jurisdictions that participated in the 2000, 2003, 2005, 2007, 2009, 2011, 2013, 2015, 2017, and 2019 mathematics assessments at grade 4 when accommodations were permitted are provided in table A-18.

The states/jurisdictions that participated in the 1990, 1992, 1996, and 2000 mathematics assessments at grade 8 when accommodations were not permitted are provided in table A-19. The states/jurisdictions that participated in the 2000, 2003, 2005, 2007, 2009, 2011, 2013, 2015, 2017, and 2019 mathematics assessments at grade 8 when accommodations were permitted are provided in table A-20.

Rates by state are reported separately for SD and ELL students at each grade in tables A-21 through A-28. Rates are also reported as the percentage of SD and/or ELL students identified in each state in tables A-29 through A-30.

District Exclusion Rates (public school students only): District-level results in mathematics are only available based on administrations in which accommodations were permitted. Among the 27 urban districts that participated in the 2019 mathematics assessment, the percentage of fourth-graders identified as SD and/or ELL are provided in table A-31. The percentage of eighth-graders identified as SD and/or ELL are provided in table A-32.

Table A-16.
Percentage of fourth- and eighth-grade public and nonpublic school students identified as students with disabilities (SD) and/or English language learners (ELL) excluded and assessed in NAEP mathematics, as a percentage of identified SD and/or ELL students, by grade and SD/ELL category: 2019

| Grade and SD/ELL category | Percentage of identified SD and/or ELL students |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations |
| Grade 4 |  |  |  |  |
| SD and/or ELL | 7 | 93 | 37 | 56 |
| SD | 10 | 90 | 21 | 69 |
| ELL | 5 | 95 | 53 | 42 |
| Grade 8 |  |  |  |  |
| SD and/or ELL | 7 | 93 | 29 | 64 |
| SD | 8 | 92 | 15 | 77 |
| ELL | 7 | 93 | 52 | 41 | 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. SD includes students identified as having either an Individualized Education Program or protection under Section 504 of the Rehabilitation Act of 1973. 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), 2019 Mathematics Assessment.

Table A-17.
Percentage of fourth-grade public school students identified as students with disabilities and/or English language learners excluded and assessed in NAEP mathematics when accommodations were not permitted, by state/jurisdiction: 1992, 1996, and 2000

|  | 1992 |  |  | 1996 |  |  | 2000 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Identified | Excluded | Assessed | Identified | Excluded | Assessed |
| Nation (public) | 10 | 7 | 4 | 16 | 6 | 9 | 16 | 7 | 9 |
| Alabama | 10 | 5 | 6 | 12 | 6 | 5 | 13 | 6 | 7 |
| Alaska | - | - | - | 20 | 4 | 16 | - | - | - |
| Arizona | 15 | 5 | 10 | 21 | 12 | 9 | 25 | 12 | 13 |
| Arkansas | 12 | 5 | 6 | 10 | 7 | 3 | 14 | 7 | 7 |
| California | 28 | 12 | 16 | 33 | 16 | 17 | 33 | 9 | 24 |
| Colorado | 10 | 5 | 5 | 15 | 8 | 7 | - | - | - |
| Connecticut | 14 | 7 | 7 | 16 | 8 | 8 | 15 | 10 | 5 |
| Delaware | 12 | 5 | 6 | 14 | 7 | 7 | - | - | - |
| Florida | 17 | 8 | 8 | 19 | 10 | 9 | - | - | - |
| Georgia | 10 | 5 | 4 | 13 | 7 | 6 | 11 | 7 | 4 |
| Hawaii | 13 | 6 | 8 | 14 | 6 | 9 | 19 | 10 | 9 |
| Idaho | 9 | 3 | 6 | - | - | - | 16 | 6 | 10 |
| Illinois | - | - | - | - | - | - | 17 | 10 | 6 |
| Indiana | 7 | 3 | 4 | 11 | 5 | 6 | 11 | 7 | 5 |
| lowa | 9 | 3 | 6 | 13 | 6 | 7 | 15 | 10 | 5 |
| Kansas | - | - | - | - | - | - | 16 | 7 | 9 |
| Kentucky | 8 | 3 | 5 | 10 | 6 | 4 | 12 | 8 | 3 |
| Louisiana | 8 | 4 | 4 | 14 | 8 | 7 | 16 | 8 | 8 |
| Maine | 14 | 6 | 8 | 15 | 8 | 7 | 16 | 10 | 6 |
| Maryland | 11 | 4 | 7 | 14 | 8 | 7 | 12 | 9 | 4 |
| Massachusetts | 18 | 7 | 11 | 18 | 9 | 9 | 19 | 10 | 9 |
| Michigan | 7 | 5 | 2 | 11 | 6 | 5 | 11 | 8 | 3 |
| Minnesota | 9 | 3 | 6 | 14 | 6 | 8 | 16 | 6 | 10 |
| Mississippi | 7 | 5 | 2 | 8 | 6 | 2 | 6 | 4 | 2 |
| Missouri | 12 | 4 | 7 | 14 | 5 | 9 | 15 | 10 | 6 |
| Montana | - | - | - | 10 | 5 | 5 | 12 | 5 | 7 |
| Nebraska | 13 | 4 | 8 | 15 | 5 | 10 | 18 | 8 | 10 |
| Nevada | - | - | - | 16 | 9 | 8 | 20 | 10 | 9 |
| New Hampshire | 12 | 4 | 8 | - | - | - | - | - | - |
| New Jersey | 11 | 6 | 6 | 11 | 6 | 5 | - | - | - |
| New Mexico | 15 | 7 | 8 | 22 | 12 | 10 | 31 | 12 | 19 |
| New York | 12 | 5 | 6 | 15 | 8 | 7 | 16 | 12 | 4 |
| North Carolina | 12 | 4 | 8 | 14 | 7 | 7 | 16 | 13 | 3 |
| North Dakota | 9 | 2 | 7 | 11 | 4 | 7 | 12 | 6 | 6 |
| Ohio | 10 | 6 | 4 | - | - | - | 12 | 10 | 2 |
| Oklahoma | 13 | 7 | 6 | - | - | - | 20 | 10 | 10 |
| Oregon | - | - | - | 19 | 9 | 10 | 18 | 8 | 11 |
| Pennsylvania | 9 | 4 | 5 | 9 | 5 | 4 | - | - | - |
| Rhode Island | 15 | 6 | 10 | 18 | 6 | 12 | 23 | 12 | 11 |
| South Carolina | 10 | 5 | 5 | 12 | 6 | 7 | 17 | 7 | 10 |
| Tennessee | 12 | 4 | 8 | 13 | 6 | 6 | 11 | 4 | 7 |
| Texas | 17 | 8 | 9 | 24 | 10 | 14 | 25 | 15 | 10 |
| Utah | 10 | 4 | 6 | 13 | 6 | 7 | 14 | 7 | 7 |
| Vermont | - | - | - | 14 | 6 | 8 | 15 | 11 | 5 |
| Virginia | 11 | 5 | 6 | 14 | 7 | 7 | 16 | 11 | 5 |
| Washington | - | - | - | 13 | 5 | 8 | - | - | - |
| West Virginia | 9 | 4 | 4 | 13 | 8 | 5 | 13 | 10 | 3 |
| Wisconsin | 11 | 5 | 5 | 12 | 8 | 4 | 19 | 12 | 8 |
| Wyoming | 10 | 4 | 7 | 13 | 4 | 9 | 15 | 6 | 9 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |
| District of Columbia | 11 | 9 | 2 | 14 | 11 | 3 | 19 | 9 | 10 |
| DoDEA ${ }^{1}$ | - | - | - | 9 | 4 | 5 | 11 | 5 | 6 |

- Not available.
${ }^{1}$ Department of Defense Education Activity (overseas and domestic schools).
NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. South Dakota did not participate in NAEP mathematics assessments from 1992 to 2000. 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), 1992, 1996, and 2000 Mathematics Assessments.

Table A-18.
Percentage of fourth-grade public school students identified as students with disabilities and/or English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19

|  | 2000 |  |  |  |  | 2003 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 19 | 4 | 15 | 10 | 5 | 22 | 4 | 18 | 10 | 8 |
| Alabama | 13 | 3 | 10 | 7 | 3 | 12 | 2 | 10 | 8 | 2 |
| Alaska | - | - | - | - | - | 31 | 1 | 30 | 20 | 10 |
| Arizona | 25 | 4 | 21 | 12 | 9 | 27 | 5 | 23 | 18 | 5 |
| Arkansas | 14 | 4 | 10 | 6 | 4 | 17 | 2 | 14 | 7 | 8 |
| California | 33 | 6 | 27 | 19 | 8 | 38 | 3 | 35 | 31 | 4 |
| Colorado | - | - | - | - | - | 20 | 2 | 17 | 7 | 11 |
| Connecticut | 14 | 5 | 10 | 5 | 4 | 16 | 4 | 12 | 5 | 8 |
| Delaware | - | - | - | - | - | 18 | 7 | 11 | 4 | 7 |
| Florida | - | - | - | - | - | 26 | 3 | 23 | 8 | 15 |
| Georgia | 11 | 3 | 8 | 4 | 4 | 16 | 2 | 14 | 6 | 7 |
| Hawaii | 19 | 9 | 11 | 8 | 3 | 17 | 3 | 14 | 5 | 8 |
| Idaho | 16 | 2 | 13 | 7 | 7 | 18 | 2 | 16 | 9 | 7 |
| Illinois | 17 | 3 | 14 | 5 | 9 | 23 | 4 | 18 | 7 | 11 |
| Indiana | 11 | 2 | 9 | 3 | 6 | 17 | 2 | 14 | 8 | 7 |
| lowa | 15 | 2 | 12 | 5 | 7 | 18 | 3 | 15 | 4 | 11 |
| Kansas | 16 | 3 | 13 | 9 | 4 | 16 | 2 | 14 | 3 | 11 |
| Kentucky | 12 | 3 | 9 | 4 | 5 | 14 | 3 | 11 | 5 | 7 |
| Louisiana | 16 | 3 | 13 | 2 | 11 | 22 | 3 | 19 | 3 | 16 |
| Maine | 16 | 5 | 12 | 5 | 7 | 18 | 3 | 15 | 4 | 11 |
| Maryland | 12 | 2 | 10 | 4 | 6 | 16 | 4 | 12 | 6 | 6 |
| Massachusetts | 19 | 3 | 17 | 7 | 10 | 22 | 3 | 19 | 4 | 15 |
| Michigan | 11 | 3 | 8 | 3 | 4 | 15 | 4 | 11 | 5 | 6 |
| Minnesota | 16 | 2 | 14 | 7 | 7 | 18 | 3 | 16 | 8 | 7 |
| Mississippi | 6 | 3 | 3 | 1 | 2 | 10 | 5 | 5 | 4 | 1 |
| Missouri | 15 | 3 | 13 | 5 | 8 | 17 | 4 | 13 | 4 | 10 |
| Montana | 12 | 2 | 11 | 5 | 6 | 16 | 2 | 14 | 7 | 7 |
| Nebraska | 18 | 3 | 15 | 10 | 4 | 20 | 3 | 17 | 9 | 9 |
| Nevada | 20 | 7 | 13 | 8 | 5 | 26 | 4 | 22 | 14 | 8 |
| New Hampshire | - | - | - | - | - | 20 | 3 | 17 | 5 | 12 |
| New Jersey | - | - | - | - | - | 18 | 2 | 16 | 1 | 14 |
| New Mexico | 31 | 6 | 26 | 16 | 10 | 40 | 4 | 36 | 22 | 15 |
| New York | 16 | 5 | 11 | 2 | 9 | 19 | 5 | 14 | 2 | 11 |
| North Carolina | 16 | 5 | 11 | 3 | 8 | 21 | 4 | 17 | 5 | 12 |
| North Dakota | 12 | 1 | 11 | 7 | 4 | 18 | 2 | 16 | 8 | 7 |
| Ohio | 12 | 5 | 7 | 2 | 5 | 13 | 4 | 9 | 2 | 7 |
| Oklahoma | 20 | 5 | 15 | 11 | 5 | 22 | 4 | 18 | 10 | 8 |
| Oregon | 18 | 3 | 16 | 8 | 8 | 27 | 4 | 23 | 11 | 11 |
| Pennsylvania | - | - | - | - | - | 15 | 3 | 12 | 3 | 9 |
| Rhode Island | 23 | 3 | 20 | 10 | 10 | 27 | 3 | 24 | 9 | 15 |
| South Carolina | 17 | 5 | 12 | 7 | 5 | 18 | 6 | 12 | 7 | 4 |
| South Dakota | - | - | - | - | - | 18 | 1 | 16 | 9 | 7 |
| Tennessee | 11 | 3 | 9 | 7 | 1 | 14 | 3 | 11 | 7 | 5 |
| Texas | 25 | 7 | 18 | 12 | 6 | 27 | 7 | 20 | 14 | 6 |
| Utah | 14 | 3 | 11 | 7 | 4 | 21 | 3 | 19 | 11 | 7 |
| Vermont | 15 | 3 | 13 | 4 | 9 | 18 | 4 | 14 | 4 | 10 |
| Virginia | 16 | 4 | 12 | 5 | 7 | 19 | 6 | 13 | 5 | 8 |
| Washington | - | - | - | - | - | 19 | 3 | 16 | 8 | 8 |
| West Virginia | 13 | 3 | 11 | 3 | 8 | 15 | 3 | 12 | 3 | 9 |
| Wisconsin | 19 | 5 | 14 | 7 | 8 | 20 | 4 | 16 | 4 | 12 |
| Wyoming | 15 | 2 | 13 | 8 | 6 | 18 | 1 | 17 | 6 | 11 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 19 | 5 | 14 | 7 | 7 | 18 | 4 | 14 | 4 | 10 |
| DoDEA ${ }^{1}$ | 11 | 3 | 8 | 4 | 4 | 14 | 1 | 13 | 6 | 7 |
| Puerto Rico | - | - | - | - | - | - | - | - | - | - |

[^5]Table A-18.
Percentage of fourth-grade public school students identified as students with disabilities and/or English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19—Continued

|  | 2005 |  |  |  |  | 2007 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 23 | 3 | 20 | 10 | 10 | 23 | 3 | 20 | 10 | 10 |
| Alabama | 13 | 1 | 12 | 9 | 3 | 13 | 2 | 12 | 8 | 4 |
| Alaska | 32 | 2 | 30 | 15 | 15 | 30 | 2 | 28 | 13 | 15 |
| Arizona | 29 | 4 | 25 | 17 | 8 | 25 | 3 | 22 | 14 | 7 |
| Arkansas | 16 | 3 | 13 | 5 | 8 | 18 | 3 | 15 | 4 | 11 |
| California | 39 | 4 | 35 | 31 | 5 | 40 | 2 | 38 | 33 | 5 |
| Colorado | 22 | 3 | 19 | 5 | 14 | 25 | 2 | 24 | 9 | 15 |
| Connecticut | 16 | 2 | 14 | 4 | 10 | 18 | 1 | 17 | 4 | 13 |
| Delaware | 20 | 8 | 12 | 5 | 7 | 20 | 5 | 15 | 5 | 10 |
| Florida | 25 | 3 | 21 | 5 | 17 | 22 | 3 | 18 | 2 | 16 |
| Georgia | 16 | 2 | 14 | 6 | 8 | 15 | 2 | 13 | 4 | 9 |
| Hawaii | 18 | 3 | 16 | 6 | 9 | 19 | 1 | 18 | 7 | 11 |
| Idaho | 18 | 1 | 17 | 9 | 8 | 18 | 2 | 16 | 8 | 8 |
| Illinois | 22 | 3 | 20 | 9 | 10 | 23 | 5 | 18 | 8 | 10 |
| Indiana | 18 | 2 | 16 | 5 | 11 | 22 | 3 | 19 | 7 | 12 |
| lowa | 18 | 2 | 16 | 4 | 12 | 17 | 1 | 16 | 4 | 12 |
| Kansas | 19 | 3 | 16 | 6 | 10 | 20 | 3 | 17 | 7 | 10 |
| Kentucky | 15 | 3 | 13 | 3 | 9 | 17 | 3 | 14 | 6 | 8 |
| Louisiana | 24 | 4 | 20 | 3 | 18 | 19 | 2 | 16 | 3 | 13 |
| Maine | 20 | 4 | 16 | 5 | 12 | 19 | 3 | 16 | 4 | 12 |
| Maryland | 17 | 4 | 13 | 5 | 9 | 16 | 4 | 12 | 4 | 9 |
| Massachusetts | 24 | 4 | 19 | 6 | 13 | 23 | 5 | 18 | 6 | 12 |
| Michigan | 17 | 4 | 13 | 4 | 9 | 15 | 3 | 12 | 5 | 7 |
| Minnesota | 19 | 2 | 17 | 9 | 9 | 21 | 2 | 18 | 8 | 10 |
| Mississippi | 11 | 2 | 9 | 5 | 4 | 11 | 1 | 10 | 5 | 6 |
| Missouri | 18 | 2 | 16 | 6 | 10 | 16 | 4 | 13 | 5 | 8 |
| Montana | 14 | 2 | 12 | 4 | 8 | 16 | 2 | 14 | 5 | 9 |
| Nebraska | 23 | 2 | 21 | 9 | 12 | 23 | 3 | 20 | 10 | 10 |
| Nevada | 26 | 3 | 23 | 13 | 10 | 32 | 3 | 29 | 16 | 13 |
| New Hampshire | 22 | 2 | 20 | 5 | 14 | 21 | 2 | 18 | 4 | 14 |
| New Jersey | 18 | 3 | 15 | 4 | 11 | 18 | 2 | 16 | 2 | 14 |
| New Mexico | 36 | 3 | 33 | 15 | 18 | 32 | 4 | 29 | 14 | 15 |
| New York | 20 | 4 | 17 | 2 | 14 | 22 | 2 | 20 | 2 | 17 |
| North Carolina | 21 | 2 | 18 | 4 | 14 | 21 | 2 | 19 | 5 | 14 |
| North Dakota | 17 | 3 | 14 | 6 | 8 | 17 | 4 | 13 | 5 | 9 |
| Ohio | 13 | 3 | 9 | 2 | 8 | 17 | 5 | 12 | 3 | 9 |
| Oklahoma | 21 | 4 | 17 | 7 | 10 | 19 | 5 | 14 | 7 | 7 |
| Oregon | 27 | 4 | 23 | 11 | 11 | 26 | 3 | 23 | 9 | 14 |
| Pennsylvania | 18 | 3 | 15 | 4 | 11 | 18 | 2 | 16 | 5 | 11 |
| Rhode Island | 26 | 3 | 23 | 8 | 15 | 25 | 2 | 23 | 7 | 16 |
| South Carolina | 16 | 4 | 12 | 7 | 5 | 17 | 2 | 15 | 7 | 8 |
| South Dakota | 19 | 2 | 17 | 9 | 8 | 19 | 1 | 17 | 9 | 8 |
| Tennessee | 13 | 3 | 10 | 4 | 6 | 16 | 6 | 10 | 5 | 5 |
| Texas | 27 | 6 | 21 | 13 | 8 | 26 | 5 | 21 | 12 | 9 |
| Utah | 23 | 2 | 20 | 11 | 9 | 22 | 2 | 20 | 11 | 9 |
| Vermont | 18 | 3 | 15 | 5 | 10 | 19 | 2 | 16 | 4 | 12 |
| Virginia | 22 | 5 | 17 | 5 | 12 | 22 | 5 | 17 | 7 | 10 |
| Washington | 21 | 3 | 18 | 8 | 10 | 22 | 3 | 19 | 8 | 11 |
| West Virginia | 20 | 2 | 17 | 9 | 8 | 18 | 1 | 17 | 8 | 8 |
| Wisconsin | 19 | 2 | 17 | 5 | 12 | 21 | 3 | 18 | 5 | 13 |
| Wyoming | 19 | 2 | 17 | 6 | 11 | 18 | 2 | 16 | 6 | 10 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 20 | 6 | 14 | 4 | 10 | 20 | 6 | 14 | 2 | 13 |
| DoDEA ${ }^{1}$ | 17 | 2 | 15 | 6 | 8 | 17 | 2 | 15 | 6 | 9 |
| Puerto Rico | - | - | - | - | - | - | - | - | - | - |

[^6]Table A-18.
Percentage of fourth-grade public school students identified as students with disabilities and/or English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19—Continued

|  | 2009 |  |  |  |  | 2011 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 23 | 2 | 20 | 9 | 11 | 23 | 2 | 21 | 9 | 12 |
| Alabama | 12 | 1 | 11 | 8 | 4 | 12 | 1 | 11 | 6 | 4 |
| Alaska | 25 | 1 | 24 | 6 | 17 | 27 | 3 | 25 | 7 | 18 |
| Arizona | 26 | 1 | 24 | 11 | 14 | 22 | 1 | 21 | 5 | 15 |
| Arkansas | 17 | 1 | 16 | 4 | 12 | 20 | 1 | 19 | 5 | 14 |
| California | 36 | 2 | 34 | 28 | 5 | 38 | 2 | 36 | 29 | 7 |
| Colorado | 21 | 2 | 19 | 6 | 13 | 25 | 1 | 24 | 9 | 14 |
| Connecticut | 18 | 2 | 16 | 2 | 14 | 19 | 1 | 17 | 2 | 16 |
| Delaware | 18 | 3 | 15 | 2 | 13 | 19 | 4 | 15 | 3 | 12 |
| Florida | 23 | 2 | 21 | 4 | 18 | 23 | 2 | 22 | 3 | 19 |
| Georgia | 14 | 1 | 13 | 4 | 9 | 16 | 2 | 15 | 4 | 10 |
| Hawaii | 20 | 1 | 18 | 5 | 13 | 20 | 2 | 18 | 7 | 11 |
| Idaho | 15 | 1 | 14 | 5 | 8 | 15 | 1 | 13 | 5 | 9 |
| Illinois | 22 | 3 | 19 | 6 | 13 | 21 | 2 | 18 | 6 | 13 |
| Indiana | 19 | 2 | 17 | 6 | 11 | 22 | 2 | 20 | 6 | 14 |
| lowa | 18 | 2 | 16 | 3 | 13 | 19 | 1 | 18 | 3 | 15 |
| Kansas | 22 | 3 | 19 | 7 | 12 | 24 | 2 | 23 | 10 | 13 |
| Kentucky | 17 | 3 | 14 | 5 | 8 | 16 | 3 | 13 | 5 | 9 |
| Louisiana | 22 | 2 | 20 | 4 | 16 | 22 | 2 | 20 | 3 | 18 |
| Maine | 20 | 2 | 18 | 3 | 15 | 20 | 2 | 19 | 4 | 15 |
| Maryland | 19 | 5 | 14 | 3 | 12 | 19 | 6 | 13 | 2 | 11 |
| Massachusetts | 24 | 5 | 19 | 7 | 13 | 25 | 3 | 21 | 6 | 15 |
| Michigan | 17 | 3 | 14 | 6 | 8 | 16 | 2 | 14 | 6 | 9 |
| Minnesota | 21 | 2 | 19 | 8 | 11 | 23 | 1 | 22 | 9 | 13 |
| Mississippi | 10 | 1 | 9 | 3 | 6 | 11 | 1 | 10 | 5 | 6 |
| Missouri | 16 | 3 | 14 | 5 | 9 | 16 | 2 | 15 | 5 | 10 |
| Montana | 14 | 2 | 13 | 4 | 9 | 14 | 2 | 12 | 4 | 8 |
| Nebraska | 24 | 3 | 21 | 10 | 11 | 23 | 2 | 22 | 8 | 14 |
| Nevada | 30 | 3 | 27 | 11 | 17 | 35 | 2 | 33 | 11 | 22 |
| New Hampshire | 21 | 2 | 18 | 3 | 15 | 19 | 2 | 17 | 2 | 15 |
| New Jersey | 19 | 3 | 16 | 2 | 14 | 20 | 3 | 16 | 2 | 14 |
| New Mexico | 26 | 2 | 24 | 8 | 15 | 27 | 3 | 24 | 9 | 15 |
| New York | 22 | 1 | 21 | 1 | 20 | 23 | 1 | 22 | 1 | 21 |
| North Carolina | 19 | 2 | 17 | 4 | 13 | 21 | 2 | 19 | 7 | 12 |
| North Dakota | 17 | 4 | 14 | 4 | 9 | 17 | 4 | 13 | 4 | 9 |
| Ohio | 16 | 3 | 13 | 2 | 11 | 17 | 2 | 15 | 2 | 13 |
| Oklahoma | 19 | 4 | 15 | 6 | 8 | 21 | 8 | 12 | 6 | 7 |
| Oregon | 26 | 3 | 23 | 8 | 15 | 28 | 3 | 25 | 10 | 15 |
| Pennsylvania | 18 | 3 | 15 | 4 | 11 | 18 | 1 | 16 | 4 | 13 |
| Rhode Island | 22 | 2 | 20 | 5 | 15 | 19 | 1 | 18 | 5 | 13 |
| South Carolina | 19 | 2 | 17 | 7 | 10 | 18 | 1 | 17 | 7 | 10 |
| South Dakota | 16 | 2 | 14 | 6 | 8 | 19 | 2 | 18 | 9 | 9 |
| Tennessee | 16 | 3 | 12 | 3 | 9 | 17 | 3 | 13 | 3 | 10 |
| Texas | 29 | 3 | 26 | 18 | 8 | 30 | 4 | 26 | 18 | 8 |
| Utah | 19 | 2 | 17 | 6 | 11 | 19 | 2 | 17 | 6 | 10 |
| Vermont | 21 | 2 | 18 | 4 | 14 | 19 | 2 | 18 | 3 | 15 |
| Virginia | 20 | 2 | 18 | 5 | 13 | 19 | 2 | 17 | 5 | 12 |
| Washington | 21 | 2 | 19 | 8 | 12 | 22 | 2 | 20 | 7 | 14 |
| West Virginia | 17 | 2 | 16 | 7 | 9 | 18 | 2 | 16 | 8 | 9 |
| Wisconsin | 20 | 2 | 18 | 4 | 15 | 21 | 2 | 19 | 4 | 16 |
| Wyoming | 18 | 1 | 17 | 5 | 12 | 19 | 2 | 17 | 5 | 12 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 20 | 4 | 16 | 3 | 13 | 21 | 5 | 16 | 2 | 14 |
| DoDEA ${ }^{1}$ | 18 | 2 | 16 | 6 | 10 | 19 | 3 | 16 | 5 | 10 |
| Puerto Rico | - | - | - | - | - | 25 | \# | 24 | 1 | 23 |

See notes at end of table.

Table A-18.
Percentage of fourth-grade public school students identified as students with disabilities and/or English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19—Continued

|  | 2013 |  |  |  |  | 2015 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 23 | 2 | 21 | 7 | 14 | 24 | 2 | 23 | 8 | 14 |
| Alabama | 12 | 1 | 11 | 6 | 5 | 14 | 1 | 13 | 7 | 6 |
| Alaska | 27 | 1 | 26 | 4 | 22 | 27 | 1 | 26 | 7 | 18 |
| Arizona | 17 | 1 | 15 | 2 | 13 | 21 | 1 | 20 | 4 | 16 |
| Arkansas | 21 | 1 | 20 | 5 | 15 | 21 | 1 | 20 | 4 | 16 |
| California | 32 | 2 | 30 | 22 | 9 | 35 | 2 | 33 | 26 | 7 |
| Colorado | 23 | 1 | 21 | 9 | 12 | 24 | 2 | 22 | 11 | 11 |
| Connecticut | 19 | 1 | 17 | 2 | 16 | 19 | 1 | 18 | 4 | 14 |
| Delaware | 18 | 2 | 16 | 2 | 14 | 20 | 2 | 19 | 5 | 14 |
| Florida | 25 | 2 | 23 | 2 | 20 | 26 | 2 | 24 | 2 | 21 |
| Georgia | 16 | 1 | 15 | 3 | 11 | 19 | 2 | 18 | 4 | 14 |
| Hawaii | 17 | 1 | 16 | 5 | 11 | 16 | 2 | 14 | 6 | 8 |
| Idaho | 15 | 1 | 13 | 4 | 10 | 15 | 2 | 14 | 4 | 10 |
| Illinois | 20 | 1 | 19 | 4 | 15 | 22 | 1 | 21 | 6 | 14 |
| Indiana | 22 | 2 | 20 | 3 | 17 | 23 | 1 | 22 | 5 | 17 |
| lowa | 18 | 1 | 17 | 3 | 14 | 20 | 1 | 19 | 3 | 16 |
| Kansas | 26 | 2 | 25 | 10 | 15 | 28 | 1 | 26 | 14 | 13 |
| Kentucky | 15 | 1 | 14 | 3 | 11 | 19 | 2 | 17 | 5 | 12 |
| Louisiana | 22 | 1 | 21 | 3 | 18 | 24 | 2 | 22 | 3 | 19 |
| Maine | 22 | 2 | 20 | 2 | 17 | 22 | 2 | 20 | 3 | 17 |
| Maryland | 21 | 1 | 20 | 2 | 17 | 21 | 1 | 19 | 4 | 15 |
| Massachusetts | 27 | 2 | 25 | 8 | 17 | 27 | 2 | 25 | 8 | 18 |
| Michigan | 20 | 2 | 18 | 7 | 11 | 19 | 3 | 16 | 6 | 10 |
| Minnesota | 22 | 1 | 20 | 10 | 11 | 23 | 2 | 21 | 11 | 9 |
| Mississippi | 12 | 1 | 11 | 4 | 7 | 14 | 1 | 13 | 5 | 8 |
| Missouri | 16 | 1 | 14 | 3 | 11 | 16 | 1 | 15 | 6 | 10 |
| Montana | 15 | 2 | 13 | 5 | 9 | 14 | 1 | 13 | 5 | 8 |
| Nebraska | 22 | 2 | 21 | 6 | 14 | 23 | 1 | 22 | 6 | 16 |
| Nevada | 31 | 1 | 30 | 7 | 23 | 33 | 2 | 31 | 11 | 20 |
| New Hampshire | 18 | 1 | 17 | 2 | 15 | 21 | 1 | 20 | 3 | 16 |
| New Jersey | 19 | 1 | 18 | 1 | 17 | 21 | 2 | 19 | 2 | 17 |
| New Mexico | 28 | 1 | 27 | 10 | 17 | 29 | 2 | 26 | 9 | 17 |
| New York | 22 | 1 | 21 | 1 | 20 | 25 | 1 | 23 | 1 | 22 |
| North Carolina | 20 | 1 | 19 | 5 | 14 | 19 | 1 | 18 | 5 | 13 |
| North Dakota | 16 | 3 | 13 | 3 | 10 | 15 | 2 | 13 | 4 | 9 |
| Ohio | 17 | 1 | 16 | 3 | 14 | 19 | 2 | 17 | 2 | 16 |
| Oklahoma | 22 | 2 | 20 | 6 | 14 | 24 | 2 | 21 | 8 | 14 |
| Oregon | 27 | 2 | 24 | 9 | 15 | 25 | 2 | 23 | 9 | 14 |
| Pennsylvania | 18 | 2 | 17 | 4 | 13 | 21 | 2 | 20 | 5 | 14 |
| Rhode Island | 19 | 1 | 18 | 3 | 15 | 20 | 2 | 18 | 5 | 13 |
| South Carolina | 20 | 1 | 19 | 7 | 12 | 21 | 1 | 20 | 8 | 12 |
| South Dakota | 19 | 1 | 17 | 7 | 11 | 19 | 1 | 18 | 7 | 11 |
| Tennessee | 18 | 1 | 16 | 3 | 14 | 20 | 2 | 18 | 4 | 14 |
| Texas | 33 | 2 | 31 | 13 | 18 | 34 | 3 | 32 | 12 | 19 |
| Utah | 18 | 1 | 16 | 4 | 13 | 16 | 1 | 15 | 7 | 8 |
| Vermont | 19 | 1 | 18 | 2 | 16 | 20 | 2 | 19 | 3 | 16 |
| Virginia | 19 | 2 | 18 | 5 | 13 | 18 | 2 | 17 | 4 | 13 |
| Washington | 22 | 2 | 20 | 6 | 14 | 24 | 1 | 23 | 9 | 14 |
| West Virginia | 19 | 2 | 17 | 7 | 10 | 21 | 1 | 20 | 8 | 11 |
| Wisconsin | 21 | 2 | 20 | 3 | 16 | 19 | 1 | 18 | 5 | 13 |
| Wyoming | 18 | 1 | 17 | 4 | 13 | 18 | 1 | 17 | 4 | 13 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 20 | 1 | 19 | 1 | 18 | 19 | 2 | 17 | 2 | 15 |
| DoDEA ${ }^{1}$ | 19 | 2 | 17 | 5 | 12 | 22 | 1 | 21 | 7 | 13 |
| Puerto Rico | 29 | \# | 29 | 1 | 27 | 31 | \# | 31 | 1 | 29 |

See notes at end of table.

Table A-18.
Percentage of fourth-grade public school students identified as students with disabilities and/or English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19—Continued

|  | 2017 |  |  |  |  | 2019 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 25 | 2 | 23 | 10 | 13 | 27 | 2 | 25 | 10 | 15 |
| Alabama | 15 | 1 | 14 | 8 | 6 | 19 | 2 | 18 | 9 | 9 |
| Alaska | 27 | 1 | 26 | 13 | 13 | 30 | 1 | 29 | 12 | 17 |
| Arizona | 21 | 2 | 19 | 5 | 14 | 20 | 1 | 19 | 7 | 12 |
| Arkansas | 24 | 2 | 23 | 7 | 16 | 24 | 1 | 23 | 5 | 18 |
| California | 34 | 3 | 31 | 25 | 6 | 34 | 3 | 31 | 23 | 8 |
| Colorado | 24 | 1 | 23 | 13 | 10 | 25 | 1 | 24 | 13 | 11 |
| Connecticut | 22 | 2 | 20 | 5 | 15 | 24 | 2 | 23 | 6 | 16 |
| Delaware | 26 | 2 | 24 | 9 | 15 | 31 | 2 | 30 | 12 | 18 |
| Florida | 25 | 3 | 22 | 2 | 20 | 30 | 2 | 27 | 3 | 24 |
| Georgia | 18 | 2 | 16 | 4 | 12 | 24 | 2 | 23 | 7 | 16 |
| Hawaii | 15 | 3 | 13 | 7 | 6 | 24 | 2 | 22 | 14 | 8 |
| Idaho | 16 | 1 | 15 | 6 | 9 | 20 | 1 | 18 | 9 | 9 |
| Illinois | 24 | 2 | 23 | 7 | 16 | 28 | 1 | 27 | 12 | 16 |
| Indiana | 22 | 1 | 20 | 6 | 15 | 27 | 1 | 25 | 5 | 20 |
| lowa | 20 | 2 | 18 | 4 | 14 | 20 | 1 | 19 | 3 | 15 |
| Kansas | 26 | 1 | 25 | 16 | 9 | 25 | 1 | 23 | 13 | 11 |
| Kentucky | 19 | 2 | 17 | 6 | 11 | 22 | 2 | 20 | 5 | 15 |
| Louisiana | 23 | 2 | 21 | 3 | 17 | 22 | 2 | 20 | 2 | 18 |
| Maine | 23 | 1 | 22 | 8 | 14 | 25 | 1 | 24 | 5 | 19 |
| Maryland | 22 | 1 | 21 | 5 | 16 | 27 | 2 | 25 | 6 | 19 |
| Massachusetts | 28 | 2 | 25 | 8 | 17 | 31 | 2 | 29 | 10 | 19 |
| Michigan | 20 | 3 | 17 | 11 | 6 | 22 | 2 | 21 | 10 | 11 |
| Minnesota | 22 | 2 | 20 | 14 | 6 | 25 | 2 | 24 | 15 | 9 |
| Mississippi | 16 | 1 | 15 | 6 | 9 | 17 | 1 | 16 | 5 | 11 |
| Missouri | 18 | 1 | 17 | 7 | 10 | 21 | 1 | 19 | 7 | 12 |
| Montana | 16 | 1 | 15 | 7 | 8 | 19 | 1 | 17 | 8 | 9 |
| Nebraska | 24 | 2 | 23 | 8 | 15 | 23 | 1 | 22 | 7 | 15 |
| Nevada | 27 | 1 | 25 | 18 | 7 | 30 | 2 | 28 | 19 | 9 |
| New Hampshire | 21 | 1 | 20 | 5 | 14 | 22 | 1 | 21 | 6 | 15 |
| New Jersey | 21 | 2 | 19 | 4 | 15 | 25 | 2 | 23 | 2 | 21 |
| New Mexico | 29 | 2 | 27 | 11 | 16 | 34 | 2 | 32 | 14 | 18 |
| New York | 24 | 2 | 22 | 3 | 19 | 25 | 3 | 23 | 3 | 19 |
| North Carolina | 20 | 2 | 18 | 6 | 12 | 23 | 1 | 22 | 8 | 14 |
| North Dakota | 15 | 1 | 14 | 6 | 8 | 18 | 2 | 17 | 6 | 11 |
| Ohio | 19 | 2 | 17 | 3 | 14 | 20 | 3 | 17 | 2 | 15 |
| Oklahoma | 25 | 2 | 23 | 9 | 14 | 28 | 2 | 26 | 10 | 16 |
| Oregon | 28 | 2 | 26 | 16 | 10 | 24 | 1 | 23 | 13 | 9 |
| Pennsylvania | 20 | 2 | 18 | 6 | 13 | 23 | 2 | 20 | 6 | 14 |
| Rhode Island | 21 | 2 | 19 | 4 | 15 | 27 | 2 | 25 | 7 | 19 |
| South Carolina | 22 | 1 | 21 | 13 | 8 | 20 | 1 | 19 | 8 | 11 |
| South Dakota | 18 | 1 | 17 | 10 | 6 | 22 | 1 | 21 | 11 | 10 |
| Tennessee | 18 | 2 | 16 | 6 | 10 | 22 | 2 | 20 | 6 | 14 |
| Texas | 37 | 3 | 34 | 15 | 19 | 35 | 3 | 33 | 12 | 21 |
| Utah | 21 | 2 | 19 | 12 | 8 | 23 | 2 | 21 | 13 | 8 |
| Vermont | 20 | 1 | 19 | 5 | 13 | 23 | 1 | 22 | 6 | 16 |
| Virginia | 21 | 2 | 19 | 8 | 11 | 25 | 1 | 24 | 9 | 15 |
| Washington | 25 | 2 | 23 | 15 | 8 | 26 | 3 | 24 | 13 | 11 |
| West Virginia | 22 | 1 | 21 | 11 | 10 | 22 | 1 | 21 | 10 | 11 |
| Wisconsin | 21 | 2 | 20 | 8 | 12 | 21 | 1 | 20 | 7 | 12 |
| Wyoming | 17 | 1 | 15 | 5 | 10 | 20 | 1 | 19 | 5 | 14 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 22 | 2 | 20 | 4 | 16 | 28 | 2 | 26 | 3 | 24 |
| DoDEA ${ }^{1}$ | 21 | 1 | 20 | 8 | 12 | 24 | 2 | 22 | 7 | 15 |
| Puerto Rico | 31 | \# | 31 | 2 | 30 | - | - | - | - | - |

## - Not available

\# Rounds to zero.
${ }^{1}$ Department of Defense Education Activity (overseas and domestic schools).
NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. Detail may not sum to totals because of rounding. In Puerto Rico, the English language learner (ELL) category is for the Spanish language learner (SLL).
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000-19 Mathematics Assessments.

Table A-19.
Percentage of eighth-grade public school students identified as students with disabilities and/or English language learners excluded and assessed in NAEP mathematics when accommodations were not permitted, by state/jurisdiction: Various years, 1990-2000

|  | 1990 |  |  | 1992 |  |  | 1996 |  |  | 2000 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Identified | Excluded | Assessed | Identified | Excluded | Assessed | Identified | Excluded | Assessed |
| Nation (public) | - | - | - | 10 | 6 | 4 | 11 | 5 | 7 | 15 | 7 | 8 |
| Alabama | 9 | 5 | 4 | 10 | 5 | 5 | 13 | 7 | 6 | 14 | 5 | 9 |
| Alaska | - | - | - | - | - | - | 15 | 5 | 10 | - | - | - |
| Arizona | 12 | 5 | 7 | 12 | 6 | 7 | 17 | 9 | 8 | 19 | 9 | 10 |
| Arkansas | 11 | 7 | 3 | 11 | 6 | 5 | 11 | 7 | 4 | 14 | 8 | 5 |
| California | 15 | 7 | 8 | 20 | 8 | 12 | 20 | 10 | 10 | 27 | 9 | 18 |
| Colorado | 10 | 4 | 5 | 10 | 4 | 5 | 12 | 4 | 8 | - | - | - |
| Connecticut | 11 | 6 | 5 | 14 | 7 | 8 | 15 | 8 | 7 | 16 | 10 | 6 |
| Delaware | 9 | 4 | 5 | 10 | 4 | 6 | 13 | 9 | 4 | - | - | - |
| Florida | 11 | 6 | 5 | 13 | 6 | 7 | 16 | 10 | 6 | - | - | - |
| Georgia | 7 | 3 | 3 | 8 | 5 | 3 | 10 | 7 | 3 | 11 | 7 | 3 |
| Hawaii | 10 | 4 | 5 | 13 | 5 | 8 | 12 | 5 | 7 | 20 | 7 | 13 |
| Idaho | 6 | 2 | 4 | 7 | 3 | 4 | - | - | - | 14 | 5 | 9 |
| Illinois | 9 | 5 | 4 | - | - | - | - | - | - | 15 | 8 | 7 |
| Indiana | 7 | 5 | 2 | 9 | 5 | 4 | 12 | 6 | 7 | 12 | 7 | 5 |
| lowa | 10 | 4 | 6 | 11 | 4 | 6 | 13 | 5 | 7 | - | - | - |
| Kansas | - | - | - | - | - | - | - | - | - | 14 | 6 | 8 |
| Kentucky | 7 | 5 | 3 | 9 | 5 | 4 | 9 | 5 | 5 | 14 | 9 | 4 |
| Louisiana | 6 | 4 | 2 | 7 | 4 | 3 | 10 | 6 | 4 | 13 | 6 | 7 |
| Maine | - | - | - | 11 | 4 | 6 | 12 | 5 | 7 | 15 | 9 | 6 |
| Maryland | 11 | 4 | 6 | 11 | 5 | 6 | 12 | 7 | 5 | 13 | 11 | 3 |
| Massachusetts | - | - | - | 18 | 8 | 9 | 17 | 8 | 9 | 19 | 12 | 7 |
| Michigan | 8 | 4 | 4 | 9 | 6 | 3 | 9 | 5 | 4 | 11 | 7 | 4 |
| Minnesota | 9 | 3 | 6 | 7 | 3 | 4 | 11 | 3 | 8 | 15 | 5 | 10 |
| Mississippi | - | - | - | 10 | 7 | 3 | 11 | 7 | 4 | 11 | 7 | 3 |
| Missouri | - | - | - | 11 | 4 | 6 | 12 | 7 | 5 | 15 | 9 | 6 |
| Montana | 6 | 2 | 4 | - | - | - | 9 | 3 | 6 | 12 | 5 | 6 |
| Nebraska | 9 | 3 | 6 | 10 | 4 | 6 | 12 | 4 | 8 | 13 | 3 | 10 |
| Nevada | - | - | - | - | - | - | 16 | 8 | 8 | 16 | 10 | 6 |
| New Hampshire | 12 | 4 | 8 | 12 | 5 | 7 | 15 | 4 | 11 | - | - | - |
| New Jersey | 12 | 7 | 5 | 14 | 7 | 7 | 13 | 7 | 6 | - | - | - |
| New Mexico | 9 | 6 | 3 | 12 | 5 | 7 | 18 | 8 | 10 | 25 | 12 | 14 |
| New York | 12 | 6 | 6 | 13 | 8 | 4 | 14 | 8 | 6 | 16 | 13 | 3 |
| North Carolina | 9 | 3 | 6 | 12 | 3 | 9 | 9 | 4 | 5 | 16 | 14 | 2 |
| North Dakota | 8 | 3 | 5 | 8 | 2 | 5 | 10 | 3 | 6 | 11 | 4 | 7 |
| Ohio | 8 | 5 | 3 | 10 | 6 | 4 | - | - | - | 11 | 9 | 3 |
| Oklahoma | 8 | 5 | 3 | 10 | 6 | 4 | - | - | - | 15 | 9 | 6 |
| Oregon | 8 | 3 | 5 | - | - | - | 12 | 4 | 8 | 17 | 6 | 11 |
| Pennsylvania | 10 | 5 | 5 | 9 | 4 | 5 | - | - | - | - | - | - |
| Rhode Island | 14 | 6 | 8 | 14 | 5 | 8 | 17 | 7 | 10 | 20 | 12 | 8 |
| South Carolina | - | - | - | 10 | 6 | 4 | 10 | 6 | 4 | 13 | 7 | 6 |
| Tennessee | - | - | - | 10 | 5 | 5 | 11 | 4 | 7 | 13 | 5 | 8 |
| Texas | 12 | 6 | 6 | 14 | 7 | 7 | 17 | 9 | 8 | 20 | 10 | 11 |
| Utah | - | - | - | 9 | 4 | 5 | 11 | 6 | 5 | 14 | 6 | 8 |
| Vermont | - | - | - | - | - | - | 12 | 4 | 8 | 17 | 10 | 7 |
| Virginia | 9 | 5 | 4 | 12 | 5 | 7 | 13 | 7 | 6 | 15 | 10 | 5 |
| Washington | - | - | - | - | - | - | 13 | 6 | 7 | - | - | - |
| West Virginia | 9 | 5 | 4 | 10 | 6 | 4 | 13 | 8 | 4 | 15 | 11 | 3 |
| Wisconsin | 8 | 4 | 4 | 10 | 4 | 6 | 12 | 7 | 5 | 17 | 10 | 7 |
| Wyoming | 8 | 3 | 5 | 9 | 4 | 5 | 10 | 2 | 8 | 13 | 4 | 9 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 6 | 5 | 1 | 11 | 10 | 2 | 13 | 10 | 4 | 15 | 9 | 6 |
| DoDEA ${ }^{1}$ | - | - | - | - | - | - | 8 | 3 | 5 | 9 | 5 | 3 |

[^7]NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. South Dakota did not participate in NAEP mathematics assessments from 1990 to 2000. 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, 19902000 Mathematics Assessments

Table A-20.
Percentage of eighth-grade public school students identified as students with disabilities and/or English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19

|  | 2000 |  |  |  |  | 2003 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 14 | 4 | 10 | 7 | 3 | 19 | 4 | 15 | 8 | 7 |
| Alabama | 14 | 6 | 8 | 7 | 1 | 14 | 2 | 11 | 9 | 3 |
| Alaska | - | - | - | - | - | 23 | 1 | 22 | 14 | 8 |
| Arizona | 19 | 3 | 16 | 11 | 4 | 24 | 4 | 20 | 15 | 6 |
| Arkansas | 14 | 2 | 11 | 8 | 4 | 17 | 2 | 15 | 7 | 8 |
| California | 27 | 4 | 22 | 17 | 5 | 27 | 3 | 25 | 22 | 3 |
| Colorado | - | - | - | - | - | 15 | 2 | 14 | 5 | 8 |
| Connecticut | 16 | 6 | 10 | 6 | 4 | 17 | 4 | 13 | 5 | 8 |
| Delaware | - | - | - | - | - | 18 | 9 | 9 | 3 | 6 |
| Florida | - | - | - | - | - | 19 | 3 | 16 | 5 | 11 |
| Georgia | 11 | 5 | 6 | 3 | 3 | 13 | 2 | 11 | 5 | 6 |
| Hawaii | 20 | 5 | 15 | 13 | 2 | 20 | 4 | 17 | 8 | 9 |
| Idaho | 14 | 2 | 12 | 8 | 4 | 15 | 1 | 14 | 9 | 5 |
| Illinois | 15 | 5 | 11 | 7 | 3 | 18 | 4 | 14 | 4 | 9 |
| Indiana | 12 | 3 | 9 | 6 | 3 | 15 | 2 | 13 | 6 | 7 |
| lowa | - | - | - | - | - | 17 | 2 | 15 | 6 | 9 |
| Kansas | 14 | 3 | 10 | 8 | 3 | 16 | 3 | 13 | 4 | 9 |
| Kentucky | 14 | 4 | 9 | 5 | 4 | 14 | 4 | 9 | 4 | 5 |
| Louisiana | 13 | 3 | 10 | 4 | 6 | 16 | 5 | 12 | 2 | 10 |
| Maine | 15 | 3 | 12 | 7 | 5 | 17 | 4 | 13 | 5 | 8 |
| Maryland | 13 | 3 | 11 | 7 | 4 | 16 | 4 | 12 | 7 | 5 |
| Massachusetts | 19 | 3 | 17 | 8 | 9 | 18 | 3 | 15 | 4 | 11 |
| Michigan | 11 | 4 | 7 | 5 | 2 | 15 | 5 | 10 | 4 | 6 |
| Minnesota | 15 | 2 | 13 | 11 | 3 | 16 | 2 | 14 | 8 | 6 |
| Mississippi | 11 | 5 | 5 | 4 | 1 | 9 | 5 | 4 | 3 | 2 |
| Missouri | 15 | 3 | 12 | 5 | 7 | 16 | 4 | 12 | 3 | 9 |
| Montana | 12 | 2 | 9 | 6 | 3 | 14 | 2 | 12 | 5 | 6 |
| Nebraska | 13 | 4 | 10 | 7 | 2 | 16 | 4 | 13 | 7 | 5 |
| Nevada | 16 | 4 | 12 | 8 | 5 | 18 | 2 | 16 | 9 | 6 |
| New Hampshire | - | - | - | - | - | 20 | 3 | 16 | 6 | 10 |
| New Jersey | - | - | - | - | - | 18 | 2 | 16 | 2 | 14 |
| New Mexico | 25 | 7 | 18 | 14 | 4 | 32 | 2 | 30 | 16 | 14 |
| New York | 16 | 4 | 12 | 5 | 7 | 20 | 5 | 15 | 3 | 12 |
| North Carolina | 16 | 5 | 11 | 4 | 7 | 18 | 4 | 15 | 3 | 12 |
| North Dakota | 11 | 2 | 9 | 8 | 2 | 16 | 1 | 14 | 7 | 7 |
| Ohio | 11 | 4 | 7 | 4 | 3 | 13 | 5 | 8 | 3 | 5 |
| Oklahoma | 15 | 4 | 11 | 8 | 3 | 19 | 2 | 17 | 10 | 7 |
| Oregon | 17 | 3 | 14 | 8 | 6 | 20 | 3 | 16 | 11 | 6 |
| Pennsylvania | - | - | - | - | - | 15 | 2 | 14 | 3 | 11 |
| Rhode Island | 20 | 3 | 16 | 12 | 4 | 23 | 4 | 20 | 7 | 13 |
| South Carolina | 13 | 4 | 9 | 7 | 2 | 15 | 7 | 8 | 5 | 4 |
| South Dakota | - | - | - | - | - | 13 | 2 | 11 | 6 | 6 |
| Tennessee | 13 | 2 | 10 | 9 | 1 | 16 | 3 | 13 | 12 | 1 |
| Texas | 20 | 8 | 12 | 10 | 2 | 20 | 7 | 13 | 11 | 2 |
| Utah | 14 | 3 | 11 | 8 | 3 | 16 | 3 | 14 | 9 | 5 |
| Vermont | 17 | 3 | 14 | 10 | 4 | 18 | 3 | 15 | 7 | 7 |
| Virginia | 15 | 6 | 9 | 5 | 4 | 17 | 7 | 10 | 4 | 6 |
| Washington | - | - | - | - | - | 16 | 2 | 14 | 10 | 5 |
| West Virginia | 15 | 3 | 12 | 4 | 8 | 16 | 3 | 14 | 5 | 9 |
| Wisconsin | 17 | 4 | 13 | 6 | 6 | 17 | 3 | 14 | 3 | 11 |
| Wyoming | 13 | 1 | 12 | 9 | 3 | 17 | 1 | 15 | 6 | 10 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 15 | 6 | 9 | 3 | 6 | 20 | 6 | 14 | 5 | 9 |
| DoDEA ${ }^{1}$ | 9 | 1 | 8 | 6 | 2 | 11 | 1 | 10 | 4 | 6 |
| Puerto Rico | - | - | - | - | - | - | - | - | - | - |

[^8]Table A-20.
Percentage of eighth-grade public school students identified as students with disabilities and/or English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19—Continued

|  | 2005 |  |  |  |  | 2007 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 19 | 4 | 15 | 7 | 8 | 18 | 4 | 14 | 6 | 8 |
| Alabama | 14 | 1 | 13 | 10 | 3 | 14 | 3 | 11 | 9 | 2 |
| Alaska | 27 | 2 | 25 | 14 | 11 | 26 | 4 | 22 | 13 | 9 |
| Arizona | 23 | 5 | 18 | 12 | 6 | 19 | 3 | 15 | 9 | 6 |
| Arkansas | 15 | 3 | 12 | 5 | 7 | 15 | 2 | 13 | 3 | 10 |
| California | 28 | 2 | 25 | 21 | 4 | 28 | 2 | 26 | 21 | 5 |
| Colorado | 17 | 3 | 14 | 5 | 9 | 16 | 2 | 14 | 4 | 10 |
| Connecticut | 16 | 3 | 13 | 5 | 9 | 16 | 2 | 15 | 4 | 11 |
| Delaware | 18 | 11 | 7 | 4 | 3 | 16 | 7 | 10 | 3 | 7 |
| Florida | 21 | 3 | 18 | 4 | 13 | 19 | 3 | 15 | 2 | 13 |
| Georgia | 14 | 2 | 11 | 4 | 7 | 11 | 5 | 7 | 3 | 4 |
| Hawaii | 20 | 3 | 17 | 8 | 9 | 19 | 2 | 18 | 8 | 10 |
| Idaho | 17 | 2 | 15 | 8 | 7 | 15 | 2 | 13 | 7 | 7 |
| Illinois | 18 | 3 | 14 | 4 | 11 | 18 | 6 | 12 | 3 | 9 |
| Indiana | 17 | 4 | 13 | 3 | 10 | 18 | 6 | 13 | 3 | 9 |
| lowa | 17 | 3 | 15 | 4 | 10 | 18 | 2 | 15 | 3 | 12 |
| Kansas | 17 | 4 | 13 | 4 | 9 | 16 | 4 | 12 | 5 | 8 |
| Kentucky | 12 | 3 | 9 | 2 | 6 | 14 | 7 | 8 | 2 | 6 |
| Louisiana | 15 | 4 | 11 | 1 | 10 | 13 | 3 | 10 | 1 | 9 |
| Maine | 19 | 5 | 14 | 5 | 9 | 18 | 5 | 13 | 4 | 9 |
| Maryland | 13 | 4 | 9 | 4 | 4 | 13 | 7 | 6 | 2 | 4 |
| Massachusetts | 20 | 6 | 13 | 4 | 10 | 20 | 9 | 11 | 3 | 7 |
| Michigan | 16 | 4 | 12 | 4 | 8 | 15 | 5 | 11 | 3 | 8 |
| Minnesota | 18 | 2 | 15 | 8 | 7 | 16 | 2 | 14 | 6 | 8 |
| Mississippi | 10 | 3 | 7 | 3 | 3 | 11 | 2 | 9 | 2 | 7 |
| Missouri | 15 | 4 | 11 | 3 | 8 | 15 | 5 | 10 | 3 | 7 |
| Montana | 16 | 2 | 14 | 5 | 9 | 17 | 3 | 14 | 4 | 9 |
| Nebraska | 16 | 1 | 14 | 6 | 9 | 15 | 3 | 13 | 5 | 8 |
| Nevada | 19 | 2 | 17 | 10 | 7 | 20 | 4 | 17 | 9 | 8 |
| New Hampshire | 19 | 2 | 17 | 6 | 11 | 21 | 3 | 17 | 6 | 12 |
| New Jersey | 18 | 4 | 15 | 2 | 12 | 18 | 3 | 15 | 2 | 12 |
| New Mexico | 30 | 3 | 26 | 13 | 13 | 26 | 3 | 23 | 14 | 9 |
| New York | 19 | 4 | 15 | 2 | 13 | 18 | 3 | 14 | 1 | 14 |
| North Carolina | 17 | 3 | 15 | 3 | 12 | 17 | 2 | 15 | 3 | 12 |
| North Dakota | 17 | 4 | 13 | 4 | 8 | 16 | 6 | 10 | 3 | 7 |
| Ohio | 14 | 6 | 9 | 2 | 7 | 16 | 7 | 9 | 2 | 7 |
| Oklahoma | 20 | 4 | 15 | 7 | 8 | 18 | 8 | 9 | 5 | 5 |
| Oregon | 19 | 3 | 16 | 9 | 8 | 19 | 3 | 16 | 8 | 8 |
| Pennsylvania | 16 | 3 | 13 | 3 | 10 | 17 | 4 | 13 | 3 | 10 |
| Rhode Island | 21 | 3 | 18 | 7 | 11 | 20 | 3 | 17 | 5 | 12 |
| South Carolina | 15 | 6 | 9 | 5 | 4 | 15 | 5 | 10 | 4 | 5 |
| South Dakota | 14 | 2 | 11 | 4 | 7 | 12 | 2 | 9 | 3 | 6 |
| Tennessee | 15 | 5 | 11 | 5 | 5 | 13 | 6 | 7 | 4 | 3 |
| Texas | 19 | 6 | 13 | 9 | 4 | 17 | 6 | 12 | 7 | 5 |
| Utah | 17 | 2 | 14 | 6 | 8 | 18 | 3 | 15 | 8 | 7 |
| Vermont | 19 | 4 | 15 | 7 | 9 | 21 | 4 | 16 | 5 | 11 |
| Virginia | 18 | 5 | 13 | 5 | 8 | 17 | 7 | 11 | 4 | 7 |
| Washington | 16 | 2 | 13 | 5 | 8 | 16 | 4 | 13 | 5 | 8 |
| West Virginia | 17 | 3 | 14 | 6 | 8 | 17 | 2 | 15 | 6 | 10 |
| Wisconsin | 18 | 4 | 13 | 3 | 10 | 18 | 5 | 13 | 2 | 11 |
| Wyoming | 17 | 2 | 15 | 5 | 10 | 15 | 2 | 13 | 4 | 9 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 19 | 6 | 14 | 2 | 11 | 21 | 10 | 11 | 3 | 8 |
| DoDEA ${ }^{1}$ | 13 | 2 | 11 | 4 | 7 | 12 | 2 | 10 | 3 | 7 |
| Puerto Rico | - | - | - | - | - | - | - | - | - | - |

[^9]Table A-20.
Percentage of eighth-grade public school students identified as students with disabilities and/or English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19—Continued

|  | 2009 |  |  |  |  | 2011 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 18 | 3 | 15 | 5 | 10 | 18 | 3 | 15 | 5 | 10 |
| Alabama | 11 | 2 | 10 | 7 | 3 | 12 | 1 | 11 | 7 | 4 |
| Alaska | 21 | 3 | 18 | 5 | 13 | 21 | 3 | 18 | 4 | 14 |
| Arizona | 16 | 2 | 14 | 5 | 9 | 12 | 1 | 11 | 2 | 9 |
| Arkansas | 16 | 1 | 15 | 3 | 11 | 16 | 1 | 14 | 3 | 12 |
| California | 25 | 2 | 24 | 18 | 6 | 23 | 1 | 22 | 15 | 7 |
| Colorado | 17 | 2 | 15 | 5 | 10 | 16 | 1 | 15 | 5 | 10 |
| Connecticut | 16 | 2 | 14 | 3 | 11 | 16 | 1 | 15 | 2 | 12 |
| Delaware | 17 | 3 | 14 | 1 | 13 | 16 | 3 | 13 | 2 | 11 |
| Florida | 19 | 2 | 17 | 1 | 16 | 19 | 2 | 17 | 1 | 16 |
| Georgia | 13 | 3 | 10 | 2 | 9 | 12 | 3 | 9 | 2 | 7 |
| Hawaii | 18 | 2 | 16 | 6 | 10 | 20 | 2 | 18 | 7 | 11 |
| Idaho | 12 | 1 | 11 | 5 | 6 | 12 | 1 | 10 | 3 | 7 |
| Illinois | 16 | 3 | 13 | 3 | 11 | 17 | 2 | 15 | 3 | 12 |
| Indiana | 16 | 4 | 12 | 3 | 9 | 17 | 3 | 14 | 2 | 12 |
| lowa | 16 | 3 | 14 | 2 | 11 | 17 | 1 | 16 | 2 | 14 |
| Kansas | 17 | 3 | 14 | 4 | 9 | 18 | 1 | 16 | 7 | 9 |
| Kentucky | 13 | 5 | 8 | 2 | 7 | 13 | 3 | 10 | 2 | 8 |
| Louisiana | 16 | 2 | 14 | 2 | 12 | 15 | 1 | 14 | 1 | 13 |
| Maine | 19 | 2 | 16 | 4 | 13 | 20 | 2 | 18 | 4 | 14 |
| Maryland | 14 | 7 | 7 | 1 | 6 | 14 | 6 | 8 | 1 | 7 |
| Massachusetts | 21 | 6 | 15 | 4 | 11 | 22 | 4 | 18 | 3 | 15 |
| Michigan | 15 | 3 | 12 | 3 | 8 | 14 | 4 | 11 | 3 | 8 |
| Minnesota | 17 | 3 | 15 | 6 | 9 | 17 | 2 | 15 | 6 | 9 |
| Mississippi | 10 | 2 | 8 | 2 | 7 | 8 | 1 | 7 | 1 | 6 |
| Missouri | 14 | 3 | 10 | 3 | 8 | 14 | 1 | 12 | 2 | 10 |
| Montana | 14 | 3 | 11 | 3 | 8 | 13 | 2 | 12 | 2 | 9 |
| Nebraska | 17 | 3 | 13 | 4 | 9 | 16 | 4 | 13 | 4 | 9 |
| Nevada | 17 | 2 | 15 | 6 | 9 | 18 | 3 | 15 | 6 | 9 |
| New Hampshire | 21 | 3 | 18 | 6 | 13 | 20 | 2 | 18 | 4 | 14 |
| New Jersey | 18 | 2 | 16 | 2 | 14 | 19 | 4 | 15 | 1 | 14 |
| New Mexico | 21 | 3 | 18 | 7 | 11 | 22 | 2 | 20 | 10 | 10 |
| New York | 20 | 3 | 17 | 1 | 16 | 20 | 1 | 19 | \# | 18 |
| North Carolina | 17 | 2 | 15 | 3 | 13 | 18 | 2 | 16 | 3 | 12 |
| North Dakota | 16 | 5 | 11 | 4 | 7 | 16 | 4 | 11 | 3 | 9 |
| Ohio | 15 | 5 | 10 | 1 | 9 | 16 | 5 | 11 | 1 | 10 |
| Oklahoma | 18 | 6 | 11 | 4 | 8 | 18 | 10 | 8 | 4 | 4 |
| Oregon | 18 | 3 | 16 | 7 | 8 | 18 | 1 | 16 | 6 | 11 |
| Pennsylvania | 19 | 3 | 16 | 3 | 13 | 17 | 2 | 15 | 2 | 13 |
| Rhode Island | 21 | 2 | 18 | 4 | 14 | 19 | 1 | 18 | 4 | 13 |
| South Carolina | 16 | 4 | 12 | 5 | 7 | 15 | 4 | 11 | 4 | 8 |
| South Dakota | 12 | 2 | 10 | 3 | 7 | 13 | 2 | 11 | 4 | 7 |
| Tennessee | 12 | 4 | 8 | 1 | 7 | 13 | 4 | 9 | 1 | 8 |
| Texas | 17 | 5 | 13 | 6 | 6 | 18 | 5 | 13 | 8 | 5 |
| Utah | 14 | 3 | 11 | 4 | 7 | 14 | 3 | 11 | 3 | 8 |
| Vermont | 21 | 2 | 19 | 5 | 13 | 20 | 1 | 18 | 4 | 15 |
| Virginia | 17 | 4 | 13 | 4 | 9 | 18 | 3 | 15 | 6 | 9 |
| Washington | 14 | 2 | 12 | 4 | 8 | 16 | 2 | 14 | 4 | 10 |
| West Virginia | 15 | 2 | 14 | 4 | 10 | 14 | 2 | 12 | 3 | 9 |
| Wisconsin | 18 | 3 | 15 | 3 | 12 | 18 | 2 | 16 | 2 | 14 |
| Wyoming | 15 | 2 | 13 | 3 | 10 | 14 | 1 | 13 | 2 | 11 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 20 | 6 | 14 | 2 | 12 | 21 | 4 | 17 | 2 | 15 |
| DoDEA ${ }^{1}$ | 13 | 2 | 11 | 4 | 7 | 14 | 3 | 11 | 3 | 8 |
| Puerto Rico | - | - | - | - | - | 19 | 1 | 18 | \# | 17 |

See notes at end of table.

Table A-20.
Percentage of eighth-grade public school students identified as students with disabilities and/or English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19—Continued

|  | 2013 |  |  |  |  | 2015 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 17 | 2 | 16 | 3 | 12 | 19 | 2 | 17 | 5 | 13 |
| Alabama | 11 | 1 | 10 | 5 | 5 | 11 | 1 | 10 | 4 | 6 |
| Alaska | 23 | 1 | 22 | 3 | 19 | 23 | 2 | 21 | 4 | 17 |
| Arizona | 13 | 1 | 12 | 1 | 11 | 14 | 1 | 13 | 3 | 11 |
| Arkansas | 19 | 2 | 17 | 3 | 14 | 19 | 2 | 17 | 4 | 13 |
| California | 19 | 1 | 18 | 10 | 8 | 22 | 1 | 21 | 13 | 8 |
| Colorado | 18 | 1 | 17 | 5 | 11 | 21 | 1 | 19 | 9 | 11 |
| Connecticut | 18 | 2 | 16 | 2 | 14 | 19 | 1 | 17 | 3 | 15 |
| Delaware | 17 | 1 | 16 | 1 | 15 | 19 | 2 | 17 | 3 | 15 |
| Florida | 18 | 2 | 16 | 1 | 15 | 20 | 2 | 18 | 1 | 17 |
| Georgia | 13 | 2 | 12 | 2 | 10 | 15 | 1 | 13 | 2 | 11 |
| Hawaii | 21 | 2 | 19 | 7 | 12 | 17 | 2 | 16 | 6 | 9 |
| Idaho | 12 | 1 | 11 | 2 | 8 | 13 | 2 | 11 | 2 | 9 |
| Illinois | 17 | 1 | 16 | 2 | 14 | 17 | 1 | 16 | 3 | 13 |
| Indiana | 18 | 2 | 16 | 2 | 14 | 19 | 1 | 18 | 3 | 15 |
| lowa | 15 | 1 | 14 | 1 | 13 | 16 | 1 | 15 | 3 | 12 |
| Kansas | 19 | 2 | 18 | 7 | 11 | 22 | 1 | 21 | 11 | 10 |
| Kentucky | 13 | 2 | 11 | 1 | 10 | 14 | 1 | 12 | 1 | 11 |
| Louisiana | 16 | 1 | 15 | 1 | 14 | 19 | 2 | 17 | 1 | 16 |
| Maine | 20 | 1 | 18 | 2 | 16 | 21 | 1 | 19 | 4 | 16 |
| Maryland | 16 | 2 | 14 | 1 | 13 | 18 | 2 | 16 | 2 | 14 |
| Massachusetts | 22 | 2 | 20 | 4 | 16 | 24 | 2 | 22 | 4 | 18 |
| Michigan | 16 | 2 | 13 | 3 | 11 | 16 | 2 | 14 | 4 | 10 |
| Minnesota | 18 | 2 | 16 | 7 | 9 | 19 | 2 | 17 | 8 | 9 |
| Mississippi | 9 | 1 | 8 | 2 | 7 | 11 | 1 | 10 | 2 | 8 |
| Missouri | 13 | 1 | 12 | 2 | 11 | 15 | 2 | 13 | 2 | 11 |
| Montana | 13 | 1 | 12 | 2 | 9 | 13 | 1 | 12 | 4 | 8 |
| Nebraska | 16 | 2 | 14 | 2 | 12 | 17 | 2 | 15 | 3 | 11 |
| Nevada | 16 | 1 | 15 | 3 | 12 | 23 | 1 | 21 | 12 | 10 |
| New Hampshire | 20 | 1 | 19 | 3 | 16 | 19 | 1 | 17 | 3 | 15 |
| New Jersey | 18 | 2 | 17 | \# | 16 | 20 | 1 | 19 | 1 | 18 |
| New Mexico | 24 | 2 | 22 | 10 | 12 | 24 | 2 | 22 | 10 | 12 |
| New York | 22 | 2 | 20 | \# | 19 | 22 | 1 | 21 | 1 | 20 |
| North Carolina | 18 | 1 | 17 | 3 | 14 | 18 | 1 | 17 | 3 | 14 |
| North Dakota | 16 | 3 | 13 | 1 | 11 | 16 | 2 | 14 | 2 | 11 |
| Ohio | 16 | 2 | 14 | 1 | 14 | 19 | 2 | 17 | 1 | 16 |
| Oklahoma | 19 | 2 | 17 | 3 | 14 | 20 | 2 | 19 | 4 | 15 |
| Oregon | 16 | 1 | 15 | 4 | 11 | 17 | 2 | 14 | 4 | 11 |
| Pennsylvania | 19 | 2 | 17 | 2 | 15 | 19 | 2 | 17 | 2 | 14 |
| Rhode Island | 19 | 1 | 18 | 2 | 16 | 20 | 2 | 18 | 4 | 14 |
| South Carolina | 15 | 1 | 14 | 4 | 10 | 17 | 1 | 15 | 5 | 10 |
| South Dakota | 13 | 1 | 12 | 3 | 9 | 14 | 1 | 12 | 5 | 8 |
| Tennessee | 12 | 2 | 10 | 1 | 10 | 16 | 2 | 14 | 1 | 13 |
| Texas | 18 | 2 | 16 | 4 | 12 | 21 | 2 | 19 | 6 | 13 |
| Utah | 14 | 2 | 12 | 2 | 10 | 13 | 1 | 12 | 3 | 9 |
| Vermont | 18 | 1 | 17 | 2 | 15 | 20 | 1 | 19 | 2 | 17 |
| Virginia | 17 | 1 | 16 | 4 | 12 | 18 | 2 | 16 | 3 | 12 |
| Washington | 16 | 2 | 14 | 3 | 11 | 18 | 1 | 17 | 5 | 12 |
| West Virginia | 13 | 2 | 12 | 3 | 9 | 15 | 2 | 13 | 2 | 11 |
| Wisconsin | 18 | 2 | 17 | 2 | 15 | 17 | 1 | 16 | 3 | 12 |
| Wyoming | 16 | 2 | 14 | 2 | 13 | 16 | 1 | 15 | 2 | 13 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 23 | 1 | 22 | 1 | 21 | 25 | 3 | 21 | 2 | 20 |
| DoDEA ${ }^{1}$ | 14 | 1 | 12 | 3 | 9 | 15 | 1 | 14 | 4 | 10 |
| Puerto Rico | 23 | \# | 23 | \# | 23 | 25 | \# | 25 | 1 | 24 |

See notes at end of table.

Table A-20.
Percentage of eighth-grade public school students identified as students with disabilities and/or English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19—Continued

|  | 2017 |  |  |  |  | 2019 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 20 | 2 | 18 | 6 | 12 | 21 | 2 | 19 | 6 | 13 |
| Alabama | 13 | 2 | 11 | 7 | 4 | 13 | 1 | 12 | 5 | 6 |
| Alaska | 23 | 2 | 22 | 8 | 14 | 24 | 1 | 23 | 7 | 15 |
| Arizona | 14 | 1 | 13 | 3 | 9 | 19 | 2 | 17 | 5 | 12 |
| Arkansas | 21 | 2 | 19 | 7 | 13 | 21 | 2 | 19 | 3 | 16 |
| California | 23 | 2 | 21 | 13 | 7 | 24 | 2 | 22 | 13 | 10 |
| Colorado | 20 | 2 | 18 | 9 | 9 | 18 | 1 | 17 | 7 | 10 |
| Connecticut | 20 | 2 | 17 | 4 | 13 | 21 | 2 | 19 | 5 | 14 |
| Delaware | 19 | 2 | 17 | 4 | 13 | 21 | 2 | 19 | 5 | 14 |
| Florida | 21 | 3 | 19 | 2 | 17 | 24 | 2 | 22 | 2 | 20 |
| Georgia | 15 | 2 | 13 | 2 | 11 | 17 | 2 | 16 | 2 | 14 |
| Hawaii | 16 | 2 | 14 | 8 | 6 | 16 | 2 | 14 | 9 | 5 |
| Idaho | 13 | 1 | 12 | 4 | 8 | 15 | 1 | 14 | 4 | 10 |
| Illinois | 18 | 1 | 16 | 3 | 14 | 19 | 1 | 18 | 3 | 15 |
| Indiana | 19 | 2 | 18 | 4 | 14 | 21 | 2 | 19 | 3 | 16 |
| lowa | 16 | 1 | 15 | 2 | 12 | 18 | 1 | 17 | 3 | 15 |
| Kansas | 23 | 1 | 22 | 14 | 8 | 21 | 1 | 20 | 10 | 10 |
| Kentucky | 15 | 1 | 13 | 2 | 12 | 16 | 2 | 15 | 1 | 13 |
| Louisiana | 21 | 3 | 18 | 1 | 17 | 20 | 2 | 18 | 1 | 17 |
| Maine | 21 | 2 | 19 | 4 | 15 | 22 | 1 | 21 | 4 | 17 |
| Maryland | 17 | 2 | 16 | 1 | 14 | 19 | 2 | 17 | 1 | 16 |
| Massachusetts | 24 | 2 | 22 | 6 | 16 | 24 | 2 | 22 | 6 | 16 |
| Michigan | 19 | 3 | 16 | 6 | 10 | 19 | 2 | 16 | 5 | 11 |
| Minnesota | 19 | 2 | 17 | 11 | 6 | 20 | 2 | 18 | 9 | 9 |
| Mississippi | 12 | 1 | 11 | 3 | 8 | 13 | 1 | 12 | 3 | 9 |
| Missouri | 15 | 2 | 14 | 4 | 10 | 15 | 1 | 15 | 4 | 11 |
| Montana | 15 | 1 | 14 | 6 | 8 | 16 | 1 | 15 | 4 | 11 |
| Nebraska | 18 | 2 | 16 | 4 | 12 | 18 | 1 | 17 | 4 | 13 |
| Nevada | 22 | 2 | 21 | 13 | 7 | 22 | 1 | 21 | 13 | 8 |
| New Hampshire | 19 | 1 | 17 | 5 | 12 | 21 | 1 | 20 | 6 | 14 |
| New Jersey | 20 | 2 | 19 | 1 | 17 | 21 | 2 | 20 | 2 | 18 |
| New Mexico | 24 | 2 | 22 | 8 | 14 | 25 | 2 | 24 | 9 | 14 |
| New York | 23 | 2 | 21 | 2 | 19 | 24 | 1 | 22 | 1 | 21 |
| North Carolina | 17 | 2 | 15 | 5 | 10 | 17 | 1 | 16 | 4 | 12 |
| North Dakota | 16 | 2 | 15 | 5 | 9 | 15 | 1 | 14 | 3 | 11 |
| Ohio | 18 | 2 | 16 | 1 | 14 | 19 | 2 | 17 | 1 | 16 |
| Oklahoma | 20 | 2 | 19 | 5 | 14 | 20 | 2 | 18 | 5 | 12 |
| Oregon | 18 | 1 | 16 | 7 | 9 | 20 | 1 | 18 | 8 | 10 |
| Pennsylvania | 19 | 2 | 17 | 4 | 13 | 22 | 1 | 20 | 5 | 15 |
| Rhode Island | 21 | 2 | 19 | 4 | 15 | 22 | 1 | 20 | 5 | 15 |
| South Carolina | 20 | 1 | 19 | 12 | 6 | 20 | 1 | 18 | 9 | 9 |
| South Dakota | 15 | 3 | 13 | 9 | 4 | 15 | 1 | 14 | 7 | 7 |
| Tennessee | 17 | 2 | 14 | 3 | 11 | 15 | 2 | 13 | 3 | 11 |
| Texas | 23 | 2 | 21 | 8 | 13 | 27 | 2 | 25 | 12 | 13 |
| Utah | 15 | 1 | 13 | 4 | 9 | 18 | 1 | 17 | 6 | 11 |
| Vermont | 21 | 1 | 20 | 4 | 16 | 21 | 1 | 19 | 4 | 15 |
| Virginia | 17 | 2 | 15 | 5 | 10 | 19 | 2 | 17 | 4 | 12 |
| Washington | 18 | 2 | 17 | 6 | 11 | 20 | 2 | 19 | 8 | 10 |
| West Virginia | 16 | 2 | 14 | 5 | 8 | 17 | 1 | 16 | 5 | 11 |
| Wisconsin | 17 | 2 | 16 | 4 | 12 | 17 | 1 | 16 | 3 | 12 |
| Wyoming | 15 | 1 | 14 | 3 | 11 | 16 | 2 | 15 | 3 | 12 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 24 | 2 | 22 | 2 | 19 | 25 | 2 | 24 | 2 | 22 |
| DoDEA ${ }^{1}$ | 15 | 1 | 14 | 4 | 10 | 17 | 1 | 15 | 4 | 11 |
| Puerto Rico | 29 | \# | 29 | 2 | 27 | - | - | - | - | - |

- Not available.
\# Rounds to zero.
${ }^{1}$ Department of Defense Education Activity (overseas and domestic schools),
NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. Detai may not sum to totals because of rounding. In Puerto Rico, the English language learner (ELL) category is for the Spanish language learner (SLL).
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000-19 Mathematics Assessments

Table A-21.
Percentage of fourth-grade public school students identified as students with disabilities excluded and assessed in NAEP mathematics when accommodations were not permitted, by state/jurisdiction: 1992, 1996, and 2000

|  | 1992 |  |  | 1996 |  |  | 2000 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Identified | Excluded | Assessed | Identified | Excluded | Assessed |
| Nation (public) | 7 | 5 | 3 | 12 | 5 | 7 | 12 | 6 | 6 |
| Alabama | 10 | 4 | 6 | 11 | 6 | 5 | 12 | 6 | 7 |
| Alaska | - | - | - | 13 | 4 | 10 | - | - | - |
| Arizona | 7 | 3 | 4 | 10 | 7 | 3 | 11 | 6 | 4 |
| Arkansas | 11 | 5 | 6 | 9 | 6 | 3 | 13 | 7 | 6 |
| California | 7 | 3 | 4 | 8 | 5 | 3 | 8 | 3 | 5 |
| Colorado | 8 | 4 | 4 | 12 | 7 | 5 | - | - | - |
| Connecticut | 10 | 4 | 6 | 14 | 7 | 7 | 11 | 8 | 3 |
| Delaware | 11 | 5 | 6 | 12 | 6 | 6 | - | - | - |
| Florida | 13 | 7 | 6 | 14 | 7 | 7 | - | - | - |
| Georgia | 9 | 5 | 4 | 11 | 6 | 5 | 9 | 6 | 4 |
| Hawaii | 10 | 5 | 5 | 10 | 4 | 5 | 13 | 8 | 5 |
| Idaho | 8 | 3 | 5 | - | - | - | 12 | 5 | 6 |
| Illinois | - | - | - | - | - | - | 11 | 7 | 4 |
| Indiana | 6 | 3 | 3 | 11 | 5 | 6 | 11 | 6 | 4 |
| lowa | 8 | 3 | 5 | 11 | 5 | 6 | 14 | 10 | 4 |
| Kansas | - | - | - | - | - | - | 12 | 6 | 6 |
| Kentucky | 8 | 3 | 5 | 10 | 6 | 4 | 11 | 8 | 3 |
| Louisiana | 7 | 4 | 3 | 13 | 7 | 6 | 15 | 7 | 8 |
| Maine | 14 | 6 | 8 | 14 | 7 | 7 | 16 | 10 | 6 |
| Maryland | 10 | 3 | 7 | 13 | 7 | 6 | 11 | 8 | 3 |
| Massachusetts | 15 | 6 | 9 | 15 | 7 | 8 | 14 | 8 | 6 |
| Michigan | 7 | 5 | 2 | 10 | 6 | 4 | 9 | 7 | 2 |
| Minnesota | 7 | 3 | 4 | 11 | 5 | 6 | 12 | 4 | 7 |
| Mississippi | 7 | 5 | 2 | 8 | 6 | 2 | 6 | 4 | 2 |
| Missouri | 12 | 4 | 7 | 14 | 5 | 9 | 15 | 9 | 5 |
| Montana | - | - | - | 10 | 5 | 5 | 11 | 5 | 5 |
| Nebraska | 12 | 4 | 8 | 14 | 4 | 10 | 16 | 6 | 9 |
| Nevada | - | - | - | 9 | 5 | 4 | 10 | 6 | 4 |
| New Hampshire | 12 | 4 | 8 | - | - | - | - | - | - |
| New Jersey | 8 | 3 | 5 | 9 | 5 | 4 | - | - | - |
| New Mexico | 12 | 6 | 6 | 14 | 8 | 6 | 15 | 9 | 6 |
| New York | 7 | 3 | 3 | 10 | 5 | 5 | 11 | 9 | 2 |
| North Carolina | 11 | 3 | 8 | 13 | 6 | 6 | 14 | 12 | 2 |
| North Dakota | 8 | 2 | 7 | 10 | 3 | 7 | 12 | 6 | 6 |
| Ohio | 10 | 6 | 4 | - | - | - | 12 | 10 | 2 |
| Oklahoma | 11 | 7 | 4 | - | - | - | 16 | 10 | 6 |
| Oregon | - | - | - | 13 | 6 | 7 | 14 | 6 | 7 |
| Pennsylvania | 8 | 3 | 5 | 8 | 4 | 4 | - | - | - |
| Rhode Island | 10 | 4 | 7 | 13 | 5 | 8 | 16 | 9 | 7 |
| South Carolina | 10 | 5 | 5 | 12 | 5 | 7 | 17 | 7 | 9 |
| Tennessee | 11 | 4 | 8 | 12 | 6 | 6 | 10 | 4 | 7 |
| Texas | 9 | 5 | 5 | 12 | 7 | 5 | 15 | 10 | 5 |
| Utah | 9 | 4 | 5 | 11 | 5 | 6 | 9 | 5 | 4 |
| Vermont | - | - | - | 14 | 6 | 8 | 14 | 10 | 4 |
| Virginia | 10 | 5 | 5 | 12 | 6 | 6 | 13 | 10 | 3 |
| Washington | - | - | - | 10 | 5 | 6 | - | - | - |
| West Virginia | 9 | 4 | 4 | 13 | 8 | 5 | 13 | 10 | 3 |
| Wisconsin | 9 | 5 | 5 | 10 | 7 | 3 | 15 | 10 | 5 |
| Wyoming | 9 | 3 | 6 | 12 | 4 | 8 | 13 | 5 | 8 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |
| District of Columbia | 8 | 7 | 1 | 9 | 7 | 1 | 14 | 7 | 7 |
| DoDEA ${ }^{1}$ | - | - | - | 8 | 4 | 4 | 8 | 4 | 4 |

- Not available.
${ }^{1}$ Department of Defense Education Activity (overseas and domestic schools).
NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. South Dakota did not participate in NAEP mathematics assessments from 1992 to 2000. 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), 1992, 1996, and 2000 Mathematics Assessments

Table A-22.
Percentage of fourth-grade public school students identified as students with disabilities excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19

|  | 2000 |  |  |  |  | 2003 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 13 | 3 | 9 | 5 | 4 | 14 | 3 | 11 | 4 | 7 |
| Alabama | 13 | 3 | 9 | 7 | 3 | 11 | 2 | 10 | 7 | 2 |
| Alaska | - | - | - | - | - | 16 | 1 | 15 | 6 | 9 |
| Arizona | 11 | 3 | 8 | 4 | 4 | 12 | 3 | 9 | 5 | 3 |
| Arkansas | 12 | 4 | 8 | 5 | 4 | 14 | 1 | 12 | 5 | 8 |
| California | 8 | 3 | 5 | 4 | 1 | 10 | 2 | 8 | 6 | 2 |
| Colorado | - | - | - | - | - | 12 | 2 | 11 | 3 | 7 |
| Connecticut | 11 | 3 | 8 | 4 | 4 | 13 | 3 | 10 | 3 | 6 |
| Delaware | - | - | - | - | - | 16 | 6 | 10 | 3 | 7 |
| Florida | - | - | - | - | - | 18 | 2 | 16 | 4 | 12 |
| Georgia | 9 | 3 | 7 | 3 | 4 | 12 | 2 | 11 | 4 | 7 |
| Hawaii | 13 | 6 | 7 | 5 | 2 | 11 | 2 | 10 | 3 | 6 |
| Idaho | 12 | 1 | 11 | 5 | 6 | 12 | 1 | 11 | 4 | 7 |
| Illinois | 11 | 2 | 9 | 3 | 6 | 15 | 3 | 13 | 4 | 9 |
| Indiana | 10 | 2 | 8 | 3 | 5 | 14 | 2 | 12 | 6 | 6 |
| lowa | 13 | 1 | 11 | 4 | 7 | 15 | 2 | 13 | 3 | 10 |
| Kansas | 12 | 3 | 9 | 5 | 4 | 14 | 1 | 12 | 2 | 10 |
| Kentucky | 11 | 3 | 8 | 3 | 5 | 13 | 3 | 11 | 4 | 7 |
| Louisiana | 15 | 3 | 13 | 2 | 11 | 21 | 3 | 18 | 3 | 16 |
| Maine | 15 | 4 | 11 | 4 | 7 | 18 | 3 | 14 | 4 | 10 |
| Maryland | 11 | 2 | 9 | 4 | 5 | 13 | 3 | 10 | 4 | 6 |
| Massachusetts | 14 | 1 | 14 | 5 | 9 | 18 | 2 | 16 | 2 | 14 |
| Michigan | 10 | 3 | 7 | 3 | 4 | 11 | 3 | 7 | 2 | 5 |
| Minnesota | 12 | 2 | 10 | 5 | 5 | 14 | 2 | 11 | 5 | 6 |
| Mississippi | 6 | 3 | 3 | 1 | 2 | 10 | 5 | 5 | 3 | 1 |
| Missouri | 14 | 2 | 12 | 5 | 7 | 15 | 3 | 12 | 3 | 9 |
| Montana | 12 | 2 | 10 | 5 | 6 | 14 | 2 | 12 | 5 | 7 |
| Nebraska | 15 | 2 | 13 | 9 | 4 | 16 | 2 | 14 | 6 | 8 |
| Nevada | 10 | 3 | 7 | 3 | 4 | 13 | 3 | 10 | 5 | 5 |
| New Hampshire | - | - | - | - | - | 18 | 3 | 16 | 4 | 11 |
| New Jersey | - | - | - | - | - | 14 | 2 | 13 | 1 | 12 |
| New Mexico | 15 | 5 | 10 | 5 | 5 | 17 | 2 | 15 | 7 | 9 |
| New York | 11 | 2 | 8 | \# | 8 | 13 | 3 | 10 | 1 | 10 |
| North Carolina | 14 | 4 | 10 | 3 | 7 | 17 | 4 | 14 | 3 | 10 |
| North Dakota | 11 | 1 | 9 | 5 | 4 | 15 | 2 | 14 | 6 | 7 |
| Ohio | 12 | 4 | 7 | 2 | 5 | 12 | 4 | 8 | 2 | 7 |
| Oklahoma | 16 | 4 | 12 | 7 | 4 | 17 | 3 | 14 | 6 | 8 |
| Oregon | 14 | 2 | 12 | 6 | 5 | 17 | 4 | 14 | 7 | 7 |
| Pennsylvania | - | - | - | - | - | 13 | 2 | 11 | 2 | 9 |
| Rhode Island | 16 | 2 | 14 | 6 | 8 | 20 | 2 | 18 | 5 | 13 |
| South Carolina | 17 | 5 | 12 | 7 | 5 | 17 | 6 | 11 | 6 | 4 |
| South Dakota | - | - | - | - | - | 15 | 1 | 13 | 7 | 6 |
| Tennessee | 10 | 2 | 8 | 7 | 1 | 13 | 2 | 11 | 6 | 5 |
| Texas | 15 | 6 | 9 | 6 | 3 | 15 | 7 | 8 | 5 | 3 |
| Utah | 9 | 3 | 6 | 4 | 2 | 12 | 2 | 10 | 5 | 5 |
| Vermont | 15 | 3 | 12 | 4 | 8 | 17 | 4 | 13 | 4 | 10 |
| Virginia | 13 | 3 | 10 | 4 | 6 | 13 | 4 | 9 | 3 | 6 |
| Washington | - | - | - | - | - | 14 | 2 | 12 | 5 | 7 |
| West Virginia | 13 | 3 | 11 | 3 | 8 | 15 | 3 | 12 | 3 | 9 |
| Wisconsin | 15 | 4 | 10 | 5 | 6 | 15 | 3 | 12 | 2 | 10 |
| Wyoming | 14 | 2 | 12 | 6 | 6 | 15 | 1 | 14 | 3 | 11 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 13 | 3 | 10 | 5 | 5 | 13 | 4 | 10 | 2 | 7 |
| DoDEA ${ }^{1}$ | 8 | 2 | 6 | 3 | 4 | 10 | 1 | 9 | 2 | 6 |
| Puerto Rico | - | - | - | - | - | - | - | - | - | - |

See notes at end of table.

Table A-22.
Percentage of fourth-grade public school students identified as students with disabilities excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19—Continued

|  | 2005 |  |  |  |  | 2007 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 14 | 3 | 11 | 4 | 8 | 14 | 3 | 11 | 3 | 8 |
| Alabama | 11 | 1 | 10 | 7 | 3 | 11 | 1 | 10 | 6 | 4 |
| Alaska | 15 | 1 | 14 | 4 | 10 | 16 | 1 | 15 | 4 | 10 |
| Arizona | 11 | 3 | 9 | 3 | 5 | 11 | 2 | 9 | 4 | 5 |
| Arkansas | 13 | 2 | 11 | 3 | 8 | 12 | 2 | 9 | 2 | 7 |
| California | 10 | 2 | 8 | 4 | 3 | 10 | 2 | 8 | 4 | 4 |
| Colorado | 12 | 2 | 10 | 2 | 8 | 12 | 2 | 11 | 2 | 9 |
| Connecticut | 13 | 2 | 11 | 3 | 8 | 13 | 1 | 11 | 2 | 9 |
| Delaware | 16 | 7 | 9 | 2 | 7 | 17 | 5 | 12 | 3 | 9 |
| Florida | 18 | 2 | 16 | 3 | 12 | 15 | 2 | 13 | 1 | 12 |
| Georgia | 14 | 2 | 12 | 5 | 7 | 12 | 2 | 10 | 3 | 7 |
| Hawaii | 11 | 2 | 10 | 3 | 7 | 11 | 1 | 10 | 2 | 8 |
| Idaho | 11 | 1 | 10 | 3 | 7 | 11 | 1 | 9 | 3 | 6 |
| Illinois | 14 | 2 | 12 | 4 | 8 | 15 | 3 | 11 | 4 | 8 |
| Indiana | 15 | 1 | 14 | 4 | 10 | 17 | 3 | 14 | 6 | 9 |
| lowa | 14 | 2 | 13 | 2 | 11 | 13 | 1 | 12 | 2 | 10 |
| Kansas | 14 | 2 | 11 | 3 | 8 | 13 | 3 | 10 | 3 | 7 |
| Kentucky | 14 | 2 | 12 | 3 | 9 | 15 | 2 | 13 | 5 | 7 |
| Louisiana | 24 | 4 | 20 | 3 | 17 | 18 | 2 | 15 | 3 | 13 |
| Maine | 19 | 3 | 16 | 4 | 12 | 18 | 3 | 15 | 3 | 11 |
| Maryland | 13 | 3 | 10 | 3 | 7 | 12 | 4 | 9 | 3 | 6 |
| Massachusetts | 18 | 3 | 15 | 3 | 12 | 18 | 5 | 13 | 3 | 11 |
| Michigan | 14 | 4 | 11 | 3 | 7 | 13 | 3 | 10 | 4 | 7 |
| Minnesota | 13 | 2 | 11 | 5 | 6 | 13 | 2 | 12 | 4 | 7 |
| Mississippi | 11 | 2 | 8 | 5 | 4 | 10 | 1 | 9 | 4 | 6 |
| Missouri | 16 | 2 | 14 | 5 | 9 | 15 | 3 | 11 | 4 | 7 |
| Montana | 12 | 2 | 10 | 2 | 7 | 13 | 2 | 10 | 2 | 8 |
| Nebraska | 18 | 2 | 16 | 6 | 10 | 17 | 2 | 14 | 5 | 9 |
| Nevada | 12 | 3 | 10 | 3 | 6 | 13 | 2 | 11 | 5 | 6 |
| New Hampshire | 20 | 2 | 18 | 4 | 14 | 19 | 2 | 16 | 3 | 13 |
| New Jersey | 15 | 2 | 13 | 3 | 10 | 14 | 2 | 12 | 1 | 11 |
| New Mexico | 14 | 2 | 13 | 3 | 10 | 13 | 3 | 10 | 3 | 7 |
| New York | 15 | 3 | 12 | 1 | 11 | 15 | 1 | 13 | 1 | 12 |
| North Carolina | 15 | 2 | 13 | 3 | 10 | 15 | 2 | 13 | 3 | 10 |
| North Dakota | 16 | 2 | 13 | 5 | 8 | 15 | 4 | 11 | 3 | 8 |
| Ohio | 12 | 3 | 9 | 2 | 7 | 15 | 4 | 11 | 2 | 8 |
| Oklahoma | 16 | 4 | 12 | 4 | 9 | 14 | 5 | 10 | 3 | 6 |
| Oregon | 15 | 3 | 11 | 5 | 7 | 15 | 2 | 13 | 5 | 8 |
| Pennsylvania | 16 | 2 | 13 | 3 | 10 | 17 | 2 | 14 | 4 | 10 |
| Rhode Island | 20 | 2 | 18 | 6 | 12 | 19 | 2 | 17 | 5 | 12 |
| South Carolina | 14 | 4 | 10 | 6 | 5 | 13 | 2 | 12 | 5 | 6 |
| South Dakota | 16 | 1 | 14 | 7 | 7 | 15 | 1 | 14 | 7 | 7 |
| Tennessee | 11 | 3 | 8 | 3 | 6 | 14 | 6 | 8 | 4 | 4 |
| Texas | 14 | 5 | 8 | 4 | 4 | 13 | 5 | 8 | 3 | 5 |
| Utah | 12 | 2 | 11 | 4 | 6 | 12 | 2 | 10 | 4 | 6 |
| Vermont | 16 | 3 | 13 | 4 | 9 | 17 | 2 | 14 | 3 | 11 |
| Virginia | 16 | 4 | 11 | 3 | 8 | 15 | 4 | 11 | 4 | 7 |
| Washington | 13 | 2 | 11 | 4 | 7 | 15 | 2 | 13 | 5 | 8 |
| West Virginia | 19 | 2 | 17 | 9 | 8 | 17 | 1 | 16 | 8 | 8 |
| Wisconsin | 14 | 2 | 12 | 2 | 10 | 15 | 2 | 12 | 3 | 9 |
| Wyoming | 15 | 1 | 14 | 3 | 11 | 15 | 2 | 13 | 4 | 9 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 16 | 5 | 11 | 2 | 8 | 14 | 5 | 9 | 1 | 8 |
| DoDEA ${ }^{1}$ | 10 | 1 | 9 | 2 | 7 | 11 | 1 | 10 | 3 | 7 |
| Puerto Rico | - | - | - | - | - | - | - | - | - | - |

See notes at end of table.

Table A-22.
Percentage of fourth-grade public school students identified as students with disabilities excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19—Continued

|  | 2009 |  |  |  |  | 2011 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 13 | 2 | 11 | 3 | 8 | 13 | 2 | 11 | 3 | 9 |
| Alabama | 10 | 1 | 9 | 6 | 4 | 10 | 1 | 9 | 5 | 4 |
| Alaska | 17 | 1 | 16 | 4 | 12 | 16 | 2 | 14 | 3 | 11 |
| Arizona | 13 | 1 | 12 | 4 | 8 | 12 | 1 | 11 | 2 | 8 |
| Arkansas | 12 | 1 | 11 | 2 | 8 | 13 | 1 | 12 | 2 | 10 |
| California | 10 | 2 | 7 | 3 | 5 | 10 | 1 | 8 | 2 | 6 |
| Colorado | 11 | 1 | 10 | 1 | 9 | 11 | 1 | 10 | 1 | 9 |
| Connecticut | 13 | 2 | 12 | 2 | 10 | 14 | 1 | 13 | 1 | 11 |
| Delaware | 15 | 3 | 12 | 2 | 11 | 16 | 3 | 13 | 3 | 10 |
| Florida | 17 | 2 | 15 | 3 | 12 | 16 | 1 | 14 | 3 | 12 |
| Georgia | 11 | 1 | 9 | 3 | 7 | 12 | 1 | 10 | 3 | 8 |
| Hawaii | 10 | 1 | 9 | 1 | 8 | 10 | 2 | 8 | 1 | 7 |
| Idaho | 10 | 1 | 9 | 3 | 7 | 11 | 1 | 9 | 2 | 7 |
| Illinois | 15 | 2 | 13 | 4 | 9 | 14 | 2 | 12 | 4 | 8 |
| Indiana | 16 | 2 | 13 | 5 | 8 | 16 | 2 | 14 | 4 | 9 |
| lowa | 14 | 2 | 12 | 2 | 10 | 15 | 1 | 14 | 2 | 12 |
| Kansas | 14 | 3 | 11 | 3 | 9 | 14 | 2 | 13 | 4 | 9 |
| Kentucky | 15 | 3 | 12 | 5 | 7 | 15 | 3 | 12 | 4 | 8 |
| Louisiana | 20 | 2 | 18 | 3 | 15 | 20 | 2 | 18 | 2 | 16 |
| Maine | 18 | 1 | 17 | 3 | 14 | 17 | 2 | 16 | 2 | 14 |
| Maryland | 14 | 4 | 9 | 2 | 7 | 14 | 5 | 8 | 2 | 7 |
| Massachusetts | 19 | 5 | 14 | 2 | 12 | 18 | 3 | 15 | 1 | 14 |
| Michigan | 14 | 2 | 11 | 4 | 8 | 13 | 2 | 11 | 3 | 8 |
| Minnesota | 14 | 2 | 13 | 5 | 8 | 15 | 1 | 13 | 4 | 9 |
| Mississippi | 10 | 1 | 9 | 3 | 6 | 9 | 1 | 9 | 4 | 5 |
| Missouri | 14 | 3 | 12 | 4 | 8 | 13 | 2 | 11 | 3 | 8 |
| Montana | 12 | 2 | 10 | 2 | 8 | 12 | 1 | 10 | 3 | 7 |
| Nebraska | 18 | 2 | 16 | 7 | 9 | 17 | 1 | 15 | 5 | 10 |
| Nevada | 12 | 2 | 10 | 3 | 6 | 11 | 2 | 9 | 3 | 6 |
| New Hampshire | 18 | 2 | 16 | 3 | 14 | 17 | 2 | 15 | 1 | 14 |
| New Jersey | 16 | 2 | 13 | 2 | 12 | 17 | 3 | 14 | 2 | 12 |
| New Mexico | 13 | 2 | 11 | 2 | 8 | 13 | 2 | 11 | 2 | 9 |
| New York | 16 | 1 | 15 | 1 | 14 | 16 | 1 | 15 | 1 | 14 |
| North Carolina | 15 | 2 | 13 | 3 | 10 | 15 | 2 | 13 | 3 | 10 |
| North Dakota | 16 | 4 | 12 | 4 | 8 | 15 | 3 | 11 | 3 | 8 |
| Ohio | 14 | 3 | 11 | 2 | 9 | 14 | 2 | 12 | 2 | 10 |
| Oklahoma | 15 | 4 | 11 | 4 | 7 | 15 | 8 | 8 | 3 | 5 |
| Oregon | 16 | 2 | 13 | 5 | 9 | 15 | 2 | 13 | 4 | 9 |
| Pennsylvania | 15 | 2 | 13 | 3 | 10 | 15 | 1 | 14 | 3 | 11 |
| Rhode Island | 17 | 2 | 16 | 3 | 13 | 14 | 1 | 13 | 1 | 12 |
| South Carolina | 14 | 2 | 13 | 5 | 8 | 14 | 1 | 12 | 4 | 8 |
| South Dakota | 15 | 2 | 13 | 5 | 8 | 16 | 2 | 14 | 7 | 7 |
| Tennessee | 14 | 3 | 10 | 3 | 7 | 14 | 3 | 10 | 3 | 7 |
| Texas | 10 | 3 | 7 | 2 | 5 | 10 | 4 | 7 | 2 | 5 |
| Utah | 12 | 2 | 10 | 3 | 7 | 13 | 2 | 11 | 4 | 7 |
| Vermont | 19 | 2 | 16 | 3 | 13 | 17 | 1 | 16 | 2 | 14 |
| Virginia | 14 | 2 | 12 | 3 | 9 | 13 | 2 | 11 | 3 | 8 |
| Washington | 12 | 2 | 11 | 3 | 7 | 14 | 2 | 12 | 3 | 9 |
| West Virginia | 17 | 2 | 16 | 7 | 9 | 18 | 1 | 16 | 7 | 9 |
| Wisconsin | 15 | 2 | 13 | 2 | 11 | 14 | 2 | 13 | 2 | 10 |
| Wyoming | 16 | 1 | 15 | 4 | 11 | 16 | 2 | 14 | 4 | 11 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 14 | 4 | 10 | 2 | 8 | 15 | 5 | 11 | \# | 10 |
| DoDEA ${ }^{1}$ | 12 | 1 | 11 | 3 | 8 | 13 | 2 | 11 | 3 | 8 |
| Puerto Rico | - | - | - | - | - | 24 | \# | 24 | 1 | 23 |

See notes at end of table.

Table A-22.
Percentage of fourth-grade public school students identified as students with disabilities excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19—Continued

|  | 2013 |  |  |  |  | 2015 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 14 | 1 | 12 | 2 | 10 | 14 | 1 | 13 | 3 | 11 |
| Alabama | 10 | 1 | 9 | 4 | 5 | 12 | 1 | 11 | 5 | 6 |
| Alaska | 16 | 1 | 15 | 2 | 13 | 15 | 1 | 14 | 2 | 12 |
| Arizona | 10 | 1 | 10 | 2 | 8 | 13 | 1 | 12 | 2 | 10 |
| Arkansas | 14 | 1 | 13 | 2 | 11 | 14 | 1 | 13 | 2 | 11 |
| California | 10 | 2 | 8 | 2 | 7 | 10 | 1 | 9 | 2 | 6 |
| Colorado | 10 | 1 | 9 | 2 | 8 | 11 | 1 | 10 | 2 | 8 |
| Connecticut | 14 | 1 | 13 | 1 | 12 | 13 | 1 | 12 | 2 | 10 |
| Delaware | 16 | 2 | 14 | 2 | 12 | 17 | 1 | 16 | 3 | 13 |
| Florida | 16 | 1 | 15 | 2 | 12 | 17 | 1 | 16 | 2 | 14 |
| Georgia | 12 | 1 | 11 | 2 | 9 | 14 | 1 | 13 | 2 | 10 |
| Hawaii | 10 | 1 | 9 | 1 | 8 | 10 | 1 | 9 | 2 | 7 |
| Idaho | 11 | 1 | 10 | 2 | 8 | 11 | 2 | 10 | 2 | 7 |
| Illinois | 14 | 1 | 13 | 2 | 11 | 13 | 1 | 13 | 3 | 9 |
| Indiana | 17 | 1 | 15 | 2 | 13 | 17 | 1 | 16 | 3 | 13 |
| lowa | 13 | 1 | 13 | 2 | 11 | 13 | 1 | 13 | 1 | 11 |
| Kansas | 15 | 1 | 14 | 3 | 11 | 15 | 1 | 14 | 4 | 10 |
| Kentucky | 13 | 1 | 12 | 2 | 9 | 16 | 2 | 14 | 4 | 10 |
| Louisiana | 20 | 1 | 19 | 2 | 17 | 21 | 2 | 19 | 2 | 17 |
| Maine | 20 | 2 | 18 | 2 | 16 | 19 | 1 | 18 | 2 | 16 |
| Maryland | 14 | 1 | 13 | 1 | 12 | 13 | 1 | 12 | 1 | 11 |
| Massachusetts | 19 | 2 | 17 | 1 | 16 | 20 | 2 | 18 | 2 | 16 |
| Michigan | 13 | 2 | 11 | 3 | 9 | 14 | 2 | 12 | 3 | 9 |
| Minnesota | 14 | 1 | 13 | 5 | 8 | 14 | 2 | 13 | 5 | 8 |
| Mississippi | 10 | 1 | 10 | 3 | 6 | 12 | 1 | 12 | 4 | 7 |
| Missouri | 14 | 1 | 13 | 3 | 9 | 14 | 1 | 13 | 4 | 9 |
| Montana | 12 | 2 | 10 | 2 | 8 | 12 | 1 | 11 | 3 | 8 |
| Nebraska | 17 | 1 | 15 | 4 | 11 | 17 | 1 | 16 | 4 | 11 |
| Nevada | 13 | 1 | 12 | 3 | 9 | 12 | 2 | 9 | 2 | 7 |
| New Hampshire | 16 | 1 | 15 | 1 | 14 | 18 | 1 | 17 | 1 | 16 |
| New Jersey | 16 | 1 | 15 | 1 | 14 | 18 | 1 | 17 | 2 | 15 |
| New Mexico | 14 | 1 | 13 | 2 | 10 | 15 | 2 | 13 | 2 | 11 |
| New York | 17 | 1 | 16 | 1 | 15 | 18 | 1 | 17 | 1 | 17 |
| North Carolina | 15 | 1 | 14 | 2 | 12 | 13 | 1 | 12 | 2 | 11 |
| North Dakota | 14 | 2 | 12 | 3 | 9 | 13 | 2 | 12 | 3 | 9 |
| Ohio | 15 | 1 | 14 | 2 | 11 | 16 | 2 | 14 | 1 | 13 |
| Oklahoma | 17 | 2 | 16 | 3 | 12 | 18 | 2 | 16 | 4 | 12 |
| Oregon | 16 | 2 | 14 | 4 | 10 | 14 | 2 | 12 | 3 | 9 |
| Pennsylvania | 16 | 1 | 15 | 3 | 12 | 19 | 1 | 17 | 4 | 13 |
| Rhode Island | 14 | 1 | 13 | 1 | 12 | 14 | 1 | 13 | 1 | 11 |
| South Carolina | 14 | 1 | 13 | 3 | 10 | 14 | 1 | 13 | 4 | 10 |
| South Dakota | 16 | 1 | 15 | 6 | 9 | 16 | 1 | 15 | 6 | 10 |
| Tennessee | 14 | 1 | 13 | 2 | 11 | 15 | 1 | 14 | 3 | 11 |
| Texas | 12 | 1 | 10 | 1 | 9 | 14 | 2 | 12 | 2 | 10 |
| Utah | 13 | 1 | 12 | 3 | 9 | 12 | 1 | 11 | 4 | 7 |
| Vermont | 17 | 1 | 16 | 1 | 15 | 18 | 1 | 16 | 2 | 15 |
| Virginia | 14 | 1 | 13 | 3 | 10 | 13 | 1 | 12 | 2 | 10 |
| Washington | 14 | 2 | 12 | 3 | 9 | 13 | 1 | 12 | 3 | 9 |
| West Virginia | 18 | 2 | 17 | 7 | 10 | 20 | 1 | 19 | 8 | 11 |
| Wisconsin | 15 | 2 | 13 | 2 | 11 | 13 | 1 | 12 | 3 | 9 |
| Wyoming | 15 | 1 | 15 | 3 | 11 | 15 | 1 | 15 | 3 | 12 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 15 | 1 | 14 | 1 | 14 | 14 | 1 | 13 | 1 | 12 |
| DoDEA ${ }^{1}$ | 14 | 1 | 13 | 3 | 10 | 14 | 1 | 14 | 3 | 11 |
| Puerto Rico | 28 | \# | 28 | 1 | 27 | 30 | \# | 30 | 1 | 29 |

See notes at end of table.

Table A-22.
Percentage of fourth-grade public school students identified as students with disabilities excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19—Continued

|  | 2017 |  |  |  |  | 2019 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 15 | 2 | 13 | 4 | 9 | 16 | 2 | 14 | 3 | 11 |
| Alabama | 12 | 1 | 11 | 6 | 6 | 15 | 1 | 14 | 6 | 8 |
| Alaska | 15 | 1 | 14 | 5 | 9 | 16 | \# | 16 | 4 | 12 |
| Arizona | 11 | 1 | 10 | 2 | 8 | 13 | 1 | 13 | 4 | 9 |
| Arkansas | 16 | 1 | 14 | 4 | 10 | 18 | 1 | 17 | 3 | 14 |
| California | 11 | 2 | 9 | 4 | 5 | 13 | 2 | 11 | 5 | 6 |
| Colorado | 12 | 1 | 11 | 3 | 8 | 13 | 1 | 12 | 4 | 8 |
| Connecticut | 15 | 1 | 14 | 3 | 10 | 15 | 1 | 14 | 3 | 12 |
| Delaware | 18 | 1 | 17 | 5 | 12 | 18 | 1 | 17 | 3 | 14 |
| Florida | 17 | 2 | 15 | 2 | 13 | 21 | 2 | 19 | 2 | 17 |
| Georgia | 14 | 1 | 12 | 3 | 10 | 15 | 1 | 13 | 2 | 11 |
| Hawaii | 10 | 1 | 8 | 3 | 5 | 11 | 1 | 10 | 4 | 6 |
| Idaho | 11 | 1 | 10 | 3 | 7 | 12 | 1 | 11 | 3 | 8 |
| Illinois | 15 | 1 | 14 | 2 | 12 | 15 | 1 | 14 | 3 | 11 |
| Indiana | 17 | 1 | 15 | 3 | 12 | 18 | 1 | 16 | 3 | 13 |
| lowa | 15 | 1 | 14 | 2 | 12 | 14 | 1 | 13 | 1 | 11 |
| Kansas | 15 | 1 | 13 | 6 | 8 | 15 | 1 | 14 | 4 | 10 |
| Kentucky | 16 | 1 | 14 | 5 | 10 | 17 | 1 | 15 | 4 | 11 |
| Louisiana | 18 | 2 | 17 | 2 | 14 | 19 | 2 | 17 | 2 | 15 |
| Maine | 20 | 1 | 19 | 5 | 14 | 21 | 1 | 20 | 2 | 18 |
| Maryland | 13 | 1 | 12 | 2 | 10 | 14 | 1 | 13 | 2 | 12 |
| Massachusetts | 20 | 2 | 18 | 3 | 15 | 21 | 2 | 19 | 2 | 17 |
| Michigan | 12 | 2 | 10 | 5 | 5 | 13 | 2 | 11 | 3 | 8 |
| Minnesota | 14 | 1 | 12 | 7 | 5 | 15 | 1 | 13 | 6 | 7 |
| Mississippi | 14 | 1 | 13 | 5 | 8 | 14 | 1 | 13 | 4 | 10 |
| Missouri | 15 | 1 | 14 | 6 | 9 | 15 | 1 | 14 | 4 | 10 |
| Montana | 13 | 1 | 12 | 5 | 7 | 15 | 1 | 14 | 5 | 9 |
| Nebraska | 17 | 1 | 16 | 6 | 10 | 17 | 1 | 16 | 5 | 12 |
| Nevada | 12 | 1 | 11 | 6 | 5 | 12 | 1 | 11 | 5 | 5 |
| New Hampshire | 18 | 1 | 17 | 4 | 13 | 19 | 1 | 18 | 3 | 14 |
| New Jersey | 17 | 1 | 16 | 3 | 13 | 17 | 1 | 16 | 1 | 15 |
| New Mexico | 16 | 1 | 14 | 4 | 10 | 17 | 1 | 15 | 4 | 11 |
| New York | 17 | 1 | 16 | 2 | 14 | 18 | 2 | 16 | 2 | 14 |
| North Carolina | 15 | 1 | 14 | 4 | 10 | 14 | 1 | 13 | 2 | 10 |
| North Dakota | 14 | 1 | 13 | 5 | 7 | 15 | 1 | 13 | 4 | 10 |
| Ohio | 16 | 2 | 14 | 2 | 12 | 18 | 2 | 15 | 2 | 13 |
| Oklahoma | 18 | 2 | 16 | 5 | 12 | 19 | 2 | 17 | 5 | 12 |
| Oregon | 14 | 1 | 13 | 6 | 7 | 16 | 1 | 14 | 7 | 7 |
| Pennsylvania | 17 | 2 | 15 | 4 | 11 | 19 | 2 | 16 | 4 | 12 |
| Rhode Island | 14 | 1 | 13 | 1 | 12 | 16 | 1 | 15 | 1 | 14 |
| South Carolina | 15 | 1 | 14 | 8 | 6 | 15 | 1 | 14 | 5 | 10 |
| South Dakota | 17 | 1 | 15 | 10 | 5 | 17 | 1 | 16 | 8 | 8 |
| Tennessee | 13 | 2 | 12 | 4 | 7 | 15 | 1 | 13 | 5 | 9 |
| Texas | 15 | 2 | 12 | 3 | 10 | 15 | 2 | 13 | 2 | 12 |
| Utah | 14 | 1 | 12 | 6 | 6 | 14 | 1 | 13 | 6 | 7 |
| Vermont | 18 | 1 | 17 | 4 | 13 | 20 | 1 | 19 | 5 | 15 |
| Virginia | 13 | 1 | 12 | 3 | 8 | 15 | 1 | 14 | 3 | 11 |
| Washington | 13 | 2 | 11 | 5 | 7 | 14 | 2 | 12 | 4 | 8 |
| West Virginia | 21 | 1 | 20 | 11 | 9 | 21 | 1 | 20 | 9 | 11 |
| Wisconsin | 15 | 1 | 13 | 4 | 9 | 14 | 1 | 13 | 4 | 9 |
| Wyoming | 15 | 1 | 14 | 4 | 10 | 17 | 1 | 16 | 3 | 13 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 16 | 1 | 15 | 2 | 13 | 17 | 1 | 16 | 1 | 16 |
| DoDEA ${ }^{1}$ | 13 | 1 | 12 | 4 | 9 | 14 | 1 | 13 | 3 | 10 |
| Puerto Rico | 31 | \# | 31 | 2 | 30 | - | - | - | - | - |

- Not available.
\# Rounds to zero.
${ }^{1}$ Department of Defense Education Activity (overseas and domestic schools),
NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. 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, 2000-19 Mathematics Assessments

Table A-23.
Percentage of eighth-grade public school students identified as students with disabilities excluded and assessed in NAEP mathematics when accommodations were not permitted, by state/jurisdiction: Various years, 1990-2000

|  | 1990 |  |  | 1992 |  |  | 1996 |  |  | 2000 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Identified | Excluded | Assessed | Identified | Excluded | Assessed | Identified | Excluded | Assessed |
| Nation (public) | - | - | - | 8 | 5 | 3 | 9 | 4 | 5 | 12 | 6 | 6 |
| Alabama | 9 | 5 | 4 | 10 | 5 | 5 | 13 | 7 | 6 | 14 | 5 | 9 |
| Alaska | - | - | - | - | - | - | 10 | 5 | 6 | - | - | - |
| Arizona | 7 | 3 | 3 | 6 | 4 | 2 | 9 | 5 | 4 | 11 | 7 | 4 |
| Arkansas | 10 | 7 | 3 | 11 | 6 | 5 | 11 | 7 | 4 | 12 | 8 | 4 |
| California | 7 | 3 | 4 | 8 | 4 | 4 | 8 | 5 | 4 | 10 | 6 | 5 |
| Colorado | 8 | 4 | 5 | 8 | 4 | 5 | 11 | 4 | 7 | - | - | - |
| Connecticut | 9 | 5 | 4 | 12 | 5 | 6 | 13 | 7 | 6 | 14 | 9 | 5 |
| Delaware | 9 | 4 | 5 | 9 | 4 | 5 | 12 | 8 | 4 | - | - | - |
| Florida | 8 | 5 | 4 | 9 | 5 | 4 | 12 | 7 | 5 | - | - | - |
| Georgia | 6 | 3 | 3 | 7 | 4 | 3 | 9 | 6 | 3 | 10 | 7 | 3 |
| Hawaii | 7 | 3 | 3 | 9 | 3 | 5 | 9 | 4 | 5 | 15 | 6 | 9 |
| Idaho | 6 | 2 | 4 | 7 | 3 | 4 | - | - | - | 10 | 5 | 6 |
| Illinois | 8 | 4 | 4 | - | - | - | - | - | - | 11 | 6 | 5 |
| Indiana | 7 | 5 | 2 | 8 | 4 | 4 | 12 | 5 | 6 | 11 | 7 | 4 |
| lowa | 9 | 4 | 6 | 10 | 4 | 6 | 12 | 5 | 7 | - | - | - |
| Kansas | - | - | - | - | - | - | - | - | - | 10 | 5 | 5 |
| Kentucky | 7 | 5 | 3 | 9 | 5 | 4 | 9 | 4 | 5 | 13 | 9 | 4 |
| Louisiana | 6 | 4 | 2 | 7 | 4 | 3 | 9 | 6 | 3 | 13 | 6 | 7 |
| Maine | - | - | - | 11 | 4 | 6 | 11 | 5 | 6 | 14 | 9 | 5 |
| Maryland | 9 | 4 | 5 | 9 | 4 | 5 | 11 | 6 | 5 | 12 | 10 | 3 |
| Massachusetts | - | - | - | 14 | 6 | 8 | 15 | 7 | 9 | 16 | 10 | 6 |
| Michigan | 8 | 4 | 4 | 9 | 6 | 3 | 8 | 5 | 3 | 10 | 6 | 4 |
| Minnesota | 8 | 3 | 6 | 7 | 3 | 4 | 10 | 3 | 7 | 13 | 4 | 8 |
| Mississippi | - | - | - | 10 | 7 | 3 | 11 | 7 | 4 | 10 | 7 | 3 |
| Missouri | - | - | - | 11 | 4 | 6 | 11 | 6 | 4 | 14 | 8 | 6 |
| Montana | 6 | 2 | 4 | - | - | - | 9 | 3 | 6 | 11 | 5 | 5 |
| Nebraska | 8 | 3 | 5 | 9 | 4 | 6 | 11 | 4 | 7 | 11 | 3 | 8 |
| Nevada | - | - | - | - | - | - | 9 | 5 | 4 | 12 | 8 | 3 |
| New Hampshire | 12 | 4 | 7 | 12 | 5 | 7 | 14 | 4 | 11 | - | - | - |
| New Jersey | 10 | 5 | 4 | 12 | 6 | 6 | 10 | 5 | 5 | - | - | - |
| New Mexico | 8 | 6 | 3 | 10 | 4 | 6 | 13 | 5 | 9 | 17 | 10 | 7 |
| New York | 8 | 4 | 4 | 10 | 6 | 4 | 10 | 5 | 4 | 12 | 10 | 1 |
| North Carolina | 9 | 3 | 6 | 12 | 3 | 9 | 8 | 4 | 5 | 14 | 13 | 2 |
| North Dakota | 7 | 2 | 5 | 7 | 2 | 5 | 9 | 3 | 6 | 11 | 4 | 7 |
| Ohio | 8 | 5 | 3 | 9 | 6 | 4 | - | - | - | 11 | 9 | 3 |
| Oklahoma | 7 | 5 | 2 | 9 | 6 | 3 | - | - | - | 13 | 8 | 5 |
| Oregon | 7 | 2 | 5 | - | - | - | 10 | 3 | 7 | 13 | 4 | 9 |
| Pennsylvania | 10 | 5 | 5 | 8 | 4 | 4 | - | - | - | - | - | - |
| Rhode Island | 11 | 5 | 6 | 10 | 4 | 7 | 13 | 5 | 7 | 16 | 9 | 7 |
| South Carolina | - | - | - | 10 | 6 | 4 | 10 | 6 | 4 | 13 | 7 | 6 |
| Tennessee | - | - | - | 10 | 5 | 5 | 11 | 4 | 7 | 12 | 4 | 8 |
| Texas | 8 | 4 | 3 | 9 | 5 | 4 | 11 | 6 | 5 | 14 | 8 | 6 |
| Utah | - | - | - | 9 | 4 | 5 | 10 | 5 | 5 | 10 | 5 | 6 |
| Vermont | - | - | - | - | - | - | 12 | 4 | 8 | 16 | 9 | 7 |
| Virginia | 8 | 4 | 4 | 10 | 5 | 5 | 12 | 7 | 5 | 14 | 10 | 4 |
| Washington | - | - | - | - | - | - | 11 | 5 | 6 | - | - | - |
| West Virginia | 9 | 5 | 4 | 10 | 6 | 4 | 13 | 8 | 4 | 14 | 11 | 3 |
| Wisconsin | 7 | 4 | 3 | 9 | 4 | 5 | 11 | 7 | 4 | 16 | 10 | 6 |
| Wyoming | 8 | 3 | 4 | 9 | 4 | 5 | 10 | 2 | 8 | 12 | 4 | 8 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 5 | 4 | 1 | 9 | 8 | 1 | 10 | 8 | 2 | 11 | 7 | 4 |
| DoDEA ${ }^{1}$ | - | - | - | - | - | - | 7 | 2 | 5 | 6 | 4 | 3 |

- Not available.
${ }^{1}$ Department of Defense Education Activity (overseas and domestic schools),
NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. South Dakota did not participate in NAEP mathematics assessments from 1990 to 2000. 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, 19902000 Mathematics Assessments

Table A-24.
Percentage of eighth-grade public school students identified as students with disabilities excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19

|  | 2000 |  |  |  |  | 2003 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 11 | 3 | 7 | 5 | 2 | 14 | 3 | 11 | 5 | 6 |
| Alabama | 14 | 6 | 7 | 7 | 1 | 13 | 2 | 11 | 8 | 3 |
| Alaska | - | - | - | - | - | 15 | 1 | 14 | 6 | 8 |
| Arizona | 11 | 2 | 9 | 6 | 2 | 11 | 3 | 9 | 4 | 4 |
| Arkansas | 13 | 2 | 11 | 7 | 4 | 15 | 1 | 13 | 6 | 7 |
| California | 10 | 3 | 7 | 5 | 3 | 11 | 1 | 9 | 7 | 2 |
| Colorado | - | - | - | - | - | 12 | 1 | 10 | 4 | 7 |
| Connecticut | 14 | 5 | 9 | 6 | 3 | 14 | 3 | 11 | 4 | 7 |
| Delaware | - | - | - | - | - | 16 | 8 | 8 | 3 | 5 |
| Florida | - | - | - | - | - | 14 | 2 | 12 | 3 | 9 |
| Georgia | 9 | 4 | 6 | 3 | 3 | 11 | 2 | 10 | 4 | 6 |
| Hawaii | 15 | 4 | 11 | 10 | 2 | 16 | 3 | 13 | 5 | 8 |
| Idaho | 11 | 2 | 9 | 6 | 3 | 10 | 1 | 10 | 6 | 4 |
| Illinois | 11 | 3 | 8 | 5 | 3 | 15 | 4 | 12 | 3 | 8 |
| Indiana | 11 | 3 | 8 | 5 | 3 | 14 | 2 | 11 | 5 | 6 |
| lowa | - | - | - | - | - | 16 | 2 | 14 | 5 | 9 |
| Kansas | 12 | 3 | 9 | 6 | 3 | 13 | 2 | 11 | 3 | 8 |
| Kentucky | 12 | 4 | 8 | 4 | 4 | 13 | 4 | 9 | 4 | 5 |
| Louisiana | 12 | 2 | 10 | 4 | 6 | 16 | 4 | 11 | 2 | 9 |
| Maine | 14 | 3 | 12 | 7 | 4 | 16 | 4 | 12 | 5 | 7 |
| Maryland | 12 | 2 | 10 | 7 | 4 | 14 | 3 | 10 | 6 | 5 |
| Massachusetts | 16 | 2 | 15 | 7 | 8 | 16 | 2 | 14 | 4 | 10 |
| Michigan | 10 | 4 | 7 | 5 | 2 | 13 | 4 | 8 | 3 | 5 |
| Minnesota | 12 | 1 | 11 | 9 | 2 | 13 | 2 | 11 | 6 | 5 |
| Mississippi | 10 | 5 | 5 | 4 | 1 | 9 | 5 | 4 | 2 | 2 |
| Missouri | 14 | 3 | 12 | 5 | 7 | 15 | 4 | 12 | 3 | 9 |
| Montana | 12 | 2 | 9 | 6 | 3 | 12 | 2 | 10 | 5 | 6 |
| Nebraska | 11 | 3 | 8 | 6 | 2 | 14 | 3 | 11 | 6 | 5 |
| Nevada | 12 | 3 | 9 | 5 | 4 | 12 | 2 | 10 | 5 | 5 |
| New Hampshire | - | - | - | - | - | 19 | 3 | 15 | 6 | 9 |
| New Jersey | - | - | - | - | - | 15 | 1 | 14 | 2 | 12 |
| New Mexico | 17 | 7 | 10 | 8 | 3 | 20 | 2 | 18 | 8 | 10 |
| New York | 12 | 3 | 9 | 2 | 6 | 16 | 4 | 12 | 2 | 10 |
| North Carolina | 14 | 4 | 10 | 3 | 7 | 16 | 3 | 12 | 2 | 10 |
| North Dakota | 11 | 2 | 9 | 7 | 2 | 14 | 1 | 13 | 6 | 7 |
| Ohio | 11 | 4 | 7 | 4 | 3 | 13 | 5 | 8 | 3 | 5 |
| Oklahoma | 13 | 4 | 9 | 7 | 3 | 16 | 2 | 14 | 8 | 6 |
| Oregon | 13 | 2 | 11 | 6 | 5 | 14 | 3 | 12 | 7 | 4 |
| Pennsylvania | - | - | - | - | - | 14 | 1 | 13 | 2 | 10 |
| Rhode Island | 16 | 3 | 14 | 10 | 4 | 20 | 3 | 17 | 5 | 12 |
| South Carolina | 13 | 4 | 9 | 7 | 2 | 15 | 7 | 8 | 4 | 4 |
| South Dakota | - | - | - | - | - | 11 | 2 | 9 | 4 | 5 |
| Tennessee | 11 | 2 | 9 | 9 | 1 | 14 | 3 | 12 | 11 | 1 |
| Texas | 14 | 7 | 7 | 5 | 1 | 15 | 6 | 9 | 8 | 2 |
| Utah | 10 | 2 | 8 | 6 | 2 | 11 | 2 | 9 | 5 | 4 |
| Vermont | 16 | 3 | 13 | 9 | 4 | 17 | 3 | 15 | 7 | 7 |
| Virginia | 13 | 5 | 7 | 4 | 4 | 15 | 6 | 9 | 3 | 6 |
| Washington | - | - | - | - | - | 13 | 2 | 11 | 7 | 4 |
| West Virginia | 14 | 3 | 12 | 4 | 8 | 16 | 3 | 13 | 5 | 9 |
| Wisconsin | 15 | 4 | 12 | 6 | 6 | 15 | 3 | 13 | 2 | 10 |
| Wyoming | 12 | 1 | 11 | 8 | 3 | 15 | 1 | 14 | 4 | 9 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 11 | 5 | 7 | 2 | 4 | 16 | 5 | 11 | 3 | 8 |
| DoDEA ${ }^{1}$ | 6 | 1 | 5 | 4 | 2 | 8 | 1 | 7 | 1 | 5 |
| Puerto Rico | - | - | - | - | - | - | - | - | - | - |

See notes at end of table.

Table A-24.
Percentage of eighth-grade public school students identified as students with disabilities excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19—Continued

|  | 2005 |  |  |  |  | 2007 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 13 | 3 | 10 | 3 | 7 | 13 | 4 | 9 | 2 | 6 |
| Alabama | 13 | 1 | 12 | 9 | 3 | 12 | 3 | 9 | 7 | 2 |
| Alaska | 14 | 2 | 12 | 3 | 10 | 12 | 4 | 8 | 3 | 6 |
| Arizona | 10 | 3 | 7 | 3 | 4 | 11 | 3 | 8 | 3 | 5 |
| Arkansas | 14 | 3 | 11 | 5 | 7 | 12 | 2 | 10 | 2 | 8 |
| California | 9 | 2 | 8 | 4 | 3 | 9 | 2 | 7 | 4 | 3 |
| Colorado | 10 | 2 | 9 | 2 | 6 | 10 | 2 | 9 | 1 | 7 |
| Connecticut | 13 | 2 | 11 | 4 | 7 | 13 | 1 | 12 | 3 | 9 |
| Delaware | 15 | 10 | 5 | 2 | 3 | 14 | 6 | 8 | 2 | 6 |
| Florida | 16 | 2 | 14 | 3 | 11 | 13 | 2 | 11 | 1 | 10 |
| Georgia | 12 | 2 | 9 | 3 | 6 | 9 | 5 | 5 | 2 | 3 |
| Hawaii | 14 | 2 | 12 | 5 | 7 | 13 | 1 | 12 | 4 | 7 |
| Idaho | 12 | 2 | 10 | 4 | 6 | 10 | 1 | 8 | 3 | 5 |
| Illinois | 15 | 3 | 13 | 2 | 10 | 14 | 5 | 9 | 2 | 8 |
| Indiana | 15 | 4 | 11 | 2 | 9 | 15 | 5 | 10 | 2 | 8 |
| lowa | 15 | 2 | 13 | 3 | 10 | 15 | 2 | 13 | 2 | 11 |
| Kansas | 14 | 3 | 10 | 2 | 8 | 12 | 4 | 9 | 2 | 7 |
| Kentucky | 11 | 3 | 8 | 2 | 6 | 13 | 6 | 7 | 2 | 5 |
| Louisiana | 14 | 4 | 10 | 1 | 9 | 12 | 3 | 9 |  | 8 |
| Maine | 18 | 4 | 14 | 5 | 8 | 17 | 5 | 12 | 3 | 9 |
| Maryland | 11 | 4 | 7 | 3 | 4 | 11 | 7 | 4 | 1 | 3 |
| Massachusetts | 17 | 6 | 12 | 2 | 9 | 17 | 9 | 8 | 2 | 6 |
| Michigan | 14 | 4 | 10 | 2 | 7 | 14 | 4 | 9 | 2 | 8 |
| Minnesota | 12 | 2 | 10 | 4 | 6 | 12 | 2 | 10 | 3 | 7 |
| Mississippi | 9 | 3 | 6 | 3 | 3 | 11 | 2 | 8 | 2 | 6 |
| Missouri | 14 | 4 | 10 | 2 | 8 | 13 | 5 | 9 | 2 | 6 |
| Montana | 13 | 2 | 11 | 3 | 8 | 13 | 3 | 10 | 2 | 8 |
| Nebraska | 13 | 1 | 12 | 4 | 8 | 13 | 2 | 11 | 3 | 7 |
| Nevada | 11 | 2 | 9 | 4 | 5 | 12 | 3 | 9 | 4 | 5 |
| New Hampshire | 18 | 2 | 16 | 6 | 10 | 19 | 3 | 16 | 5 | 12 |
| New Jersey | 16 | 3 | 14 | 2 | 12 | 14 | 3 | 12 | 1 | 11 |
| New Mexico | 16 | 2 | 14 | 4 | 9 | 12 | 2 | 10 | 4 | 7 |
| New York | 15 | 3 | 12 | 1 | 11 | 14 | 3 | 11 | 1 | 11 |
| North Carolina | 14 | 2 | 12 | 2 | 11 | 13 | 2 | 11 | 1 | 10 |
| North Dakota | 16 | 4 | 12 | 4 | 8 | 14 | 6 | 8 | 2 | 6 |
| Ohio | 14 | 5 | 8 | 2 | 7 | 15 | 7 | 8 | 1 | 7 |
| Oklahoma | 16 | 4 | 12 | 5 | 7 | 14 | 8 | 6 | 2 | 4 |
| Oregon | 13 | 2 | 10 | 4 | 6 | 12 | 3 | 9 | 4 | 5 |
| Pennsylvania | 15 | 3 | 12 | 3 | 10 | 15 | 4 | 12 | 3 | 9 |
| Rhode Island | 17 | 3 | 15 | 6 | 9 | 17 | 2 | 15 | 3 | 12 |
| South Carolina | 14 | 6 | 8 | 4 | 4 | 13 | 5 | 8 | 3 | 5 |
| South Dakota | 12 | 2 | 10 | 3 | 6 | 11 | 2 | 9 | 2 | 6 |
| Tennessee | 14 | 5 | 10 | 5 | 5 | 12 | 6 | 5 | 3 | 3 |
| Texas | 13 | 5 | 8 | 5 | 3 | 11 | 5 | 6 | 3 | 3 |
| Utah | 11 | 2 | 9 | 3 | 6 | 10 | 2 | 8 | 2 | 6 |
| Vermont | 18 | 4 | 14 | 6 | 8 | 19 | 4 | 15 | 5 | 10 |
| Virginia | 15 | 4 | 10 | 3 | 7 | 14 | 6 | 8 | 2 | 6 |
| Washington | 11 | 2 | 9 | 3 | 7 | 11 | 3 | 8 | 2 | 6 |
| West Virginia | 17 | 3 | 14 | 6 | 8 | 17 | 2 | 15 | 5 | 10 |
| Wisconsin | 14 | 3 | 11 | 2 | 9 | 14 | 4 | 10 | 2 | 9 |
| Wyoming | 14 | 2 | 13 | 3 | 10 | 13 | 2 | 11 | 3 | 9 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 17 | 5 | 12 | 2 | 10 | 17 | 9 | 8 | 2 | 6 |
| DoDEA ${ }^{1}$ | 9 | 1 | 8 | 2 | 5 | 7 | 1 | 7 | 1 | 6 |
| Puerto Rico | - | - | - | - | - | - | - | - | - | - |

See notes at end of table.

Table A-24.
Percentage of eighth-grade public school students identified as students with disabilities excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19—Continued

|  | 2009 |  |  |  |  | 2011 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 13 | 3 | 10 | 2 | 8 | 13 | 2 | 10 | 2 | 9 |
| Alabama | 10 | 1 | 9 | 6 | 3 | 10 | 1 | 9 | 6 | 3 |
| Alaska | 13 | 3 | 10 | 1 | 9 | 13 | 3 | 10 | 1 | 9 |
| Arizona | 12 | 2 | 10 | 2 | 7 | 11 | 1 | 9 | 1 | 8 |
| Arkansas | 12 | 1 | 11 | 2 | 9 | 11 | 1 | 10 | 1 | 9 |
| California | 9 | 1 | 8 | 2 | 5 | 10 | 1 | 9 | 3 | 6 |
| Colorado | 11 | 2 | 9 | 1 | 7 | 10 | 1 | 9 | 1 | 8 |
| Connecticut | 13 | 2 | 11 | 2 | 9 | 12 | 1 | 11 | 1 | 10 |
| Delaware | 15 | 2 | 13 | 1 | 12 | 14 | 3 | 12 | 2 | 10 |
| Florida | 15 | 2 | 13 | 1 | 12 | 14 | 2 | 13 | 1 | 12 |
| Georgia | 11 | 3 | 9 | 1 | 8 | 10 | 3 | 8 | 1 | 6 |
| Hawaii | 12 | 1 | 11 | 3 | 8 | 11 | 1 | 10 | 2 | 8 |
| Idaho | 9 | 1 | 8 | 3 | 5 | 8 | 1 | 7 | 1 | 6 |
| Illinois | 14 | 3 | 11 | 2 | 9 | 14 | 2 | 12 | 1 | 10 |
| Indiana | 14 | 4 | 10 | 2 | 8 | 14 | 2 | 12 | 1 | 11 |
| lowa | 14 | 2 | 12 | 2 | 10 | 15 | 1 | 13 | 1 | 12 |
| Kansas | 12 | 3 | 9 | 1 | 8 | 12 | 1 | 10 | 2 | 8 |
| Kentucky | 12 | 4 | 7 | 1 | 6 | 12 | 3 | 8 | 1 | 7 |
| Louisiana | 15 | 2 | 13 | 2 | 12 | 14 | 1 | 13 | 1 | 12 |
| Maine | 17 | 2 | 15 | 3 | 12 | 18 | 1 | 17 | 3 | 14 |
| Maryland | 12 | 7 | 5 | 1 | 4 | 11 | 6 | 5 | 1 | 5 |
| Massachusetts | 19 | 5 | 13 | 3 | 10 | 19 | 3 | 15 | 1 | 14 |
| Michigan | 13 | 3 | 10 | 2 | 8 | 12 | 3 | 9 | 2 | 7 |
| Minnesota | 12 | 2 | 10 | 3 | 7 | 13 | 2 | 11 | 3 | 8 |
| Mississippi | 9 | 2 | 8 | 1 | 6 | 8 | 1 | 7 | 1 | 6 |
| Missouri | 13 | 3 | 10 | 2 | 7 | 13 | 1 | 12 | 2 | 10 |
| Montana | 12 | 3 | 9 | 2 | 8 | 12 | 2 | 11 | 2 | 9 |
| Nebraska | 14 | 3 | 11 | 3 | 8 | 14 | 3 | 11 | 2 | 8 |
| Nevada | 11 | 2 | 8 | 2 | 6 | 10 | 3 | 7 | 2 | 5 |
| New Hampshire | 20 | 3 | 17 | 5 | 12 | 18 | 2 | 16 | 3 | 13 |
| New Jersey | 16 | 2 | 14 | 1 | 13 | 17 | 4 | 13 | 1 | 12 |
| New Mexico | 13 | 3 | 10 | 3 | 8 | 12 | 2 | 11 | 3 | 8 |
| New York | 16 | 2 | 14 | 1 | 13 | 16 | 1 | 15 | \# | 14 |
| North Carolina | 12 | 1 | 11 | 1 | 10 | 14 | 2 | 12 | 1 | 10 |
| North Dakota | 15 | 5 | 10 | 4 | 6 | 14 | 4 | 10 | 2 | 8 |
| Ohio | 15 | 5 | 10 | 1 | 9 | 15 | 5 | 10 | 1 | 9 |
| Oklahoma | 15 | 6 | 9 | 2 | 7 | 16 | 9 | 6 | 3 | 3 |
| Oregon | 13 | 3 | 10 | 4 | 6 | 13 | 1 | 12 | 3 | 9 |
| Pennsylvania | 17 | 3 | 14 | 2 | 12 | 16 | 2 | 13 | 2 | 11 |
| Rhode Island | 18 | 2 | 16 | 3 | 13 | 16 | 1 | 15 | 3 | 12 |
| South Carolina | 14 | 4 | 9 | 4 | 5 | 11 | 4 | 7 | 2 | 6 |
| South Dakota | 10 | 2 | 9 | 2 | 6 | 11 | 1 | 9 | 3 | 7 |
| Tennessee | 11 | 4 | 7 | 1 | 6 | 12 | 4 | 8 | 1 | 7 |
| Texas | 12 | 5 | 7 | 2 | 5 | 11 | 5 | 6 | 2 | 4 |
| Utah | 10 | 3 | 7 | 2 | 6 | 10 | 3 | 8 | 1 | 7 |
| Vermont | 20 | 2 | 18 | 5 | 13 | 18 | 1 | 17 | 3 | 14 |
| Virginia | 14 | 3 | 10 | 3 | 7 | 13 | 2 | 11 | 3 | 8 |
| Washington | 11 | 2 | 9 | 2 | 7 | 12 | 1 | 10 | 2 | 9 |
| West Virginia | 15 | 2 | 13 | 4 | 10 | 13 | 2 | 12 | 3 | 9 |
| Wisconsin | 14 | 2 | 12 | 2 | 10 | 14 | 2 | 12 | 1 | 11 |
| Wyoming | 14 | 2 | 12 | 2 | 10 | 13 | 1 | 12 | 1 | 10 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 17 | 6 | 11 | 1 | 10 | 17 | 4 | 13 | 1 | 12 |
| DoDEA ${ }^{1}$ | 8 | 1 | 7 | 2 | 5 | 10 | 2 | 8 | 1 | 7 |
| Puerto Rico | - | - | - | - | - | 19 | 1 | 18 | \# | 17 |

See notes at end of table.

Table A-24.
Percentage of eighth-grade public school students identified as students with disabilities excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19—Continued

|  | 2013 |  |  |  |  | 2015 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 13 | 1 | 12 | 1 | 10 | 13 | 1 | 12 | 1 | 11 |
| Alabama | 10 | 1 | 9 | 4 | 5 | 10 | 1 | 9 | 4 | 6 |
| Alaska | 14 | 1 | 13 | 1 | 12 | 14 | 2 | 13 | 1 | 12 |
| Arizona | 12 | 1 | 11 | 1 | 10 | 11 | 1 | 10 | 1 | 9 |
| Arkansas | 13 | 2 | 11 | 1 | 11 | 12 | 2 | 11 | 1 | 9 |
| California | 10 | 1 | 8 | 2 | 7 | 11 | 1 | 10 | 3 | 7 |
| Colorado | 11 | 1 | 10 | 1 | 9 | 11 | 1 | 10 | 1 | 9 |
| Connecticut | 15 | 2 | 13 | 1 | 12 | 16 | 1 | 15 | 2 | 13 |
| Delaware | 15 | 1 | 14 | 1 | 14 | 17 | 1 | 16 | 2 | 14 |
| Florida | 13 | 1 | 12 | 1 | 11 | 14 | 1 | 13 | 1 | 12 |
| Georgia | 12 | 1 | 10 | 2 | 9 | 12 | 1 | 11 | 1 | 10 |
| Hawaii | 12 | 1 | 11 | 2 | 8 | 11 | 1 | 10 | 3 | 7 |
| Idaho | 9 | 1 | 8 | 1 | 7 | 11 | 1 | 10 | 1 | 9 |
| Illinois | 13 | 1 | 13 | 1 | 12 | 13 | \# | 13 | 1 | 11 |
| Indiana | 15 | 2 | 13 | 1 | 12 | 14 | 1 | 13 |  | 12 |
| lowa | 13 | 1 | 12 | 1 | 12 | 13 | 1 | 12 | 1 | 11 |
| Kansas | 13 | 2 | 11 | 1 | 10 | 12 | 1 | 11 | 2 | 9 |
| Kentucky | 11 | 2 | 10 | \# | 9 | 13 | 1 | 11 | 1 | 11 |
| Louisiana | 15 | 1 | 14 | \# | 13 | 18 | 1 | 17 | 1 | 16 |
| Maine | 18 | 1 | 17 | 2 | 15 | 18 | 1 | 17 | 2 | 16 |
| Maryland | 13 | 1 | 12 | \# | 11 | 15 | 1 | 13 | 1 | 12 |
| Massachusetts | 17 | 1 | 16 | 1 | 15 | 19 | 2 | 18 | 2 | 16 |
| Michigan | 13 | 2 | 11 | 2 | 9 | 13 | 2 | 11 | 1 | 10 |
| Minnesota | 13 | 1 | 11 | 4 | 8 | 13 | 2 | 11 | 4 | 8 |
| Mississippi | 8 | 1 | 8 | 1 | 6 | 10 | 1 | 10 | 1 | 8 |
| Missouri | 12 | 1 | 11 | 1 | 10 | 13 | 1 | 12 | 1 | 10 |
| Montana | 12 | 1 | 10 | 1 | 9 | 12 | 1 | 11 | 3 | 8 |
| Nebraska | 14 | 2 | 12 | 2 | 11 | 14 | 2 | 13 | 2 | 11 |
| Nevada | 11 | 1 | 10 | 1 | 9 | 10 | 1 | 9 | 2 | 8 |
| New Hampshire | 18 | 1 | 17 | 2 | 15 | 18 | 1 | 16 | 2 | 14 |
| New Jersey | 17 | 1 | 15 | \# | 15 | 18 | 1 | 17 | 1 | 16 |
| New Mexico | 13 | 2 | 12 | 3 | 9 | 14 | 1 | 12 | 3 | 9 |
| New York | 16 | 2 | 15 | \# | 15 | 17 | 1 | 17 | 1 | 16 |
| North Carolina | 14 | 1 | 13 | 1 | 12 | 15 | 1 | 14 | 1 | 12 |
| North Dakota | 14 | 3 | 11 | 1 | 10 | 14 | 2 | 12 | 2 | 11 |
| Ohio | 15 | 1 | 13 | 1 | 13 | 16 | 2 | 14 | \# | 13 |
| Oklahoma | 16 | 1 | 14 | 2 | 13 | 16 | 1 | 15 | 2 | 14 |
| Oregon | 14 | 1 | 13 | 3 | 10 | 15 | 2 | 13 | 3 | 10 |
| Pennsylvania | 16 | 1 | 15 | 2 | 13 | 17 | 2 | 15 | 1 | 14 |
| Rhode Island | 15 | 1 | 14 | 1 | 13 | 16 | 1 | 14 | 2 | 13 |
| South Carolina | 12 | 1 | 11 | 2 | 9 | 12 | 1 | 11 | 2 | 10 |
| South Dakota | 11 | 1 | 10 | 2 | 8 | 12 | 1 | 10 | 3 | 7 |
| Tennessee | 11 | 2 | 10 | 1 | 9 | 14 | 2 | 13 | 1 | 12 |
| Texas | 11 | 1 | 10 | 1 | 9 | 12 | 2 | 10 | 1 | 9 |
| Utah | 11 | 1 | 10 | 1 | 9 | 11 | 1 | 10 | 1 | 8 |
| Vermont | 17 | 1 | 17 | 2 | 15 | 19 | 1 | 18 | 1 | 16 |
| Virginia | 13 | 1 | 12 | 2 | 10 | 14 | 2 | 12 | 2 | 10 |
| Washington | 12 | 2 | 10 | 1 | 9 | 12 | 1 | 12 | 1 | 10 |
| West Virginia | 13 | 2 | 11 | 2 | 9 | 14 | 2 | 13 | 2 | 11 |
| Wisconsin | 14 | 1 | 13 | 1 | 12 | 14 | 1 | 13 | 1 | 11 |
| Wyoming | 14 | 1 | 13 | 1 | 11 | 14 | 1 | 13 | 1 | 12 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 18 | \# | 17 | \# | 17 | 19 | 1 | 18 | \# | 18 |
| DoDEA ${ }^{1}$ | 11 | 1 | 10 | 1 | 8 | 10 | 1 | 10 | 1 | 8 |
| Puerto Rico | 23 | \# | 23 | \# | 23 | 24 | \# | 24 | 1 | 23 |

See notes at end of table.

Table A-24.
Percentage of eighth-grade public school students identified as students with disabilities excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19—Continued

|  | 2017 |  |  |  |  | 2019 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 14 | 1 | 13 | 3 | 10 | 15 | 1 | 13 | 2 | 11 |
| Alabama | 11 | 1 | 10 | 5 | 4 | 12 | 1 | 11 | 5 | 6 |
| Alaska | 14 | 1 | 12 | 2 | 10 | 14 | 1 | 13 | 2 | 11 |
| Arizona | 10 | 1 | 9 | 2 | 7 | 13 | 1 | 12 | 3 | 9 |
| Arkansas | 14 | 2 | 12 | 2 | 10 | 15 | 2 | 14 | 2 | 12 |
| California | 12 | 1 | 11 | 4 | 6 | 12 | 1 | 11 | 3 | 9 |
| Colorado | 12 | 1 | 10 | 3 | 8 | 12 | 1 | 11 | 2 | 9 |
| Connecticut | 16 | 1 | 14 | 3 | 12 | 18 | 1 | 16 | 4 | 12 |
| Delaware | 17 | 2 | 15 | 3 | 12 | 17 | 1 | 16 | 3 | 12 |
| Florida | 15 | 2 | 13 | 1 | 12 | 17 | 1 | 16 | 1 | 14 |
| Georgia | 13 | 1 | 11 | 2 | 10 | 15 | 2 | 13 | 1 | 12 |
| Hawaii | 11 | 2 | 9 | 5 | 4 | 11 | 1 | 9 | 5 | 5 |
| Idaho | 10 | 1 | 9 | 2 | 7 | 12 | 1 | 11 | 2 | 9 |
| Illinois | 14 | 1 | 13 | 1 | 12 | 14 | 1 | 14 | 1 | 12 |
| Indiana | 15 | 1 | 13 | 2 | 12 | 16 | 1 | 15 | 1 | 14 |
| lowa | 13 | 1 | 12 | 1 | 11 | 14 | 1 | 13 | 1 | 12 |
| Kansas | 13 | 1 | 12 | 5 | 7 | 13 | 1 | 12 | 3 | 9 |
| Kentucky | 13 | 1 | 12 | 1 | 10 | 14 | 1 | 12 | 1 | 12 |
| Louisiana | 19 | 2 | 16 | 1 | 15 | 17 | 2 | 15 | 1 | 15 |
| Maine | 19 | 1 | 18 | 3 | 14 | 19 | 1 | 18 | 2 | 16 |
| Maryland | 13 | 1 | 12 | 1 | 11 | 13 | 1 | 12 | \# | 12 |
| Massachusetts | 19 | 2 | 17 | 3 | 14 | 19 | 1 | 17 | 3 | 14 |
| Michigan | 13 | 2 | 11 | 2 | 9 | 13 | 2 | 11 | 2 | 9 |
| Minnesota | 13 | 2 | 11 | 6 | 5 | 15 | 2 | 13 | 6 | 7 |
| Mississippi | 10 | 1 | 10 | 2 | 8 | 12 | 1 | 11 | 2 | 9 |
| Missouri | 14 | 1 | 12 | 3 | 9 | 13 | 1 | 13 | 3 | 10 |
| Montana | 13 | 1 | 12 | 4 | 8 | 14 | 1 | 13 | 3 | 10 |
| Nebraska | 15 | 1 | 14 | 2 | 11 | 15 | 1 | 14 | 3 | 11 |
| Nevada | 11 | 1 | 9 | 4 | 5 | 12 | 1 | 11 | 5 | 6 |
| New Hampshire | 17 | 1 | 16 | 5 | 11 | 19 | 1 | 18 | 5 | 13 |
| New Jersey | 17 | 1 | 16 | 1 | 15 | 16 | 1 | 16 | 1 | 14 |
| New Mexico | 15 | 2 | 14 | 3 | 11 | 17 | 1 | 16 | 4 | 12 |
| New York | 17 | 1 | 17 | 1 | 15 | 19 | 1 | 18 | 1 | 17 |
| North Carolina | 14 | 2 | 13 | 4 | 9 | 14 | 1 | 13 | 2 | 10 |
| North Dakota | 14 | 1 | 13 | 4 | 8 | 13 | 1 | 12 | 3 | 10 |
| Ohio | 16 | 2 | 14 | 1 | 13 | 17 | 2 | 16 | 1 | 15 |
| Oklahoma | 17 | 1 | 15 | 3 | 13 | 15 | 2 | 13 | 3 | 10 |
| Oregon | 14 | 1 | 13 | 5 | 8 | 15 | 1 | 14 | 4 | 9 |
| Pennsylvania | 17 | 2 | 15 | 3 | 11 | 19 | 1 | 17 | 4 | 14 |
| Rhode Island | 16 | 2 | 15 | 3 | 12 | 15 | 1 | 14 | 2 | 12 |
| South Carolina | 13 | 1 | 12 | 7 | 6 | 14 | 1 | 13 | 4 | 9 |
| South Dakota | 13 | 2 | 11 | 7 | 4 | 13 | 1 | 12 | 6 | 6 |
| Tennessee | 14 | 2 | 12 | 2 | 10 | 12 | 1 | 11 | 2 | 9 |
| Texas | 14 | 2 | 12 | 1 | 10 | 14 | 1 | 13 | 2 | 11 |
| Utah | 11 | 1 | 10 | 2 | 8 | 14 | 1 | 13 | 3 | 10 |
| Vermont | 20 | 1 | 19 | 4 | 15 | 20 | 1 | 19 | 4 | 15 |
| Virginia | 13 | 1 | 12 | 4 | 8 | 15 | 2 | 13 | 2 | 10 |
| Washington | 14 | 1 | 12 | 3 | 9 | 13 | 1 | 12 | 3 | 9 |
| West Virginia | 15 | 2 | 13 | 5 | 8 | 17 | 1 | 15 | 5 | 11 |
| Wisconsin | 13 | 1 | 12 | 2 | 9 | 12 | 1 | 11 | 1 | 10 |
| Wyoming | 14 | 1 | 13 | 2 | 11 | 15 | 2 | 13 | 1 | 12 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 18 | 1 | 17 | 2 | 15 | 20 | 1 | 19 | 1 | 17 |
| DoDEA ${ }^{1}$ | 11 | 1 | 11 | 2 | 8 | 12 | 1 | 11 | 1 | 10 |
| Puerto Rico | 28 | \# | 28 | 2 | 27 | - | - | - | - | - |

- Not available.
\# Rounds to zero.
${ }^{1}$ Department of Defense Education Activity (overseas and domestic schools).
NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. 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, 2000-19 Mathematics Assessments

Table A-25.
Percentage of fourth-grade public school students identified as English language learners excluded and assessed in NAEP mathematics when accommodations were not permitted, by state/jurisdiction: 1992, 1996, and 2000

|  | 1992 |  |  | 1996 |  |  | 2000 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Identified | Excluded | Assessed | Identified | Excluded | Assessed |
| Nation (public) | 3 | 2 | 1 | 4 | 2 | 2 | 6 | 2 | 3 |
| Alabama | \# | \# | \# | \# | \# | \# | 1 | \# | \# |
| Alaska | - | - | - | 8 | 1 | 6 | - | - | - |
| Arizona | 8 | 2 | 6 | 12 | 7 | 6 | 16 | 7 | 9 |
| Arkansas | 1 | \# | \# | \# | \# | \# | 1 | \# | 1 |
| California | 22 | 10 | 12 | 26 | 12 | 14 | 27 | 7 | 20 |
| Colorado | 2 | 1 | 1 | 4 | 2 | 2 | - | - | - |
| Connecticut | 4 | 2 | 1 | 3 | 2 | 1 | 4 | 2 | 1 |
| Delaware | 1 | 1 | \# | 2 | 1 | 1 | - | - | - |
| Florida | 4 | 2 | 2 | 6 | 3 | 3 | - | - | - |
| Georgia | 1 | 1 | \# | 2 | 2 | 1 | 2 | 1 | 1 |
| Hawaii | 4 | 2 | 3 | 5 | 1 | 4 | 7 | 3 | 4 |
| Idaho | 2 | 1 | 1 | - | - | - | 5 | 2 | 4 |
| Illinois | - | - | - | - | - | - | 7 | 4 | 2 |
| Indiana | \# | \# | \# | \# | \# | \# | 1 | 1 | \# |
| lowa | 1 | \# | 1 | 2 | 1 | 1 | 1 | 1 | \# |
| Kansas | - | - | - | - | - | - | 5 | 2 | 3 |
| Kentucky | \# | \# | \# | \# | \# | \# | \# | \# | \# |
| Louisiana | 1 | \# | 1 | 1 | 1 | \# | 1 | 1 | 1 |
| Maine | \# | \# | \# | \# | \# | \# | 1 | \# | \# |
| Maryland | 1 | 1 | 1 | 1 | 1 | \# | 2 | 2 | \# |
| Massachusetts | 3 | 1 | 2 | 4 | 2 | 1 | 6 | 3 | 3 |
| Michigan | 1 | 1 | \# | 2 | 1 | 1 | 2 | 2 | 1 |
| Minnesota | 2 | \# | 2 | 3 | 1 | 2 | 5 | 2 | 3 |
| Mississippi | \# | \# | \# | \# | \# | \# | \# | \# | \# |
| Missouri | \# | \# | \# | 1 | \# | \# | 1 | \# | \# |
| Montana | - | - | - | \# | \# | \# | 2 | \# | 2 |
| Nebraska | 1 | \# | 1 | 2 | 1 | 1 | 4 | 3 | 1 |
| Nevada | - | - | - | 8 | 4 | 4 | 11 | 5 | 6 |
| New Hampshire | \# | \# | \# | - | - | - | - | - | - |
| New Jersey | 4 | 2 | 1 | 2 | 1 | 1 | - | - | - |
| New Mexico | 4 | 1 | 2 | 10 | 5 | 5 | 20 | 6 | 14 |
| New York | 5 | 2 | 3 | 6 | 3 | 3 | 6 | 4 | 3 |
| North Carolina | 1 | \# | \# | 2 | 1 | 1 | 3 | 2 | 1 |
| North Dakota | 1 | \# | \# | \# | \# | \# | 1 | \# | \# |
| Ohio | 1 | \# | 1 | - | - | - | 1 | \# | \# |
| Oklahoma | 2 | \# | 1 | - | - | - | 5 | 2 | 4 |
| Oregon | - | - | - | 6 | 3 | 3 | 6 | 2 | 3 |
| Pennsylvania | 1 | 1 | \# | 1 | 1 | \# | - | - | - |
| Rhode Island | 6 | 3 | 3 | 5 | 2 | 4 | 7 | 3 | 4 |
| South Carolina | \# | \# | \# | \# | \# | \# | 1 | 1 | \# |
| Tennessee | \# | \# | \# | 1 | 1 | \# | 1 | \# | \# |
| Texas | 9 | 4 | 5 | 13 | 5 | 9 | 13 | 7 | 5 |
| Utah | 1 | 1 | \# | 2 | 1 | 1 | 6 | 3 | 3 |
| Vermont | - | - | - | 1 | \# | \# | 2 | 1 | 1 |
| Virginia | 1 | 1 | 1 | 2 | 1 | 1 | 4 | 2 | 2 |
| Washington | - | - | - | 3 | 1 | 2 | - | - | - |
| West Virginia | \# | \# | \# | \# | \# | \# | \# | \# | \# |
| Wisconsin | 1 | 1 | 1 | 2 | 1 | 1 | 5 | 3 | 3 |
| Wyoming | 1 | \# | 1 | 1 | \# | \# | 2 | 1 | 2 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |
| District of Columbia | 4 | 2 | 1 | 6 | 4 | 1 | 6 | 3 | 4 |
| DoDEA ${ }^{1}$ | - | - | - | 2 | 1 | 1 | 3 | 1 | 2 |

- Not available.
\# Rounds to zero.
${ }^{1}$ Department of Defense Education Activity (overseas and domestic schools).
NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. South Dakota did not participate in NAEP mathematics assessments from 1992 to 2000. 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), 1992, 1996, and 2000 Mathematics Assessments.

Table A-26.
Percentage of fourth-grade public school students identified as English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19

|  | 2000 |  |  |  |  | 2003 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 7 | 1 | 6 | 5 | 1 | 11 | 1 | 9 | 7 | 2 |
| Alabama | \# | \# | \# | \# | \# | 1 | \# | 1 | 1 | \# |
| Alaska | - | - | - | - | - | 18 | \# | 18 | 15 | 3 |
| Arizona | 16 | 3 | 13 | 8 | 5 | 19 | 2 | 17 | 15 | 2 |
| Arkansas | 1 | \# | 1 | 1 | \# | 4 | 1 | 3 | 2 | \# |
| California | 27 | 3 | 24 | 16 | 7 | 33 | 2 | 30 | 27 | 3 |
| Colorado | - | - | - | - | - | 9 | 1 | 9 | 4 | 4 |
| Connecticut | 3 | 1 | 2 | 1 | 1 | 4 | 1 | 3 | 1 | 2 |
| Delaware | - | - | - | - | - | 3 | 1 | 2 | 1 | 1 |
| Florida | - | - | - | - | - | 11 | 2 | 9 | 5 | 4 |
| Georgia | 2 | 1 | 1 | 1 | \# | 4 | 1 | 4 | 3 | 1 |
| Hawaii | 7 | 3 | 4 | 4 | \# | 7 | 2 | 5 | 3 | 2 |
| Idaho | 5 | 2 | 4 | 3 | 1 | 7 | 1 | 6 | 5 | 2 |
| Illinois | 7 | 2 | 5 | 2 | 3 | 9 | 2 | 7 | 4 | 3 |
| Indiana | 1 | 1 | 1 | \# | 1 | 3 | \# | 2 | 2 | 1 |
| lowa | 2 | 1 | 1 | 1 | \# | 4 | 1 | 3 | 2 | 1 |
| Kansas | 5 | \# | 5 | 4 | 1 | 3 | \# | 3 | 1 | 1 |
| Kentucky | 1 | \# | \# | \# | \# | 2 | 1 | 1 | 1 | \# |
| Louisiana | 1 | \# | \# | \# | \# | 2 | \# | 2 | \# | 1 |
| Maine | 1 | \# | 1 | 1 | \# | 1 | 1 | 1 | 1 | \# |
| Maryland | 2 | 1 | 1 | 1 | \# | 4 | 2 | 2 | 2 | 1 |
| Massachusetts | 6 | 2 | 4 | 2 | 2 | 5 | 1 | 4 | 2 | 2 |
| Michigan | 1 | 1 | \# | \# | \# | 5 | 1 | 4 | 3 | 1 |
| Minnesota | 5 | 1 | 4 | 2 | 3 | 6 | 1 | 5 | 3 | 2 |
| Mississippi | \# | \# | \# | \# | \# | 1 | 1 | \# | \# | \# |
| Missouri | 1 | 1 | 1 | 1 | \# | 2 | 1 | 2 | \# | 1 |
| Montana | \# | \# | \# | \# | \# | 4 | \# | 4 | 3 | 1 |
| Nebraska | 3 | 1 | 2 | 2 | \# | 5 | 1 | 4 | 3 | 1 |
| Nevada | 11 | 4 | 7 | 6 | 1 | 17 | 2 | 14 | 11 | 4 |
| New Hampshire | - | - | - | - | - | 3 | 1 | 2 | 1 | 1 |
| New Jersey | - | - | - | - | - | 4 | 1 | 3 | 1 | 3 |
| New Mexico | 20 | 2 | 18 | 12 | 6 | 29 | 2 | 27 | 18 | 9 |
| New York | 6 | 3 | 3 | 1 | 2 | 8 | 3 | 4 | 2 | 3 |
| North Carolina | 3 | 1 | 2 | 1 | 1 | 5 | 1 | 4 | 2 | 2 |
| North Dakota | 1 | \# | 1 | 1 | \# | 4 | \# | 4 | 3 | 1 |
| Ohio | \# | \# | \# | \# | \# | 2 | 1 | 1 | \# | 1 |
| Oklahoma | 5 | 1 | 5 | 3 | 1 | 7 | 1 | 6 | 5 | 1 |
| Oregon | 6 | 1 | 4 | 2 | 2 | 12 | 1 | 11 | 6 | 5 |
| Pennsylvania | - | - | - | - | - | 3 | 1 | 2 | 1 | 1 |
| Rhode Island | 7 | 1 | 6 | 4 | 2 | 10 | 2 | 7 | 4 | 3 |
| South Carolina | 1 | 1 | \# | \# | \# | 2 | \# | 2 | 1 | \# |
| South Dakota | - | - | - | - | - | 4 | \# | 4 | 2 | 2 |
| Tennessee | 1 | 1 | 1 | 1 | \# | 1 | \# | 1 | 1 | \# |
| Texas | 13 | 2 | 11 | 8 | 3 | 16 | 2 | 14 | 10 | 4 |
| Utah | 6 | 1 | 5 | 3 | 2 | 12 | 1 | 10 | 8 | 3 |
| Vermont | \# | \# | \# | \# | \# | 2 | \# | 2 | 1 | 1 |
| Virginia | 4 | 2 | 2 | 1 | 1 | 8 | 2 | 6 | 2 | 3 |
| Washington | - | - | - | - | - | 7 | 1 | 6 | 4 | 2 |
| West Virginia | \# | \# | \# | \# | \# | \# | \# | \# | \# | \# |
| Wisconsin | 5 | 1 | 4 | 2 | 3 | 7 | 1 | 6 | 2 | 3 |
| Wyoming | 2 | \# | 2 | 2 | \# | 4 | \# | 4 | 3 | 1 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 6 | 2 | 4 | 2 | 2 | 7 | 1 | 5 | 2 | 3 |
| DoDEA ${ }^{1}$ | 3 | 1 | 2 | 2 | \# | 6 | 1 | 5 | 4 | 2 |
| Puerto Rico | - | - | - | - | - | - | - | - | - | - |

See notes at end of table.

Table A-26.
Percentage of fourth-grade public school students identified as English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19—Continued

|  | 2005 |  |  |  |  | 2007 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 10 | 1 | 9 | 7 | 3 | 11 | 1 | 10 | 7 | 3 |
| Alabama | 2 | \# | 2 | 1 | \# | 2 | \# | 2 | 2 | \# |
| Alaska | 19 | 1 | 19 | 11 | 7 | 16 | 1 | 15 | 9 | 6 |
| Arizona | 20 | 2 | 18 | 14 | 5 | 16 | 2 | 14 | 11 | 3 |
| Arkansas | 4 | 2 | 3 | 2 | 1 | 7 | 1 | 6 | 2 | 5 |
| California | 33 | 3 | 30 | 28 | 2 | 34 | 1 | 33 | 30 | 3 |
| Colorado | 11 | 1 | 11 | 4 | 7 | 15 | \# | 14 | 7 | 7 |
| Connecticut | 5 | 1 | 4 | 2 | 2 | 7 | \# | 7 | 2 | 5 |
| Delaware | 5 | 1 | 3 | 2 | 1 | 5 | 1 | 4 | 2 | 2 |
| Florida | 8 | 1 | 6 | 1 | 5 | 8 | 2 | 7 | 1 | 5 |
| Georgia | 3 | 1 | 2 | 1 | 1 | 3 | \# | 3 | 1 | 2 |
| Hawaii | 8 | 1 | 7 | 4 | 3 | 10 | 1 | 9 | 5 | 4 |
| Idaho | 8 | 1 | 8 | 6 | 2 | 8 | \# | 8 | 5 | 2 |
| Illinois | 9 | 1 | 9 | 6 | 3 | 9 | 1 | 8 | 4 | 3 |
| Indiana | 4 | 1 | 3 | 1 | 2 | 5 | \# | 5 | 2 | 3 |
| lowa | 4 | \# | 4 | 2 | 2 | 5 | \# | 5 | 2 | 3 |
| Kansas | 6 | 1 | 5 | 3 | 3 | 8 | \# | 8 | 4 | 4 |
| Kentucky | 1 | \# | 1 | \# | 1 | 2 | \# | 2 | 1 | 1 |
| Louisiana | 1 | \# | 1 | \# | \# | 1 | \# | 1 | 1 | 1 |
| Maine | 1 | \# | 1 | 1 | \# | 2 | \# | 2 | 1 | 1 |
| Maryland | 4 | 1 | 3 | 1 | 2 | 4 | 1 | 4 | 1 | 3 |
| Massachusetts | 7 | 1 | 6 | 3 | 2 | 6 | 1 | 5 | 4 | 2 |
| Michigan | 3 | 1 | 3 | 1 | 1 | 2 | \# | 2 | 1 | 1 |
| Minnesota | 7 | 1 | 7 | 4 | 3 | 8 | 1 | 7 | 4 | 3 |
| Mississippi | 1 | \# | \# | \# | \# | 1 | \# | 1 | 1 | \# |
| Missouri | 3 | \# | 2 | 1 | 1 | 2 | \# | 2 | 1 | 1 |
| Montana | 3 | \# | 3 | 2 | 1 | 4 | \# | 4 | 2 | 2 |
| Nebraska | 7 | 1 | 7 | 4 | 3 | 8 | 1 | 7 | 5 | 2 |
| Nevada | 17 | 1 | 15 | 10 | 5 | 22 | 2 | 21 | 11 | 9 |
| New Hampshire | 3 | \# | 2 | 2 | 1 | 3 | \# | 2 | 1 | 1 |
| New Jersey | 3 | 1 | 3 | 1 | 1 | 4 | \# | 3 | \# | 3 |
| New Mexico | 25 | 1 | 24 | 13 | 11 | 23 | 2 | 21 | 12 | 9 |
| New York | 6 | 1 | 5 | 1 | 4 | 9 | 1 | 8 | 1 | 7 |
| North Carolina | 6 | 1 | 6 | 2 | 4 | 7 | 1 | 7 | 2 | 4 |
| North Dakota | 2 | \# | 1 | 1 | \# | 3 | 1 | 2 | 1 | 1 |
| Ohio | 1 | \# | 1 | \# | \# | 3 | 1 | 2 | 1 | 1 |
| Oklahoma | 6 | 1 | 5 | 3 | 2 | 5 | \# | 5 | 4 | 1 |
| Oregon | 14 | 1 | 12 | 7 | 5 | 13 | 1 | 12 | 5 | 7 |
| Pennsylvania | 2 | \# | 2 | 1 | 1 | 2 | \# | 2 | 1 | 1 |
| Rhode Island | 7 | 1 | 6 | 2 | 4 | 7 | 1 | 6 | 3 | 4 |
| South Carolina | 2 | \# | 2 | 1 | \# | 4 | \# | 4 | 2 | 1 |
| South Dakota | 4 | \# | 3 | 2 | 2 | 4 | \# | 4 | 3 | 1 |
| Tennessee | 2 | 1 | 2 | 1 | \# | 2 | \# | 2 | 1 | 1 |
| Texas | 15 | 2 | 13 | 9 | 4 | 16 | 2 | 14 | 9 | 5 |
| Utah | 12 | 1 | 11 | 7 | 4 | 12 | 1 | 11 | 8 | 4 |
| Vermont | 2 | \# | 2 | 1 | 1 | 3 | \# | 2 | 1 | 1 |
| Virginia | 8 | 1 | 7 | 2 | 5 | 8 | 1 | 7 | 3 | 4 |
| Washington | 9 | 1 | 8 | 5 | 3 | 9 | 1 | 8 | 4 | 4 |
| West Virginia | \# | \# | \# | \# | \# | 1 | \# | 1 | 1 | \# |
| Wisconsin | 6 | 1 | 6 | 2 | 3 | 7 | 1 | 6 | 2 | 4 |
| Wyoming | 5 | \# | 4 | 3 | 1 | 4 | \# | 4 | 2 | 1 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 5 | 1 | 4 | 1 | 2 | 8 | 2 | 6 | 1 | 5 |
| DoDEA ${ }^{1}$ | 8 | 1 | 7 | 4 | 2 | 7 | 1 | 5 | 3 | 2 |
| Puerto Rico | - | - | - | - | - | - | - | - | - | - |

[^10]Table A-26.
Percentage of fourth-grade public school students identified as English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19—Continued

|  | 2009 |  |  |  |  | 2011 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 10 | 1 | 10 | 6 | 4 | 11 | \# | 11 | 6 | 4 |
| Alabama | 2 | \# | 2 | 2 | \# | 2 | \# | 2 | 2 | 1 |
| Alaska | 10 | \# | 10 | 3 | 7 | 14 | 1 | 13 | 4 | 9 |
| Arizona | 15 | \# | 14 | 7 | 8 | 12 | \# | 12 | 3 | 9 |
| Arkansas | 6 | \# | 5 | 1 | 4 | 8 | \# | 8 | 2 | 5 |
| California | 30 | 1 | 28 | 26 | 2 | 32 | 1 | 31 | 27 | 4 |
| Colorado | 11 | \# | 10 | 5 | 6 | 16 | \# | 16 | 8 | 7 |
| Connecticut | 6 | 1 | 5 | 1 | 5 | 6 | \# | 6 | 1 | 5 |
| Delaware | 4 | \# | 3 | \# | 3 | 4 | \# | 3 | 1 | 2 |
| Florida | 8 | \# | 7 | \# | 7 | 9 | \# | 9 | \# | 8 |
| Georgia | 4 | \# | 4 | 1 | 3 | 5 | \# | 5 | 2 | 3 |
| Hawaii | 10 | \# | 10 | 4 | 6 | 11 | \# | 11 | 6 | 5 |
| Idaho | 5 | \# | 5 | 3 | 2 | 5 | \# | 4 | 2 | 2 |
| Illinois | 8 | 1 | 7 | 2 | 5 | 8 | 1 | 7 | 2 | 6 |
| Indiana | 4 | \# | 4 | 1 | 3 | 7 | \# | 7 | 2 | 5 |
| lowa | 5 | \# | 4 | 1 | 3 | 6 | \# | 5 | 1 | 4 |
| Kansas | 9 | \# | 9 | 5 | 4 | 11 | \# | 11 | 6 | 5 |
| Kentucky | 2 | \# | 2 | 1 | 1 | 2 | 1 | 1 | \# | 1 |
| Louisiana | 2 | \# | 2 | 1 | 2 | 2 | \# | 2 | 1 | 1 |
| Maine | 2 | \# | 1 | 1 | 1 | 3 | \# | 3 | 2 | 2 |
| Maryland | 6 | 1 | 5 | 1 | 4 | 6 | 1 | 5 | 1 | 5 |
| Massachusetts | 7 | 1 | 6 | 5 | 2 | 8 | 1 | 7 | 5 | 2 |
| Michigan | 3 | \# | 3 | 2 | 1 | 4 | \# | 3 | 3 | 1 |
| Minnesota | 8 | 1 | 8 | 4 | 4 | 10 | \# | 9 | 5 | 4 |
| Mississippi | 1 | \# | 1 | \# | 1 | 2 | \# | 2 | 1 | 1 |
| Missouri | 2 | \# | 2 | 1 | 1 | 3 | \# | 3 | 1 | 2 |
| Montana | 3 | \# | 3 | 1 | 1 | 2 | \# | 2 | 2 | \# |
| Nebraska | 7 | \# | 6 | 4 | 3 | 8 | \# | 8 | 3 | 5 |
| Nevada | 20 | 1 | 20 | 8 | 12 | 27 | \# | 26 | 8 | 18 |
| New Hampshire | 3 | \# | 2 | 1 | 2 | 3 | \# | 2 | 1 | 2 |
| New Jersey | 4 | 1 | 3 | \# | 3 | 3 | \# | 3 | \# | 3 |
| New Mexico | 17 | 1 | 16 | 7 | 9 | 17 | 1 | 16 | 8 | 8 |
| New York | 8 | 1 | 7 | \# | 7 | 9 | 1 | 9 | \# | 8 |
| North Carolina | 6 | \# | 5 | 2 | 4 | 7 | \# | 7 | 4 | 3 |
| North Dakota | 2 | \# | 1 | 1 | 1 | 3 | \# | 3 | 1 | 1 |
| Ohio | 2 | \# | 2 | 1 | 2 | 3 | \# | 3 | \# | 3 |
| Oklahoma | 4 | \# | 4 | 2 | 2 | 6 | 1 | 5 | 3 | 3 |
| Oregon | 12 | 1 | 11 | 4 | 7 | 14 | 1 | 13 | 6 | 7 |
| Pennsylvania | 3 | \# | 3 | 1 | 2 | 3 | \# | 3 | 1 | 2 |
| Rhode Island | 6 | 1 | 6 | 2 | 3 | 6 | \# | 6 | 4 | 2 |
| South Carolina | 5 | \# | 5 | 2 | 2 | 6 | \# | 6 | 3 | 2 |
| South Dakota | 2 | \# | 2 | 1 | 1 | 5 | \# | 4 | 2 | 2 |
| Tennessee | 2 | \# | 2 | \# | 2 | 4 | \# | 3 | \# | 3 |
| Texas | 21 | 1 | 20 | 16 | 4 | 22 | 1 | 21 | 16 | 4 |
| Utah | 9 | 1 | 8 | 3 | 5 | 7 | \# | 6 | 3 | 4 |
| Vermont | 2 | \# | 2 | 1 | 1 | 2 | \# | 2 | 1 | 1 |
| Virginia | 7 | \# | 6 | 2 | 5 | 7 | \# | 7 | 2 | 5 |
| Washington | 10 | \# | 10 | 4 | 5 | 11 | \# | 11 | 4 | 7 |
| West Virginia | \# | \# | \# | \# | \# | 1 | \# | 1 | \# | \# |
| Wisconsin | 7 | 1 | 6 | 1 | 4 | 8 | \# | 8 | 1 | 6 |
| Wyoming | 2 | \# | 2 | 1 | 1 | 4 | \# | 3 | 2 | 2 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 8 | 1 | 6 | 1 | 5 | 7 | 1 | 6 | 1 | 5 |
| DoDEA ${ }^{1}$ | 7 | 1 | 6 | 3 | 3 | 7 | 1 | 5 | 3 | 2 |
| Puerto Rico | - | - | - | - | - | \# | \# | \# | \# | \# |

See notes at end of table.

Table A-26.
Percentage of fourth-grade public school students identified as English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19—Continued

|  | 2013 |  |  |  |  | 2015 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 11 | \# | 11 | 5 | 5 | 12 | 1 | 11 | 6 | 5 |
| Alabama | 2 | \# | 2 | 2 | 1 | 2 | \# | 2 | 2 | 1 |
| Alaska | 14 | \# | 14 | 2 | 11 | 15 | \# | 15 | 5 | 9 |
| Arizona | 7 | \# | 7 | 1 | 6 | 10 | \# | 10 | 2 | 7 |
| Arkansas | 8 | \# | 8 | 3 | 6 | 8 | \# | 8 | 2 | 6 |
| California | 26 | 1 | 25 | 20 | 4 | 28 | 1 | 28 | 24 | 4 |
| Colorado | 14 | \# | 14 | 8 | 6 | 14 | \# | 14 | 10 | 4 |
| Connecticut | 6 | \# | 6 | \# | 5 | 7 | 1 | 7 | 2 | 5 |
| Delaware | 3 | \# | 3 | 1 | 2 | 5 | \# | 5 | 2 | 3 |
| Florida | 10 | 1 | 10 | \# | 10 | 10 | 1 | 9 | \# | 9 |
| Georgia | 5 | \# | 5 | 1 | 3 | 6 | \# | 5 | 2 | 4 |
| Hawaii | 8 | 1 | 7 | 4 | 4 | 8 | 1 | 7 | 4 | 3 |
| Idaho | 5 | \# | 4 | 2 | 2 | 5 | \# | 5 | 2 | 3 |
| Illinois | 9 | \# | 8 | 1 | 7 | 10 | 1 | 10 | 3 | 6 |
| Indiana | 6 | \# | 6 | 1 | 5 | 7 | \# | 7 | 2 | 5 |
| lowa | 6 | \# | 5 | 1 | 5 | 8 | 1 | 7 | 1 | 6 |
| Kansas | 13 | \# | 13 | 6 | 6 | 14 | \# | 13 | 10 | 4 |
| Kentucky | 3 | \# | 3 | \# | 2 | 4 | \# | 4 | 1 | 3 |
| Louisiana | 3 | \# | 3 | 1 | 2 | 3 | \# | 3 | 1 | 2 |
| Maine | 2 | \# | 2 | 1 | 2 | 3 | \# | 3 | 2 | 2 |
| Maryland | 8 | \# | 8 | 1 | 7 | 9 | \# | 8 | 2 | 6 |
| Massachusetts | 11 | \# | 10 | 7 | 3 | 10 | \# | 9 | 6 | 3 |
| Michigan | 8 | \# | 8 | 5 | 3 | 5 | \# | 4 | 3 | 2 |
| Minnesota | 8 | \# | 8 | 5 | 4 | 10 | \# | 9 | 6 | 3 |
| Mississippi | 2 | \# | 1 | 1 | 1 | 2 | \# | 2 | 1 | 1 |
| Missouri | 2 | \# | 2 | \# | 2 | 3 | \# | 3 | 1 | 1 |
| Montana | 4 | \# | 3 | 3 | 1 | 3 | \# | 3 | 2 | 1 |
| Nebraska | 7 | \# | 7 | 2 | 5 | 7 | \# | 7 | 2 | 5 |
| Nevada | 23 | \# | 22 | 4 | 18 | 24 | 1 | 24 | 9 | 15 |
| New Hampshire | 2 | \# | 2 | 1 | 1 | 3 | \# | 3 | 2 | 1 |
| New Jersey | 3 | \# | 3 | \# | 3 | 3 | 1 | 3 | \# | 2 |
| New Mexico | 18 | \# | 18 | 8 | 10 | 17 | 1 | 16 | 7 | 9 |
| New York | 8 | 1 | 7 | \# | 7 | 8 | 1 | 8 | \# | 7 |
| North Carolina | 7 | \# | 6 | 3 | 4 | 7 | \# | 6 | 3 | 3 |
| North Dakota | 2 | \# | 2 | 1 | 1 | 2 | \# | 2 | 1 | 1 |
| Ohio | 3 | \# | 3 | \# | 3 | 4 | \# | 4 | 1 | 4 |
| Oklahoma | 7 | \# | 6 | 3 | 3 | 7 | \# | 6 | 4 | 3 |
| Oregon | 14 | 1 | 13 | 5 | 8 | 13 | 1 | 13 | 7 | 6 |
| Pennsylvania | 3 | \# | 3 | \# | 2 | 3 | \# | 3 | 1 | 2 |
| Rhode Island | 7 | \# | 6 | 2 | 4 | 8 | 1 | 7 | 4 | 3 |
| South Carolina | 7 | \# | 7 | 4 | 3 | 8 | \# | 7 | 5 | 3 |
| South Dakota | 4 | \# | 4 | 1 | 3 | 3 | \# | 3 | 1 | 2 |
| Tennessee | 4 | \# | 4 | \# | 4 | 5 | \# | 5 | 1 | 3 |
| Texas | 23 | 1 | 23 | 12 | 11 | 23 | 1 | 22 | 11 | 11 |
| Utah | 6 | \# | 6 | 1 | 5 | 5 | 1 | 4 | 3 | 1 |
| Vermont | 2 | \# | 2 | 1 | 1 | 3 | \# | 3 | 2 | 1 |
| Virginia | 7 | \# | 7 | 2 | 5 | 7 | 1 | 6 | 1 | 5 |
| Washington | 9 | \# | 9 | 2 | 7 | 13 | \# | 13 | 6 | 7 |
| West Virginia | 1 | \# | 1 | \# | \# | 1 | \# | 1 | 1 | \# |
| Wisconsin | 8 | \# | 8 | 1 | 7 | 7 | \# | 7 | 2 | 5 |
| Wyoming | 3 | \# | 3 | 1 | 2 | 4 | \# | 4 | 2 | 2 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 7 | 1 | 6 | 1 | 6 | 7 | 1 | 6 | 2 | 4 |
| DoDEA ${ }^{1}$ | 6 | 1 | 6 | 2 | 3 | 9 | \# | 8 | 4 | 4 |
| Puerto Rico | 1 | \# | 1 | \# | 1 | 1 | \# | 1 | \# | \# |

See notes at end of table.

Table A-26.
Percentage of fourth-grade public school students identified as English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19—Continued

|  | 2017 |  |  |  |  | 2019 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 12 | 1 | 11 | 7 | 5 | 13 | 1 | 12 | 7 | 6 |
| Alabama | 4 | \# | 3 | 2 | 1 | 5 | \# | 5 | 3 | 1 |
| Alaska | 14 | \# | 14 | 9 | 5 | 15 | \# | 15 | 9 | 7 |
| Arizona | 11 | 1 | 10 | 4 | 7 | 8 | \# | 8 | 4 | 4 |
| Arkansas | 10 | \# | 10 | 3 | 7 | 8 | \# | 8 | 2 | 5 |
| California | 27 | 1 | 25 | 22 | 4 | 25 | 1 | 24 | 19 | 4 |
| Colorado | 15 | 1 | 14 | 10 | 4 | 15 | 1 | 14 | 10 | 4 |
| Connecticut | 9 | 1 | 8 | 2 | 6 | 11 | 1 | 10 | 4 | 6 |
| Delaware | 10 | 1 | 9 | 5 | 4 | 16 | 1 | 15 | 10 | 6 |
| Florida | 9 | 1 | 8 | \# | 7 | 11 | 1 | 10 | 1 | 9 |
| Georgia | 5 | 1 | 5 | 2 | 3 | 11 | \# | 11 | 5 | 6 |
| Hawaii | 7 | 2 | 5 | 4 | 1 | 14 | 1 | 13 | 11 | 2 |
| Idaho | 6 | \# | 6 | 4 | 2 | 9 | \# | 8 | 6 | 2 |
| Illinois | 12 | 1 | 11 | 5 | 6 | 16 | \# | 16 | 9 | 7 |
| Indiana | 6 | \# | 6 | 3 | 3 | 10 | \# | 10 | 2 | 8 |
| lowa | 6 | 1 | 5 | 2 | 4 | 7 | 1 | 6 | 2 | 5 |
| Kansas | 13 | 1 | 12 | 10 | 2 | 12 | \# | 12 | 9 | 2 |
| Kentucky | 3 | \# | 3 | 1 | 2 | 5 | \# | 5 | 1 | 4 |
| Louisiana | 5 | \# | 5 | 1 | 4 | 4 | \# | 4 | \# | 3 |
| Maine | 4 | \# | 3 | 2 | 1 | 5 | \# | 4 | 2 | 2 |
| Maryland | 11 | 1 | 10 | 3 | 8 | 14 | 1 | 13 | 4 | 9 |
| Massachusetts | 10 | 1 | 9 | 6 | 4 | 14 | 1 | 13 | 7 | 5 |
| Michigan | 8 | 1 | 8 | 6 | 1 | 11 | \# | 10 | 6 | 4 |
| Minnesota | 9 | 1 | 9 | 8 | 1 | 13 | \# | 12 | 10 | 2 |
| Mississippi | 3 | \# | 3 | 1 | 2 | 3 | \# | 3 | 2 | 2 |
| Missouri | 4 | \# | 4 | 1 | 2 | 6 | \# | 6 | 4 | 2 |
| Montana | 3 | \# | 3 | 2 | 1 | 4 | \# | 4 | 3 | 1 |
| Nebraska | 9 | 1 | 8 | 3 | 6 | 7 | \# | 7 | 3 | 4 |
| Nevada | 18 | 1 | 18 | 13 | 4 | 21 | 1 | 20 | 15 | 5 |
| New Hampshire | 4 | \# | 3 | 2 | 2 | 5 | \# | 4 | 3 | 1 |
| New Jersey | 5 | 1 | 4 | 1 | 3 | 8 | 1 | 8 | 1 | 7 |
| New Mexico | 17 | 1 | 17 | 8 | 9 | 21 | 1 | 21 | 11 | 10 |
| New York | 10 | 1 | 9 | 2 | 7 | 10 | 1 | 9 | 2 | 7 |
| North Carolina | 5 | 1 | 5 | 2 | 3 | 11 | \# | 11 | 6 | 4 |
| North Dakota | 2 | \# | 2 | 1 | 1 | 4 | \# | 4 | 2 | 2 |
| Ohio | 4 | \# | 4 | 2 | 2 | 2 | \# | 2 | 1 | 1 |
| Oklahoma | 9 | \# | 8 | 4 | 4 | 11 | 1 | 11 | 6 | 5 |
| Oregon | 16 | 1 | 15 | 11 | 5 | 11 | \# | 11 | 7 | 4 |
| Pennsylvania | 4 | 1 | 4 | 2 | 2 | 5 | \# | 5 | 2 | 3 |
| Rhode Island | 9 | 1 | 7 | 3 | 4 | 13 | 1 | 12 | 5 | 7 |
| South Carolina | 8 | \# | 8 | 6 | 2 | 6 | \# | 6 | 4 | 2 |
| South Dakota | 2 | \# | 2 | 1 | 1 | 5 | \# | 5 | 3 | 2 |
| Tennessee | 5 | 1 | 5 | 2 | 3 | 9 | 1 | 8 | 1 | 7 |
| Texas | 25 | 1 | 24 | 13 | 11 | 23 | 1 | 22 | 11 | 11 |
| Utah | 9 | 1 | 8 | 6 | 2 | 11 | 1 | 10 | 8 | 2 |
| Vermont | 3 | \# | 2 | 1 | 1 | 3 | \# | 3 | 2 | 2 |
| Virginia | 10 | 1 | 9 | 5 | 4 | 12 | \# | 11 | 6 | 5 |
| Washington | 14 | 1 | 13 | 11 | 2 | 15 | 1 | 14 | 9 | 5 |
| West Virginia | 1 | \# | 1 | 1 | \# | 1 | \# | 1 | 1 | \# |
| Wisconsin | 8 | \# | 8 | 4 | 4 | 8 | \# | 8 | 4 | 4 |
| Wyoming | 3 | \# | 2 | 1 | 1 | 4 | \# | 4 | 2 | 2 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 8 | 1 | 8 | 2 | 5 | 13 | 1 | 13 | 2 | 11 |
| DoDEA ${ }^{1}$ | 9 | 1 | 9 | 5 | 4 | 11 | 1 | 10 | 5 | 6 |
| Puerto Rico | \# | \# | \# | \# | \# | - | - | - | - | - |

## -Not avalable.

\# Rounds to zero.
${ }^{1}$ Department of Defense Education Activity (overseas and domestic schools).
NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. Detail may not sum to totals because of rounding. In Puerto Rico, the English language learner (ELL) category is for the Spanish language learner (SLL).
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000-19 Mathematics Assessments

Table A-27.
Percentage of eighth-grade public school students identified as English language learners excluded and assessed in NAEP mathematics when accommodations were not permitted, by state/jurisdiction: Various years, 1990-2000

|  | 1990 |  |  | 1992 |  |  | 1996 |  |  | 2000 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Identified | Excluded | Assessed | Identified | Excluded | Assessed | Identified | Excluded | Assessed |
| Nation (public) | - | - | - | 2 | 2 | 1 | 3 | 1 | 2 | 4 | 2 | 3 |
| Alabama | \# | \# | \# | \# | \# | \# | \# | \# | \# | 1 | \# | \# |
| Alaska | - | - | - | - | - | - | 5 | 1 | 4 | - | - | - |
| Arizona | 5 | 1 | 4 | 6 | 2 | 4 | 9 | 4 | 5 | 10 | 4 | 6 |
| Arkansas | \# | \# | \# | \# | \# | \# | 1 | \# | \# | 2 | 1 | 1 |
| California | 8 | 4 | 4 | 13 | 5 | 8 | 13 | 6 | 7 | 19 | 4 | 15 |
| Colorado | 1 | 1 | \# | 1 | 1 | 1 | 2 | 1 | 1 | - | - | - |
| Connecticut | 2 | 1 | 1 | 3 | 1 | 1 | 2 | 2 | 1 | 2 | 1 | 1 |
| Delaware | 1 | \# | \# | 1 | \# | 1 | 1 | \# | \# | - | - | - |
| Florida | 2 | 2 | 1 | 4 | 2 | 2 | 4 | 3 | 1 | - | - | - |
| Georgia | \# | \# | \# | 1 | \# | \# | 2 | 1 | \# | 1 | 1 | \# |
| Hawaii | 3 | 1 | 2 | 5 | 2 | 3 | 4 | 1 | 2 | 6 | 2 | 4 |
| Idaho | 1 | \# | \# | 1 | \# | \# | - | - | - | 4 | 1 | 3 |
| Illinois | 1 | 1 | \# | - | - | - | - | - | - | 5 | 2 | 3 |
| Indiana | \# | \# | \# | 1 | \# | \# | 1 | \# | 1 | 2 | 1 | 1 |
| lowa | \# | \# | \# | 1 | \# | 1 | \# | \# | \# | - | - | - |
| Kansas | - | - | - | - | - | - | - | - | - | 5 | 2 | 2 |
| Kentucky | \# | \# | \# | \# | \# | \# | \# | \# | \# | 1 | \# | \# |
| Louisiana | \# | \# | \# | \# | \# | \# | 1 | \# | 1 | \# | \# | \# |
| Maine | - | - | - | \# | \# | \# | 1 | \# | 1 | 1 | \# | 1 |
| Maryland | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \# | 2 | 1 | \# |
| Massachusetts | - | - | - | 4 | 2 | 1 | 2 | 1 | \# | 4 | 3 | 1 |
| Michigan | \# | \# | \# | 1 | \# | \# | 1 | 1 | 1 | 1 | 1 | \# |
| Minnesota | 1 | \# | 1 | \# | \# | \# | 1 | \# | 1 | 2 | 1 | 1 |
| Mississippi | - | - | - | \# | \# | \# | \# | \# | \# | \# | \# | \# |
| Missouri | - | - | - | 1 | \# | \# | 1 | 1 | \# | 1 | \# | \# |
| Montana | \# | \# | \# | - | - | - | \# | \# | \# | 1 | \# | 1 |
| Nebraska | \# | \# | \# | 1 | \# | \# | 1 | 1 | \# | 2 | 1 | 1 |
| Nevada | - | - | - | - | - | - | 7 | 3 | 4 | 5 | 3 | 2 |
| New Hampshire | \# | \# | \# | \# | \# | \# | \# | \# | \# | - | - | - |
| New Jersey | 2 | 2 | 1 | 3 | 1 | 1 | 3 | 2 | 1 | - | - | - |
| New Mexico | 1 | 1 | 1 | 3 | 1 | 2 | 6 | 4 | 2 | 11 | 4 | 8 |
| New York | 4 | 2 | 2 | 3 | 3 | 1 | 5 | 3 | 2 | 6 | 4 | 2 |
| North Carolina | \# | \# | \# | \# | \# | \# | 1 | 1 | \# | 3 | 3 | \# |
| North Dakota | 1 | \# | 1 | 1 | \# | 1 | \# | \# | \# | 1 | \# | \# |
| Ohio | \# | \# | \# | \# | \# | \# | - | - | - | 1 | 1 | \# |
| Oklahoma | 1 | \# | \# | 1 | \# | 1 | - | - | - | 2 | 1 | 1 |
| Oregon | 1 | \# | 1 | - | - | - | 2 | 1 | 1 | 5 | 3 | 2 |
| Pennsylvania | \# | \# | \# | 1 | \# | 1 | - | - | - | - | - | - |
| Rhode Island | 4 | 2 | 2 | 4 | 2 | 2 | 4 | 2 | 2 | 4 | 3 | 1 |
| South Carolina | - | - | - | \# | \# | \# | \# | \# | \# | \# | \# | \# |
| Tennessee | - | - | - | \# | \# | \# | \# | \# | \# | 1 | 1 | \# |
| Texas | 5 | 2 | 3 | 6 | 2 | 4 | 7 | 3 | 4 | 8 | 3 | 5 |
| Utah | - | - | - | 1 | 1 | \# | 2 | 1 | \# | 4 | 2 | 2 |
| Vermont | - | - | - | - | - | - | 1 | \# | 1 | 1 | 1 | \# |
| Virginia | 1 | 1 | \# | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 |
| Washington | - | - | - | - | - | - | 2 | 1 | 1 | - | - | - |
| West Virginia | \# | \# | \# | \# | \# | \# | \# | \# | \# | \# | \# | \# |
| Wisconsin | 1 | \# | \# | 1 | \# | 1 | 1 | 1 | \# | 1 | 1 | \# |
| Wyoming | 1 | \# | \# | \# | \# | \# | 1 | \# | 1 | 2 | \# | 1 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 1 | 1 | \# | 3 | 2 | 1 | 4 | 3 | 2 | 4 | 3 | 2 |
| DoDEA ${ }^{1}$ | - | - | - | - | - | - | 1 | 1 | \# | 3 | 2 | 1 |

- Not available.
\# Rounds to zero.
${ }^{1}$ Department of Defense Education Activity (overseas and domestic schools),
NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. South Dakota did not participate in NAEP mathematics assessments from 1990 to 2000. 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, 19902000 Mathematics Assessments

Table A-28.
Percentage of eighth-grade public school students identified as English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19

|  | 2000 |  |  |  |  | 2003 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 4 | 1 | 3 | 3 | 1 | 6 | 1 | 5 | 4 | 1 |
| Alabama | 1 | \# | \# | \# | \# | 1 | \# | 1 | 1 | \# |
| Alaska | - | - | - | - | - | 11 | \# | 11 | 10 | 1 |
| Arizona | 10 | 1 | 8 | 6 | 2 | 16 | 2 | 14 | 12 | 2 |
| Arkansas | 1 | \# | \# | \# | \# | 3 | 1 | 2 | 1 | 1 |
| California | 19 | 2 | 17 | 13 | 4 | 20 | 2 | 19 | 17 | 1 |
| Colorado | - | - | - | - | - | 5 | 1 | 4 | 2 | 2 |
| Connecticut | 2 | 2 | 1 | \# | 1 | 4 | 1 | 3 |  | 1 |
| Delaware | - | - | - | - | - | 2 | 1 | 1 | 1 | 1 |
| Florida | - | - | - | - | - | 7 | 1 | 5 | 3 | 3 |
| Georgia | 2 | 1 | \# | \# | \# | 2 | 1 | 2 | 1 | 1 |
| Hawaii | 6 | 1 | 4 | 4 | \# | 6 | 1 | 5 | 3 | 2 |
| Idaho | 4 | 1 | 4 | 3 | 1 | 6 | \# | 5 | 4 | 1 |
| Illinois | 5 | 2 | 3 | 3 | \# | 4 | 1 | 3 | 1 | 2 |
| Indiana | 1 | \# | 1 | 1 | \# | 3 | \# | 2 | 1 | 1 |
| lowa | - | - | - | - | - | 2 | \# | 2 | 1 | 1 |
| Kansas | 1 | \# | 1 | 1 | \# | 4 | 1 | 3 | 1 | 2 |
| Kentucky | 1 | 1 | 1 | 1 | \# | 1 | 1 | 1 | 1 | \# |
| Louisiana | 1 | \# | 1 | \# | \# | 1 | 1 | 1 | \# | \# |
| Maine | \# | \# | \# | \# | \# | 1 | \# | 1 | \# | \# |
| Maryland | 2 | 1 | 1 | 1 | \# | 3 | 1 | 2 | 2 | \# |
| Massachusetts | 4 | 2 | 2 | 1 | 1 | 3 | 1 | 2 | 1 | 1 |
| Michigan | \# | \# | \# | \# | \# | 3 | 1 | 2 | 1 | 1 |
| Minnesota | 3 | 1 | 3 | 2 | \# | 4 | 1 | 3 | 2 | 1 |
| Mississippi | \# | \# | \# | \# | \# | 1 | \# | \# | \# | \# |
| Missouri | \# | \# | \# | \# | \# | 1 | \# | 1 | \# | 1 |
| Montana | \# | \# | \# | \# | \# | 3 | \# | 2 | 1 | 1 |
| Nebraska | 2 | 1 | 1 | 1 | \# | 3 | 1 | 2 | 1 | \# |
| Nevada | 5 | 1 | 4 | 3 | \# | 7 | 1 | 6 | 5 | 2 |
| New Hampshire | - | - | - | - | - | 1 | \# | 1 | \# | 1 |
| New Jersey | - | - | - | - | - | 3 | 1 | 2 | \# | 2 |
| New Mexico | 11 | 2 | 9 | 7 | 2 | 20 | 1 | 19 | 11 | 7 |
| New York | 6 | 2 | 4 | 3 | 1 | 6 | 2 | 4 | 1 | 3 |
| North Carolina | 2 | 1 | 1 | 1 | \# | 4 | 1 | 3 | 1 | 2 |
| North Dakota | 1 | \# | 1 | 1 | \# | 2 | \# | 2 | 1 | 1 |
| Ohio | 2 | 1 | 1 | \# | \# | 1 | \# | 1 | \# | \# |
| Oklahoma | 2 | \# | 1 | 1 | \# | 5 | 1 | 5 | 3 | 1 |
| Oregon | 5 | 1 | 4 | 3 | 1 | 7 | 1 | 6 | 4 | 2 |
| Pennsylvania | - | - | - | - | - | 2 | \# | 2 | 1 | 1 |
| Rhode Island | 4 | 1 | 3 | 2 | 1 | 5 | 2 | 4 | 2 | 2 |
| South Carolina | 1 | \# | \# | \# | \# | 1 | \# | 1 | 1 | \# |
| South Dakota | - | - | - | - | - | 3 | \# | 3 | 2 | 1 |
| Tennessee | 1 | 1 | 1 | 1 | \# | 3 | 1 | 2 | 2 | \# |
| Texas | 8 | 2 | 6 | 5 | 1 | 8 | 2 | 6 | 5 | 1 |
| Utah | 4 | \# | 3 | 3 | 1 | 7 | 1 | 6 | 5 | 2 |
| Vermont | 1 | 1 | 1 | \# | \# | 1 | \# | 1 | 1 | \# |
| Virginia | 3 | 1 | 2 | 1 | 1 | 4 | 2 | 2 | 1 | 1 |
| Washington | - | - | - | - | - | 5 | 1 | 4 | 3 | 1 |
| West Virginia | \# | \# | \# | \# | \# | 1 | \# | \# | \# | \# |
| Wisconsin | 2 | 1 | 1 | 1 | 1 | 3 | 1 | 2 | 1 | 1 |
| Wyoming | 2 | \# | 2 | 2 | \# | 3 | \# | 3 | 2 | 1 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 4 | 2 | 2 | 1 | 2 | 5 | 1 | 4 | 2 | 2 |
| DoDEA ${ }^{1}$ | 3 | 1 | 2 | 2 | \# | 5 | 1 | 4 | 2 | 1 |
| Puerto Rico | - | - | - | - | - | - | - | - | - | - |

See notes at end of table.

Table A-28.
Percentage of eighth-grade public school students identified as English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19—Continued

|  | 2005 |  |  |  |  | 2007 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 6 | 1 | 5 | 4 | 1 | 7 | 1 | 6 | 4 | 2 |
| Alabama | 1 | \# | 1 | 1 | \# | 2 | \# | 2 | 2 | \# |
| Alaska | 15 | \# | 15 | 11 | 4 | 17 | 1 | 16 | 11 | 5 |
| Arizona | 14 | 2 | 12 | 10 | 2 | 10 | 1 | 9 | 7 | 2 |
| Arkansas | 1 | 1 | 1 | \# | \# | 3 | \# | 3 | 1 | 2 |
| California | 21 | 1 | 20 | 18 | 2 | 22 | 1 | 21 | 19 | 2 |
| Colorado | 7 | 1 | 6 | 3 | 3 | 7 | \# | 6 | 3 | 3 |
| Connecticut | 3 | \# | 3 | 1 | 2 | 4 | \# | 4 | 1 | 2 |
| Delaware | 4 | 1 | 2 | 2 | 1 | 3 | 1 | 2 | 1 | 1 |
| Florida | 6 | 1 | 4 | 1 | 3 | 6 | 1 | 5 | 1 | 4 |
| Georgia | 2 | \# | 2 | 1 | 1 | 2 | \# | 2 | 1 | 1 |
| Hawaii | 7 | 1 | 6 | 4 | 2 | 7 | 1 | 6 | 4 | 3 |
| Idaho | 6 | 1 | 6 | 4 | 2 | 6 | \# | 5 | 4 | 2 |
| Illinois | 3 | 1 | 2 | 1 | 1 | 4 | 1 | 3 | 2 | 1 |
| Indiana | 2 | \# | 2 | 1 | 1 | 4 | \# | 3 | 2 | 1 |
| lowa | 2 | \# | 2 | 1 | 1 | 3 | \# | 3 | 1 | 2 |
| Kansas | 4 | 1 | 3 | 2 | 1 | 4 | \# | 4 | 3 | 1 |
| Kentucky | 1 | \# | 1 | \# | 1 | 2 | \# | 1 | \# | 1 |
| Louisiana | 1 | \# | 1 | \# | 1 | 1 | \# | 1 | 1 | 1 |
| Maine | 1 | \# | 1 | \# | 1 | 2 | \# | 1 | 1 | \# |
| Maryland | 2 | \# | 2 | 1 | \# | 2 | \# | 2 | 1 | 1 |
| Massachusetts | 3 | 1 | 2 | 1 | 1 | 3 | 1 | 3 | 1 | 1 |
| Michigan | 3 | \# | 2 | 2 | 1 | 2 | \# | 2 | 1 | \# |
| Minnesota | 7 | 1 | 6 | 5 | 1 | 5 | \# | 4 | 4 | 1 |
| Mississippi | 1 | \# | 1 | \# | \# | \# | \# | \# | \# | \# |
| Missouri | 1 | \# | 1 | \# | 1 | 2 | \# | 2 | 1 | 1 |
| Montana | 5 | \# | 4 | 2 | 2 | 5 | \# | 4 | 3 | 2 |
| Nebraska | 3 | \# | 3 | 2 | 1 | 3 | 1 | 2 | 1 | 1 |
| Nevada | 9 | 1 | 9 | 6 | 2 | 11 | 1 | 9 | 6 | 4 |
| New Hampshire | 1 | \# | 1 | \# | 1 | 2 | \# | 2 | 1 | 1 |
| New Jersey | 2 | 1 | 1 | \# | 1 | 4 | 1 | 3 | 1 | 2 |
| New Mexico | 17 | 2 | 15 | 9 | 6 | 17 | 2 | 15 | 11 | 4 |
| New York | 5 | 1 | 4 | 1 | 3 | 5 | 1 | 4 | \# | 4 |
| North Carolina | 4 | 1 | 3 | 1 | 2 | 4 | \# | 4 | 2 | 2 |
| North Dakota | 1 | \# | 1 | 1 | \# | 3 | \# | 2 | 1 | 1 |
| Ohio | 1 | \# | 1 | \# | \# | 1 | \# | 1 | \# | \# |
| Oklahoma | 4 | 1 | 4 | 2 | 1 | 4 | 1 | 3 | 2 | 1 |
| Oregon | 8 | 1 | 7 | 5 | 3 | 9 | 1 | 8 | 5 | 3 |
| Pennsylvania | 1 | \# | 1 | \# | \# | 2 | 1 | 1 | \# | 1 |
| Rhode Island | 5 | 1 | 4 | 2 | 2 | 4 | 1 | 3 | 2 | 1 |
| South Carolina | 1 | \# | 1 | 1 | \# | 2 | \# | 2 | 1 | 1 |
| South Dakota | 2 | \# | 2 | 1 | 1 | 1 | \# | 1 | \# | \# |
| Tennessee | 1 | \# | 1 | 1 | \# | 2 | \# | 2 | 1 | 1 |
| Texas | 8 | 2 | 6 | 5 | 1 | 8 | 2 | 6 | 4 | 2 |
| Utah | 7 | 1 | 6 | 4 | 2 | 9 | 1 | 8 | 6 | 2 |
| Vermont | 1 | \# | 1 | \# | \# | 2 | \# | 1 | 1 | 1 |
| Virginia | 4 | 1 | 3 | 2 | 1 | 4 | 1 | 3 | 2 | 1 |
| Washington | 5 | 1 | 4 | 3 | 2 | 6 | 1 | 5 | 3 | 2 |
| West Virginia | \# | \# | \# | \# | \# | 1 | \# | 1 | 1 | \# |
| Wisconsin | 4 | 1 | 3 | 1 | 1 | 5 | 1 | 3 | 1 | 2 |
| Wyoming | 4 | \# | 4 | 3 | 1 | 3 | \# | 3 | 1 | 1 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 4 | 1 | 3 | 1 | 2 | 4 | 1 | 3 | 1 | 2 |
| DoDEA ${ }^{1}$ | 4 | 1 | 4 | 2 | 1 | 5 | 1 | 3 | 2 | 1 |
| Puerto Rico | - | - | - | - | - | - | - | - | - | - |

See notes at end of table.

Table A-28.
Percentage of eighth-grade public school students identified as English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19—Continued

|  | 2009 |  |  |  |  | 2011 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 6 | \# | 5 | 3 | 2 | 6 | \# | 6 | 3 | 2 |
| Alabama | 1 | \# | 1 | 1 | \# | 2 | \# | 2 | 1 | \# |
| Alaska | 11 | 1 | 10 | 4 | 6 | 11 | 1 | 10 | 3 | 7 |
| Arizona | 6 | 1 | 6 | 2 | 3 | 2 | \# | 2 | 1 | 1 |
| Arkansas | 4 | \# | 4 | 1 | 2 | 5 | \# | 5 | 2 | 3 |
| California | 20 | 1 | 19 | 16 | 3 | 17 | 1 | 17 | 13 | 4 |
| Colorado | 7 | \# | 7 | 3 | 4 | 7 | \# | 7 | 4 | 3 |
| Connecticut | 3 | \# | 3 | 1 | 2 | 4 | \# | 4 | 1 | 3 |
| Delaware | 2 | 1 | 2 | \# | 1 | 2 | \# | 2 | 1 | 1 |
| Florida | 5 | \# | 5 | \# | 4 | 5 | \# | 5 | \# | 4 |
| Georgia | 2 | \# | 2 | \# | 1 | 2 | \# | 2 | \# | 1 |
| Hawaii | 7 | 1 | 6 | 3 | 3 | 9 | 1 | 9 | 5 | 3 |
| Idaho | 4 | \# | 3 | 2 | 1 | 4 | \# | 4 | 2 | 2 |
| Illinois | 3 | 1 | 3 | 1 | 2 | 4 | \# | 3 | 2 | 2 |
| Indiana | 3 | \# | 3 | 1 | 1 | 3 | \# | 3 |  | 2 |
| lowa | 2 | \# | 2 | 1 | 1 | 3 | \# | 3 | 1 | 2 |
| Kansas | 6 | \# | 5 | 3 | 2 | 7 | \# | 7 | 5 | 2 |
| Kentucky | 1 | \# | 1 | \# | 1 | 1 | \# | 1 | \# | 1 |
| Louisiana | 1 | \# | 1 | \# | 1 | 1 | \# | 1 | \# | 1 |
| Maine | 2 | \# | 1 | 1 | 1 | 3 | \# | 3 | 2 | 1 |
| Maryland | 3 | \# | 2 | \# | 2 | 3 | 1 | 2 | \# | 2 |
| Massachusetts | 3 | 1 | 2 | 1 | 1 | 4 | 1 | 3 | 2 | 2 |
| Michigan | 2 | \# | 2 | 1 | 1 | 2 | \# | 2 | 1 | 1 |
| Minnesota | 5 | 1 | 5 | 3 | 2 | 5 | \# | 5 | 3 | 2 |
| Mississippi | 1 | \# | 1 | \# | \# | 1 | \# | 1 | \# | \# |
| Missouri | 1 | \# | 1 | \# | \# | 1 | \# | 1 | \# | 1 |
| Montana | 3 | \# | 3 | 1 | 1 | 2 | \# | 2 | 1 | 1 |
| Nebraska | 3 | \# | 3 | 2 | 1 | 3 | \# | 2 | 1 | 1 |
| Nevada | 8 | \# | 8 | 4 | 4 | 10 | 1 | 9 | 5 | 4 |
| New Hampshire | 1 | \# | 1 | 1 | \# | 2 | \# | 2 | 1 | 1 |
| New Jersey | 2 | \# | 2 | \# | 2 | 2 | \# | 2 | \# | 2 |
| New Mexico | 11 | 1 | 10 | 5 | 5 | 12 | 1 | 11 | 7 | 4 |
| New York | 5 | 1 | 4 | \# | 4 | 6 | \# | 5 | \# | 5 |
| North Carolina | 5 | \# | 5 | 2 | 3 | 5 | \# | 5 | 2 | 3 |
| North Dakota | 2 | 1 | 1 | 1 | \# | 2 | \# | 2 | 1 | 1 |
| Ohio | 1 | 1 | 1 | \# | \# | 1 | \# | 1 | \# | 1 |
| Oklahoma | 3 | \# | 3 | 2 | 1 | 3 | 1 | 3 | 1 | 1 |
| Oregon | 6 | \# | 6 | 4 | 2 | 6 | \# | 6 | 3 | 3 |
| Pennsylvania | 2 | \# | 2 | 1 | 1 | 2 | \# | 2 | \# | 2 |
| Rhode Island | 3 | 1 | 3 | 1 | 2 | 3 | \# | 3 | 1 | 2 |
| South Carolina | 3 | \# | 3 | 1 | 1 | 4 | \# | 4 | 2 | 3 |
| South Dakota | 2 | \# | 1 | 1 | \# | 2 | \# | 2 | 1 | 1 |
| Tennessee | 1 | \# | 1 | \# | 1 | 2 | \# | 1 | \# | 1 |
| Texas | 7 | 1 | 6 | 4 | 1 | 9 | 1 | 8 | 6 | 1 |
| Utah | 5 | \# | 4 | 3 | 2 | 5 | 1 | 4 | 2 | 2 |
| Vermont | 2 | \# | 1 | 1 | 1 | 1 | \# | 1 | 1 | 1 |
| Virginia | 4 | \# | 3 | 1 | 2 | 6 | 1 | 5 | 3 | 2 |
| Washington | 4 | \# | 3 | 2 | 2 | 5 | \# | 5 | 3 | 2 |
| West Virginia | \# | \# | \# | \# | \# | 1 | \# | 1 | \# | \# |
| Wisconsin | 4 | 1 | 3 | 1 | 2 | 5 | \# | 5 | 1 | 4 |
| Wyoming | 2 | \# | 2 | 1 | 1 | 2 | \# | 2 | 1 | 1 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 4 | 1 | 3 | 1 | 2 | 6 | 1 | 5 | 1 | 4 |
| DoDEA ${ }^{1}$ | 5 | 1 | 4 | 2 | 2 | 5 | 1 | 4 | 2 | 1 |
| Puerto Rico | - | - | - | - | - | \# | \# | \# | \# | \# |

[^11]Table A-28.
Percentage of eighth-grade public school students identified as English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19—Continued

|  | 2013 |  |  |  |  | 2015 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 6 | \# | 5 | 2 | 3 | 7 | \# | 6 | 3 | 3 |
| Alabama | 1 | \# | 1 | 1 | \# | 1 | \# | 1 | 1 | 1 |
| Alaska | 11 | \# | 11 | 2 | 9 | 12 | 1 | 11 | 4 | 7 |
| Arizona | 2 | \# | 1 | \# | 1 | 4 | \# | 4 | 1 | 2 |
| Arkansas | 7 | \# | 6 | 2 | 4 | 7 | \# | 7 | 3 | 4 |
| California | 13 | 1 | 12 | 9 | 3 | 15 | \# | 14 | 10 | 4 |
| Colorado | 8 | \# | 8 | 4 | 4 | 12 | \# | 11 | 8 | 4 |
| Connecticut | 4 | \# | 4 | \# | 3 | 4 | \# | 3 | 1 | 2 |
| Delaware | 2 | \# | 2 | \# | 1 | 3 | \# | 2 | 1 | 1 |
| Florida | 5 | 1 | 4 | \# | 4 | 7 | 1 | 6 | \# | 5 |
| Georgia | 2 | \# | 2 | \# | 2 | 3 | \# | 3 | 1 | 2 |
| Hawaii | 10 | 1 | 10 | 5 | 5 | 7 | 1 | 6 | 4 | 3 |
| Idaho | 3 | \# | 3 | 1 | 2 | 3 | \# | 3 | 1 | 2 |
| Illinois | 5 | \# | 4 | 1 | 3 | 5 | \# | 5 | 2 | 3 |
| Indiana | 4 | \# | 3 | 1 | 3 | 6 | \# | 5 | 2 | 3 |
| lowa | 3 | \# | 3 | \# | 2 | 4 | \# | 4 | 2 | 2 |
| Kansas | 8 | \# | 8 | 5 | 2 | 11 | \# | 10 | 9 | 2 |
| Kentucky | 2 | \# | 2 | \# | 1 | 1 | \# | 1 | \# | 1 |
| Louisiana | 1 | \# | 1 | \# | 1 | 1 | \# | 1 | \# | 1 |
| Maine | 2 | \# | 2 | \# | 1 | 3 | \# | 3 | 2 | \# |
| Maryland | 3 | 1 | 3 | \# | 2 | 4 | 1 | 3 | 1 | 2 |
| Massachusetts | 6 | 1 | 5 | 3 | 2 | 6 | \# | 5 | 3 | 3 |
| Michigan | 4 | 1 | 3 | 1 | 2 | 4 | \# | 3 | 2 | 1 |
| Minnesota | 6 | \# | 5 | 3 | 2 | 7 | \# | 6 | 5 | 2 |
| Mississippi | 1 | \# | 1 | 1 | \# | 1 | \# | 1 | 1 | \# |
| Missouri | 1 | \# | 1 | \# | 1 | 2 | \# | 2 | 1 | 1 |
| Montana | 2 | \# | 2 | 1 | 1 | 2 | \# | 2 | 1 | \# |
| Nebraska | 3 | \# | 2 | 1 | 2 | 3 | 1 | 2 | 1 | 1 |
| Nevada | 7 | \# | 7 | 2 | 5 | 15 | \# | 15 | 10 | 4 |
| New Hampshire | 2 | \# | 2 | \# | 2 | 2 | \# | 2 | \# | 1 |
| New Jersey | 2 | \# | 1 | \# | 1 | 2 | 1 | 2 | \# | 2 |
| New Mexico | 14 | \# | 13 | 7 | 6 | 14 | 1 | 13 | 8 | 5 |
| New York | 7 | \# | 6 | \# | 6 | 6 | \# | 6 | \# | 6 |
| North Carolina | 5 | \# | 4 | 2 | 3 | 5 | \# | 5 | 2 | 3 |
| North Dakota | 2 | \# | 2 | 1 | 1 | 2 | \# | 2 | 1 | 1 |
| Ohio | 2 | \# | 2 | \# | 1 | 3 | 1 | 3 | 1 | 2 |
| Oklahoma | 4 | \# | 4 | 2 | 2 | 5 | \# | 5 | 3 | 2 |
| Oregon | 4 | \# | 3 | 1 | 2 | 3 | 1 | 3 | 1 | 1 |
| Pennsylvania | 3 | \# | 3 | \# | 2 | 3 | 1 | 2 | 1 | 1 |
| Rhode Island | 5 | \# | 5 | 1 | 4 | 5 | 1 | 5 | 2 | 3 |
| South Carolina | 4 | \# | 3 | 2 | 1 | 5 | \# | 4 | 3 | 1 |
| South Dakota | 3 | \# | 2 | 1 | 1 | 3 | \# | 2 | 2 | 1 |
| Tennessee | 1 | \# | 1 | \# | 1 | 2 | \# | 2 | \# | 1 |
| Texas | 8 | 1 | 7 | 3 | 4 | 11 | 1 | 10 | 5 | 5 |
| Utah | 4 | \# | 4 | 1 | 3 | 4 | 1 | 3 |  | 2 |
| Vermont | 1 | \# | 1 | \# | 1 | 2 | \# | 2 | \# | 1 |
| Virginia | 5 | \# | 5 | 1 | 4 | 6 | 1 | 5 | 2 | 3 |
| Washington | 5 | \# | 5 | 2 | 3 | 7 | \# | 7 | 4 | 3 |
| West Virginia | 1 | \# | 1 | \# | \# | 1 | \# | 1 | \# | \# |
| Wisconsin | 5 | \# | 5 | 1 | 4 | 4 | \# | 4 | 2 | 2 |
| Wyoming | 2 | \# | 2 | \# | 2 | 3 | \# | 3 | 1 | 1 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 6 | 1 | 6 | 1 | 5 | 7 | 2 | 5 | 1 | 3 |
| DoDEA ${ }^{1}$ | 4 | \# | 3 | 2 | 2 | 5 | \# | 5 | 3 | 2 |
| Puerto Rico | \# | \# | \# | \# | \# | 1 | \# | \# | \# | \# |

See notes at end of table.

Table A-28.
Percentage of eighth-grade public school students identified as English language learners excluded and assessed in NAEP mathematics when accommodations were permitted, by state/jurisdiction: Various years, 2000-19-Continued

|  | 2017 |  |  |  |  | 2019 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State/jurisdiction | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| Nation (public) | 7 | 1 | 6 | 3 | 3 | 8 | 1 | 7 | 4 | 3 |
| Alabama | 2 | \# | 2 | 1 | \# | 1 | \# | 1 | 1 | \# |
| Alaska | 12 | 1 | 11 | 6 | 6 | 12 | \# | 12 | 5 | 6 |
| Arizona | 4 | \# | 4 | 1 | 3 | 6 | \# | 6 | 3 | 3 |
| Arkansas | 9 | 1 | 8 | 4 | 4 | 6 | \# | 6 | 2 | 4 |
| California | 15 | 1 | 13 | 10 | 3 | 15 | 1 | 14 | 11 | 4 |
| Colorado | 10 | 1 | 9 | 7 | 3 | 8 | \# | 8 | 5 | 3 |
| Connecticut | 5 | 1 | 4 | 1 | 2 | 5 | 1 | 4 | 2 | 2 |
| Delaware | 3 | 1 | 3 | 1 | 2 | 5 | \# | 4 | 2 | 2 |
| Florida | 7 | 1 | 6 | 1 | 5 | 7 | 1 | 7 | \# | 6 |
| Georgia | 3 | \# | 2 | \# | 2 | 3 | \# | 3 | 1 | 2 |
| Hawaii | 6 | 1 | 5 | 3 | 2 | 6 | 1 | 5 | 4 | 1 |
| Idaho | 4 | 1 | 3 | 2 | 1 | 4 | \# | 4 | 2 | 2 |
| Illinois | 5 | 1 | 5 | 2 | 3 | 7 | \# | 6 | 2 | 4 |
| Indiana | 5 | \# | 5 | 2 | 3 | 5 | \# | 5 | 2 | 3 |
| lowa | 4 | \# | 3 | 1 | 2 | 5 | \# | 5 | 1 | 4 |
| Kansas | 12 | \# | 11 | 10 | 1 | 9 | \# | 8 | 7 | 2 |
| Kentucky | 2 | \# | 2 | \# | 1 | 3 | \# | 2 | \# | 2 |
| Louisiana | 2 | \# | 2 | \# | 2 | 3 | \# | 3 | 1 | 2 |
| Maine | 2 | 1 | 2 | 1 | 1 | 3 | \# | 3 | 2 | 1 |
| Maryland | 5 | 1 | 4 | 1 | 4 | 6 | 1 | 6 | 1 | 5 |
| Massachusetts | 7 | 1 | 6 | 3 | 4 | 7 | 1 | 6 | 3 | 3 |
| Michigan | 7 | 1 | 6 | 4 | 1 | 6 | \# | 6 | 3 | 3 |
| Minnesota | 7 | 1 | 6 | 5 | 1 | 6 | \# | 6 | 4 | 2 |
| Mississippi | 2 | \# | 1 | 1 | 1 | 2 | \# | 2 | 1 | 1 |
| Missouri | 2 | \# | 2 | 1 | 1 | 2 | \# | 2 | 1 | 1 |
| Montana | 2 | \# | 2 | 1 | 1 | 2 | \# | 2 | 1 | 1 |
| Nebraska | 3 | 1 | 3 | 1 | 1 | 4 | \# | 3 | 1 | 2 |
| Nevada | 14 | 1 | 13 | 10 | 3 | 14 | 1 | 13 | 10 | 3 |
| New Hampshire | 2 | \# | 2 | 1 | 1 | 3 | \# | 3 | 1 | 2 |
| New Jersey | 3 | 1 | 2 | \# | 2 | 5 | 1 | 4 | \# | 4 |
| New Mexico | 12 | 1 | 12 | 5 | 7 | 12 | 1 | 12 | 6 | 6 |
| New York | 7 | 1 | 6 | 1 | 5 | 7 | 1 | 6 | 1 | 5 |
| North Carolina | 4 | 1 | 3 | 2 | 2 | 4 | \# | 4 | 2 | 2 |
| North Dakota | 3 | \# | 2 | 1 | 1 | 2 | \# | 2 | 1 | 1 |
| Ohio | 3 | \# | 2 | 1 | 2 | 2 | \# | 2 | \# | 2 |
| Oklahoma | 5 | \# | 5 | 3 | 2 | 6 | 1 | 6 | 3 | 3 |
| Oregon | 5 | \# | 5 | 2 | 3 | 7 | \# | 6 | 4 | 2 |
| Pennsylvania | 3 | \# | 3 | 1 | 2 | 4 | \# | 4 | 1 | 2 |
| Rhode Island | 6 | 1 | 5 | 1 | 4 | 8 | 1 | 7 | 3 | 4 |
| South Carolina | 7 | \# | 7 | 6 | 1 | 7 | \# | 7 | 6 | 1 |
| South Dakota | 3 | 1 | 2 | 2 | \# | 3 | \# | 3 | 2 | 1 |
| Tennessee | 3 | \# | 2 | 1 | 2 | 3 | \# | 3 | 1 | 2 |
| Texas | 12 | \# | 11 | 7 | 4 | 15 | \# | 15 | 11 | 4 |
| Utah | 5 | \# | 5 | 2 | 3 | 6 | \# | 5 | 3 | 2 |
| Vermont | 1 | \# | 1 | 1 | 1 | 1 | \# | 1 | \# | 1 |
| Virginia | 6 | 1 | 5 | 2 | 3 | 5 | 1 | 5 | 2 | 3 |
| Washington | 6 | \# | 6 | 3 | 2 | 9 | 1 | 8 | 6 | 3 |
| West Virginia | 1 | \# | 1 | 1 | \# | \# | \# | \# | \# | \# |
| Wisconsin | 5 | \# | 5 | 2 | 3 | 5 | \# | 5 | 2 | 3 |
| Wyoming | 2 | \# | 2 | 1 | 1 | 2 | \# | 2 | 1 | 1 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 8 | 1 | 6 | 1 | 5 | 7 | 1 | 6 | 1 | 6 |
| DoDEA ${ }^{1}$ | 5 | 1 | 4 | 2 | 2 | 6 | \# | 5 | 3 | 3 |
| Puerto Rico | \# | \# | \# | \# | \# | - | - | - | - | - |

## -Not avalable.

\# Rounds to zero.
${ }^{1}$ Department of Defense Education Activity (overseas and domestic schools),
NOTE: Beginning with the 2017 assessment, NAEP mathematics results are from a digitally based assessment; prior to 2017, results were from a paper-and-pencil based assessment. Detail may not sum to totals because of rounding. In Puerto Rico, the English language learner (ELL) category is for the Spanish language learner (SLL).
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000-19 Mathematics Assessments

Table A-29.
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 identified SD and/or ELL students, by state/jurisdiction: 2019

|  | Percentage of identified SD and/or ELL students |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SD and/or ELL |  |  |  | SD |  |  |  | ELL |  |  |  |
| State/jurisdiction | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Excluded | Assessed | Assessed without accom-modations | Assessed with accommodations | Excluded | Assessed | Assessed without accommodations | $\begin{array}{r} \text { Assessed } \\ \text { with } \\ \text { accom- } \\ \text { modations } \end{array}$ |
| Nation (public) | 7 | 93 | 37 | 56 | 10 | 90 | 21 | 3 |  | 95 | 52 | 43 |
| Alabama | 8 | 92 | 47 | 45 | 7 | 93 | 40 | 6 | 9 | 91 | 65 | 26 |
| Alaska | 2 | 98 | 41 | 56 | 2 | 98 | 25 | 4 | 2 | 98 | 56 | 42 |
| Arizona | 5 | 95 | 35 | 60 | 7 | 93 | 27 | 4 | 1 | 99 | 47 | 51 |
| Arkansas | 5 | 95 | 20 | 75 | 6 | 94 | 15 | 3 |  | 97 | 29 | 67 |
| California | 8 | 92 | 68 | 24 | 16 | 84 | 36 | 5 | 6 | 94 | 77 | 17 |
| Colorado | 5 | 95 | 51 | 44 | 6 | 94 | 31 | 4 | 5 | 95 | 66 | 29 |
| Connecticut | 7 | 93 | 26 | 67 | 7 | 93 | 18 | 3 | 7 | 93 | 38 | 55 |
| Delaware | 5 | 95 | 38 | 57 | 6 | 94 | 15 | 3 | 4 | 96 | 61 | 35 |
| Florida | 8 | 92 | 10 | 82 | 8 | 92 | 12 | 2 |  | 93 | 6 | 87 |
| Georgia | 6 | 94 | 30 | 64 | 9 | 91 | 17 | 2 | 4 | 96 | 45 | 52 |
| Hawaii | 8 | 92 | 60 | 32 | 10 | 90 | 37 | 4 | 6 | 94 | 76 | 17 |
| Idaho | 7 | 93 | 46 | 47 | 10 | 90 | 26 | 3 | 2 | 98 | 70 | 28 |
| Illinois | 3 | 97 | 42 | 55 | 4 | 96 | 19 | 3 | 2 | 98 | 57 | 41 |
| Indiana | 5 | 95 | 19 | 75 | 8 | 92 | 18 | 3 | 4 | 96 | 19 | 77 |
| lowa | 7 | 93 | 16 | 77 | 8 | 92 | 10 | 1 | 7 | 93 | 28 | 65 |
| Kansas | 6 | 94 | 51 | 43 | 8 | 92 | 28 | 4 | 3 | 97 | 77 | 20 |
| Kentucky | 8 | 92 | 24 | 68 | 9 | 91 | 24 | 4 | 9 | 91 | 22 | 69 |
| Louisiana | 8 | 92 | 10 | 81 | 9 | 91 | 11 | 2 | 5 | 95 | 8 | 87 |
| Maine | 4 | 96 | 19 | 77 | 4 | 96 | 12 | 2 | 4 | 96 | 51 | 45 |
| Maryland | 6 | 94 | 22 | 72 | 6 | 94 | 10 | 2 | 4 | 96 | 32 | 63 |
| Massachusetts | 8 | 92 | 30 | 62 | 8 | 92 | 12 | 2 | 8 | 92 | 53 | 39 |
| Michigan | 8 | 92 | 43 | 50 | 13 | 87 | 27 | 3 | 3 | 97 | 59 | 38 |
| Minnesota | 7 | 93 | 59 | 34 | 10 | 90 | 39 | 6 | 2 | 98 | 80 | 18 |
| Misssissippi | 6 | 94 | 30 | 65 | 6 | 94 | 26 | 4 | 5 | 95 | 44 | 51 |
| Missouri | 6 | 94 | 36 | 58 | 6 | 94 | 26 | 4 | 5 | 95 | 58 | 37 |
| Montana | 7 | 93 | 43 | 50 | 8 | 92 | 35 | 5 | 4 | 96 | 79 | 17 |
| Nebraska | 5 | 95 | 30 | 64 | 6 | 94 | 26 | 5 | 4 | 96 | 38 | 58 |
| Nevada | 6 | 94 | 63 | 31 | 12 | 88 | 44 | 5 | 3 | 97 | 72 | 24 |
| New Hampshire | 6 | 94 | 28 | 67 | 6 | 94 | 17 | 3 | 5 | 95 | 65 | 29 |
| New Jersey | 7 | 93 | 7 | 86 | 7 | 93 | 8 | 1 | 6 | 94 | 6 | 87 |
| New Mexico | 4 | 96 | 42 | 53 | 8 | 92 | 26 | 4 | 2 | 98 | 50 | 47 |
| New York | 11 | 89 | 13 | 76 | 13 | 87 | 11 | 2 | 10 | 90 | 16 | 74 |
| North Carolina | 6 | 94 | 36 | 58 | 10 | 90 | 16 | 2 | 3 | 97 | 57 | 40 |
| North Dakota | 8 | 92 | 31 | 60 | 9 | 91 | 25 | 4 | 6 | 94 | 54 | 40 |
| Ohio | 13 | 87 | 12 | 75 | 14 | 86 | 10 | 2 | 12 | 88 | 23 | 65 |
| Oklahoma | 7 | 93 | 37 | 56 | 10 | 90 | 25 | 5 | 4 | 96 | 53 | 42 |
| Oregon | 5 | 95 | 55 | 39 | 7 | 93 | 46 | 7 | 4 | 96 | 63 | 33 |
| Pennsylvania | 11 | 89 | 26 | 63 | 12 | 88 | 21 | 4 | 7 | 93 | 40 | 53 |
| Rhode Island | 7 | 93 | 25 | 69 | 6 | 94 | 8 | 1 | 7 | 93 | 41 | 53 |
| South Carolina | 5 | 95 | 42 | 53 | 5 | 95 | 32 | 5 | 6 | 94 | 67 | 27 |
| South Dakota | 5 | 95 | 51 | 45 | 5 | 95 | 47 | 8 | 4 | 96 | 59 | 37 |
| Tennessee | 10 | 90 | 25 | 65 | 10 | 90 | 32 | 5 | 8 | 92 | 11 | 81 |
| Texas | 7 | 93 | 34 | 59 | 14 | 86 | 10 | 2 | 3 | 97 | 47 | 50 |
| Utah | 7 | 93 | 57 | 35 | 9 | 91 | 42 | 6 | 5 | 95 | 73 | 21 |
| Vermont | 5 | 95 | 26 | 69 | 5 | 95 | 23 | 5 | 7 | 93 | 45 | 47 |
| Virginia | 5 | 95 | 36 | 59 | 7 | 93 | 21 | 3 | 4 | 96 | 52 | 45 |
| Washington | 10 | 90 | 48 | 42 | 16 | 84 | 31 | 4 | 6 | 94 | 62 | 32 |
| West Virginia | 5 | 95 | 44 | 51 | 5 | 95 | 43 | 9 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Wisconsin | 6 | 94 | 35 | 59 | 8 | 92 | 26 | 4 | 2 | 98 | 47 | 50 |
| Wyoming | 5 | 95 | 25 | 71 | 5 | 95 | 17 | 3 | 4 | 96 | 55 | 41 |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 6 | 94 | 10 | 85 | 6 | 94 | 4 | 1 | 5 | 95 | 16 | 79 |
| DoDEA ${ }^{1}$ | 7 | 93 | 32 | 61 | 6 | 94 | 22 | 3 | 8 | 92 | 41 | 51 |
| Puerto Rico | - | - | - | - | - | - | - | - | - | - | - | - |

- Not available.
$\ddagger$ Reporting standards not met.
${ }^{1}$ Department of Defense Education Activity (overseas and domestic schools).


 (SLL).
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 Mathematics Assessment.

Table A-30.
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 identified SD and/or ELL students, by state/jurisdiction: 2019

|  | Percentage of identified SD and/or ELL students |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SD and/or ELL |  |  |  | SD |  |  |  | ELL |  |  |  |
| State/jurisdiction | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations | Excluded | Assessed | Assessed without accom-modations | Assessed with accommodations | Excluded | Assessed | $\begin{array}{r} \text { Assessed } \\ \text { without } \\ \text { accom- } \\ \text { modations } \end{array}$ | $\begin{array}{r} \text { Assessed } \\ \text { with } \\ \text { accom- } \\ \text { modations } \end{array}$ |
| Nation (public) | 8 | 92 | 29 | 64 | 8 | 92 | 15 | 77 | 7 | 93 | 52 | 42 |
| Alabama | 10 | 90 | 41 | 48 | 10 | 90 | 38 | 52 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Alaska | 5 | 95 | 31 | 64 | 7 | 93 | 16 | 78 | 4 | 96 | 44 | 52 |
| Arizona | 9 | 91 | 28 | 63 | 10 | 90 | 22 | 68 | 8 | 92 | 39 | 54 |
| Arkansas | 9 | 91 | 16 | 76 | 10 | 90 | 10 | 79 | 5 | 95 | 28 | 68 |
| California | 7 | 93 | 53 | 41 | 9 | 91 | 22 | 70 | 6 | 94 | 69 | 25 |
| Colorado | 6 | 94 | 38 | 56 | 7 | 93 | 20 | 73 | 5 | 95 | 59 | 36 |
| Connecticut | 9 | 91 | 25 | 66 | 8 | 92 | 22 | 70 | 14 | 86 | 35 | 51 |
| Delaware | 9 | 91 | 25 | 67 | 8 | 92 | 20 | 72 | 9 | 91 | 42 | 49 |
| Florida | 8 | 92 | 7 | 85 | 8 | 92 | 8 | 84 | 9 | 91 | 4 | 87 |
| Georgia | 10 | 90 | 12 | 79 | 11 | 89 | 8 | 81 | 4 | 96 | 29 | 67 |
| Hawaii | 14 | 86 | 54 | 32 | 13 | 87 | 44 | 43 | 17 | 83 | 69 | 15 |
| Idaho | 8 | 92 | 26 | 65 | 9 | 91 | 17 | 73 | 4 | 96 | 50 | 46 |
| Illinois | 5 | 95 | 18 | 77 | 5 | 95 | 8 | 87 | 5 | 95 | 35 | 60 |
| Indiana | 8 | 92 | 16 | 76 | 8 | 92 | 8 | 83 | 7 | 93 | 39 | 54 |
| Iowa | 6 | 94 | 14 | 80 | 7 | 93 | 8 | 85 | 3 | 97 | 27 | 70 |
| Kansas | 6 | 94 | 46 | 48 | 7 | 93 | 24 | 68 | 5 | 95 | 77 | 18 |
| Kentucky | 11 | 89 | 8 | 81 | 11 | 89 | 7 | 83 | 13 | 87 | 12 | 75 |
| Louisiana | 11 | 89 | 7 | 83 | 11 | 89 | 4 | 85 | 11 | 89 | 21 | 68 |
| Maine | 5 | 95 | 18 | 77 | 5 | 95 | 12 | 82 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Maryland | 9 | 91 | 5 | 86 | 8 | 92 | 3 | 89 | 8 | 92 | 9 | 83 |
| Massachusetts | 10 | 90 | 23 | 67 | 8 | 92 | 15 | 77 | 16 | 84 | 43 | 40 |
| Michigan | 13 | 87 | 29 | 58 | 16 | 84 | 18 | 65 | 5 | 95 | 53 | 42 |
| Minnesota | 10 | 90 | 46 | 45 | 12 | 88 | 38 | 50 | 7 | 93 | 64 | 29 |
| Mississippi | 8 | 92 | 21 | 70 | 8 | 92 | 14 | 78 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Missouri | 5 | 95 | 23 | 72 | 5 | 95 | 19 | 76 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Montana | 6 | 94 | 27 | 67 | 6 | 94 | 22 | 71 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Nebraska | 7 | 93 | 22 | 72 | 7 | 93 | 17 | 76 | 6 | 94 | 38 | 56 |
| Nevada | 5 | 95 | 58 | 36 | 7 | 93 | 41 | 52 | 5 | 95 | 70 | 25 |
| New Hampshire | 5 | 95 | 28 | 67 | 5 | 95 | 26 | 70 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| New Jersey | 8 | 92 | 7 | 84 | 5 | 95 | 8 | 87 | 19 | 81 | 6 | 76 |
| New Mexico | 7 | 93 | 37 | 56 | 9 | 91 | 24 | 68 | 6 | 94 | 50 | 45 |
| New York | 6 | 94 | 6 | 88 | 5 | 95 | 3 | 92 | 10 | 90 | 15 | 74 |
| North Carolina | 8 | 92 | 23 | 69 | 7 | 93 | 18 | 75 | 10 | 90 | 38 | 52 |
| North Dakota | 8 | 92 | 23 | 69 | 8 | 92 | 20 | 72 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Ohio | 8 | 92 | 6 | 86 | 9 | 91 | 4 | 87 | 5 | 95 | 19 | 76 |
| Oklahoma | 11 | 89 | 27 | 62 | 12 | 88 | 20 | 68 | 9 | 91 | 43 | 48 |
| Oregon | 8 | 92 | 39 | 53 | 8 | 92 | 29 | 63 | 7 | 93 | 60 | 33 |
| Pennsylvania | 7 | 93 | 23 | 70 | 7 | 93 | 19 | 74 | 5 | 95 | 36 | 58 |
| Rhode Island | 6 | 94 | 24 | 70 | 5 | 95 | 13 | 83 | 9 | 91 | 41 | 50 |
| South Carolina | 7 | 93 | 47 | 46 | 8 | 92 | 30 | 62 | 3 | 97 | 77 | 20 |
| South Dakota | 9 | 91 | 49 | 43 | 10 | 90 | 46 | 44 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Tennessee | 12 | 88 | 17 | 72 | 11 | 89 | 15 | 74 | 14 | 86 | 22 | 64 |
| Texas | 6 | 94 | 45 | 49 | 8 | 92 | 12 | 80 | 3 | 97 | 70 | 27 |
| Utah | 5 | 95 | 32 | 63 | 5 | 95 | 20 | 75 | 5 | 95 | 58 | 37 |
| Vermont | 7 | 93 | 20 | 73 | 7 | 93 | 19 | 74 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Virginia | 12 | 88 | 22 | 66 | 13 | 87 | 17 | 71 | 12 | 88 | 36 | 52 |
| Washington | 8 | 92 | 40 | 51 | 8 | 92 | 24 | 68 | 10 | 90 | 62 | 28 |
| West Virginia | 7 | 93 | 29 | 64 | 7 | 93 | 28 | 65 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Wisconsin | 7 | 93 | 20 | 72 | 7 | 93 | 10 | 83 | 8 | 92 | 43 | 49 |
| Wyoming | 10 | 90 | 15 | 74 | 11 | 89 | 10 | 80 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Other jurisdictions |  |  |  |  |  |  |  |  |  |  |  |  |
| District of Columbia | 6 | 94 | 7 | 86 | 5 | 95 | 6 | 88 | 11 | 89 | 10 | 78 |
| DoDEA ${ }^{1}$ | 8 | 92 | 24 | 68 | 8 | 92 | 12 | 80 | 7 | 93 | 46 | 47 |
| Puerto Rico | - | - | - | - | - | - | - | - | - | - | - | - |

- Not available.
$\ddagger$ Reporting standards not met.
${ }^{1}$ Department of Defense Education Activity (overseas and domestic schools).


 (SLL).
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2019 Mathematics Assessment.

Table A-31.
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, by SD/ELL category and urban district/jurisdiction: Various years, 2003-19

| SD/ELL category and urban district/jurisdiction | 2003 |  |  |  |  | 2005 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| SD and/or ELL |  |  |  |  |  |  |  |  |  |  |
| Nation (public) | 22 | 4 | 18 | 10 | 8 | 23 | 3 | 20 | 10 | 10 |
| Large city ${ }^{1}$ (public) | 31 | 5 | 25 | 17 | 9 | 32 | 4 | 28 | 17 | 11 |
| Albuquerque | - | - | - | - | - | - | - | - | - | - |
| Atlanta | 9 | 1 | 8 | 4 | 4 | 11 | 1 | 9 | 3 | 6 |
| Austin | - | - | - | - | - | 37 | 10 | 27 | 12 | 14 |
| Baltimore City | - | - | - | - | - | - | - | - | - | - |
| Boston | 33 | 5 | 28 | 11 | 17 | 33 | 6 | 27 | 11 | 15 |
| Charlotte | 21 | 4 | 17 | 5 | 12 | 22 | 3 | 19 | 7 | 12 |
| Chicago | 31 | 8 | 23 | 16 | 7 | 29 | 4 | 25 | 15 | 9 |
| Clark County (NV) | - | - | - | - | - | - | - | - | - | - |
| Cleveland | 15 | 7 | 8 | 3 | 5 | 17 | 6 | 12 | 2 | 9 |
| Dallas | - | - | - | - | - | - | - | - | - | - |
| Denver | - | - | - | - | - | - | - | - | - | - |
| Detroit | - | - | - | - | - | - | - | - | - | - |
| District of Columbia (DCPS) | 18 | 4 | 14 | 4 | 10 | 20 | 6 | 14 | 4 | 10 |
| Duval County (FL) | - | - | - | - | - | - | - | - | - | - |
| Fort Worth | - | - | - | - | - | - | - | - | - | - |
| Fresno | - | - | - | - | - | - | - | - | - | - |
| Guilford County (NC) | - | - | - | - | - | - | - | - | - | - |
| Hillsborough County (FL) | - | - | - | - | - | - | - | - | - | - |
| Houston | 45 | 8 | 37 | 19 | 18 | 46 | 7 | 38 | 17 | 21 |
| Jefferson County (KY) | - | - | - | - | - | - | - | - | - | - |
| Los Angeles | 60 | 3 | 56 | 48 | 8 | 59 | 5 | 54 | 47 | 7 |
| Miami-Dade | - | - | - | - | - | - | - | - | - | - |
| Milwaukee | - | - | - | - | - | - | - | - | - | - |
| New York City | 22 | 6 | 16 | 4 | 12 | 24 | 4 | 19 | 2 | 17 |
| Philadelphia | - | - | - | - | - | - | - | - | - | - |
| San Diego | 41 | 2 | 38 | 34 | 4 | 43 | 4 | 39 | 33 | 6 |
| Shelby County (TN) | - | - | - | - | - | - | - | - | - | - |
| SD |  |  |  |  |  |  |  |  |  |  |
| Nation (public) | 14 | ${ }^{3}$ | 11 | 4 | 7 | 14 | 3 | 11 | 4 | 8 |
| Large city ${ }^{1}$ (public) | 13 | 3 | 9 | 4 | 6 | 13 | 3 | 10 | 3 | 7 |
| Albuquerque | - | - | - | - | - | - | - | - | - | - |
| Atlanta | 8 | 1 | 7 | 3 | 4 | 9 | 1 | 8 | 2 | 6 |
| Austin | - | - | - |  | - | 15 | 7 | 8 | 2 | 6 |
| Batimore City | - | - | - | - | - | - | - | - | - | - |
| Boston | 20 | 3 | 16 | 4 | 12 | 22 | 5 | 17 | 3 | 14 |
| Charotte | 17 | 3 | 14 | 3 | 10 | 13 | 2 | 11 | 3 | 8 |
| Chicago | 15 | 5 | 10 | 4 | 6 | 13 | 4 | 10 | ${ }^{3}$ | 7 |
| Clark County (NV) | - | - | - | - | - | - | - | - | - | - |
| Cleveland | 12 | 5 | 6 | 2 | 5 | 13 | 5 | 8 | 1 | 8 |
| Dallas | - | - | - | - | - | - | - | - | - | - |
| Denver | - | - | - | - | - | - | - | - | - | - |
| Detroit | - | - | - | - | - | - | - | - | - | - |
| District of Columbia (DCPS) | 13 | 4 | 10 | 2 | 7 | 16 | 5 | 11 | 2 | 8 |
| Duval County (FL) | - | - | - | - | - | - | - | - | - | - |
| Fort Worth | - | - | - | - | - | - | - | - | - | - |
| Fresno | - | - | - | - | - | - | - | - | - | - |
| Guilford County (NC) | - | - | - | - | - | - | - | - | - | - |
| Hillsborough County (FL) | - | - | - | - | - | - | - | - | - | - |
| Houston | 18 | 7 | 11 | 8 | 3 | 12 | 5 | 7 | 3 | 4 |
| Jefferson County (KY) | - | - | - | - | - | - | - | - | - | - |
| Los Angeles | 11 | 2 | 9 | 5 | 4 | 11 | 3 | 8 | 3 | 5 |
| Miami-Dade | - | - | - | - | - | - | - | - | - | - |
| Milwaukee | - | - | - | - | - | - | - | - | - | - |
| New York City | 12 | 1 | 12 | 1 | 10 | 14 | 2 | 11 | 1 | 11 |
| Philadelphia | - | - | - | - | - | - | - | - | - | - |
| San Diego | 11 | 1 | 10 | 7 | 3 | 11 | 2 | 9 | 4 | 4 |
| Shelby County (TN) | - | - | - | - | - | - | - | - | - | - |
| ELL |  |  |  |  |  |  |  |  |  |  |
| Nation (public) | 11 | 1 | 9 | 7 | 2 | 10 | 1 | 9 | 7 | 3 |
| Large city ${ }^{1}$ (public) | 21 | 3 | 18 | 14 | 4 | 21 | 2 | 19 | 14 | 5 |
| Albuquerque | - | - | - | - | - | - | - | - | - | - |
| Atlanta | 2 | \# | 2 | 1 | \# | 2 | \# | 2 | 1 | 1 |
| Austin | - | - | - | - | - | 25 | 5 | 20 | 11 | 9 |
| Batimore City | - | - | - | - | - | - | - | - | - | - |
| Boston | 18 | 3 | 15 | 8 | 7 | 15 | 3 | 12 | 9 | 3 |
| Charlotte | 8 | 2 | 6 | 2 | 4 | 10 | 1 | 8 | 4 | 4 |
| Chicago | 20 | 5 | 15 | 13 | 2 | 18 | 2 | 16 | 12 | 4 |
| Clark County (NV) | - | - | - | - | - | - | - | - | - | - |
| Cleveland | 4 | 1 | 2 | 1 | 1 | 4 | 1 | 3 | 2 | 2 |
| Dallas | - | - | - | - | - | - | - | - | - | - |
| Denver | - | - | - | - | - | - | - | - | - | - |
| Detroit | - | - | - | - | - | - | - | - | - | - |
| District of Columbia (DCPS) | 7 | 1 | 5 | 2 | 3 | 5 | 1 | 4 | 1 | 2 |
| Duval County (FL) | - | - | - | - | - | - | - | - | - | - |
| Fort Worth | - | - | - | - | - | - | - | - | - | - |
| Fresno | - | - | - | - | - | - | - | - | - | - |
| Guilford County (NC) | - | - | - | - | - | - | - | - | - | - |
| Hillsborough County (FL) | - | - | - | - | - | - | - | - | - | - |
| Houston | 35 | 4 | 31 | 14 | 17 | 37 | 4 | 33 | 15 | 18 |
| Jefferson County (KY) | - | - | - | - | - | - | - | - | - | - |
| Los Angeles | ${ }_{56}$ | 2 | 53 | 47 | 6 | 54 | 4 | 50 | 45 | 5 |
| Miami-Dade | - | - | - | - | - | - | - | - | - | - |
| Milwaukee | - | - | - | - | - | - | - | - | - | - |
| New York City | 13 | 6 | 7 | 3 | 4 | 12 | 3 | 9 | 1 | 8 |
| Philadelphia | - | - | - | - | - | - | - | - | - | - |
| San Diego | 34 | 2 | 32 | 30 | 2 | 36 | 3 | 33 | 30 | 3 |
| Shelby County (TN) | - | - | - | - | - | - | - | - | - | - |

Table A-31.
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, by SD/ELL category and urban district/jurisdiction: Various years, 2003-19—Continued

| SD/ELL category and urban district/jurisdiction | 2007 |  |  |  |  | 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| SD and/or ELL |  |  |  |  |  |  |  |  |  |  |
| Nation (public) | 23 | 3 | 20 | 10 | 10 | 23 | 2 | 20 | 9 | 11 |
| Large city ${ }^{1}$ (public) | 33 |  | 29 | 17 | 12 | 31 | 3 | 28 | 14 | 14 |
| Albuquerque | - | - | - | - | - | - | - | - | - | - |
| Atlanta | 12 | 2 | 11 | 4 | 7 | 12 | 1 | 11 | 4 | 7 |
| Austin | 40 | 5 | 34 | 17 | 18 | 44 | 5 | 39 | 20 | 19 |
| Batimore City | - | - | - | - | - | 19 | 9 | 11 | 1 | 9 |
| Boston | 47 | 5 | 42 | 25 | 17 | 35 | 6 | 30 | 13 | 16 |
| Charlotte | 22 | 3 | 19 | 7 | 12 | 19 | , | 17 | 4 | 13 |
| Chicago | 32 | 5 | 26 | 17 | 10 | 24 | 4 | 20 | 7 | 13 |
| Clark County (NV) | - | - | - | - | - | - | - | - | - | - |
| Cleveland | 23 | 13 | 10 | 1 | 8 | 25 | 10 | 15 | 2 | 13 |
| Dallas | - | - |  | - | - | - | - | - | - | - |
| Denver | - | - | - | - | - | - | - | - | - | - |
| Detroit | - | - | - | - | - | 20 | 3 | 17 | 7 | 10 |
| District of Columbia (DCPS) | 20 | 6 | 14 | 2 | 13 | 21 | 5 | 17 | 3 | 14 |
| Duval County (FL) | - | - | - | - | - | - | - | - | - | - |
| Fort Worth | - | - | - | - | - | - | - | - | - | - |
| Fresno | - | - | - | - | - | 38 | 3 | 34 | 29 | 5 |
| Guilford County (NC) | - | - | - | - | - | - | - | - | - | - |
| Hillsborough County (FL) | - | - | - | - | - | - | - | - | - | - |
| Houston | 45 | 4 | 41 | 23 | 18 | 43 | 3 | 40 | 22 | 17 |
| Jefferson County (KY) | - | - | - | - | - | 19 | 3 | 15 | 5 | 10 |
| Los Angeles | 53 | 1 | 51 | 44 | 8 | 46 | 1 | 44 | 37 | 7 |
| Miami-Dade | - | - | - | - | - | 21 | 3 | 18 | 2 | 16 |
| Milwaukee | - | - | - | - | - | 30 | 7 | 23 | 2 | 20 |
| New York City | 29 | 2 | 27 | 2 | 25 | 31 | 2 | 29 | 1 | 28 |
| Philadelphia | - | - | - | - | - | 22 | 4 | 18 | 2 | 15 |
| San Diego | 46 | 3 | 43 | 36 | 7 | 43 | 3 | 40 | 32 | 7 |
| Shelby County (TN) | - | - | - | - | - | - | - | - | - | - |
| SD |  |  |  |  |  |  |  |  |  |  |
| Nation (public) | 14 | 3 | 11 | 3 | 8 | 13 | 2 | 11 | 3 | 8 |
| Large city ${ }^{1}$ (public) | 13 | , | 10 | 3 | 7 | 13 | 2 | 11 | 2 | 9 |
| Albuquerque | - | - | - | - | - | - | - | - | - | - |
| Atlanta | 10 | 2 | 8 | 4 | 5 | 10 | 1 | 9 | 3 | 6 |
| Austin | 13 | 4 | 9 | 2 | 7 | 16 | 4 | 12 | 2 | 10 |
| Batimore City | - | , | - |  | - | 17 | 8 | 9 | 1 | 8 |
| Boston | 22 | 4 | 18 | 3 | 15 | 22 | 5 | 17 | 3 | 15 |
| Charlotte | 12 | 2 | 10 | 2 | 8 | 12 | 2 | 11 | 2 | 9 |
| Chicago | 14 | 4 | 10 | 4 | 6 | 14 | 3 | 12 | 3 | 8 |
| Clark County (NV) | - | - | - | - | - | - | - | - | - | - |
| Cleveland | 17 | 13 | 5 | \# | 4 | 20 | 10 | 10 | \# | 10 |
| Dallas | - | - | - | - | - | - | - | - | - | - |
| Denver | - | - | - | - | - | - | - | - | - | - |
| Detroit | - | - | - | - | - | 15 | 3 | 12 | 3 | 8 |
| District of Columbia (DCPS) | 14 | 5 | 9 | 1 | 8 | 15 | 4 | 10 | 2 | 9 |
| Duval County (FL) | - | - | - | - | - | - | - | - | - | - |
| Fort Worth | - | - | - | - | - | - | - | - | - | - |
| Fresno | - | - | - | - | - | 11 | 3 | 7 | 3 | 5 |
| Guilford County (NC) | - | - | - | - | - | - | - | - | - | - |
| Hillsborough County (FL) | - | - | - | - | - | - | - | - | - | - |
| Houston | 10 | 3 | 7 | 2 | 4 | 7 | 2 | 5 | 1 | 4 |
| Jefferson County (KY) | - | - | - | - | - | 15 |  | 13 | 5 | 8 |
| Los Angeles | 11 | 1 | 9 | 4 | 5 | 10 | 1 | 9 | 3 | 7 |
| Miami-Dade | - | - | - | - | - | 13 | 2 | 11 | 1 | 10 |
| Milwaukee | - | - | - | - | - | 19 | 6 | 13 | 1 | 12 |
| New York City | 16 | 1 | 15 | 1 | 14 | 19 | 1 | 18 | 1 | 17 |
| Philadelphia | - | - | - | - | - | 15 | 4 | 11 | 2 | 9 |
| San Diego | 12 | 2 | 9 | 4 | 5 | 13 | 3 | 10 | 4 | 6 |
| Shelby County (TN) | - | - | - | - | - | - | - | - | - | - |
| ELL |  |  |  |  |  |  |  |  |  |  |
| Nation (public) | 11 | 1 | 10 | 7 | 3 | 10 | 1 | 10 | 6 | 4 |
| Large city ${ }^{1}$ (public) | 22 | , | 21 | 14 | 6 | 20 | 1 | 19 | 12 | 7 |
| Albuquerque | - | - | - | - | - | - | - | - | - | - |
| Atlanta | 3 | \# | 2 | \# | 2 | 2 | \# | 2 | \# | 2 |
| Austin | 29 | 2 | 27 | 15 | 12 | 32 | 2 | 30 | 18 | 12 |
| Batimore City | - | - | - | - | - | 2 | \# | 2 | \# | 2 |
| Boston | 31 | 2 | 28 | 22 | 6 | 18 | 2 | 16 | 11 | 4 |
| Chariotte | 11 | , | 10 | 5 | 5 | 8 | , | 7 | 2 | 5 |
| Chicago | 20 | 2 | 18 | 13 | 5 | 12 | 2 | 10 | 4 | 6 |
| Clark County (NV) | - | - | - | - | - | - | - | - | - | - |
| Cleveland | 7 | 1 | 5 | 1 | 4 | 7 | 2 | 5 | 1 | 4 |
| Dallas | - | - | - | - | - | - | - | - | - | - |
| Denver | - | - | - | - | - | - | - | - | - | - |
| Detroit | - | - | - | - | - | 6 | \# | 6 | 4 | 2 |
| District of Columbia (DCPS) | 8 | 2 | 6 | 1 | 5 | 8 | 1 | 7 | 1 | 6 |
| Duval County (FL) | - | - | - | - | - | - | - | - | - | - |
| Fort Worth | - | - | - | - | - | - | - | - | - | - |
| Fresno | - | - | - | - | - | 30 | 1 | 29 | 27 | 1 |
| Guilford County (NC) | - | - | - | - | - | - | - | - | - | - |
| Hillsborough County (FL) | - | - | - | - | - | - | - | - | - | - |
| Houston | 38 | 2 | 36 | 21 | 15 | 38 | 2 | 36 | 21 | 15 |
| Jefferson County ( KY ) | - | - | - | - | - | 4 | , | 2 | , | 2 |
| Los Angeles | 48 | 1 | 47 | 42 | 5 | 41 | , | 40 | 36 | 4 |
| Miami-Dade | - | - | - | - | - | 9 | 1 | 8 | 1 | 7 |
| Milwaukee | - | - | - | - | - | 12 | 2 | 10 | 1 | 9 |
| New York City | 17 | 2 | 15 | 1 | 13 | 16 | 1 | 15 | 1 | 14 |
| Philadelphia | - | - | - | - | - | 8 | 1 | 7 | \# | 7 |
| San Diego | 40 | 1 | 38 | 34 | 4 | 35 | 1 | 34 | 30 | 4 |
| Shelby County (TN) | - | - | - | - | - | - | - | - | - | - |

Table A-31.
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, by SD/ELL category and urban district/jurisdiction: Various years, 2003-19—Continued

| SD/ELL category and urban district/jurisdiction | 2011 |  |  |  |  | 2013 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| SD and/or ELL |  |  |  |  |  |  |  |  |  |  |
| Nation (public) | 23 | 2 | 21 | 9 | 12 | 23 | 2 | 21 | 7 | 14 |
| Large city ${ }^{1}$ (public) | 32 | 3 | 29 | 14 | 15 | 30 | 2 | 29 | 11 | 18 |
| Albuquerque | 30 | 3 | 27 | 7 | 19 | 31 | 1 | 30 | 9 | 20 |
| Atlanta | 11 | 1 | 10 | 1 | 8 | 12 | 1 | 11 | 1 | 10 |
| Austin | 45 | 4 | 41 | 24 | 17 | 45 | 2 | 43 | 12 | 31 |
| Baltimore City | 21 | 11 | 10 | 2 | 8 | 21 | 2 | 20 | 1 | 19 |
| Boston | 51 | 5 | 46 | 29 | 17 | 50 | 4 | 46 | 26 | 20 |
| Charlotte | 20 | 1 | 19 | 7 | 12 | 18 | 1 | 17 | 4 | 13 |
| Chicago | 29 | 2 | 27 | 7 | 20 | 24 | 1 | 23 | 3 | 19 |
| Clark County (NV) | - | - | - | - | - | - | - | - | - | - |
| Cleveland | 28 | 6 | 22 | 1 | 21 | 28 | 4 | 23 | 1 | 22 |
| Dallas | 56 | 3 | 53 | 45 | 8 | 57 | 2 | 55 | 20 | 35 |
| Denver | - | - | - | - | - | - | - | - | - | - |
| Detroit | 26 | 6 | 20 | 14 | 6 | 31 | 5 | 26 | 11 | 14 |
| District of Columbia (DCPS) | 23 | 6 | 16 | 1 | 15 | 22 | 2 | 20 | 1 | 18 |
| Duval County (FL) | - | - | - | - | - | - | - | - | - | - |
| Fort Worth | - | - | - | - | - | - | - | - | - | - |
| Fresno | 36 | 1 | 35 | 28 | 7 | 34 | 1 | 33 | 25 | 8 |
| Guilford County (NC) | - | - | - | - | - | - | - | - |  | - |
| Hillsborough County (FL) | 30 | 2 | 28 | 2 | 26 | 26 | 1 | 25 | 2 | 23 |
| Houston | 44 | 4 | 40 | 26 | 14 | 46 | 2 | 44 | 16 | 27 |
| Jefferson County (KY) | 19 | 5 | 14 | 5 | 9 | 18 | 2 | 16 | 4 | 12 |
| Los Angeles | 39 | 2 | 37 | 28 | 9 | 33 | 2 | 31 | 22 | 10 |
| Miami-Dade | 27 | 3 | 24 | 1 | 23 | 32 | 2 | 29 | 1 | 28 |
| Milwaukee | 33 | 3 | 30 | 3 | 28 | 32 | 3 | 29 | 2 | 27 |
| New York City | 30 | 2 | 29 | 1 | 27 | 30 | 1 | 28 | , | 28 |
| Philadelphia | 22 | 4 | 18 | 2 | 16 | 22 | 3 | 18 | 2 | 16 |
| San Diego | 43 | 3 | 41 | 32 | 8 | 40 | , | 38 | 26 | 12 |
| Shelby County (TN) | - | - | - | - | - | - | - | - | - | - |
| SD |  |  |  |  |  |  |  |  |  |  |
| Nation (public) | 13 | 2 | 11 | 3 | 9 | 14 | 1 | 12 | 2 | 10 |
| Large city ${ }^{1}$ (public) | 13 |  | 11 | 2 | 9 | 13 | 1 | 12 | 1 | 10 |
| Albuquerque | 15 | 2 | 13 | 2 | 11 | 16 | 1 | 15 | 2 | 14 |
| Atlanta | 9 | 1 | 8 | 1 | 7 | 10 | 1 | 9 | 1 | 8 |
| Austin | 15 | , | 12 | 2 | 10 | 15 | 2 | 13 | 1 | 12 |
| Baltimore City | 19 | 11 | 8 | 1 | 6 | 18 | 1 | 17 | 1 | 16 |
| Boston | 21 | 3 | 18 | 2 | 16 | 21 | 3 | 18 | 1 | 17 |
| Charlotte | 11 | 1 | 10 | 2 | 8 | 11 | 1 | 10 | 1 | 9 |
| Chicago | 15 | 2 | 13 | 3 | 10 | 13 | 1 | 12 | 1 | 11 |
| Clark County (NV) | - | - | - | - | - | - | - | - | - | - |
| Cleveland | 22 | 5 | 17 | 1 | 16 | 22 | 4 | 18 | 1 | 17 |
| Dallas | 8 | 2 | 6 | 1 | 5 | 10 | 2 | 8 | 1 | 7 |
| Denver | - | - | - | - | - | - | - | - | - | - |
| Detroit | 15 | 6 | 9 | 3 | 6 | 16 | 5 | 11 | 3 | 8 |
| District of Columbia (DCPS) | 16 | 5 | 10 | \# | 10 | 15 | 1 | 14 | 1 | 13 |
| Duval County (FL) | - | - | - | - | - | - | - | - | - | - |
| Fort Worth | - | - | - | - | - | - | - | - | - | - |
| Fresno | 10 | 1 | 9 | 2 | 7 | 9 | 1 | 8 | 1 | 7 |
| Guilford County (NC) | - | - | - | - | - | - | - | - | - | - |
| Hillsborough County (FL) | 17 | 1 | 16 | 2 | 14 | 19 | 1 | 18 | 2 | 16 |
| Houston | 8 | 3 | 5 | 1 | 4 | 8 | 1 | 7 | 1 | 7 |
| Jefferson County (KY) | 15 | 3 | 12 | 4 | 8 | 13 | 1 | 12 | 4 | 9 |
| Los Angeles | 12 | 2 | 10 | 1 | 9 | 9 | 2 | 8 | 1 | 7 |
| Miami-Dade | 12 | 2 | 10 | 1 | 10 | 11 | 1 | 10 | 1 | 8 |
| Milwaukee | 20 | 3 | 18 | 2 | 16 | 20 | 3 | 17 | 2 | 16 |
| New York City | 17 | 1 | 16 | 1 | 15 | 18 | \# | 17 | 1 | 17 |
| Philadelphia | 16 | 4 | 12 | 1 | 11 | 16 | 3 | 13 | 1 | 12 |
| San Diego | 11 | 2 | 9 | 1 | 7 | 11 | 1 | 10 | 1 | 8 |
| Shelby County (TN) | - |  | - | - | - | - | - | - | - | - |
| ELL |  |  |  |  |  |  |  |  |  |  |
| Nation (public) | 11 | \# | 11 | 6 | 4 | 11 | \# | 11 | 5 | 5 |
| Large city ${ }^{1}$ (public) | 22 | 1 | 21 | 12 | 9 | 20 | 1 | 20 | 9 | 10 |
| Albuquerque | 18 | 1 | 17 | 6 | 11 | 20 | 1 | 19 | 8 | 11 |
| Atlanta | 2 | \# | 2 | \# | 2 | 3 | \# | 3 | \# | 3 |
| Austin | 33 | 2 | 32 | 23 | 9 | 34 | 1 | 34 | 11 | 22 |
| Baltimore City | 2 | \# | 2 | \# | 2 | 4 | \# | 4 | \# | 4 |
| Boston | 36 | 3 | 34 | 28 | 6 | 36 | 1 | 35 | 26 | 9 |
| Charlotte | 10 | \# | 10 | 6 | 5 | 8 | 1 | 8 | 2 | 5 |
| Chicago | 18 | 1 | 17 | 4 | 13 | 15 | 1 | 14 | 2 | 12 |
| Clark County (NV) | $\bigcirc$ | - | - | - | - | - | - | $\bigcirc$ | - | ${ }_{7}$ |
| Cleveland | 7 | 1 | 6 | \# | 6 | 8 | 1 | 7 | \# | 7 |
| Dallas | 50 | 1 | 48 | 44 | 4 | 52 | 1 | 51 | 19 | 32 |
| Denver | - | - | - | - | - | - | - | - | - | - |
| Detroit | 12 | \# | 12 | 11 | 1 | 17 | 1 | 16 | 9 | 7 |
| District of Columbia (DCPS) | 8 | 1 | 7 | 1 | 6 | 8 | 1 | 7 | 1 | 7 |
| Duval County (FL) | - | - | - | - | - | - | - | - | - | - |
| Fort Worth | - | - | - | - | - | - | - | - | - | - |
| Fresno | 30 | \# | 30 | 27 | 3 | 27 | \# | 27 | 24 | 3 |
| Guilford County (NC) | - | - | - | - | - | - | - | - | - | - |
| Hillsborough County (FL) | 17 | 1 | 16 | \# | 16 | 10 | \# | 10 | \# | 10 |
| Houston | 38 | 2 | 36 | 25 | 11 | 40 | 1 | 39 | 16 | 23 |
| Jefferson County (KY) | 5 | 3 | 2 | 1 | 1 | 5 | 1 | 5 | 1 | 4 |
| Los Angeles | 34 | 1 | 33 | 27 | 6 | 28 | 1 | 27 | 21 | 6 |
| Miami-Dade | 17 | 1 | 16 | \# | 15 | 25 | 2 | 23 | \# | 23 |
| Milwaukee | 15 | \# | 15 | 1 | 13 | 14 | 1 | 13 | \# | 13 |
| New York City | 17 | 1 | 16 | 1 | 15 | 16 | 1 | 15 | \# | 15 |
| Philadelphia | 8 | \# | 7 | 1 | 6 | 8 | 1 | 7 | 1 | 5 |
| San Diego | 36 | 1 | 35 | 31 | 4 | 33 | 1 | 32 | 25 | 7 |
| Shelby County (TN) |  |  |  | - | - |  | - | - | - | - |

Table A-31.
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, by SD/ELL category and urban district/jurisdiction: Various years, 2003-19—Continued

| SD/ELL category and urban district/jurisdiction | 2015 |  |  |  |  | 2017 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| SD and/or ELL |  |  |  |  |  |  |  |  |  |  |
| Nation (public) | 24 | 2 | 23 | 8 | 14 | 25 | 2 | 23 | 10 | 13 |
| Large city ${ }^{1}$ (public) | 32 | 2 | 29 | 12 | 17 | 31 | 2 | 29 | 13 | 16 |
| Albuquerque | 33 | 2 | 31 | 9 | 22 | 30 | 1 | 29 | 12 | 17 |
| Atlanta | 14 | , | 12 | 2 | 10 | 16 | 1 | 15 | 2 | 13 |
| Austin | 50 | 4 | 46 | 17 | 29 | 50 | 3 | 47 | 13 | 34 |
| Baltimore City | 22 | 1 | 20 | 2 | 19 | 23 | 2 | 21 | 2 | 18 |
| Boston | 49 | 3 | 45 | 19 | 26 | 48 | 3 | 45 | 21 | 24 |
| Charlotte | 19 | 2 | 18 | 7 | 11 | 19 | 2 | 16 | 6 | 10 |
| Chicago | 25 | 2 | 23 | 6 | 16 | 29 | 3 | 27 | 7 | 20 |
| Clark County (NV) | - | - | - | - | - | 28 | 1 | 26 | 19 | 8 |
| Cleveland | 29 | 6 | 23 | 2 | 21 | 31 | 6 | 25 | 5 | 20 |
| Dallas | 56 | 4 | 53 | 29 | 24 | 60 | 4 | 56 | 23 | 33 |
| Denver | - | - | - | - | - | 46 | 3 | 43 | 33 | 11 |
| Detroit | 28 | 5 | 24 | 16 | 8 | 31 | 5 | 26 | 17 | 9 |
| District of Columbia (DCPS) | 20 | 2 | 17 | 2 | 15 | 23 | 3 | 20 | 5 | 16 |
| Duval County (FL) | 21 | 4 | 17 | 2 | 15 | 22 | 3 | 19 | 3 | 15 |
| Fort Worth | - | - | - | - | - | 52 | 4 | 48 | 33 | 16 |
| Fresno | 34 | 1 | 33 | 25 | 7 | 32 | 1 | 31 | 26 | 6 |
| Guilford County (NC) | - | - | - | - | - | 20 | 2 | 18 | 9 | 9 |
| Hillsborough County (FL) | 28 | 2 | 26 | 2 | 24 | 26 | 2 | 24 | 2 | 22 |
| Houston | 48 | 3 | 45 | 16 | 28 | 47 | 2 | 44 | 19 | 25 |
| Jefferson County (KY) | 20 | 2 | 18 | 7 | 11 | 20 | 2 | 18 | 6 | 12 |
| Los Angeles | 37 | 2 | 35 | 25 | 10 | 35 | 2 | 33 | 27 | 6 |
| Miami-Dade | 29 | 4 | 25 | \# | 25 | 26 | 4 | 23 | 2 | 21 |
| Milwaukee | - | - | - |  | - | 32 | 3 | 29 | 7 | 21 |
| New York City | 32 | 2 | 31 | 1 | 30 | 31 | 2 | 29 | 3 | 25 |
| Philadelphia | 24 | 5 | 19 | 3 | 16 | 26 | 5 | 21 | 5 | 15 |
| San Diego | 46 |  | 42 | 35 | 8 | 41 | 2 | 38 | 28 | 10 |
| Shelby County (TN) | - | - | - | - | - | 18 | 4 | 15 | 4 | 11 |
| SD |  |  |  |  |  |  |  |  |  |  |
| Nation (public) | 14 | 1 | 13 | 3 | 11 | 15 | 2 | 13 | 4 | 9 |
| Large city ${ }^{1}$ (public) | 14 | 2 | 13 | 2 | 11 | 14 | 1 | 13 | 3 | 10 |
| Albuquerque | 17 | 1 | 15 | 2 | 13 | 17 | 1 | 16 | 5 | 11 |
| Atlanta | 10 | 1 | 9 | 1 | 8 | 13 | 1 | 12 | 2 | 11 |
| Austin | 17 | 2 | 15 | 2 | 13 | 19 | 2 | 17 | 2 | 16 |
| Baltimore City | 17 | 1 | 16 | 1 | 15 | 17 | 1 | 16 | 1 | 14 |
| Boston | 22 | 3 | 19 | \# | 19 | 21 | 2 | 19 | 2 | 18 |
| Charlotte | 10 | 1 | 9 | 2 | 8 | 11 | 1 | 10 | 2 | 8 |
| Chicago | 14 | 2 | 12 | 1 | 12 | 16 | 2 | 14 | 1 | 13 |
| Clark County (NV) | - | - | - | - | - | 11 | 1 | 10 | 6 | 4 |
| Cleveland | 21 | 5 | 17 | 1 | 16 | 22 | 4 | 18 | 2 | 16 |
| Dallas | 8 | 2 | 6 | 1 | 6 | 10 | 2 | 8 | 1 | 7 |
| Denver | - | - | - | - | - | 11 | , | 10 | 5 | 5 |
| Detroit | 15 | 4 | 11 | 3 | 8 | 15 | 4 | 11 | 3 | 8 |
| District of Columbia (DCPS) | 13 | 1 | 12 | \# | 12 | 15 | 2 | 14 | 2 | 12 |
| Duval County (FL) | 17 | 3 | 14 | 2 | 12 | 17 | 2 | 14 | 3 | 12 |
| Fort Worth | - | - | - | - | - | 13 | 2 | 11 | 3 | 8 |
| Fresno | 10 | 1 | 8 | 2 | 6 | 10 | 1 | 9 | 4 | 5 |
| Guilford County (NC) | - | - | - | - | - | 16 | 2 | 14 | 7 | 7 |
| Hillsborough County (FL) | 20 | 2 | 18 | 2 | 16 | 17 | 1 | 16 | 2 | 14 |
| Houston | 10 | 2 | 8 | 1 | 7 | 8 | 2 | , | , | 5 |
| Jefferson County (KY) | 13 | 1 | 11 | 4 | 7 | 14 | 1 | 12 | 4 | 8 |
| Los Angeles | 13 | 2 | 11 | 2 | 9 | 12 | 1 | 11 | 6 | 5 |
| Miami-Dade | 10 | 2 | 9 | \# | 8 | 11 | 1 | 10 | 1 | 9 |
| Milwaukee | - | - | - | - | - | 18 | 2 | 16 | 4 | 12 |
| New York City | 22 | 1 | 22 | 1 | 21 | 21 | 1 | 20 | 2 | 18 |
| Philadelphia | 16 | 4 | 12 | 1 | 11 | 17 | 4 | 13 | 2 | 11 |
| San Diego | 12 | 3 | 10 | 3 | 7 | 13 | 1 | 12 | 4 | 7 |
| Shelby County (TN) | - | - | - | - | - | 11 | 3 | 8 | 3 | 5 |
| ELL |  |  |  |  |  |  |  |  |  |  |
| Nation (public) | 12 | 1 | 11 | 6 | 5 | 12 | 1 | 11 | 7 | 5 |
| Large city ${ }^{1}$ (public) | 21 | , | 20 | 11 | 9 | 21 | 1 | 19 | 10 | 9 |
| Albuquerque | 21 | 1 | 20 | 6 | 14 | 18 | 1 | 17 | 8 | 9 |
| Atlanta | 4 | \# | 4 | 1 | 3 | 3 | \# | 3 | 1 | 3 |
| Austin | 38 | 2 | 36 | 16 | 19 | 36 | 2 | 34 | 12 | 22 |
| Baltimore City | 5 | \# | 4 | \# | 4 | 7 | 1 | 6 | 1 | 5 |
| Boston | 33 | 1 | 32 | 19 | 13 | 34 | 2 | 32 | 20 | 12 |
| Charlotte | 11 | 1 | 10 | 5 | 5 | 9 | 1 | 8 | 5 | 3 |
| Chicago | 15 | 1 | 13 | 6 | 7 | 18 | 2 | 16 | 6 | 10 |
| Clark County (NV) | - | - | - | - | - | 20 | 1 | 19 | 14 | 6 |
| Cleveland | 10 | 2 | 8 | 1 | 7 | 11 | 2 | 9 | 3 | 5 |
| Dallas | 51 | 2 | 48 | 28 | 20 | 54 | 3 | 51 | 22 | 29 |
| Denver | - | - | - | - | - | 39 | 2 | 37 | 30 | 7 |
| Detroit | 14 | \# | 13 | 13 | \# | 16 | 1 | 16 | 14 | 2 |
| District of Columbia (DCPS) | 8 | 1 | 7 | 2 | 5 | 10 | 1 | 8 | 3 | 5 |
| Duval County (FL) | 5 | 1 | 4 | \# | 3 | 6 | 1 | 5 | 1 | 4 |
| Fort Worth | - | - | - | - | - | 43 | 1 | 41 | 31 | 11 |
| Fresno | 27 | 1 | 27 | 24 | 3 | 25 | \# | 24 | 22 | 2 |
| Guilford County (NC) | - | - | - | - | - | 6 | \# | 5 | 2 | 3 |
| Hillsborough County (FL) | 12 | \# | 12 | \# | 12 | 12 | 1 | 11 | \# | 11 |
| Houston | 41 | 1 | 40 | 16 | 24 | 41 | 1 | 40 | 19 | 22 |
| Jefferson County (KY) | 9 | 1 | 8 | 3 | 5 | 8 | 1 | 7 | 2 | 5 |
| Los Angeles | 31 | 1 | 30 | 24 | 6 | 30 | 2 | 28 | 24 | 4 |
| Miami-Dade | 22 | 3 | 20 | \# | 19 | 18 | 3 | 15 | 1 | 15 |
| Milwaukee | - | - | - | - | - | 16 | 1 | 15 | 4 | 11 |
| New York City | 14 | 1 | 13 | \# | 13 | 15 | 1 | 14 | 2 | 12 |
| Philadelphia | 10 | 1 | 9 | 2 | 6 | 11 | 1 | 9 | 3 | 6 |
| San Diego | 39 | 2 | 37 | 33 | 4 | 33 | 1 | 32 | 25 | 7 |
| $\frac{\text { Shelby County (TN) }}{\text { See notes at end of table }}$ |  |  |  |  |  | 9 | 1 | 7 | 1 |  |

Table A-31.
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, by SD/ELL category and urban district/jurisdiction: Various years, 2003-19-Continued

| SD/ELL category and urban districtfiurisdiction | 2019 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations |
| SD and/or ELL |  |  |  |  |  |
| Nation (public) | 27 | 2 | 25 | 10 | 15 |
| Large city ${ }^{1}$ (public) | 33 | 3 | 30 | 13 | 17 |
| Albuquerque | 39 | 2 | 37 | 15 | 22 |
| Atlanta | 21 | 1 | 20 | 2 | 18 |
| Austin | 52 | 3 | 49 | 14 | 35 |
| Baltimore City | 25 | 2 | 23 | 2 | 21 |
| Boston | 50 | 4 | 46 | 21 | 25 |
| Charlotte | 27 | 2 | 25 | 14 | 11 |
| Chicago | 36 | 2 | 34 | 11 | 23 |
| Clark County (NV) | 32 | 2 | 31 | 20 | 11 |
| Cleveland | 31 | 4 | 27 | 5 | 23 |
| Dallas | 59 | 3 | 55 | 30 | 26 |
| Denver | 45 | 2 | 44 | 29 | 15 |
| Detroit | 29 | 5 | 24 | 17 | 7 |
| District of Columbia (DCPS) | 30 | 2 | 28 | 2 | 26 |
| Duval County (FL) | 27 | 2 | 25 | 2 | 23 |
| Fort Worth | 54 | 2 | 52 | 36 | 16 |
| Fresno | 33 | 2 | 31 | 25 | 6 |
| Guilford County (NC) | 27 | 1 | 25 | 10 | 16 |
| Hillsborough County (FL) | 30 | 3 | 27 | 3 | 24 |
| Houston | 48 | 2 | 45 | 23 | 22 |
| Jefferson County (KY) | 25 | 3 | 22 | 6 | 17 |
| Los Angeles | 31 | 2 | 29 | 19 | 10 |
| Miami-Dade | 32 | 4 | 29 | 2 | 27 |
| Milwaukee | 32 | 2 | 30 | 6 | 24 |
| New York City | 35 | 4 | 31 | 5 | 26 |
| Philadelphia | 30 | 6 | 24 | 10 | 14 |
| San Diego | 38 | 2 | 36 | 22 | 14 |
| Shelby County (TN) | 19 | 2 | 17 | 5 | 12 |
| SD |  |  |  |  |  |
| Nation (public) | 16 | 2 | 14 | 3 | 11 |
| Large city ${ }^{1}$ (public) | 15 | 2 | 13 | 3 | 11 |
| Albuquerque | 21 | 1 | 20 | 7 | 13 |
| Atlanta | 16 | 1 | 15 | 1 | 14 |
| Austin | 23 | 2 | 21 | 1 | 20 |
| Baltimore City | 17 | \# | 16 | 1 | 15 |
| Boston | 23 | 2 | 21 | 3 | 18 |
| Charlotte | 11 | 2 | 10 | 2 | 8 |
| Chicago | 15 | 1 | 13 | 1 | 12 |
| Clark County (NV) | 11 | 1 | 10 | 5 | 6 |
| Cleveland | 22 | 3 | 19 | 2 | 17 |
| Dallas | 14 | 3 | 11 | 1 | 10 |
| Denver | 12 | 1 | 11 | 3 | 8 |
| Detroit | 14 | 4 | 10 | 5 | 6 |
| District of Columbia (DCPS) | 17 | 2 | 16 | \# | 15 |
| Duval County (FL) | 22 | 2 | 20 | 1 | 19 |
| Fort Worth | 15 | 2 | 13 | 4 | 9 |
| Fresno | 12 | 2 | 10 | 4 | 6 |
| Guilford County (NC) | 15 | 1 | 14 | 4 | 10 |
| Hillsborough County (FL) | 21 | 2 | 19 | 2 | 17 |
| Houston | 9 | 2 | 8 | 1 | 7 |
| Jefferson County (KY) | 14 | 2 | 12 | 3 | 9 |
| Los Angeles | 13 | 1 | 11 | 4 | 7 |
| Miami-Dade | 14 | 2 | 13 | 1 | 12 |
| Milwaukee | 22 | 2 | 20 | 3 | 17 |
| New York City | 24 | 3 | 21 | 3 | 18 |
| Philadelphia | 17 | 4 | 13 | 3 | 10 |
| San Diego | 16 | 2 | 14 | 3 | 11 |
| Shelby County (TN) | 9 | 2 | 8 | 3 | 5 |
| ELL |  |  |  |  |  |
| Nation (public) | 13 | 1 | 12 | 7 | 6 |
| Large city ${ }^{1}$ (public) | 21 | 1 | 20 | 11 | 9 |
| Albuquerque | 23 | 1 | 22 | 10 | 13 |
| Atlanta | 7 | 1 | 6 | 1 | 5 |
| Austin | 36 | 1 | 34 | 13 | 22 |
| Baltimore City | 9 | 1 | 8 | 1 | 7 |
| Boston | 35 | 2 | 33 | 19 | 13 |
| Charlotte | 18 | 1 | 17 | 13 | 4 |
| Chicago | 25 | 1 | 24 | 11 | 14 |
| Clark County (NV) | 23 | 1 | 23 | 16 | 6 |
| Cleveland | 11 | \# | 10 | 3 | 7 |
| Dallas | 51 | 2 | 49 | 30 | 20 |
| Denver | 38 | 1 | 37 | 26 | 10 |
| Detroit | 16 | 1 | 15 | 12 | 2 |
| District of Columbia (DCPS) | 16 | 1 | 15 | 2 | 13 |
| Duval County (FL) | 6 | \# | 5 | \# | 5 |
| Fort Worth | 44 | 1 | 44 | 33 | 10 |
| Fresno | 25 | 1 | 25 | 22 | 3 |
| Guilford County (NC) | 13 | \# | 13 | 6 | 7 |
| Hillsborough County (FL) | 11 | 1 | 10 | \# | 10 |
| Houston | 41 | 1 | 40 | 23 | 17 |
| Jefferson County (KY) | 13 | 1 | 11 | 3 | 8 |
| Los Angeles | 25 | 1 | 23 | 17 | 6 |
| Miami-Dade | 23 | 2 | 21 | 1 | 20 |
| Milwaukee | 13 | 1 | 12 | 3 | 9 |
| New York City | 16 | 2 | 14 | 3 | 12 |
| Philadelphia | 15 | 2 | 13 | 8 | 5 |
| San Diego | 29 | 1 | 28 | 20 | 8 |
| Shelby County (TN) | 10 | 1 | 10 | 2 | 8 |

## - Not available.

\# Rounds to zero.
${ }^{1}$ Large city includes students from all cities in the nation with populations of 250,000 or more including the participating districts.


 Individualized Education Program or protection under Section 504 of the Rehabilitation Act of 1973. 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, 2003-19 Mathematics Assessments.

Table A-32.
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, by SD/ELL category and urban district/jurisdiction: Various years, 2003-19

| SD/ELL category and urban district/jurisdiction | 2003 |  |  |  |  | 2005 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| SD and/or ELL |  |  |  |  |  |  |  |  |  |  |
| Nation (public) | 19 | 4 | 15 | 8 | 7 | 19 | 4 | 15 | 7 | 8 |
| Large city ${ }^{1}$ (public) | 24 | 5 | 19 | 13 | 7 | 24 | , | 20 | 12 | 8 |
| Albuquerque | - | - | - | - | - | - | - | - | - | - |
| Atlanta | 11 | 2 | 9 | 4 | 5 | 12 | 1 | 10 | 3 | 8 |
| Austin | - | - | - | - | - | 26 | 10 | 16 | 12 | 4 |
| Baltimore City | - | - | - | - | - | - | - | - | - | - |
| Boston | 31 | 7 | 24 | 9 | 15 | 25 | 9 | 16 | 7 | , |
| Charlotte | 18 | 3 | 14 | 5 | 9 | 18 | 3 | 15 | 5 | 10 |
| Chicago | 22 | 7 | 15 | 8 | 7 | 21 | 3 | 18 | 5 | 12 |
| Clark County (NV) | - | - | - | - | - | - | - | - | - | - |
| Cleveland | 21 | 9 | 12 | 2 | 9 | 20 | 9 | 12 | 3 | 9 |
| Dallas | - | - | - | - | - | - | - | - | - | - |
| Denver | - | - | - | - | - | - | - | - | - | - |
| Detroit | - | - | - | - | - | - | - | - | - | - |
| District of Columbia (DCPS) | 20 | 6 | 14 | 5 | 9 | 19 | 6 | 14 | 2 | 11 |
| Duval County (FL) | - | - | - | - | - | - | - | - | - | - |
| Fort Worth | - | - | - | - | - | - | - | - | - | - |
| Fresno | - | - | - | - | - | - | - | - | - | - |
| Guilford County (NC) | - | - | - | - | - | - | - | - | - | - |
| Hillsborough County (FL) | - | - | - | - | - | - | - | - | - | - |
| Houston | 26 | 8 | 18 | 16 | 3 | 24 | 6 | 18 | 14 | 4 |
| Jefferson County (KY) | - | - | - | - | - | - | - | - | - | - |
| Los Angeles | 37 | 2 | 35 | 29 | 6 | 39 | 3 | 36 | 30 | 6 |
| Miami-Dade | - | - | - | - | - | - | - | - | - | - |
| Milwaukee | - | - | - | - | - | - | - | - | - | - |
| New York City | 24 | 5 | 19 | 6 | 14 | 20 | 2 | 18 | 2 | 16 |
| Philadelphia | - | - | - | - | - | - | - | - | - | - |
| San Diego | 29 | 4 | 26 | 22 | 4 | 28 | 4 | 24 | 17 | 7 |
| Shelby County (TN) | - | - | - | - | - | - | - | - | - | - |
| SD |  |  |  |  |  |  |  |  |  |  |
| Nation (public) | 14 | 3 | 11 | 5 | 6 | 13 | 3 | 10 | 3 | 7 |
| Large city ${ }^{1}$ (public) | 14 | 3 | 11 | 5 | 5 | 13 | 3 | 10 | 3 | 6 |
| Albuquerque | - | - | - | - | - | - | - | - | - | - |
| Atlanta | 10 | 1 | 9 | 4 | 5 | 11 | 1 | 9 | 3 | 7 |
| Austin | - | - | - | - | - | 14 | 8 | 6 | 5 | 2 |
| Baltimore City | - | - | - | - | - | - | - | - |  | - |
| Boston | 24 | 4 | 20 | 7 | 13 | 18 | 7 | 11 | 3 | 8 |
| Charotte | 14 | 3 | 12 | 4 | 8 | 12 | 2 | 10 | 2 | 8 |
| Chicago | 17 | 5 | 12 | 6 | 7 | 16 | 2 | 14 | 3 | 11 |
| Clark County (NV) | - | - | - | - | - | - | - | - | - | - |
| Cleveland | 17 | 9 | 8 | 1 | 6 | 18 | 8 | 9 | 3 | 7 |
| Dallas | - | - |  | - | - | - | - | - |  | - |
| Denver | - | - | - | - | - | - | - | - | - | - |
| Detroit | - | - | - | - | - | - | - | - | - | - |
| District of Columbia (DCPS) | 16 | 5 | 11 | 3 | 8 | 17 | 5 | 12 | 2 | 10 |
| Duval County (FL) | - | - | - | - | - | - | - | - | - | - |
| Fort Worth | - | - | - | - | - | - | - | - | - | - |
| Fresno | - | - | - | - | - | - | - | - | - | - |
| Guilford County (NC) | - | - | - | - | - | - | - | - | - | - |
| Hillsborough County (FL) | - | - | - | - | - | - | - | - | - | - |
| Houston | 16 | 7 | 10 | 9 | \# | 11 | 4 | 7 | 5 | 2 |
| Jefferson County (KY) | - | - | - | - | - | - | - | - | - | - |
| Los Angeles | 12 | 2 | 10 | 5 | 5 | 12 | 2 | 10 | 5 | 5 |
| Miami-Dade | - | - | - | - | - | - | - | - | - | - |
| Milwaukee | - | - | - | - | - | - | - | - | - | - |
| New York City | 15 | 2 | 13 | 3 | 10 | 12 | 1 | 11 | 1 | 10 |
| Philadelphia | - | - | - | - | - | - | - | - | - | - |
| San Diego | 11 | 1 | 10 | 7 | 3 | 11 | 3 | 8 | 4 | 4 |
| Shelby County (TN) | - | - | - | - | - | - | - | - | - | - |
| ELL |  |  |  |  |  |  |  |  |  |  |
| Nation (public) | 6 | 1 | 5 | 4 | 1 | 6 | 1 | 5 | 4 | 1 |
| Large city ${ }^{1}$ (public) | 13 | 2 | 11 | 9 | 3 | 13 | 2 | 12 | 9 | 3 |
| Albuquerque | - | - | - | - | - | - | - | - | - | - |
| Atlanta | 2 | 1 | 1 | 1 | \# | 1 | \# | 1 | \# | 1 |
| Austin | - | - | - | - | - | 14 | 4 | 10 | 8 | 2 |
| Baltimore City | - | - | - | - | - | - | - | - | - | - |
| Boston | 13 | 5 | 8 | 4 | 4 | 10 | 4 | 6 | 5 | 1 |
| Chariotte | 7 | 1 | 6 | 3 | 3 | 7 | 1 | 6 | 4 | 2 |
| Chicago | 8 | 3 | 5 | 3 | 2 | 6 | 2 | 5 | 2 | 2 |
| Clark County (NV) | - | - | - | - | - | - | - | - | - | - |
| Cleveland | 5 | 1 | 4 | 1 | 3 | 3 | 1 | 2 | \# | 2 |
| Dallas | - | - | - | - | - | - | - | - | - | - |
| Denver | - | - | - | - | - | - | - | - | - | - |
| Detroit | - | - | - | - | - | - | - | - | - | - |
| District of Columbia (DCPS) | 5 | 1 | 4 | 2 | 2 | 4 | 1 | 3 | 1 | 2 |
| Duval County (FL) | - | - | - | - | - | - | - | - | - | - |
| Fort Worth | - | - | - | - | - | - | - | - | - | - |
| Fresno | - | - | - | - | - | - | - | - | - | - |
| Guilford County (NC) | - | - | - | - | - | - | - | - | - | - |
| Hillsborough County (FL) | - | - | - | - | - | $-$ | - | - | - | - |
| Houston | 16 | 5 | 11 | 9 | 2 | 16 | 3 | 12 | 10 | 3 |
| Jefferson County (KY) | - | - | - | - | - | - | - | - | - | - |
| Los Angeles | 33 | 2 | 31 | 27 | 4 | 34 | 2 | 32 | 28 | 4 |
| Miami-Dade | - | - | - | - | - | - | - | - | - | - |
| Milwaukee | - | - | - | - | - | - | - | - | - | - |
| New York City | 13 | 4 | 9 | 3 | 6 | 10 | 2 | 9 | 2 | 7 |
| Philadelphia | - | - | - | - | - | - | - | - | - | - |
| San Diego | 23 | 3 | 20 | 18 | 2 | 21 | 3 | 18 | 14 | 4 |
| Shelby County (TN) | - | - | - | - | - | - | - | - | - | - |

Table A-32.
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, by SD/ELL category and urban district/jurisdiction: Various years, 2003-19—Continued

| SD/ELL category and urban district/jurisdiction | 2007 |  |  |  |  | 2009 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| SD and/or ELL |  |  |  |  |  |  |  |  |  |  |
| Nation (public) | 18 | 4 | 14 | 6 | 8 | 18 | 3 | 15 | 5 | 10 |
| Large city ${ }^{1}$ (public) | 23 | 4 | 19 | 10 | 9 | 23 | 3 | 20 | 9 | 11 |
| Albuquerque | - | - | - | - | - | - | - | - | - | - |
| Atlanta | 11 | 3 | 8 | 2 | 6 | 12 | 1 | 10 | 1 | 9 |
| Austin | 29 | 5 | 23 | 16 | 8 | 29 | 7 | 23 | 13 | 9 |
| Batimore City | - | - | - | - | - | 19 | 11 | 8 | 1 | 6 |
| Boston | 27 | 8 | 18 | 6 | 12 | 30 | 9 | 20 | 5 | 16 |
| Charlotte | 20 | 3 | 18 | 6 | 12 | 17 | 3 | 14 | 5 | 10 |
| Chicago | 23 | 6 | 17 | 5 | 12 | 21 | 4 | 17 | 3 | 13 |
| Clark County (NV) | - | - | - | - | - | - | - | - | - | - |
| Cleveland | 24 | 13 | 11 | 2 | 9 | 28 | 11 | 17 | 2 | 15 |
| Dallas | - | - | - | - | - | - | - | - | - | - |
| Denver | - | - | - | - | - | - | - | - | - | - |
| Detroit | - | - | - | - | - | 23 | 5 | 18 | 7 | 11 |
| District of Columbia (DCPS) | 21 | 10 | 11 | 3 | 8 | 23 | 7 | 16 | 3 | 14 |
| Duval County (FL) | - | - | - | - | - | - | - | - | - | - |
| Fort Worth | - | - | - | - | - | - | - | - | - | - |
| Fresno | - | - | - | - | - | 29 | 2 | 27 | 20 | 7 |
| Guilford County (NC) | - | - | - | - | - | - | - | - | - | - |
| Hillsborough County (FL) | - | - | - | - | - | - | - | - | - | - |
| Houston | 22 | 6 | 16 | 10 | 6 | 22 | 5 | 16 | 9 | 8 |
| Jefferson County (KY) | - | - | - | - | - | 15 | 4 | 11 | 4 | 7 |
| Los Angeles | 33 | 2 | 31 | 25 | 6 | 29 | 2 | 27 | 19 | 8 |
| Miami-Dade | - | - | - | - | - | 20 | ${ }^{3}$ | 17 | 1 | 16 |
| Milwaukee | - | - | - | - | - | 26 | 4 | 22 | 2 | 20 |
| New York City | 22 | 2 | 20 | 1 | 19 | 23 | 2 | 21 | , | 20 |
| Philadelphia | - | - | - | - | - | 22 | 6 | 17 | 2 | 14 |
| San Diego | 28 | 4 | 24 | 19 | 5 | 25 | 5 | 20 | 15 | 5 |
| Shelby County (TN) | - | - | - | - | - | - | - | - | - | - |
| SD |  |  |  |  |  |  |  |  |  |  |
| Nation (public) | 13 | 4 | 9 | 2 | 6 | 13 | 3 | 10 | 2 | 8 |
| Large city ${ }^{1}$ (public) | 13 | 4 | 9 | 3 | 6 | 13 | 3 | 10 | 2 | 9 |
| Albuquerque | - | - | - | - | - | - | - | - | - | - |
| Atlanta | 11 | 3 | 7 | 2 | 5 | 11 | 1 | 10 | 1 | 9 |
| Austin | 16 | 4 | 12 | 7 | 5 | 17 | 6 | 10 | 3 | 7 |
| Baltimore City | - | - | - | - | - | 18 | 11 | 7 | 1 | 5 |
| Boston | 19 | 7 | 12 | 3 | 9 | 22 | 7 | 15 | 3 | 12 |
| Charlotte | 13 | 2 | 11 | 2 | 10 | 11 | 2 | 9 | 1 | 7 |
| Chicago | 17 | 5 | 13 | 3 | 10 | 16 | 3 | 13 | 1 | 11 |
| Clark County (NV) | - | - | - | - | - | - | - | - | - | - |
| Cleveland | 20 | 13 | 7 | 1 | 6 | 23 | 11 | 12 | 1 | 11 |
| Dallas | - | - | - | - | - | - | - | - | - | - |
| Denver | - | - | - | - | - | - | - | - | - | - |
| Detroit | - | - | - | - | - | 17 | 4 | 13 | 2 | 10 |
| District of Columbia (DCPS) | 17 | 9 | 8 | 2 | - | 19 | 6 | 12 | 1 | 11 |
| Duval County (FL) | - | - | - | - | - | - |  | - | - | - |
| Fort Worth | - | - | - | - | - | - | - | - | - | - |
| Fresno | - | - | - | - | - | 11 | 2 | 9 | 2 | 6 |
| Guilford County (NC) | - | - | - | - | - | - | - | - | - | - |
| Hillsborough County (FL) | - | - | - | - | - | - | - | - | - | - |
| Houston | 13 | 5 | 8 | 4 | 4 | 12 | 5 | 7 | 2 | 6 |
| Jefferson County (KY) | - | - | - | - | - | 12 | 3 | 9 | 3 | 6 |
| Los Angeles | 10 | 2 | 8 | 3 | 5 | 11 | 2 | 10 | 3 | 7 |
| Miami-Dade | - | - | - | - | - | 12 | 2 | 11 | \# | 10 |
| Milwaukee | - | - | - | - | - | 21 | 3 | 17 | 1 | 16 |
| New York City | 13 | 1 | 12 | 1 | 11 | 15 | 1 | 14 | \# | 13 |
| Philadelphia | - | - | - | - | - | 17 | 5 | 11 | 1 | 10 |
| San Diego | 11 | 4 | 7 | 3 | 4 | 12 | 5 | 7 | 2 | 5 |
| Shelby County (TN) | - | - | - | - | - | - | - | - | - | - |
| ELL |  |  |  |  |  |  |  |  |  |  |
| Nation (public) | 7 | 1 | 6 | 4 | 2 | 6 | \# | 5 | 3 | 2 |
| Large city ${ }^{1}$ (public) | 13 | 1 | 11 | 7 | 4 | 12 | 1 | 11 | 7 | 4 |
| Albuquerque | - | - | - | - | - | - | - | - | - | - |
| Atlanta | 1 | \# | 1 | \# | 1 | 1 | \# | 1 | \# | \# |
| Austin | 16 | 2 | 13 | 10 | 3 | 16 | 2 | 14 | 10 | 4 |
| Batimore City | - | - | - | - | - | 1 | \# | 1 | \# | 1 |
| Boston | 9 | 2 | 7 | 4 | 3 | 11 | 4 | 7 | 2 | 5 |
| Charlotte | 9 | 1 | 7 | 4 | 3 | 7 | 1 | 6 | 3 | 3 |
| Chicago | 7 | 2 | 5 | 2 | 3 | 7 | 2 | 5 | 2 | 3 |
| Clark County (NV) | - | - | - | - | - | - | - | - | - | - |
| Cleveland | 5 | 1 | 4 | 1 | 3 | 6 | 1 | 5 | 1 | 4 |
| Dallas | - | - | - | - | - | - | - | - | - | - |
| Denver | - | - | - | - | - | - | - | - | - | - |
| Detroit | - | - | - | - | - | 6 | \# | 6 | 5 | 1 |
| District of Columbia (DCPS) | 4 | 1 | 3 | 1 | 2 | 6 | 2 | 4 | 2 | 2 |
| Duval County (FL) | - | - | - | - | - | - | - | - | - | - |
| Fort Worth | - | - | - | - | - | - | - | - | - | - |
| Fresno | - | - | - | - | - | 22 | 1 | 21 | 19 | 2 |
| Guilford County (NC) | - | - | - | - | - | - | - | - | - | - |
| Hillsborough County (FL) | - | - | - | - | - | - | - | - | - | - |
| Houston | 12 | 2 | 10 | 7 | 2 | 12 | 2 | 10 | 7 | 3 |
| Jefferson County (KY) | - | - | - | - | - | ${ }^{3}$ | 1 | 2 | 1 | 2 |
| Los Angeles | 28 | 1 | 27 | 23 | 4 | 23 | 1 | 22 | 18 | 4 |
| Miami-Dade | - | - | - | - | - | 8 | 1 | 7 | \# | 6 |
| Milwaukee | - | - | - | - | - | 7 | 1 | 5 | 1 | 4 |
| New York City | 11 | 1 | 10 | 1 | 9 | 10 | 1 | 9 | \# | 9 |
| Philadelphia | - | - | - | - | - | 6 | \# | 6 | 1 | 5 |
| San Diego | 21 | 2 | 19 | 17 | 3 | 16 | 1 | 15 | 13 | 2 |
| Shelby County (TN) | - | - | - | - | - | - | - | - | - | - |

Table A-32.
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, by SD/ELL category and urban district/jurisdiction: Various years, 2003-19—Continued

| SD/ELL category and urban district/jurisdiction | 2011 |  |  |  |  | 2013 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| SD and/or ELL |  |  |  |  |  |  |  |  |  |  |
| Nation (public) | 18 | 3 | 15 | 5 | 10 | 17 | 2 | 16 | 3 | 12 |
| Large city ${ }^{1}$ (public) | 23 | 3 | 20 | 8 | 12 | 22 | 2 | 20 | 5 | 15 |
| Albuquerque | 25 | 3 | 22 | 9 | 12 | 27 | 2 | 25 | 11 | 14 |
| Atlanta | 12 | 2 | 10 | 1 | 8 | 14 |  | 13 | 2 | 11 |
| Austin | 26 | 5 | 22 | 13 | 9 | 27 | 2 | 25 | 4 | 21 |
| Baltimore City | 21 | 12 | 8 | 1 | 7 | 22 | 2 | 20 | 1 | 20 |
| Boston | 36 | 6 | 30 | 11 | 19 | 37 | 3 | 34 | 14 | 21 |
| Charlotte | 17 | 1 | 16 | 4 | 11 | 17 | , | 16 |  | 10 |
| Chicago | 23 | 3 | 20 | 4 | 16 | 20 | 1 | 19 | 2 | 17 |
| Clark County (NV) | - | - | - | - | - | - | - | - | - | - |
| Cleveland | 31 | 6 | 25 | 1 | 24 | 32 | 3 | 29 | 1 | 28 |
| Dallas | 29 | 5 | 24 | 18 | 6 | 29 | 2 | 26 | 8 | 18 |
| Denver | - | - | - | - | - | - | - | - | - | - |
| Detroit | 26 | 8 | 18 | 10 | 8 | 28 | 4 | 24 |  | 15 |
| District of Columbia (DCPS) | 26 | 7 | 20 | 1 | 18 | 25 | 2 | 23 | 1 | 22 |
| Duval County (FL) | - | - | - | - | - | - | - | - | - | - |
| Fort Worth | - | - | - | - | - | - | - | - | - | - |
| Fresno | 24 | 1 | 23 | 16 | 7 | 21 | 2 | 20 | 13 | 7 |
| Guilford County (NC) | - | - | - | - | - | - | - | - |  | - |
| Hillsborough County (FL) | 24 | 2 | 22 | 1 | 21 | 22 | 1 | 21 | * | 20 |
| Houston | 23 | 6 | 18 | 12 | 5 | 25 | 2 | 22 | 8 | 15 |
| Jefferson County (KY) | 15 | 3 | 12 | , | 8 | 16 | 2 | 14 | 2 | 13 |
| Los Angeles | 26 | 1 | 24 | 15 | 9 | 21 | 2 | 20 | 9 | 11 |
| Miami-Dade | 20 | 2 | 18 | \# | 18 | 22 | 2 | 19 | 1 | 19 |
| Milwaukee | 33 | 5 | 28 | 3 | 25 | 31 | 4 | 27 | 1 | 26 |
| New York City | 26 | 1 | 25 | \# | 24 | 28 | 2 | 26 | \# | 26 |
| Philadelphia | 26 | 7 | 19 | 1 | 18 | 26 | , | 22 | 1 | 21 |
| San Diego | 24 | 3 | 21 | 13 | 8 | 24 | 2 | 22 | 10 | 12 |
| Shelby County (TN) | - | - | - | - | - | - | - | - | - | - |
| SD |  |  |  |  |  |  |  |  |  |  |
| Nation (public) | 13 | 2 | 10 | 2 | 9 | 13 | 1 | 12 | 1 | 10 |
| Large city ${ }^{1}$ (public) | 13 | 3 | 11 | 2 | 9 | 14 | 1 | 12 | 1 | 11 |
| Albuquerque | 15 | 3 | 13 | 3 | 9 | 16 | 1 | 15 | 4 | 11 |
| Atlanta | 11 | 2 | 8 | 1 | 7 | 12 | 1 | 11 | 2 | 10 |
| Austin | 13 | 4 | 10 | 2 | 8 | 15 | 2 | 14 | 1 | 13 |
| Baltimore City | 19 | 12 | 7 | 1 | 6 | 20 | 2 | 18 | , | 18 |
| Boston | 20 | 4 | 15 | 1 | 15 | 20 | 2 | 17 | 1 | 17 |
| Charlotte | 11 | 1 | 10 | 1 | 8 | 11 | 1 | 10 | 2 | 8 |
| Chicago | 18 | 3 | 15 | 2 | 13 | 15 | 1 | 14 | 1 | 14 |
| Clark County (NV) | - | - | - | - | - | - | - | - | - | - |
| Cleveland | 25 | 5 | 19 | 1 | 19 | 26 | 2 | 24 | \# | 24 |
| Dallas | 9 | 4 | 5 | 1 | 4 | 9 | 2 | 7 | \# | 7 |
| Denver | - | - | - | - | - | - | - | - | - | - |
| Detroit | 18 | 8 | 10 | 2 | 8 | 18 | 4 | 14 | 1 | 13 |
| District of Columbia (DCPS) | 20 | 5 | 15 | 1 | 14 | 18 | 1 | 17 | \# | 17 |
| Duval County (FL) | - | - | - | - | - | - | - | - | - | - |
| Fort Worth | - | - | - | - | - | - | - | - | - | - |
| Fresno | 9 | 1 | 8 | 2 | 6 | 10 | 2 | 8 | 1 | 7 |
| Guilford County (NC) | - | - | - | - | - | - | - | - | - | - |
| Hillsborough County (FL) | 16 | 2 | 14 | 1 | 14 | 15 | , | 14 |  | 14 |
| Houston | 12 | 5 | 7 | 3 | 4 | 10 | 2 | 8 | 1 | 7 |
| Jefferson County (KY) | 11 | 2 | 9 | 2 | 7 | 12 | 2 | 10 | \# | 10 |
| Los Angeles | 12 | 1 | 11 | 2 | 9 | 12 | 1 | 11 | , | 10 |
| Miami-Dade | 11 | 1 | 10 | \# | 10 | 10 | 1 | 9 | 1 | 9 |
| Milwaukee | 21 | 5 | 16 | 1 | 15 | 24 | 4 | 20 | \# | 20 |
| New York City | 17 | 1 | 16 | \# | 16 | 17 | 1 | 16 | \# | 16 |
| Philadelphia | 17 | 6 | 11 | \# | 11 | 20 | 3 | 17 | 1 | 16 |
| San Diego | 14 | 3 | 11 | 4 | 7 | 14 | 2 | 12 | 3 | 9 |
| Shelby County (TN) | - | - | - | - | - | - | - | - | - | - |
| ELL |  |  |  |  |  |  |  |  |  |  |
| Nation (public) | 6 | \# | 6 | 3 | 2 | 6 | \# | 5 | 2 | 3 |
| Large city ${ }^{1}$ (public) | 12 | 1 | 11 | 6 | 5 | 11 | 1 | 10 | 4 | 6 |
| Albuquerque | 13 | 2 | 11 | 6 | 5 | 14 | \# | 14 | 8 | 7 |
| Atlanta | 2 | \# | 2 | \# | 1 | 2 | \# | 2 | \# | 2 |
| Austin | 16 | 2 | 14 | 11 | 3 | 15 | 1 | 15 | 3 | 11 |
| Baltimore City | 2 | 1 | 1 | \# | 1 | 2 | \# | 2 | \# | 2 |
| Boston | 21 | 3 | 18 | 11 | 7 | 23 | 1 | 22 | 13 | 9 |
| Charlotte | 8 | \# | 7 | 3 | 4 | 8 | \# | 8 |  | 3 |
| Chicago | 7 | 1 | 6 | 2 | 4 | 7 | 1 | 7 | 1 | 6 |
| Clark County (NV) | - | - | ${ }_{7}$ | - | - | 7 | - | ${ }_{7}$ | - | - |
| Cleveland | 8 | 1 | 7 | 1 | 6 | 7 | 1 | 7 | \# | 6 |
| Dallas | 24 | 2 | 22 | 18 | 4 | 22 | 1 | 21 | 8 | 13 |
| Denver | - | - | - | - | - | - | - | - | - | - |
| Detroit | 9 | \# | 9 | 8 | 1 | 10 | \# | 10 | 7 | 3 |
| District of Columbia (DCPS) | 7 | 1 | 6 | 1 | 5 | - | 1 | 7 | 1 | 6 |
| Duval County (FL) | - | - | - | - | - | - | - | - | - | - |
| Fort Worth | - | - | - | - | - | - | - | - | - | - |
| Fresno | 19 | \# | 19 | 16 | 3 | 15 | 1 | 14 | 12 | 2 |
| Guilford County (NC) | - | - | - | - | - | - | - | - | - | - |
| Hillsborough County (FL) | 9 | \# | 9 | \# | 9 | 8 | \# | 8 | \# | 8 |
| Houston | 14 | 2 | 12 | 10 | 3 | 17 | 1 | 16 | 7 | 9 |
| Jefferson County (KY) | 4 | 1 | 3 | 2 | 1 | 4 | \# | 4 | 1 | 3 |
| Los Angeles | 19 | 1 | 19 | 14 | 5 | 15 | 1 | 14 | 8 | 5 |
| Miami-Dade | 10 | 1 | 9 | \# | 9 | 12 | 1 | 11 | \# | 11 |
| Milwaukee | 14 | 1 | 13 | 2 | 12 | 9 | 1 | 8 | 1 | 8 |
| New York City | 12 | 1 | 12 | \# | 12 | 15 | 1 | 14 | \# | 14 |
| Philadelphia | 10 | 1 | 9 | \# | 8 | 8 | 1 | 7 | \# |  |
| San Diego | 16 | 1 | 15 | 11 | 4 | 15 | 1 | 14 | 8 | 7 |
| Shelby County (TN) |  |  | - |  | - |  | - | - | - | - |

Table A-32.
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, by SD/ELL category and urban district/jurisdiction: Various years, 2003-19—Continued

| SD/ELL category and urban district/jurisdiction | 2015 |  |  |  |  | 2017 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations | Identified | Excluded | Assessed | Assessed without accommodations | Assessed with accommodations |
| SD and/or ELL |  |  |  |  |  |  |  |  |  |  |
| Nation (public) | 19 | 2 | 17 | 5 | 13 | 20 | 2 | 18 | 6 | 12 |
| Large city ${ }^{1}$ (public) | 24 | 2 | 21 | 7 | 15 | 25 |  | 22 | 9 | 13 |
| Albuquerque | 27 | 1 | 26 | 12 | 14 | 26 | 2 | 24 | 9 | 16 |
| Atlanta | 14 | 1 | 12 | 1 | 11 | 15 | 1 | 14 | 3 | 11 |
| Austin | 29 | 3 | 26 | 8 | 18 | 33 | 2 | 31 | 9 | 22 |
| Baltimore City | 26 | 3 | 22 | 1 | 22 | 22 | 2 | 20 | 1 | 19 |
| Boston | 38 | 4 | 34 | 7 | 27 | 39 | 5 | 34 | 12 | 23 |
| Charlotte | 16 | 1 | 14 | 4 | 10 | 18 | 2 | 16 | 9 | 6 |
| Chicago | 21 | 1 | 20 | 3 | 18 | 21 | 2 | 19 | 4 | 15 |
| Clark County (NV) | - | - | - | - | - | 24 | 2 | 22 | 15 | 7 |
| Cleveland | 32 | 5 | 27 | 2 | 25 | 33 | 6 | 28 | 6 | 21 |
| Dallas | 41 | 3 | 38 | 17 | 21 | 53 | 3 | 50 | 23 | 27 |
| Denver | - | - | - | - | - | 39 | 3 | 36 | 27 | 9 |
| Detroit | 32 | 5 | 27 | 14 | 13 | 35 | 6 | 29 | 19 | 9 |
| District of Columbia (DCPS) | 28 | 5 | 22 | 2 | 21 | 26 | 3 | 23 | 3 | 20 |
| Duval County (FL) | 16 | 2 | 13 | 2 | 12 | 18 | 3 | 15 | 3 | 13 |
| Fort Worth | - | - | - | - | - | 30 | 2 | 28 | 15 | 12 |
| Fresno | 26 | 2 | 24 | 16 | 8 | 21 | 2 | 19 | 13 | 6 |
| Guilford County (NC) | - | - | - | - | - | 20 | 1 | 18 | 6 | 12 |
| Hillsborough County (FL) | 25 | 2 | 23 | 1 | 22 | 25 | 2 | 23 | 1 | 21 |
| Houston | 27 | 4 | 23 | 6 | 17 | 28 | 4 | 24 | 10 | 14 |
| Jefferson County (KY) | 17 | 1 | 15 | 2 | 14 | 14 | 1 | 12 | 3 | 10 |
| Los Angeles | 22 | 3 | 20 | 8 | 12 | 22 | 3 | 19 | 12 | 7 |
| Miami-Dade | 22 | 3 | 19 | \# | 19 | 23 | 3 | 20 | 2 | 18 |
| Milwaukee | - |  | - | - |  | 30 | 4 | 26 | 4 | 22 |
| New York City | 26 | 2 | 24 | 1 | 24 | 30 | 2 | 27 | 3 | 24 |
| Philadelphia | 24 | 3 | 21 | 3 | 18 | 27 | 5 | 22 | 6 | 15 |
| San Diego | 24 | 2 | 22 | 14 | 7 | 22 | 2 | 20 | 13 | 7 |
| Shelby County (TN) | - | - | - | - | - | 20 | 2 | 17. | 2 | 15 |
| SD |  |  |  |  |  |  |  |  |  |  |
| Nation (public) | 13 | 1 | 12 | 1 | 11 | 14 | 1 | 13 | 3 | 10 |
| Large city ${ }^{1}$ (public) | 14 | 1 | 12 | 1 | 11 | 14 | 2 | 12 | 3 | 10 |
| Albuquerque | 17 | 1 | 16 | 4 | 11 | 19 | 2 | 17 | 5 | 12 |
| Atlanta | 12 | 1 | 11 | 1 | 10 | 13 | 1 | 12 | 3 | 9 |
| Austin | 16 | 1 | 14 | 1 | 14 | 17 | 1 | 15 | 1 | 14 |
| Baltimore City | 20 | 1 | 19 | \# | 19 | 19 | 2 | 18 | 1 | 17 |
| Boston | 20 | 3 | 16 | 1 | 16 | 20 | 4 | 16 | 1 | 16 |
| Charlote | 9 | 1 | 9 | 1 | 8 | 10 | 1 | 10 | 5 | 5 |
| Chicago | 16 | 1 | 15 | 1 | 14 | 15 | 1 | 14 | 1 | 13 |
| Clark County (NV) | - | - | - | - | - | 10 | 1 | 9 | 4 | 5 |
| Cleveland | 26 | 4 | 22 | 1 | 21 | 24 | 5 | 19 | 2 | 18 |
| Dallas | 10 | 2 | 8 | \# | 8 | 11 | 2 | 9 | 1 | 8 |
| Denver | - | - | - | - | - | 12 | 2 | 10 | 4 | 6 |
| Detroit | 19 | 5 | 14 | 1 | 13 | 18 | 5 | 13 | 4 | 9 |
| District of Columbia (DCPS) | 20 | 2 | 18 | \# | 18 | 18 | 1 | 16 | 2 | 14 |
| Duval County (FL) | 12 | 1 | 10 | 1 | 9 | 14 | 2 | 12 | 2 | 10 |
| Fort Worth | - | - | - | - | - | 11 | 2 | 9 | 1 | 8 |
| Fresno | 11 | 1 | 9 | 2 | 7 | 10 | 2 | 9 | 2 | 6 |
| Guilford County (NC) | - | - | - | - | - | 16 | 1 | 15 | 4 | 11 |
| Hillsborough County (FL) | 17 | 1 | 16 | 1 | 16 | 17 | 2 | 15 | 1 | 14 |
| Houston | 11 | 2 | 9 | 1 | 8 | 10 | 2 | 7 | 1 | 6 |
| Jefferson County (KY) | 12 | 1 | 11 | 1 | 10 | 10 | 1 | 9 | 1 | 8 |
| Los Angeles | 14 | 2 | 12 | 2 | 10 | 13 | 2 | 12 | 6 | 6 |
| Miami-Dade | 10 | 1 | 9 | \# | 9 | 11 | 1 | 10 | 1 | 9 |
| Milwaukee | - | - | - | - | - | 22 | 4 | 19 | 3 | 16 |
| New York City | 19 | 1 | 18 | \# | 18 | 19 | 1 | 18 | 2 | 16 |
| Philadelphia | 18 | 3 | 15 | 1 | 14 | 18 | 4 | 15 | 2 | 13 |
| San Diego | 12 | 2 | 10 | 4 | 6 | 12 | 1 | 11 | 5 | 6 |
| Shelby County (TN) | - | - | - | - | - | 16 | 2 | 14 | 1 | 13 |
| ELL |  |  |  |  |  |  |  |  |  |  |
| Nation (public) | 7 | \# | 6 | 3 | 3 | 7 | 1 | 6 | 3 | 3 |
| Large city ${ }^{1}$ (public) | 12 | 1 | 11 | 5 | 6 | 13 | 1 | 12 | 6 | 5 |
| Albuquerque | 15 | \# | 15 | 8 | 6 | 12 | 1 | 11 | 5 | 7 |
| Atlanta | 2 | \# | 2 | \# | 2 | 2 | \# | 2 | \# | 1 |
| Austin | 17 | 2 | 15 | 8 | 7 | 20 | 2 | 19 | 8 | 11 |
| Baltimore City | 6 | 2 | 3 | \# | 3 | 3 | 1 | 3 | 1 | 2 |
| Boston | 25 | 2 | 23 | 7 | 16 | 25 | 2 | 23 | 11 | 12 |
| Charlotte | 7 | 1 | 7 | 3 | 3 | 8 | 1 | 7 | 5 | 2 |
| Chicago | 9 | 1 | 8 | 2 | 7 | 9 | 1 | 8 | 3 | 4 |
| Clark County (NV) | - | - | - | - | - | 17 | 1 | 16 | 12 | 4 |
| Cleveland | 8 | 1 | 7 | 2 | 5 | 10 | 1 | 9 | 4 | 5 |
| Dallas | 33 | 1 | 32 | 17 | 15 | 46 | 1 | 45 | 23 | 23 |
| Denver | - | - | - | - | - | 32 | 2 | 30 | 25 | 5 |
| Detroit | 15 | 1 | 14 | 13 | 1 | 18 | 1 | 17 | 16 | 1 |
| District of Columbia (DCPS) | 9 | 4 | 5 | 1 | 4 | 10 | 2 | 8 | 1 | 7 |
| Duval County (FL) | 4 | 1 | 3 | \# | 3 | 5 | 1 | 4 | \# | 4 |
| Fort Worth | - | - |  | - | , | 23 | \# | 22 | 15 | 8 |
| Fresno | 19 | 1 | 18 | 15 | 3 | 14 | 1 | 13 | 11 | 2 |
| Guilford County (NC) | - | - | - | - | - | 6 | \# | 5 | 2 | 3 |
| Hillsborough County (FL) | 10 | 1 | 9 | \# | 9 | 10 | 1 | 9 | 1 | 8 |
| Houston | 18 | 2 | 16 | 5 | 11 | 19 | 1 | 18 | 9 | 9 |
| Jefferson County (KY) | 5 | \# | 5 | 1 | 4 | 4 | \# | 4 | 2 | 2 |
| Los Angeles | 14 | 1 | 12 | 6 | 6 | 14 | 3 | 12 | 8 | 4 |
| Miami-Dade | 14 | 2 | 12 | \# | 12 | 14 | 2 | 12 | 1 | 10 |
| Milwaukee | - | - | - | - | - | 10 | 1 | 10 | 2 | 8 |
| New York City | 10 | 1 | 9 | \# | 8 | 13 | 2 | 12 | 1 | 10 |
| Philadelphia | 7 | 1 | 7 | 2 | 5 | 10 | 2 | 8 | 5 | 4 |
| San Diego | 17 | 1 | 16 | 12 | 4 | 14 | , | 12 | 9 | 3 |
| Shelby County (TN) |  |  |  |  |  | 5 | \# | 4 | 1 | 3 |

Table A-32.
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, by SD/ELL category and urban district/jurisdiction: Various years, 2003-19—Continued

| SD/ELL category and urban district/jurisdiction | 2019 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Identified | Excluded | Assessed | Assessed without accom-modations | Assessed with accom-modations |
| SD and/or ELL |  |  |  |  |  |
| Nation (public) | 21 | 2 | 19 | 6 | 13 |
| Large city ${ }^{1}$ (public) | 25 | 2 | 24 | 8 | 16 |
| Albuquerque | 30 | 2 | 28 | 13 | 15 |
| Atlanta | 18 | 1 | 16 | 1 | 15 |
| Austin | 35 | 2 | 34 | 11 | 23 |
| Baltimore City | 25 | 2 | 24 | 1 | 22 |
| Boston | 39 | 5 | 34 | 10 | 24 |
| Charlotte | 17 | 2 | 15 | 6 | 9 |
| Chicago | 24 | 1 | 22 | 4 | 18 |
| Clark County (NV) | 23 | 1 | 22 | 14 | 8 |
| Cleveland | 32 | 5 | 27 | 4 | 23 |
| Dallas | 54 | 2 | 51 | 34 | 17 |
| Denver | 33 | 1 | 32 | 20 | 12 |
| Detroit | 31 | 6 | 25 | 11 | 14 |
| District of Columbia (DCPS) | 27 | 2 | 24 | 1 | 23 |
| Duval County (FL) | 21 | 3 | 18 | 2 | 17 |
| Fort Worth | 34 | 1 | 33 | 21 | 12 |
| Fresno | 23 | 1 | 22 | 13 | 9 |
| Guilford County (NC) | 16 | 1 | 16 | 3 | 12 |
| Hillsborough County (FL) | 27 | 1 | 26 | 2 | 24 |
| Houston | 30 | 2 | 28 | 16 | 12 |
| Jefferson County (KY) | 17 | 2 | 15 | 2 | 13 |
| Los Angeles | 22 | 2 | 20 | 11 | 9 |
| Miami-Dade | 25 | 2 | 23 | 1 | 22 |
| Milwaukee | 31 | 3 | 28 | 3 | 25 |
| New York City | 30 | 1 | 29 | 2 | 27 |
| Philadelphia | 28 | 5 | 23 | 7 | 16 |
| San Diego | 22 | 2 | 20 | 12 | 8 |
| Shelby County (TN) | 17 | 2 | 15 | 3 | 12 |
| SD |  |  |  |  |  |
| Nation (public) | 15 | 1 | 13 | 2 | 11 |
| Large city ${ }^{1}$ (public) | 14 | 1 | 13 | 2 | 11 |
| Albuquerque | 20 | 2 | 19 | 6 | 13 |
| Atlanta | 16 | 1 | 15 | 1 | 14 |
| Austin | 18 | 1 | 17 | 1 | 16 |
| Baltimore City | 20 | 1 | 20 | 1 | 19 |
| Boston | 20 | 3 | 18 | 1 | 17 |
| Charlotte | 9 | 1 | 8 | 2 | 7 |
| Chicago | 16 | 1 | 15 | 1 | 15 |
| Clark County (NV) | 11 | 1 | 10 | 4 | 6 |
| Cleveland | 23 | 4 | 18 | 1 | 17 |
| Dallas | 11 | 1 | 9 | 2 | 8 |
| Denver | 11 | 1 | 10 | 2 | 9 |
| Detroit | 19 | 6 | 13 | 1 | 11 |
| District of Columbia (DCPS) | 18 | 1 | 17 | 1 | 16 |
| Duval County (FL) | 16 | 2 | 14 | 1 | 13 |
| Fort Worth | 11 | 1 | 10 | 3 | 7 |
| Fresno | 12 | 1 | 11 | 2 | 8 |
| Guilford County (NC) | 13 | 1 | 12 | 2 | 10 |
| Hillsborough County (FL) | 19 | 1 | 18 | 2 | 16 |
| Houston | 9 | 1 | 8 | 1 | 7 |
| Jefferson County (KY) | 11 | 1 | 10 | 1 | 10 |
| Los Angeles | 13 | 1 | 12 | 4 | 8 |
| Miami-Dade | 12 | 1 | 11 | \# | 11 |
| Milwaukee | 22 | 3 | 19 | 1 | 18 |
| New York City | 21 | \# | 20 | 1 | 19 |
| Philadelphia | 18 | 3 | 14 | 2 | 13 |
| San Diego | 14 | 2 | 13 | 6 | 6 |
| Shelby County (TN) | 12 | 2 | 10 | 2 | 9 |
| ELL |  |  |  |  |  |
| Nation (public) | 8 | 1 | 7 | 4 | 3 |
| Large city ${ }^{1}$ (public) | 14 | 1 | 13 | 7 | 6 |
| Albuquerque | 14 | \# | 14 | 9 | 5 |
| Atlanta | 3 | \# | 2 | \# | 2 |
| Austin | 22 | 1 | 21 | 10 | 11 |
| Baltimore City | 5 | 1 | 4 | \# | 4 |
| Boston | 25 | 3 | 21 | 9 | 13 |
| Charlotte | 9 | 1 | 8 | 4 | 3 |
| Chicago | 12 | 1 | 11 | 4 | 7 |
| Clark County (NV) | 15 | 1 | 15 | 11 | 4 |
| Cleveland | 12 | 1 | 11 | 3 | 8 |
| Dallas | 47 | 2 | 45 | 33 | 11 |
| Denver | 26 | 1 | 25 | 18 | 6 |
| Detroit | 14 | 1 | 13 | 9 | 4 |
| District of Columbia (DCPS) | 10 | 1 | 9 | 1 | 8 |
| Duval County (FL) | 5 | 1 | 5 | 1 | 4 |
| Fort Worth | 26 | \# | 26 | 19 | 7 |
| Fresno | 15 | 1 | 14 | 11 | 3 |
| Guilford County (NC) | 5 | \# | 5 | 1 | 3 |
| Hillsborough County (FL) | 9 | \# | 9 | \# | 9 |
| Houston | 23 | 1 | 22 | 15 | 7 |
| Jefferson County (KY) | 6 | 1 | 6 | 2 | 4 |
| Los Angeles | 15 | 1 | 13 | 8 | 5 |
| Miami-Dade | 14 | 1 | 13 | \# | 13 |
| Milwaukee | 12 | 1 | 11 | 2 | 9 |
| New York City | 12 | 1 | 11 | 2 | 10 |
| Philadelphia | 12 | 2 | 10 | 6 | 4 |
| San Diego | 10 | 1 | 10 | 7 | 3 |
| Shelby County (TN) | 6 | \# | 5 | 2 | 3 |

## Data Collection

The NAEP 2019 mathematics assessment was conducted from January to March 2019 by contractors to the U.S. Department of Education. Data collection for NAEP involves a collaborative effort among the participating schools, school districts, states, and NAEP staff. To reduce the burden on the participating schools, NAEP field staff perform most of the work associated with the assessment. The cooperation of the schools involves enlisting a school staff member to assist in coordinating selected students and providing space to administer the assessments.

Assessment sessions are scripted so that all students are given the same instructions and opportunity to demonstrate what they know and can do. Assessment administrators conduct the sessions under the supervision of their team's assessment coordinator. Training of assessment administrators focuses on their responsibilities in the classroom and on reading the scripts verbatim to administer the sessions in a uniform manner.

NAEP procedures guarantee the anonymity of participants. The names of students are never removed from the schools. The results of NAEP are reported on the national level and by region of the country, state, and for some urban districts-not by school or individual student.

## Scoring

After students have entered their responses on their tablets, the National Assessment of Educational Progress (NAEP) representatives submit the response data from the administrator's tablet to a central server so that the responses can be exported for scoring.

The National Center for Education Statistics (NCES) oversees the scoring of multiple-choice items electronically, and employs human scorers for short and extended constructed-response items. NCES is also responsible for developing scoring guides that match criteria in assessment frameworks, recruiting and training qualified scorers, and monitoring scoring consistency.

NCES follows the NAEP scoring process which implements quality control and validity checks at each stage of a five-stage process:

- Rubric Development: Develop scoring guides that match criteria in assessment frameworks.
- Training Materials Development: Develop training materials after receiving actual student responses to the items during a pilot assessment.
- Pilot scoring: Identify and address any mismatches between what NCES expected from students, how they interpreted the item, and what students actually provided.
- Operational Scoring: Seek to develop consensus/agreement by having the team score consistently according to the rubric and training sets.
- Trend Scoring/Monitoring: Maintain consensus by scoring consistently with how items were scored in previous years.


## Data Analysis and Scaling

The goal of the analysis of NAEP data is to summarize the performance of groups of students. Initial analysis activities verify the accuracy of the data and data files used in the analysis and provide the first indication of aspects of the data and analysis that require special consideration and attention. The first step is to determine the percentages of students who gave various responses to each cognitive item. Next, the properties of the items are further examined using classical test theory measures of item difficulty and item discrimination. Some of these activities are conducted without student weights or with preliminary student weights, but final student weights are used whenever possible.

After the initial activities are completed, NAEP score scales are created using Item Response Theory (IRT), and scale score distributions are estimated for groups of students. Not all students take the same blocks of items in a NAEP assessment, so results cannot be summarized using the total number of correct item responses. Instead, IRT models are used to describe the relationships between the item responses provided by students and the underlying scale (e.g., mathematics ability). The primary purpose of IRT scaling is to provide a common scale on which performance can be compared even when students receive different blocks of items. Item parameters that are used in the models are estimated from student response data for each item. Different IRT models with different types of item parameters are used to describe multiple-choice items, constructed-response items that are scored simply right or wrong, and complex constructed-response items that have three or more categories.

Because the NAEP design gives each student a small proportion of the pool of assessment items, the assessment cannot provide reliable information about individual student performance. Traditional test scores for individual students, even those based on IRT, would result in misleading estimates of population characteristics, such as student group means and percentages of students at or above a certain scale-score level. However, it is NAEP's goal to estimate these population characteristics. This is accomplished using marginal estimation techniques for latent variables. Under the assumptions of the analysis models, these population estimates will be consistent in the sense that the estimates approach the population values as the sample size increases.

IRT and the NAEP marginal estimation methodology are used to estimate score scales for each of the mathematics content areas at each grade (e.g., at grades 4 and 8 , score scales are estimated for number properties and operations; measurement; geometry; data analysis, statistics, and probability; and algebra). The scales summarize student performance across all three types of questions in the assessment (multiple-choice, short constructedresponse, and extended constructed-response). Each scale score distribution is transformed to a NAEP scale that ranges from 0 to 500 . A mathematics composite scale is subsequently created by combining the content area scales. Summary statistics of the scale scores are estimated, and statistical tests are used to make inferences about the comparisons of results for different groups of students or for different assessment years. Finally, NAEP scale score distributions are described via achievement levels and/or item mapping procedures. For more information about NAEP analysis, IRT, and scaling see https://nces.ed.gov/nationsreportcard/tdw/analysis/.

## Variance Estimation

The averages and percentages in this report are estimates based on samples of students rather than on entire populations. Moreover, the collection of questions used at each grade level is only a sample of the many questions that could have been asked to assess the skills and abilities described in the NAEP framework. Therefore, the results are subject to a measure of uncertainty, reflected in the standard error of the estimates-a range of up to a few points above or below the score or percentage-which takes into account potential score fluctuation due to sampling error and measurement error.

Because NAEP uses complex sampling procedures, conventional formulas for estimating sampling variability that assume simple random sampling are inappropriate. NAEP uses a jackknife replication procedure to estimate standard errors. The jackknife standard error provides a reasonable measure of uncertainty for any student information that can be observed without error. However, because each student typically responds to only a few questions within any mathematics content area, the estimated scale score for any single student would be imprecise. In this case, NAEP's marginal estimation methodology is used to describe the performance of groups of students without requiring precise estimates of individual student performance. The estimate of the variance of the students' scale score distributions (which reflect the imprecision due to lack of measurement accuracy) is computed. This component of variability is then included in the standard errors of NAEP scale scores.

## Drawing Inferences from the NAEP Results

Drawing correct inferences from NAEP assessment results depends on the use of appropriate statistical procedures for comparing assessment results for population groups of interest and following guidelines to ensure the validity of the inferences. Comparisons of different groups of students with respect to scores or percentages of a certain attribute are of primary interest to users of NAEP results. The user is cautioned to rely on the results of statistical tests, rather than on the apparent magnitude of the difference between two numbers when determining whether differences are likely to represent actual differences among the groups in the population.
$t$ Test Comparison: By convention, references to differences in NAEP reports indicate that scores or percentages from two groups are different (e.g., one group performed higher or lower than another group) only when the difference in the point estimates for the groups being compared is statistically significant at an approximate level of 05 .

Since 1998, $t$ tests have been used for most NAEP comparisons. These tests are more appropriate than $z$ tests (based on normal distribution approximations) when the statistics that are being compared are from distributions with proportionally larger extremes (i.e., thicker tails) than the normal distribution. One aspect of the use of tests that contributes to the difficulty in their use for large-scale surveys is the determination of the appropriate degrees of freedom for the $t$ distribution of interest.

Multiple Comparison Procedures: The $t$ test used by NAEP and the certainty ascribed to intervals (e.g., a 95 percent confidence interval) are based on statistical theory that assumes that only one confidence interval or test of statistical significance is being performed. However, in some sections of a report, many different groups may be compared (i.e., multiple sets of confidence intervals are being analyzed). In sets of confidence intervals, statistical theory indicates that certainty associated with the entire set of intervals is less than that attributable to each individual comparison from the set. To hold the significance level for the set of comparisons at a particular level (e.g., .05), adjustments-called multiple comparison procedures-must be made to the methods.

To ensure that comparisons made using NAEP data are as accurate as possible, error rates are controlled when multiple comparisons are made. When making a number of comparisons in a single analysis, such as analyzing White student performance versus the performance of Black, Hispanic, Asian/Pacific Islander, and American Indian/Alaska Native students, the probability of finding significant differences by chance, for at least one comparison, increases with the family size or number of comparisons. There are several ways to take into account how many related comparisons are being made. In NAEP, the Benjamini-Hochberg False Discovery Rate (FDR) procedure is used to control for this.

Unlike other multiple comparison procedures (e.g., the Bonferroni procedure) that control the familywise error rate (i.e., the probability of making even one false rejection in the set of comparisons), the FDR procedure controls the expected proportion of falsely rejected hypotheses. Familywise procedures are considered conservative for large families of comparisons; therefore the FDR procedure is more suitable for multiple comparisons in NAEP than other procedures. There are two exceptions where the FDR is not applied: when comparing multiple years and when comparing a state's overall results to the nation.

## NAEP Reporting Groups

In addition to overall results for each grade assessed, NAEP results are reported for certain student groups provided there are sufficient numbers of students and adequate school representation. Results for some student groups may not be available for certain years, grades, or jurisdictions.

Race/Ethnicity: The school-recorded race/ethnicity variable records the race/ethnicity of each student as reported by the student's school. For 2019, the mutually exclusive racial/ethnic categories are White, Black, Hispanic, Asian, American Indian/Alaska Native, Native Hawaiian or Other Pacific Islander, and Two or more races. Black includes African American and Hispanic includes Latino. Race categories exclude Hispanic origin unless specified.

Gender: The gender of the student assessed is taken from school records.
Eligibility for the National School Lunch Program: NAEP first began collecting data in 1996 on student eligibility for NSLP as an indicator of poverty. Based on available school records, students were classified as either currently eligible for the free/reduced-price school lunch or not eligible. Eligibility for free and reduced-price lunches is determined by students' family income in relation to the federally established poverty level. Students from families with incomes at or below 130 percent of the poverty level qualify to receive free lunches and those from families with incomes between 130 and 185 percent of the poverty level qualify to receive reduced-price lunch. For the period July 1, 2018, through June 30, 2019, for a family of four, 130 percent of the poverty level is $\$ 32,630$ and 185 percent is $\$ 46,435$.

The classification applies only to the school year when the assessment was administered (i.e., the 2018-19 school year) and is not based on eligibility in previous years. If school records were not available, the student was classified as "Information not available." If the school did not participate in the program, all students in that school were classified as Information not available. Because of the improved quality of the data on students' eligibility for NSLP, the percentage of students for whom information was not available has decreased compared to the percentages reported prior to the 2003 assessment.

As a result of the passage of the Healthy, Hunger-Free Kids Act of 2010, schools can use a new universal meal service option, the "Community Eligibility Provision" (CEP). Through CEP, eligible schools can provide meal service to all students at no charge, regardless of economic status and without the need to collect eligibility data through household applications. CEP became available nationwide in the 2014-2015 school year; as a result, the percentage of students in many states categorized as eligible for NSLP may have increased in comparison to 2013. Therefore, readers should interpret NSLP trend results with caution.

Type of Location: Results for four mutually exclusive categories of school location are also reported: city, suburb, town, and rural. The categories are based on standard definitions established by the Federal Office of Management and Budget using population and geographic information from the U.S. Census Bureau. Schools are assigned to these categories in the NCES Common Core of Data based on their physical address. The classification system was revised for 2007; therefore, trend comparisons to previous years are not available. The new locale codes are based on an address's proximity to an urbanized area (a densely settled core with densely settled surrounding areas). This is a change from the original system based on metropolitan statistical areas. To distinguish the two systems, the new system is referred to as "urban-centric locale codes."

Parental Education: Eighth-graders were asked the following two questions, the responses to which were combined to derive the parental education variable:

How far in school did your mother go?

- She did not finish high school.
- She graduated from high school.
- She had some education after high school.
- She graduated from college.
- I don't know.

How far in school did your father go?

- He did not finish high school.
- He graduated from high school.
- He had some education after high school.
- He graduated from college.
- I don't know.

The information was combined into one parental-education reporting variable in the following way:

- If a student indicated the extent of education for only one parent, that level was included in the data. If a student indicated the extent of education for both parents, the higher of the two levels was included in the data.
- If a student responded "I don't know" for both parents, or responded "I don't know" for one parent and did not respond for the other, the parental education level was classified as "I don't know."
- If the student did not respond for either parent, the student was recorded as having provided no response.

Because fourth-graders' responses to the questions tend to be highly variable, the questions are not presented to students at grade 4.

Region of the Country: Prior to 2003, NAEP results were reported for four NAEP-defined regions of the nation: Northeast, Southeast, Central, and West. To align NAEP with other federal data collections, NAEP analysis and reports have used the U.S. Census Bureau's definition of "region" beginning in 2003. The four regions defined by the U.S. Census Bureau are Northeast, South, Midwest, and West. Therefore, trend data by region are not provided for assessment years prior to 2003.

Figure A-1 shows how states are subdivided into these census regions. All 50 states and the District of Columbia are listed. Other jurisdictions, including the Department of Defense Education Activity schools, are not assigned to any region.

Figure A-1.
States/jurisdiction within regions of the country defined by the U.S. Census Bureau


SOURCE: U.S. Department of Commerce Economics and Statistics Administration, U.S. Census Bureau.

## Caution in Interpretations

As previously stated, the NAEP mathematics scale makes it possible to examine relationships between students' performance and various background factors that NAEP measures. However, the relationship between achievement and another variable does not reveal its underlying cause, which may be influenced by a number of other variables. Similarly, the assessments do not reflect the influence of unmeasured variables. The results are most useful when considered in combination with other knowledge about the student population and the educational system, such as trends in instruction, changes in the school-age population, and societal demands and expectations.

Caution in interpretation is also warranted for some small population group estimates. At times in this report, smaller population groups show very large increases or decreases across years in average scores; however, it is necessary to interpret such score changes with extreme caution. The effects of exclusion-rate changes for small student groups may be more marked for small groups than they are for the whole population. In addition, standard errors are often quite large around the score estimates for small groups, which in turn means the standard error around the gain is also large.


[^0]:    \# Rounds to zero.

[^1]:    ${ }^{1}$ 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), 2019 Mathematics Assessment.

[^2]:    ${ }^{1}$ 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), 2019 Mathematics Assessment.

[^3]:    The NAEP State Report Generator was developed for the NAEP 2019 reports by Phillip Leung, Patricia Donahue, Marc Berger, Rick Hasney, Ming Kuang, and Amy De Santo.

[^4]:    Not avallable.

[^5]:    See notes at end of table.

[^6]:    See notes at end of table.

[^7]:    - Not available.
    ${ }^{1}$ Department of Defense Education Activity (overseas and domestic schools)

[^8]:    See notes at end of table.

[^9]:    See notes at end of table.

[^10]:    See notes at end of table.

[^11]:    See notes at end of table.

