# Illinois

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

This report provides selected results for Illinois' 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: <a href="https://nces.ed.gov/nationsreportcard/">https://nces.ed.gov/nationsreportcard/</a>, which contains

- The Nation's Report Card™, 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 Illinois was 237. This was lower than that for the nation's public schools (240).
- The average scale score for students in Illinois in 2019 (237) was higher than that in 2000 (223) and was not significantly different from that in 2017 (238).
- In 2019, the percentage of students in Illinois who performed at or above *NAEP Proficient* was 38 percent. This was not significantly different from that for the nation's public schools (40 percent).
- The percentage of students in Illinois who performed at or above *NAEP Proficient* in 2019 (38 percent) was greater than that in 2000 (20 percent) and was not significantly different from that in 2017 (39 percent).
- In 2019, the percentage of students in Illinois who performed at or above *NAEP Basic* was 77 percent. This was smaller than that for the nation's public schools (80 percent).
- The percentage of students in Illinois who performed at or above *NAEP Basic* in 2019 (77 percent) was greater than that in 2000 (63 percent) and was not significantly different from that in 2017 (76 percent).

#### Grade 8:

- In 2019, the average mathematics scale score for eighth-grade students in Illinois was 283. This was not significantly different from that for the nation's public schools (281).
- The average scale score for students in Illinois in 2019 (283) was higher than that in 1990 (261) and was not significantly different from that in 2017 (282).
- In 2019, the percentage of students in Illinois who performed at or above *NAEP Proficient* was 34 percent. This was not significantly different from that for the nation's public schools (33 percent).
- The percentage of students in Illinois who performed at or above *NAEP Proficient* in 2019 (34 percent) was greater than that in 1990 (15 percent) and was not significantly different from that in 2017 (32 percent).
- In 2019, the percentage of students in Illinois who performed at or above *NAEP Basic* was 69 percent. This was not significantly different from that for the nation's public schools (68 percent).
- The percentage of students in Illinois who performed at or above *NAEP Basic* in 2019 (69 percent) was greater than that in 1990 (50 percent) and was not significantly different from that in 2017 (68 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 constructed-response questions required students to write both a solution and its justification, explanation, or interpretation. Released test questions, along with student performance data by state, are available on the NAEP website at <a href="https://nces.ed.gov/nationsreportcard/data/">https://nces.ed.gov/nationsreportcard/data/</a>.

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 <a href="https://www.nationsreportcard.gov/mathematics/about/samples?anchor=footer&grade=4">https://www.nationsreportcard.gov/mathematics/about/samples?anchor=footer&grade=4</a>.

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, 75th, 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 grade-level 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.

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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 achievement-level descriptions are summarized in Figures 1-A and 1-B.

Figure 1-A

#### The Nation's Report Card 2019 State Assessment

Descriptions of fourth-grade NAEP achievement levels for 2019 NAEP mathematics assessment

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

Level (214)

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.

**Figure 1-B** 

### The Nation's Report Card 2019 State Assessment

Descriptions of eighth-grade NAEP achievement levels for 2019 NAEP mathematics assessment

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

Level (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 procedures **Proficient** 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 in the five NAEP content areas.

Level (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

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how mathematics questions looked in the paper-based version of the <u>grade 4</u> and <u>grade 8</u> 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 Illinois 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 (<a href="https://nces.ed.gov/nationsreportcard/hsts/tabulations/regions.asp">https://nces.ed.gov/nationsreportcard/hsts/tabulations/regions.asp</a>). 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 Illinois, 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 Illinois was 237. This was lower than that for students across the nation (240).
- In Illinois, the average scale score for students in 2019 was not significantly different from that in 2017 (238). However, the average scale score for students in public schools across the nation in 2019 was higher than that in 2017 (239).
- In Illinois, the average scale score for students in 2019 was higher than the scores in 2000, 2003, and 2005. However, it was not significantly different from the scores in 2007, 2009, 2011, 2013, 2015, and 2017.

#### **Grade 8 Average Scale Score Results**

- In 2019, the average scale score for students in Illinois was 283. This was not significantly different from that for students across the nation (281).
- In Illinois, the average scale score for students in 2019 was not significantly different from that in 2017 (282). However, the average scale score for students in public schools across the nation in 2019 was lower than that in 2017 (282).
- In Illinois, the average scale score for students in 2019 was higher than the scores in 1990, 2000, 2003, and 2005. However, it was not significantly different from the scores in 2007, 2009, 2011, 2013, 2015, and 2017.

Table 1-A

## 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, 2000–2019

| Year and jurisdiction |                      | Average scale score | 10th<br>percentile | 25th<br>percentile | 50th<br>percentile | 75th<br>percentile | 90th<br>percentile |
|-----------------------|----------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 20001                 | Nation (public)      | 226*                | 185*               | 206*               | 228*               | 249*               | 265*               |
|                       | Illinois             | 225*                | 186*               | 205*               | 227*               | 246*               | 262*               |
| 2000                  | Nation (public)      | 224*                | 183*               | 203*               | 225*               | 247*               | 264*               |
|                       | Illinois             | 223*                | 184*               | 202*               | 225*               | 244*               | 261*               |
| 2003                  | Nation (public)      | 234*                | 196*               | 215*               | 235*               | 254*               | 270*               |
|                       | Midwest <sup>2</sup> | 237*                | 199                | 218*               | 238*               | 256*               | 272*               |
|                       | Illinois             | 233*                | 192                | 212*               | 234*               | 255*               | 272*               |
| 2005                  | Nation (public)      | 237*                | 199                | 219*               | 239*               | 257*               | 272*               |
|                       | Midwest <sup>2</sup> | 239*                | 201*               | 221                | 241*               | 259*               | 274*               |
|                       | Illinois             | 233*                | 192                | 213                | 235*               | 255*               | 271*               |
| 2007                  | Nation (public)      | 239*                | 201*               | 221*               | 241                | 259*               | 274*               |
|                       | Midwest <sup>2</sup> | 242                 | 204*               | 224*               | 244                | 261*               | 276*               |
|                       | Illinois             | 237                 | 198                | 218                | 239                | 258                | 274*               |
| 2009                  | Nation (public)      | 239*                | 201*               | 221                | 241*               | 259*               | 275*               |
|                       | Midwest <sup>2</sup> | 241                 | 204*               | 223*               | 243                | 261                | 277*               |
|                       | Illinois             | 238                 | 198                | 219                | 240                | 259                | 276                |
| 2011                  | Nation (public)      | 240                 | 202*               | 222*               | 242                | 260*               | 276*               |
|                       | Midwest <sup>2</sup> | 242*                | 204*               | 224*               | 244                | 262                | 277*               |
|                       | Illinois             | 239                 | 199                | 219                | 240                | 260                | 277                |
| 2013                  | Nation (public)      | 241*                | 202*               | 222*               | 243*               | 262                | 278*               |
|                       | Midwest <sup>2</sup> | 243*                | 203*               | 224*               | 245*               | 264                | 280                |
|                       | Illinois             | 239                 | 197                | 218                | 240                | 261                | 279                |
| 2015                  | Nation (public)      | 240                 | 201*               | 221                | 241                | 260*               | 277*               |
|                       | Midwest <sup>2</sup> | 242                 | 202*               | 222*               | 243                | 262                | 279                |
|                       | Illinois             | 237                 | 195                | 216                | 238                | 260                | 278                |
| 2017                  | Nation (public)      | 239*                | 197                | 219*               | 241*               | 261                | 279                |
|                       | Midwest <sup>2</sup> | 241                 | 199                | 220                | 243                | 263                | 281                |
|                       | Illinois             | 238                 | 194                | 215                | 239                | 262                | 280                |
| 2019                  | Nation (public)      | 240                 | 198                | 220                | 242                | 262                | 279                |
|                       | Midwest <sup>2</sup> | 241                 | 198                | 220                | 243                | 263                | 280                |
|                       | Illinois             | 237                 | 194                | 217                | 240                | 261                | 279                |

<sup>\*</sup> Value is significantly different (p < .05) from the value for the same jurisdiction in 2019.

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.

 $<sup>^{\</sup>mbox{\scriptsize 1}}$  Accommodations were not permitted for this assessment.

<sup>&</sup>lt;sup>2</sup> 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.

Table 1-B

## The Nation's Report Card 2019 State Assessment

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

| Year and jurisdiction |                      | Average scale score | 10th<br>percentile | 25th<br>percentile | 50th<br>percentile | 75th<br>percentile | 90th<br>percentile |
|-----------------------|----------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 1990 <sup>1</sup>     | Nation (public)      | 262*                | 214*               | 237*               | 263*               | 288*               | 307*               |
|                       | Illinois             | 261*                | 212*               | 237*               | 262*               | 286*               | 306*               |
| 20001                 | Nation (public)      | 274*                | 225*               | 250*               | 276*               | 300*               | 321*               |
|                       | Illinois             | 277*                | 233                | 254                | 278                | 301*               | 319*               |
| 2000                  | Nation (public)      | 272*                | 221*               | 247*               | 274*               | 299*               | 320*               |
|                       | Illinois             | 275*                | 227                | 253                | 277                | 300*               | 318*               |
| 2003                  | Nation (public)      | 276*                | 228                | 253                | 278*               | 301*               | 321*               |
|                       | Midwest <sup>2</sup> | 281*                | 235                | 259                | 283                | 305*               | 324*               |
|                       | Illinois             | 277*                | 228                | 252                | 279                | 303*               | 324*               |
| 2005                  | Nation (public)      | 278*                | 230                | 254                | 279*               | 303*               | 323*               |
|                       | Midwest <sup>2</sup> | 281*                | 235                | 259                | 283                | 306*               | 325*               |
|                       | Illinois             | 278*                | 230                | 254                | 280                | 302*               | 322*               |
| 2007                  | Nation (public)      | 280                 | 234*               | 257*               | 281                | 305*               | 325*               |
|                       | Midwest <sup>2</sup> | 283                 | 238*               | 261*               | 285                | 308*               | 327*               |
|                       | Illinois             | 280                 | 235                | 257                | 281                | 305*               | 326*               |
| 2009                  | Nation (public)      | 282                 | 235*               | 258*               | 283*               | 307*               | 328*               |
|                       | Midwest <sup>2</sup> | 285                 | 240*               | 262*               | 287*               | 309                | 329*               |
|                       | Illinois             | 282                 | 237                | 259                | 284                | 307                | 327                |
| 2011                  | Nation (public)      | 283*                | 236*               | 259*               | 284*               | 308                | 329*               |
|                       | Midwest <sup>2</sup> | 286                 | 241*               | 263*               | 287*               | 309                | 329*               |
|                       | Illinois             | 283                 | 238*               | 260                | 283                | 307                | 329                |
| 2013                  | Nation (public)      | 284*                | 236*               | 260*               | 285*               | 309                | 330*               |
|                       | Midwest <sup>2</sup> | 286*                | 240*               | 263*               | 288*               | 311                | 332                |
|                       | Illinois             | 285                 | 236                | 261*               | 286                | 311                | 332                |
| 2015                  | Nation (public)      | 281                 | 234*               | 257*               | 282                | 307*               | 328*               |
|                       | Midwest <sup>2</sup> | 284                 | 237*               | 261*               | 286                | 309                | 330*               |
|                       | Illinois             | 282                 | 235                | 259                | 283                | 306                | 327                |
| 2017                  | Nation (public)      | 282*                | 232*               | 255*               | 282                | 309                | 332                |
|                       | Midwest <sup>2</sup> | 285                 | 235                | 259                | 285                | 312                | 334                |
|                       | Illinois             | 282                 | 232                | 255                | 281                | 308                | 333                |
| 2019                  | Nation (public)      | 281                 | 230                | 254                | 281                | 308                | 332                |
|                       | Midwest <sup>2</sup> | 284                 | 234                | 258                | 285                | 311                | 333                |
|                       | Illinois             | 283                 | 232                | 256                | 282                | 309                | 333                |

<sup>\*</sup> Value is significantly different (p < .05) from the value for the same jurisdiction in 2019.

<sup>&</sup>lt;sup>1</sup> Accommodations were not permitted for this assessment.

<sup>&</sup>lt;sup>2</sup> 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 Illinois' students who performed at or above *NAEP Proficient* was 38 percent. This was not significantly different from the percentage of the nation's public school students who performed at or above *NAEP Proficient* (40 percent).
- In Illinois, the percentage of students who performed at or above *NAEP Proficient* in 2019 was greater than the percentages in 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 Illinois' students who performed at or above *NAEP Basic* was 77 percent. This was smaller than the percentage of the nation's public school students who performed at or above *NAEP Basic* (80 percent).
- In Illinois, the percentage of students who performed at or above *NAEP Basic* in 2019 was greater than the percentages in 2000 and 2003, but was not significantly different from the percentages in 2005, 2007, 2009, 2011, 2013, 2015, and 2017.

#### **Grade 8 NAEP Achievement-Level Results**

- In 2019, the percentage of Illinois' students who performed at or above *NAEP Proficient* was 34 percent. This was not significantly different from the percentage of the nation's public school students who performed at or above *NAEP Proficient* (33 percent).
- In Illinois, the percentage of students who performed at or above *NAEP Proficient* in 2019 was greater than the percentages in 1990, 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 Illinois' students who performed at or above *NAEP Basic* was 69 percent. This was not significantly different from the percentage of the nation's public school students who performed at or above *NAEP Basic* (68 percent).
- In Illinois, the percentage of students who performed at or above *NAEP Basic* in 2019 was greater than the percentage in 1990, but was smaller than the percentages in 2011 and 2013.

Table 2-A

## 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, 2000–2019

| Year and jurisdiction |                      | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
|-----------------------|----------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| 20001                 | Nation (public)      | 33*                 | 67*                       | 25*                               | 2*                     |
|                       | Illinois             | 34*                 | 66*                       | 21*                               | 2*                     |
| 2000                  | Nation (public)      | 36*                 | 64*                       | 22*                               | 2*                     |
|                       | Illinois             | 37*                 | 63*                       | 20*                               | 2*                     |
| 2003                  | Nation (public)      | 24*                 | 76*                       | 31*                               | 4*                     |
|                       | Midwest <sup>2</sup> | 21                  | 79                        | 35*                               | 4*                     |
|                       | Illinois             | 27*                 | 73*                       | 32*                               | 5*                     |
| 2005                  | Nation (public)      | 21                  | 79                        | 35*                               | 5*                     |
|                       | Midwest <sup>2</sup> | 19                  | 81                        | 38*                               | 5*                     |
|                       | Illinois             | 26                  | 74                        | 32*                               | 5*                     |
| 2007                  | Nation (public)      | 19*                 | 81*                       | 39*                               | 5*                     |
|                       | Midwest <sup>2</sup> | 16*                 | 84*                       | 42                                | 6*                     |
|                       | Illinois             | 21                  | 79                        | 36                                | 6*                     |
| 2009                  | Nation (public)      | 19*                 | 81*                       | 38*                               | 6*                     |
|                       | Midwest <sup>2</sup> | 17*                 | 83*                       | 42                                | 7*                     |
|                       | Illinois             | 20                  | 80                        | 38                                | 7                      |
| 2011                  | Nation (public)      | 18*                 | 82*                       | 40                                | 6*                     |
|                       | Midwest <sup>2</sup> | 16*                 | 84*                       | 42                                | 7*                     |
|                       | Illinois             | 20                  | 80                        | 38                                | 7                      |
| 2013                  | Nation (public)      | 18*                 | 82*                       | 41                                | 8*                     |
|                       | Midwest <sup>2</sup> | 16*                 | 84*                       | 45*                               | 9                      |
|                       | Illinois             | 21                  | 79                        | 39                                | 8                      |
| 2015                  | Nation (public)      | 19                  | 81                        | 39                                | 7*                     |
|                       | Midwest <sup>2</sup> | 18*                 | 82*                       | 42                                | 8                      |
|                       | Illinois             | 23                  | 77                        | 37                                | 8                      |
| 2017                  | Nation (public)      | 21*                 | 79*                       | 40                                | 8                      |
|                       | Midwest <sup>2</sup> | 20                  | 80                        | 42                                | 9                      |
|                       | Illinois             | 24                  | 76                        | 39                                | 9                      |
| 2019                  | Nation (public)      | 20                  | 80                        | 40                                | 9                      |
|                       | Midwest <sup>2</sup> | 20                  | 80                        | 42                                | 9                      |
|                       | Illinois             | 23                  | 77                        | 38                                | 8                      |

<sup>\*</sup> Value is significantly different (p < .05) from the value for the same jurisdiction in 2019.

<sup>&</sup>lt;sup>1</sup> Accommodations were not permitted for this assessment.

<sup>&</sup>lt;sup>2</sup> 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. NAEP 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*. 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 2-B

## 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<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
|-----------------------|----------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| 1990 <sup>1</sup>     | Nation (public)      | 49*                 | 51*                       | 15*                               | 2*                     |
|                       | Illinois             | 50*                 | 50*                       | 15*                               | 2*                     |
| 2000 <sup>1</sup>     | Nation (public)      | 35*                 | 65*                       | 26*                               | 5*                     |
|                       | Illinois             | 32                  | 68                        | 27*                               | 4*                     |
| 2000                  | Nation (public)      | 38*                 | 62*                       | 25*                               | 5*                     |
|                       | Illinois             | 33                  | 67                        | 26*                               | 4*                     |
| 2003                  | Nation (public)      | 33*                 | 67*                       | 27*                               | 5*                     |
|                       | Midwest <sup>2</sup> | 28                  | 72                        | 32*                               | 6*                     |
|                       | Illinois             | 34                  | 66                        | 29*                               | 6*                     |
| 2005                  | Nation (public)      | 32                  | 68                        | 28*                               | 6*                     |
|                       | Midwest <sup>2</sup> | 28                  | 72                        | 32*                               | 6*                     |
|                       | Illinois             | 32                  | 68                        | 29*                               | 5*                     |
| 2007                  | Nation (public)      | 30*                 | 70*                       | 31*                               | 7*                     |
|                       | Midwest <sup>2</sup> | 26*                 | 74*                       | 34*                               | 7*                     |
|                       | Illinois             | 30                  | 70                        | 31                                | 7*                     |
| 2009                  | Nation (public)      | 29*                 | 71*                       | 33                                | 7*                     |
|                       | Midwest <sup>2</sup> | 25*                 | 75*                       | 36                                | 8*                     |
|                       | Illinois             | 27                  | 73                        | 33                                | 7*                     |
| 2011                  | Nation (public)      | 28*                 | 72*                       | 34                                | 8*                     |
|                       | Midwest <sup>2</sup> | 24*                 | 76*                       | 36                                | 8*                     |
|                       | Illinois             | 27*                 | 73*                       | 33                                | 8                      |
| 2013                  | Nation (public)      | 27*                 | 73*                       | 34*                               | 8*                     |
|                       | Midwest <sup>2</sup> | 24*                 | 76*                       | 37                                | 9                      |
|                       | Illinois             | 26*                 | 74*                       | 36                                | 9                      |
| 2015                  | Nation (public)      | 30*                 | 70*                       | 32                                | 8*                     |
|                       | Midwest <sup>2</sup> | 26*                 | 74*                       | 35                                | 8*                     |
|                       | Illinois             | 28                  | 72                        | 32                                | 7*                     |
| 2017                  | Nation (public)      | 31*                 | 69*                       | 33                                | 10                     |
|                       | Midwest <sup>2</sup> | 28                  | 72                        | 36                                | 11                     |
|                       | Illinois             | 32                  | 68                        | 32                                | 10                     |
| 2019                  | Nation (public)      | 32                  | 68                        | 33                                | 10                     |
|                       | Midwest <sup>2</sup> | 28                  | 72                        | 36                                | 10                     |
|                       | Illinois             | 31                  | 69                        | 34                                | 10                     |

<sup>\*</sup> Value is significantly different (p < .05) from the value for the same jurisdiction in 2019.

<sup>&</sup>lt;sup>1</sup> Accommodations were not permitted for this assessment.

<sup>&</sup>lt;sup>2</sup> 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. NAEP 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. 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 Illinois, 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 Illinois' 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 Illinois in the NAEP 2019 mathematics assessment.

#### Grade 4 Average Scale Score Comparison Results

• The average scale score for students in Illinois was higher than 6 jurisdictions, not significantly different from 21 jurisdictions, and lower than 24 jurisdictions.

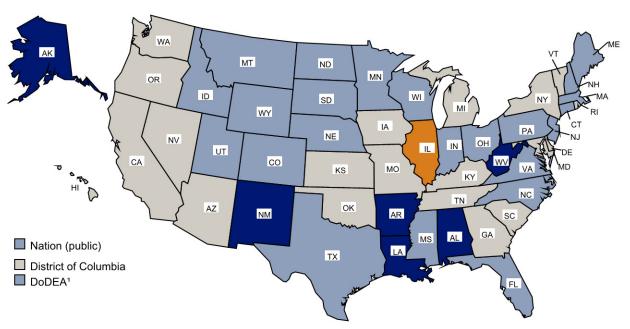
#### **Grade 8 Average Scale Score Comparison Results**

• The average scale score for students in Illinois was higher than 17 jurisdictions, not significantly different from 23 jurisdictions, and lower than 11 jurisdictions.

Figure 2-A

## The Nation's Report Card 2019 State Assessment

Illinois' average scale score in NAEP mathematics for fourth-grade public school students compared with scores for the nation and other participating jurisdictions: 2019





<sup>&</sup>lt;sup>1</sup> Department of Defense Education Activity (overseas and domestic schools).

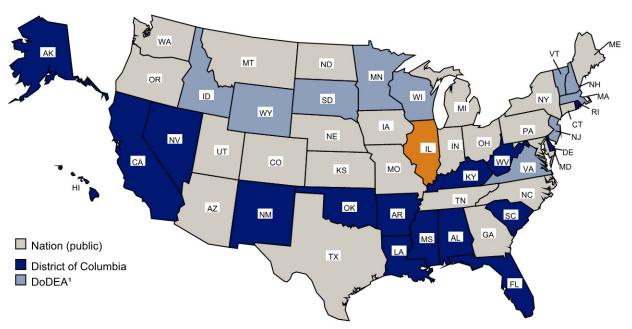
NOTE: Significance tests used a multiple-comparison procedure based on all jurisdictions that participated.

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

Figure 2-B

## The Nation's Report Card 2019 State Assessment

Illinois' average scale score in NAEP mathematics for eighth-grade public school students compared with scores for the nation and other participating jurisdictions: 2019





<sup>&</sup>lt;sup>1</sup> 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 Illinois.

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 Illinois was greater than
  the percentages in 8 jurisdictions, not significantly different from those in 25 jurisdictions, and smaller
  than those in 18 jurisdictions.
- The percentage of students performing at or above the *NAEP Basic* level in Illinois was greater than the percentages in 4 jurisdictions, not significantly different from those in 23 jurisdictions, and smaller than those in 24 jurisdictions (data not shown).

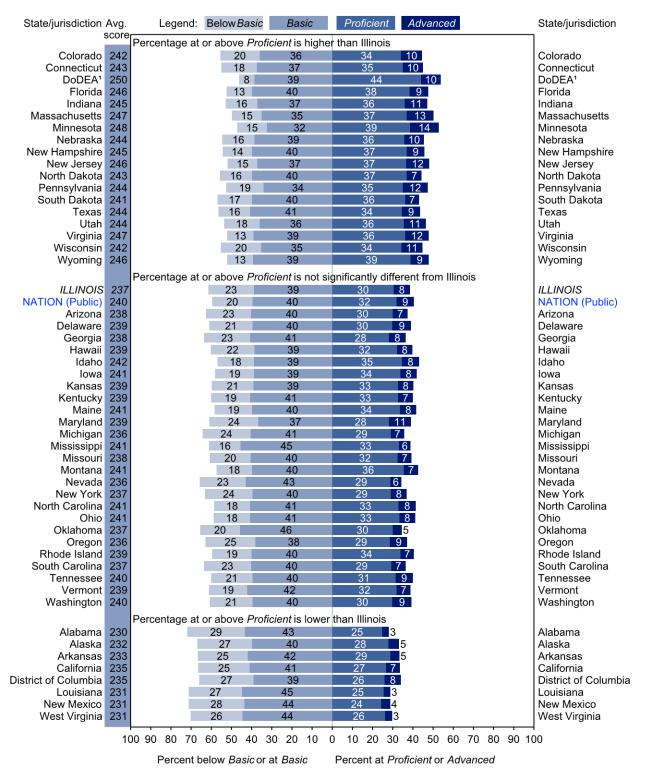
#### **Grade 8 NAEP Achievement-Level Comparison Results**

- The percentage of students performing at or above the *NAEP Proficient* level in Illinois was greater than the percentages in 17 jurisdictions, not significantly different from those in 23 jurisdictions, and smaller than those in 11 jurisdictions.
- The percentage of students performing at or above the *NAEP Basic* level in Illinois was greater than the percentages in 15 jurisdictions, not significantly different from those in 21 jurisdictions, and smaller than those in 15 jurisdictions (data not shown).

Figure 3-A

#### 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 Illinois' percentage at or above *NAEP Proficient* compared with the nation and other participating jurisdictions: 2019



<sup>&</sup>lt;sup>1</sup> Department of Defense Education Activity (overseas and domestic schools).

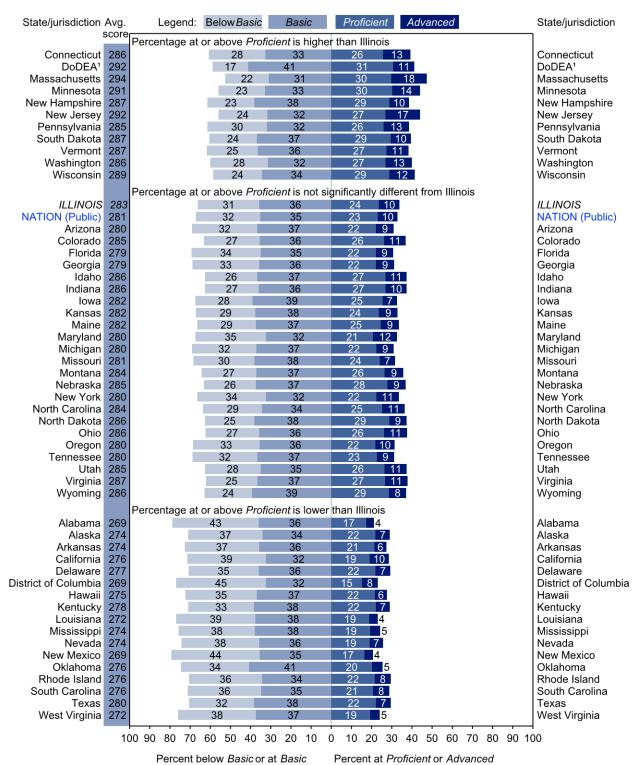
NOTE: The bars above contain percentages of students in each NAEP mathematics achievement level. Achievement levels corresponding to each population of students are aligned at the point where the *NAEP Proficient* category begins, so that they may be compared at *NAEP Proficient* and above. Detail may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

Figure 3-B

#### The Nation's Report Card 2019 State Assessment

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



<sup>&</sup>lt;sup>1</sup> 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. 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.

## **Mathematics Performance of Selected Student Groups**

This section of the report presents trend results for public school students in Illinois 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)
- parents' highest level of education

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 <a href="https://nces.ed.gov/nationsreportcard/naepdata/">https://nces.ed.gov/nationsreportcard/naepdata/</a>.

## **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 Illinois and the nation, by race/ethnicity.

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

- In 2019, White students in Illinois had an average scale score that was higher than the average scale scores of Black and Hispanic students, but lower than the average scale score of Asian/Pacific Islander students.
- In 2019, the average scale score of White students in Illinois was higher than their respective score in 2000, but not significantly different from their respective scores in 2003, 2005, 2007, 2009, 2011, 2013, 2015, and 2017.
- In 2019, the average scale score of Black students in Illinois was higher than their respective scores in 2000 and 2003, but not significantly different from their respective scores in 2005, 2007, 2009, 2011, 2013, 2015, and 2017.
- In 2019, the average scale score of Hispanic students in Illinois was higher than their respective scores in 2000, 2003, 2005, and 2007, but not significantly different from their respective scores in 2009, 2011, 2013, 2015, and 2017.
- In 2019, the average scale score of Asian/Pacific Islander students in Illinois was not significantly different from their respective scores in 2003, 2005, 2007, 2009, 2011, 2013, 2015, and 2017.
- In 2019, Black students in Illinois had an average scale score that was lower than that of White students by 30 points. In 2000, the average scale score for Black students was lower than that of White students by 33 points.
- In 2019, Hispanic students in Illinois had an average scale score that was lower than that of White students by 15 points. In 2000, the average scale score for Hispanic students was lower than that of White students by 24 points.

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

- In 2019 in Illinois, the percentage of White students performing at or above *NAEP Proficient* was greater than the corresponding percentages of Black and Hispanic students, but smaller than the percentage of Asian/Pacific Islander students.
- In 2019, the percentage of White students in Illinois performing at or above *NAEP Proficient* was greater than the percentages of their respective peers in 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 Black students in Illinois performing at or above *NAEP Proficient* was greater than the percentages of their respective peers in 2000 and 2003, but not significantly different from the percentages of their respective peers in 2005, 2007, 2009, 2011, 2013, 2015, and 2017.
- In 2019, the percentage of Hispanic students in Illinois performing at or above *NAEP Proficient* was greater than the percentages of their respective peers in 2000, 2003, 2005, 2007, 2009, and 2011, but not significantly different from the percentages of their respective peers in 2013, 2015, and 2017.
- In 2019, the percentage of Asian/Pacific Islander students in Illinois performing at or above *NAEP Proficient* was not significantly different from the percentages of their respective peers in 2003, 2005, 2007, 2009, 2011, 2013, 2015, and 2017.

## 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, 2000–2019

|  |                 |                        |                     | Percent             |                           |                                   |                        |
|--|-----------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| Race/ethnicity, year, and jurisdiction |                 | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| White                                  |                 |                        |                     |                     |                           |                                   |                        |
| 20001                                  | Nation (public) | 67*                    | 234*                | 22*                 | 78*                       | 32*                               | 3*                     |
|  | Illinois        | 57*                    | 236*                | 20                  | 80                        | 32*                               | 3*                     |
| 2000                                   | Nation (public) | 62*                    | 233*                | 24*                 | 76*                       | 30*                               | 3*                     |
|  | Illinois        | 56*                    | 235*                | 20                  | 80                        | 30*                               | 3*                     |
| 2003                                   | Nation (public) | 58*                    | 243*                | 13*                 | 87*                       | 42*                               | 5*                     |
|  | Illinois        | 59*                    | 244                 | 13                  | 87                        | 44*                               | 7*                     |
| 2005                                   | Nation (public) | 57*                    | 246*                | 11                  | 89                        | 47*                               | 7*                     |
|  | Illinois        | 54*                    | 245                 | 11                  | 89                        | 44*                               | 6*                     |
| 2007                                   | Nation (public) | 55*                    | 248                 | 9*                  | 91*                       | 51                                | 8*                     |
|  | Illinois        | 56*                    | 248                 | 9*                  | 91*                       | 50                                | 8                      |
| 2009                                   | Nation (public) | 54*                    | 248                 | 10*                 | 90*                       | 50                                | 8*                     |
|  | Illinois        | 51*                    | 249                 | 10*                 | 90*                       | 52                                | 10                     |
| 2011                                   | Nation (public) | 52*                    | 249                 | 9*                  | 91*                       | 52                                | 9*                     |
|  | Illinois        | 53*                    | 249                 | 10                  | 90                        | 51                                | 10                     |
| 2013                                   | Nation (public) | 51*                    | 250*                | 9*                  | 91*                       | 54                                | 10*                    |
|  | Illinois        | 48                     | 248                 | 12                  | 88                        | 51                                | 11                     |
| 2015                                   | Nation (public) | 49*                    | 248                 | 10*                 | 90*                       | 51                                | 10*                    |
|  | Illinois        | 46                     | 248                 | 11                  | 89                        | 49                                | 11                     |
| 2017                                   | Nation (public) | 47*                    | 248                 | 12                  | 88                        | 51                                | 11                     |
|  | Illinois        | 47                     | 249                 | 13                  | 87                        | 52                                | 13                     |
| 2019                                   | Nation (public) | 46                     | 249                 | 12                  | 88                        | 52                                | 12                     |
| Consideration of the                   | Illinois        | 46                     | 246                 | 14                  | 86                        | 51                                | 11                     |

## 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, 2000–2019—Continued

|  |                 |                        |                     | Percent             |                           |                                   |                        |
|--|-----------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| Race/ethnicity, year, and jurisdiction |                 | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| Black                                  |                 |                        |                     |                     |                           |                                   |                        |
| 20001                                  | Nation (public) | 17*                    | 204*                | 64*                 | 36*                       | 5*                                | #                      |
|  | Illinois        | 22                     | 203*                | 66*                 | 34*                       | 4*                                | #                      |
| 2000                                   | Nation (public) | 17                     | 203*                | 65*                 | 35*                       | 4*                                | #*                     |
|  | Illinois        | 22                     | 202*                | 69*                 | 31*                       | 4*                                | #                      |
| 2003                                   | Nation (public) | 17*                    | 216*                | 46*                 | 54*                       | 10*                               | #*                     |
|  | Illinois        | 20                     | 210*                | 56*                 | 44*                       | 7*                                | #                      |
| 2005                                   | Nation (public) | 17*                    | 220*                | 40*                 | 60*                       | 13*                               | 1*                     |
|  | Illinois        | 19                     | 212                 | 54*                 | 46*                       | 9                                 | 1                      |
| 2007                                   | Nation (public) | 17*                    | 222*                | 37                  | 63                        | 15*                               | 1*                     |
|  | Illinois        | 19                     | 216                 | 46                  | 54                        | 9                                 | #                      |
| 2009                                   | Nation (public) | 16*                    | 222*                | 37                  | 63                        | 15*                               | 1*                     |
|  | Illinois        | 19                     | 216                 | 46                  | 54                        | 11                                | 1                      |
| 2011                                   | Nation (public) | 16                     | 224                 | 34                  | 66                        | 17*                               | 1*                     |
|  | Illinois        | 19                     | 219                 | 42                  | 58                        | 14                                | 2                      |
| 2013                                   | Nation (public) | 16                     | 224                 | 34                  | 66                        | 18                                | 1*                     |
|  | Illinois        | 17                     | 220                 | 41                  | 59                        | 16                                | 1                      |
| 2015                                   | Nation (public) | 15                     | 224                 | 35                  | 65                        | 19                                | 1*                     |
|  | Illinois        | 18                     | 215                 | 49                  | 51                        | 12                                | 1                      |
| 2017                                   | Nation (public) | 15                     | 223                 | 37                  | 63                        | 19                                | 2                      |
|  | Illinois        | 17                     | 217                 | 46                  | 54                        | 15                                | 1                      |
| 2019                                   | Nation (public) | 15                     | 224                 | 35                  | 65                        | 20                                | 2                      |
|  | Illinois        | 17                     | 217                 | 43                  | 57                        | 14                                | 1                      |

## 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, 2000–2019—Continued

|  |                 |                        |                     | Percent             |                           |                                   |                        |
|--|-----------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| Race/ethnicity, year, and jurisdiction |                 | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| Hispanic                               |                 |                        |                     |                     |                           |                                   |                        |
| 2000 <sup>1</sup>                      | Nation (public) | 11*                    | 209*                | 55*                 | 45*                       | 8*                                | #                      |
|  | Illinois        | 17*                    | 215*                | 46*                 | 54*                       | 7*                                | #*                     |
| 2000                                   | Nation (public) | 16*                    | 207*                | 59*                 | 41*                       | 7*                                | #*                     |
|  | Illinois        | 20                     | 211*                | 53*                 | 47*                       | 6*                                | #                      |
| 2003                                   | Nation (public) | 19*                    | 221*                | 38*                 | 62*                       | 15*                               | 1*                     |
|  | Illinois        | 18*                    | 218*                | 45*                 | 55*                       | 13*                               | #*                     |
| 2005                                   | Nation (public) | 20*                    | 225*                | 33*                 | 67*                       | 19*                               | 1*                     |
|  | Illinois        | 22                     | 219*                | 41*                 | 59*                       | 14*                               | 1*                     |
| 2007                                   | Nation (public) | 21*                    | 227*                | 31*                 | 69*                       | 22*                               | 1*                     |
|  | Illinois        | 19*                    | 223*                | 36*                 | 64*                       | 19*                               | 1                      |
| 2009                                   | Nation (public) | 22*                    | 227*                | 30                  | 70                        | 21*                               | 1*                     |
|  | Illinois        | 22*                    | 227                 | 28                  | 72                        | 20*                               | 1                      |
| 2011                                   | Nation (public) | 24*                    | 229*                | 28                  | 72                        | 24*                               | 2*                     |
|  | Illinois        | 20*                    | 226                 | 30                  | 70                        | 20*                               | 1                      |
| 2013                                   | Nation (public) | 25*                    | 230                 | 27                  | 73                        | 26                                | 2*                     |
|  | Illinois        | 27                     | 229                 | 29                  | 71                        | 25                                | 3                      |
| 2015                                   | Nation (public) | 26*                    | 230                 | 27                  | 73                        | 26                                | 3                      |
|  | Illinois        | 28                     | 228                 | 30                  | 70                        | 24                                | 3                      |
| 2017                                   | Nation (public) | 27                     | 229                 | 30*                 | 70*                       | 26                                | 3                      |
|  | Illinois        | 27                     | 227                 | 33*                 | 67*                       | 23                                | 3                      |
| 2019                                   | Nation (public) | 28                     | 231                 | 27                  | 73                        | 28                                | 3                      |
| See notes at and of t                  | Illinois        | 27                     | 231                 | 26                  | 74                        | 28                                | 4                      |

## 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, 2000–2019—Continued

|  |                 |                        |                     |                     | Perc                      | ent                               |                        |
|--|-----------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| Race/ethnicity, year, and jurisdiction |                 | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| Asian/Pacific I                        | slander         |                        |                     |                     |                           |                                   |                        |
| 2000 <sup>1</sup>                      | Nation (public) | ‡                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
|  | Illinois        | 3                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2000                                   | Nation (public) | ‡                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
|  | Illinois        | 2*                     | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2003                                   | Nation (public) | 4*                     | 246*                | 13*                 | 87*                       | 48*                               | 10*                    |
|  | Illinois        | 2*                     | 252                 | 8                   | 92                        | 58                                | 9*                     |
| 2005                                   | Nation (public) | 4*                     | 251*                | 11*                 | 89*                       | 54*                               | 14*                    |
|  | Illinois        | 4                      | 258                 | 8                   | 92                        | 66                                | 20                     |
| 2007                                   | Nation (public) | 5*                     | 254*                | 9                   | 91                        | 59*                               | 16*                    |
|  | Illinois        | 4                      | 257                 | 5                   | 95                        | 62                                | 17                     |
| 2009                                   | Nation (public) | 5                      | 255*                | 9                   | 91                        | 61*                               | 18*                    |
|  | Illinois        | 5                      | 265                 | 3                   | 97                        | 73                                | 25                     |
| 2011                                   | Nation (public) | 5                      | 256*                | 9                   | 91                        | 62*                               | 20*                    |
|  | Illinois        | 4                      | 257                 | 7                   | 93                        | 63                                | 19                     |
| 2013                                   | Nation (public) | 5                      | 258                 | 9                   | 91                        | 64                                | 23                     |
|  | Illinois        | 5                      | 266                 | 5                   | 95                        | 73                                | 31                     |
| 2015                                   | Nation (public) | 5                      | 256*                | 10                  | 90                        | 61                                | 22                     |
|  | Illinois        | 5                      | 262                 | 6                   | 94                        | 69                                | 25                     |
| 2017                                   | Nation (public) | 6                      | 258                 | 10                  | 90                        | 64                                | 24                     |
|  | Illinois        | 5                      | 263                 | 8                   | 92                        | 69                                | 28                     |
| 2019                                   | Nation (public) | 5                      | 261                 | 9                   | 91                        | 67                                | 27                     |
| Cooperation at and of t                | Illinois        | 4                      | 259                 | 12                  | 88                        | 65                                | 25                     |

## 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, 2000–2019—Continued

|                               |                 |                        |                     |                     | Perc                      | ent                               |                        |
|-------------------------------|-----------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| Race/ethnicity jurisdiction   | , year, and     | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| American Indian/Alaska Native |                 |                        |                     |                     |                           |                                   |                        |
| 2000 <sup>1</sup>             | Nation (public) | 1                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
|                               | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2000                          | Nation (public) | 1                      | 207*                | 61*                 | 39*                       | 8*                                | #                      |
|                               | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2003                          | Nation (public) | 1*                     | 224*                | 35                  | 65                        | 18*                               | 1*                     |
|                               | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2005                          | Nation (public) | 1*                     | 227                 | 31                  | 69                        | 22                                | 2                      |
|                               | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2007                          | Nation (public) | 1                      | 229                 | 28                  | 72                        | 26                                | 3                      |
|                               | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2009                          | Nation (public) | 1*                     | 227                 | 32                  | 68                        | 23                                | 2                      |
|                               | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2011                          | Nation (public) | 1                      | 227                 | 32                  | 68                        | 24                                | 2                      |
|                               | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2013                          | Nation (public) | 1                      | 228                 | 30                  | 70                        | 24                                | 2                      |
|                               | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2015                          | Nation (public) | 1                      | 228                 | 30                  | 70                        | 24                                | 2                      |
|                               | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2017                          | Nation (public) | 1                      | 228                 | 31                  | 69                        | 25                                | 3                      |
|                               | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2019                          | Nation (public) | 1                      | 228                 | 32                  | 68                        | 25                                | 4                      |
|                               | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |

<sup>#</sup> Rounds to zero.

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.

<sup>‡</sup> Reporting standards not met.

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

 $<sup>^{\</sup>rm 1}$  Accommodations were not permitted for this assessment.

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. NAEP 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. 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.

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

- In 2019, White students in Illinois had an average scale score that was higher than the average scale scores of Black and Hispanic students, but lower than the average scale score of Asian/Pacific Islander students.
- In 2019, the average scale score of White students in Illinois was higher than their respective scores in 1990 and 2000, but not significantly different from their respective scores in 2003, 2005, 2007, 2009, 2011, 2013, 2015, and 2017.
- In 2019, the average scale score of Black students in Illinois was higher than their respective scores in 1990, 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 Illinois was higher than their respective scores in 1990, 2000, 2003, 2005, and 2007, but not significantly different from their respective scores in 2009, 2011, 2013, 2015, and 2017.
- In 2019, the average scale score of Asian/Pacific Islander students in Illinois was higher than their respective scores in 1990, 2003, 2005, and 2009, but not significantly different from their respective scores in 2007, 2011, 2013, 2015, and 2017.
- In 2019, Black students in Illinois had an average scale score that was lower than that of White students by 29 points. In 1990, the average scale score for Black students was lower than that of White students by 38 points.
- In 2019, Hispanic students in Illinois had an average scale score that was lower than that of White students by 17 points. This performance gap was narrower than that of 1990 (33 points).

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

- In 2019 in Illinois, the percentage of White students performing at or above *NAEP Proficient* was greater than the corresponding percentages of Black and Hispanic students, but smaller than the percentage of Asian/Pacific Islander students.
- In 2019, the percentage of White students in Illinois performing at or above *NAEP Proficient* was greater than the percentages of their respective peers in 1990 and 2000, but not significantly different from the percentages of their respective peers in 2003, 2005, 2007, 2009, 2011, 2013, 2015, and 2017.
- In 2019, the percentages of Black and Hispanic students in Illinois performing at or above *NAEP Proficient* were greater than the percentages of their respective peers in 1990, 2000, 2003, 2005, and 2007, but not significantly different from the percentages of their respective peers in 2009, 2011, 2013, 2015, and 2017.
- In 2019, the percentage of Asian/Pacific Islander students in Illinois performing at or above *NAEP Proficient* was greater than the percentages of their respective peers in 1990, 2005, and 2007, but not significantly different from the percentages of their respective peers in 2003, 2009, 2011, 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

|                               |  |     |                     |                     | Perc                      | ent                               |                        |
|-------------------------------|--|-----|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| Race/ethnicit<br>jurisdiction | Race/ethnicity, year, and jurisdiction |     | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| White                         |  |     |                     |                     |                           |                                   |                        |
| 1990 <sup>1</sup>             | Nation (public)                        | 73* | 269*                | 41*                 | 59*                       | 18*                               | 3*                     |
|                               | Illinois                               | 70* | 270*                | 39*                 | 61*                       | 18*                               | 2*                     |
| 2000 <sup>1</sup>             | Nation (public)                        | 69* | 284*                | 24*                 | 76*                       | 33*                               | 6*                     |
|                               | Illinois                               | 61* | 287                 | 20                  | 80                        | 37                                | 5*                     |
| 2000                          | Nation (public)                        | 63* | 283*                | 25*                 | 75*                       | 33*                               | 6*                     |
|                               | Illinois                               | 61* | 285*                | 22                  | 78                        | 35*                               | 5*                     |
| 2003                          | Nation (public)                        | 62* | 287*                | 21                  | 79                        | 36*                               | 7*                     |
|                               | Illinois                               | 62* | 289                 | 20                  | 80                        | 40                                | 8*                     |
| 2005                          | Nation (public)                        | 60* | 288*                | 21                  | 79                        | 37*                               | 7*                     |
|                               | Illinois                               | 61* | 289                 | 18                  | 82                        | 39                                | 8*                     |
| 2007                          | Nation (public)                        | 58* | 290                 | 19*                 | 81*                       | 41*                               | 9*                     |
|                               | Illinois                               | 60* | 291                 | 19                  | 81                        | 41                                | 9                      |
| 2009                          | Nation (public)                        | 56* | 292                 | 18*                 | 82*                       | 43                                | 10*                    |
|                               | Illinois                               | 58* | 294                 | 15*                 | 85*                       | 44                                | 10                     |
| 2011                          | Nation (public)                        | 54* | 293                 | 17*                 | 83*                       | 43                                | 10*                    |
|                               | Illinois                               | 51  | 294                 | 16*                 | 84*                       | 44                                | 11                     |
| 2013                          | Nation (public)                        | 53* | 293*                | 17*                 | 83*                       | 44                                | 11*                    |
|                               | Illinois                               | 52  | 296                 | 15*                 | 85*                       | 48                                | 13                     |
| 2015                          | Nation (public)                        | 51* | 291                 | 19*                 | 81*                       | 42                                | 10*                    |
|                               | Illinois                               | 50  | 290                 | 18                  | 82                        | 40                                | 9                      |
| 2017                          | Nation (public)                        | 50* | 292                 | 20                  | 80                        | 43                                | 13                     |
|                               | Illinois                               | 51  | 291                 | 21                  | 79                        | 42                                | 13                     |
| 2019                          | Nation (public)                        | 48  | 291                 | 21                  | 79                        | 43                                | 13                     |
|                               | Illinois                               | 48  | 291                 | 22                  | 78                        | 42                                | 12                     |

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

|  |                 |                        |                     | Percent             |                           |   |                        |
|--|-----------------|------------------------|---------------------|---------------------|---------------------------|---|------------------------|
| Race/ethnicity, year, and jurisdiction |                 | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br><i>NAEP</i><br><i>Proficient</i> | At<br>NAEP<br>Advanced |
| Black                                  |                 |                        |                     |                     |                           |   |                        |
| 1990 <sup>1</sup>                      | Nation (public) | 16*                    | 236*                | 79*                 | 21*                       | 5*  | #                      |
|  | Illinois        | 19                     | 232*                | 81*                 | 19*                       | 3*  | #                      |
| 2000 <sup>1</sup>                      | Nation (public) | 14                     | 245*                | 70*                 | 30*                       | 5*  | #*                     |
|  | Illinois        | 19                     | 256                 | 58                  | 42                        | 7*  | #                      |
| 2000                                   | Nation (public) | 17*                    | 243*                | 70*                 | 30*                       | 5*  | #*                     |
|  | Illinois        | 20                     | 252*                | 59                  | 41                        | 8*  | #                      |
| 2003                                   | Nation (public) | 17*                    | 252*                | 61*                 | 39*                       | 7*  | #*                     |
|  | Illinois        | 20                     | 249*                | 66*                 | 34*                       | 6*  | #                      |
| 2005                                   | Nation (public) | 17*                    | 254*                | 59*                 | 41*                       | 8*  | 1*                     |
|  | Illinois        | 21                     | 249*                | 66*                 | 34*                       | 6*  | #                      |
| 2007                                   | Nation (public) | 17*                    | 259                 | 53                  | 47                        | 11*   | 1*                     |
|  | Illinois        | 16                     | 253*                | 59                  | 41                        | 7*  | #                      |
| 2009                                   | Nation (public) | 16*                    | 260                 | 51*                 | 49*                       | 12*   | 1*                     |
|  | Illinois        | 18                     | 255*                | 59                  | 41                        | 9   | 1                      |
| 2011                                   | Nation (public) | 16*                    | 262*                | 50*                 | 50*                       | 13  | 1*                     |
|  | Illinois        | 18                     | 260                 | 52                  | 48                        | 10  | 1                      |
| 2013                                   | Nation (public) | 15                     | 263*                | 49*                 | 51*                       | 14  | 2*                     |
|  | Illinois        | 17                     | 260                 | 51                  | 49                        | 12  | 1                      |
| 2015                                   | Nation (public) | 15                     | 260                 | 53                  | 47                        | 12  | 1*                     |
|  | Illinois        | 16                     | 261                 | 51                  | 49                        | 12  | 1                      |
| 2017                                   | Nation (public) | 15                     | 260                 | 54                  | 46                        | 13  | 2                      |
|  | Illinois        | 15                     | 257                 | 58                  | 42                        | 11  | 1                      |
| 2019                                   | Nation (public) | 15                     | 259                 | 54                  | 46                        | 13  | 2                      |
| Con notes at and of                    | Illinois        | 18                     | 262                 | 51                  | 49                        | 14  | 2                      |

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

|  |                 |                        |                     |                     | Perc                      | ent   |                        |
|--|-----------------|------------------------|---------------------|---------------------|---------------------------|---|------------------------|
| Race/ethnicity, year, and jurisdiction |                 | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br><i>NAEP</i><br><i>Proficient</i> | At<br>NAEP<br>Advanced |
| Hispanic                               |                 |                        |                     |                     |                           |   |                        |
| 1990 <sup>1</sup>                      | Nation (public) | 7*                     | 245*                | 67*                 | 33*                       | 7*  | 1*                     |
|  | Illinois        | 8*                     | 238*                | 76*                 | 24*                       | 3*  | #                      |
| 2000 <sup>1</sup>                      | Nation (public) | 11*                    | 252*                | 60*                 | 40*                       | 8*  | #*                     |
|  | Illinois        | 16*                    | 259*                | 51                  | 49                        | 9*  | #                      |
| 2000                                   | Nation (public) | 14*                    | 252*                | 60*                 | 40*                       | 8*  | #*                     |
|  | Illinois        | 15*                    | 258*                | 49                  | 51                        | 11*   | 1                      |
| 2003                                   | Nation (public) | 15*                    | 258*                | 53*                 | 47*                       | 11*   | 1*                     |
|  | Illinois        | 15*                    | 259*                | 52*                 | 48*                       | 9*  | #*                     |
| 2005                                   | Nation (public) | 17*                    | 261*                | 50*                 | 50*                       | 13*   | 1*                     |
|  | Illinois        | 14*                    | 265*                | 45                  | 55                        | 13*   | 1                      |
| 2007                                   | Nation (public) | 19*                    | 264*                | 46                  | 54                        | 15*   | 2*                     |
|  | Illinois        | 18*                    | 265*                | 45                  | 55                        | 13*   | 1*                     |
| 2009                                   | Nation (public) | 21*                    | 266                 | 44                  | 56                        | 17*   | 2*                     |
|  | Illinois        | 18*                    | 269                 | 41                  | 59                        | 17  | 1*                     |
| 2011                                   | Nation (public) | 23*                    | 269                 | 40*                 | 60*                       | 20  | 3*                     |
|  | Illinois        | 24                     | 272                 | 36                  | 64                        | 19  | 3                      |
| 2013                                   | Nation (public) | 23*                    | 271*                | 38*                 | 62*                       | 21  | 3*                     |
|  | Illinois        | 24                     | 272                 | 36                  | 64                        | 22  | 2                      |
| 2015                                   | Nation (public) | 25*                    | 269                 | 40*                 | 60*                       | 19  | 3*                     |
|  | Illinois        | 26                     | 273                 | 35                  | 65                        | 22  | 3                      |
| 2017                                   | Nation (public) | 25*                    | 268                 | 43                  | 57                        | 20  | 3                      |
|  | Illinois        | 27                     | 272                 | 40                  | 60                        | 21  | 4                      |
| 2019                                   | Nation (public) | 27                     | 268                 | 43                  | 57                        | 19  | 3                      |
| Con potent and of                      | Illinois        | 25                     | 273                 | 38                  | 62                        | 24  | 5                      |

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

|  |                 |                        |                     |                     | Perc                      | ent                               |                        |
|--|-----------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| Race/ethnicity, year, and jurisdiction |                 | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| Asian/Pacific Islander                 |                 |                        |                     |                     |                           |                                   |                        |
| 1990 <sup>1</sup>                      | Nation (public) | 2*                     | 275*                | 36*                 | 64*                       | 30*                               | 6*                     |
|  | Illinois        | 2*                     | 279*                | 32*                 | 68*                       | 31*                               | 3*                     |
| 2000 <sup>1</sup>                      | Nation (public) | 4*                     | 286*                | 27*                 | 73*                       | 40*                               | 12*                    |
|  | Illinois        | 3*                     | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2000                                   | Nation (public) | 4*                     | 287*                | 27*                 | 73*                       | 40*                               | 12*                    |
|  | Illinois        | 3                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2003                                   | Nation (public) | 4*                     | 289*                | 23*                 | 77*                       | 42*                               | 12*                    |
|  | Illinois        | 3*                     | 302*                | 11                  | 89                        | 58                                | 15*                    |
| 2005                                   | Nation (public) | 5*                     | 294*                | 19*                 | 81*                       | 46*                               | 16*                    |
|  | Illinois        | 4                      | 300*                | 10                  | 90                        | 50*                               | 15*                    |
| 2007                                   | Nation (public) | 5*                     | 296*                | 18*                 | 82*                       | 49*                               | 17*                    |
|  | Illinois        | 5                      | 303                 | 13                  | 87                        | 55*                               | 23                     |
| 2009                                   | Nation (public) | 5*                     | 300*                | 16                  | 84                        | 53*                               | 20*                    |
|  | Illinois        | 4*                     | 304*                | 11                  | 89                        | 60                                | 19                     |
| 2011                                   | Nation (public) | 6                      | 302*                | 15                  | 85                        | 55*                               | 22*                    |
|  | Illinois        | 5                      | 314                 | 8                   | 92                        | 67                                | 31                     |
| 2013                                   | Nation (public) | 5*                     | 306*                | 13                  | 87                        | 60                                | 25*                    |
|  | Illinois        | 5                      | 313                 | 11                  | 89                        | 69                                | 33                     |
| 2015                                   | Nation (public) | 6                      | 305                 | 14                  | 86                        | 58                                | 25*                    |
|  | Illinois        | 5                      | 309                 | 12                  | 88                        | 59                                | 28                     |
| 2017                                   | Nation (public) | 6                      | 310                 | 14                  | 86                        | 62                                | 30                     |
|  | Illinois        | 4                      | 313                 | 13                  | 87                        | 65                                | 33                     |
| 2019                                   | Nation (public) | 6                      | 309                 | 15                  | 85                        | 61                                | 32                     |
| Soo notes at and of                    | Illinois        | 6                      | 320                 | 8                   | 92                        | 73                                | 36                     |

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

|                             |  |    |                     |                     | Perc                      | ent                               |                        |
|-----------------------------|--|----|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| Race/ethnicity jurisdiction | Race/ethnicity, year, and jurisdiction |    | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| American Ind                | ian/Alaska Native                      |    |                     |                     |                           |                                   |                        |
| 1990 <sup>1</sup>           | Nation (public)                        | 1  | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
|                             | Illinois                               | #  | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2000 <sup>1</sup>           | Nation (public)                        | 1  | 264                 | 47                  | 53                        | 14                                | 2                      |
|                             | Illinois                               | #  | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2000                        | Nation (public)                        | 1  | 263                 | 47                  | 53                        | 13                                | 3                      |
|                             | Illinois                               | #  | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2003                        | Nation (public)                        | 1* | 265                 | 46                  | 54                        | 16                                | 2                      |
|                             | Illinois                               | #  | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2005                        | Nation (public)                        | 1* | 266                 | 45                  | 55                        | 14                                | 2                      |
|                             | Illinois                               | #  | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2007                        | Nation (public)                        | 1* | 265                 | 44                  | 56                        | 17                                | 2                      |
|                             | Illinois                               | #  | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2009                        | Nation (public)                        | 1* | 267                 | 43                  | 57                        | 20                                | 3                      |
|                             | Illinois                               | #  | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2011                        | Nation (public)                        | 1  | 266                 | 45                  | 55                        | 17                                | 4                      |
|                             | Illinois                               | #  | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2013                        | Nation (public)                        | 1* | 270*                | 40*                 | 60*                       | 21*                               | 3                      |
|                             | Illinois                               | #  | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2015                        | Nation (public)                        | 1  | 267                 | 43                  | 57                        | 19                                | 3                      |
|                             | Illinois                               | #  | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2017                        | Nation (public)                        | 1  | 268                 | 43                  | 57                        | 19                                | 4                      |
|                             | Illinois                               | #  | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2019                        | Nation (public)                        | 1  | 263                 | 48                  | 52                        | 15                                | 3                      |
|                             | Illinois                               | #  | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |

<sup>#</sup> Rounds to zero.

NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500. NAEP 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. 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.

<sup>‡</sup> Reporting standards not met.

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

<sup>&</sup>lt;sup>1</sup> Accommodations were not permitted for this assessment.

### NAEP 2019 Mathematics Report for Illinois

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 Illinois and the nation.

Table 4-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, 2011–2019

|                                |                 |                        |                     |                     | Perce                     | ent                               |                        |
|--------------------------------|-----------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| Race/ethnicity<br>jurisdiction | /, year, and    | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| White                          |                 |                        |                     |                     |                           |                                   |                        |
| 2011                           | Nation (public) | 52*                    | 249                 | 9*                  | 91*                       | 52                                | 9*                     |
|                                | Illinois        | 53*                    | 249                 | 10                  | 90                        | 51                                | 10                     |
| 2013                           | Nation (public) | 51*                    | 250*                | 9*                  | 91*                       | 54                                | 10                     |
|                                | Illinois        | 48                     | 248                 | 12                  | 88                        | 51                                | 11                     |
| 2015                           | Nation (public) | 49*                    | 248                 | 10                  | 90                        | 51                                | 10*                    |
|                                | Illinois        | 46                     | 248                 | 11                  | 89                        | 49                                | 11                     |
| 2017                           | Nation (public) | 47*                    | 248                 | 12                  | 88                        | 51                                | 11                     |
|                                | Illinois        | 47                     | 249                 | 13                  | 87                        | 52                                | 13                     |
| 2019                           | Nation (public) | 46                     | 249                 | 12                  | 88                        | 52                                | 12                     |
| 2013                           | Illinois        | 46                     | 246                 | 14                  | 86                        | 51                                | 11                     |
| Black                          | 11111013        | 40                     | 240                 | 1-4                 | 00                        | 31                                |                        |
| 2011                           | Nation (public) | 16                     | 224                 | 34                  | 66                        | 17*                               | 1*                     |
| 2011                           | Illinois        | 19                     | 219                 | 42                  | 58                        | 14                                | 2                      |
| 2013                           | Nation (public) | 16                     | 224                 | 34                  | 66                        | 18                                | 1*                     |
| 2013                           | Illinois        | 17                     | 220                 | 41                  | 59                        | 16                                | 1                      |
| 2015                           | Nation (public) | 15                     | 224                 | 35                  | 65                        | 19                                | 1                      |
| 2015                           |                 |                        |                     |                     |                           |                                   | 1                      |
| 2047                           | Illinois        | 18                     | 215                 | 49                  | 51                        | 12                                | ı                      |
| 2017                           | Nation (public) | 15                     | 223                 | 37                  | 63                        | 19                                | 2                      |
|                                | Illinois        | 17                     | 217                 | 46                  | 54                        | 15                                | 1                      |
| 2019                           | Nation (public) | 15                     | 224                 | 35                  | 65                        | 20                                | 2                      |
|                                | Illinois        | 17                     | 217                 | 43                  | 57                        | 14                                | 1                      |
| Hispanic                       |                 |                        |                     |                     |                           |                                   |                        |
| 2011                           | Nation (public) | 24*                    | 229*                | 28                  | 72                        | 24*                               | 2*                     |
|                                | Illinois        | 20*                    | 226                 | 30                  | 70                        | 20*                               | 1                      |
| 2013                           | Nation (public) | 25*                    | 230                 | 27                  | 73                        | 26                                | 2*                     |
|                                | Illinois        | 27                     | 229                 | 29                  | 71                        | 25                                | 3                      |
| 2015                           | Nation (public) | 26*                    | 230                 | 27                  | 73                        | 26                                | 3                      |
|                                | Illinois        | 28                     | 228                 | 30                  | 70                        | 24                                | 3                      |
| 2017                           | Nation (public) | 27                     | 229                 | 30*                 | 70*                       | 26                                | 3                      |
|                                | Illinois        | 27                     | 227                 | 33*                 | 67*                       | 23                                | 3                      |
| 2019                           | Nation (public) | 28                     | 231                 | 27                  | 73                        | 28                                | 3                      |
|                                | Illinois        | 27                     | 231                 | 26                  | 74                        | 28                                | 4                      |
| Asian                          |                 |                        |                     |                     |                           |                                   |                        |
| 2011                           | Nation (public) | 5                      | 257*                | 8                   | 92                        | 64*                               | 21*                    |
|                                | Illinois        | 4                      | 258                 | 6                   | 94                        | 65                                | 20                     |
| 2013                           | Nation (public) | 5                      | 260                 | 7                   | 93                        | 67                                | 24                     |
|                                | Illinois        | 5                      | 266                 | 4                   | 96                        | 73                                | 31                     |
| 2015                           | Nation (public) | 5                      | 259                 | 8                   | 92                        | 64                                | 23                     |
|                                | Illinois        | 5                      | 262                 | 6                   | 94                        | 70                                | 25                     |
| 2017                           | Nation (public) | 5                      | 260                 | 8                   | 92                        | 67                                | 26                     |
| _0.,                           | Illinois        | 5                      | 263                 | 8                   | 92                        | 70                                | 28                     |
| 2019                           | Nation (public) | 5                      | 263                 | 7                   | 93                        | 70                                | 29                     |
| 2013                           | Illinois        | 4                      | 259                 | 12                  | 88                        | 65                                | 25                     |

**Table** 4-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, 2011–2019—Continued

|                              |                 |                        |                     |                     | Perc                      | ent                               |                        |  |
|------------------------------|-----------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|--|
| Race/ethnicity, jurisdiction | year, and       | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |  |
| American India               | n/Alaska Native |                        |                     |                     |                           |                                   |                        |  |
| 2011                         | Nation (public) | 1                      | 227                 | 32                  | 68                        | 24                                | 2                      |  |
|                              | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |  |
| 2013                         | Nation (public) | 1                      | 228                 | 30                  | 70                        | 24                                | 2                      |  |
|                              | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |  |
| 2015                         | Nation (public) | 1                      | 228                 | 30                  | 70                        | 24                                | 2                      |  |
|                              | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |  |
| 2017                         | Nation (public) | 1                      | 228                 | 31                  | 69                        | 25                                | 3                      |  |
|                              | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |  |
| 2019                         | Nation (public) | 1                      | 228                 | 32                  | 68                        | 25                                | 4                      |  |
|                              | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |  |
| Native Hawaiia<br>Islander   | n/Other Pacific |                        |                     |                     |                           |                                   |                        |  |
| 2011                         | Nation (public) | #                      | 235                 | 24                  | 76                        | 33                                | 7                      |  |
|                              | Illinois        | #*                     | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |  |
| 2013                         | Nation (public) | #                      | 235                 | 23                  | 77                        | 32                                | 4                      |  |
|                              | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |  |
| 2015                         | Nation (public) | #                      | 226                 | 35                  | 65                        | 24                                | 3                      |  |
|                              | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |  |
| 2017                         | Nation (public) | #                      | 228                 | 30                  | 70                        | 27                                | 4                      |  |
|                              | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |  |
| 2019                         | Nation (public) | #                      | 230                 | 30                  | 70                        | 29                                | 5                      |  |
|                              | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |  |
| Two or More Ra               | aces            |                        |                     |                     |                           |                                   |                        |  |
| 2011                         | Nation (public) | 2*                     | 244                 | 15                  | 85                        | 43                                | 9                      |  |
|                              | Illinois        | 3*                     | 244                 | 15                  | 85                        | 45                                | 8                      |  |
| 2013                         | Nation (public) | 3*                     | 244                 | 14                  | 86                        | 45                                | 9                      |  |
|                              | Illinois        | 3*                     | 246                 | 13                  | 87                        | 46                                | 12                     |  |
| 2015                         | Nation (public) | 3*                     | 244                 | 15                  | 85                        | 44                                | 9                      |  |
|                              | Illinois        | 3                      | 244                 | 17                  | 83                        | 47                                | 11                     |  |
| 2017                         | Nation (public) | 4*                     | 244                 | 16                  | 84                        | 44                                | 10                     |  |
|                              | Illinois        | 3                      | 243                 | 16                  | 84                        | 40                                | 11                     |  |
| 2019                         | Nation (public) | 4                      | 243                 | 17                  | 83                        | 44                                | 10                     |  |
| # Dayanda ta zava            | Illinois        | 4                      | 238                 | 24                  | 76                        | 40                                | 12                     |  |

<sup>#</sup> 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. NAEP 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.

<sup>‡</sup> Reporting standards not met.

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

|                                |                 |                        |                     |                     | Perce                     | ent                               |                        |
|--------------------------------|-----------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| Race/ethnicity<br>jurisdiction | y, year, and    | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| White                          |                 |                        |                     |                     |                           |                                   |                        |
| 2011                           | Nation (public) | 54*                    | 293                 | 17*                 | 83*                       | 43                                | 10*                    |
|                                | Illinois        | 51                     | 294                 | 16*                 | 84*                       | 44                                | 11                     |
| 2013                           | Nation (public) | 53*                    | 293*                | 17*                 | 83*                       | 44                                | 11*                    |
|                                | Illinois        | 52                     | 296                 | 15*                 | 85*                       | 48                                | 13                     |
| 2015                           | Nation (public) | 51*                    | 291                 | 19*                 | 81*                       | 42                                | 10*                    |
|                                | Illinois        | 50                     | 290                 | 18                  | 82                        | 40                                | 9                      |
| 2017                           | Nation (public) | 50*                    | 292                 | 20                  | 80                        | 43                                | 13                     |
|                                | Illinois        | 51                     | 291                 | 21                  | 79                        | 42                                | 13                     |
| 2019                           | Nation (public) | 48                     | 291                 | 21                  | 79                        | 43                                | 13                     |
| 2013                           | Illinois        | 48                     | 291                 | 22                  | 78                        | 42                                | 12                     |
| Black                          | 11111013        | -10                    | 251                 | 22                  | , 0                       | 72                                | 12                     |
| 2011                           | Nation (public) | 16*                    | 262*                | 50*                 | 50*                       | 13                                | 1*                     |
| 2011                           | Illinois        | 18                     | 260                 | 52                  | 48                        | 10                                | 1                      |
| 2013                           | Nation (public) | 15                     | 263*                | 49*                 | 51*                       | 14                                | 2*                     |
| 2013                           | Illinois        | 17                     | 260                 | 51                  | 49                        | 12                                | 1                      |
| 2015                           | Nation (public) | 15                     | 260                 | 53                  | 49                        | 12                                | 1*                     |
| 2015                           | Illinois        | 16                     | 261                 |                     |                           |                                   | 1                      |
| 2017                           |                 |                        |                     | 51                  | 49                        | 12                                | 1                      |
| 2017                           | Nation (public) | 15                     | 260                 | 54                  | 46                        | 13                                | 2                      |
| 2040                           | Illinois        | 15                     | 257                 | 58                  | 42                        | 11                                | 1                      |
| 2019                           | Nation (public) | 15                     | 259                 | 54                  | 46                        | 13                                | 2                      |
|                                | Illinois        | 18                     | 262                 | 51                  | 49                        | 14                                | 2                      |
| Hispanic                       |                 |                        |                     |                     |                           |                                   | - 4                    |
| 2011                           | Nation (public) | 23*                    | 269                 | 40*                 | 60*                       | 20                                | 3*                     |
|                                | Illinois        | 24                     | 272                 | 36                  | 64                        | 19                                | 3                      |
| 2013                           | Nation (public) | 23*                    | 271*                | 38*                 | 62*                       | 21                                | 3*                     |
|                                | Illinois        | 24                     | 272                 | 36                  | 64                        | 22                                | 2                      |
| 2015                           | Nation (public) | 25*                    | 269                 | 40*                 | 60*                       | 19                                | 3                      |
|                                | Illinois        | 26                     | 273                 | 35                  | 65                        | 22                                | 3                      |
| 2017                           | Nation (public) | 25*                    | 268                 | 43                  | 57                        | 20                                | 3                      |
|                                | Illinois        | 27                     | 272                 | 40                  | 60                        | 21                                | 4                      |
| 2019                           | Nation (public) | 27                     | 268                 | 43                  | 57                        | 19                                | 3                      |
|                                | Illinois        | 25                     | 273                 | 38                  | 62                        | 24                                | 5                      |
| Asian                          |                 |                        |                     |                     |                           |                                   |                        |
| 2011                           | Nation (public) | 5                      | 305*                | 12                  | 88                        | 58*                               | 24*                    |
|                                | Illinois        | 4                      | 315                 | 7                   | 93                        | 68                                | 32                     |
| 2013                           | Nation (public) | 5*                     | 308*                | 12                  | 88                        | 62                                | 27*                    |
|                                | Illinois        | 5                      | 313                 | 10                  | 90                        | 70                                | 34                     |
| 2015                           | Nation (public) | 5                      | 307*                | 12                  | 88                        | 60                                | 26*                    |
|                                | Illinois        | 5                      | 309                 | 10                  | 90                        | 59                                | 28                     |
| 2017                           | Nation (public) | 5                      | 312                 | 12                  | 88                        | 65                                | 32                     |
|                                | Illinois        | 4                      | 314                 | 13                  | 87                        | 66                                | 34                     |
| 2019                           | Nation (public) | 6                      | 313                 | 12                  | 88                        | 64                                | 33                     |
|                                | Illinois        | 6                      | 320                 | 8                   | 92                        | 73                                | 36                     |

**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

|                              |                 |                        |                     |                     | Perc                      | ent                               |                        |  |
|------------------------------|-----------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|--|
| Race/ethnicity, jurisdiction | year, and       | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |  |
| American India               | n/Alaska Native |                        |                     |                     |                           |                                   |                        |  |
| 2011                         | Nation (public) | 1                      | 266                 | 45                  | 55                        | 17                                | 4                      |  |
|                              | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |  |
| 2013                         | Nation (public) | 1*                     | 270*                | 40*                 | 60*                       | 21*                               | 3                      |  |
|                              | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |  |
| 2015                         | Nation (public) | 1                      | 267                 | 43                  | 57                        | 19                                | 3                      |  |
|                              | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |  |
| 2017                         | Nation (public) | 1                      | 268*                | 43                  | 57                        | 19                                | 4                      |  |
|                              | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |  |
| 2019                         | Nation (public) | 1                      | 263                 | 48                  | 52                        | 15                                | 3                      |  |
|                              | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |  |
| Native Hawaiia<br>Islander   | n/Other Pacific |                        |                     |                     |                           |                                   |                        |  |
| 2011                         | Nation (public) | #                      | 265                 | 45                  | 55                        | 19                                | 3                      |  |
|                              | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |  |
| 2013                         | Nation (public) | #                      | 274*                | 34*                 | 66*                       | 24                                | 4                      |  |
|                              | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |  |
| 2015                         | Nation (public) | #                      | 277*                | 35*                 | 65*                       | 30                                | 6                      |  |
|                              | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |  |
| 2017                         | Nation (public) | #                      | 272*                | 38                  | 62                        | 23                                | 5                      |  |
|                              | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |  |
| 2019                         | Nation (public) | #                      | 263                 | 47                  | 53                        | 18                                | 4                      |  |
|                              | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |  |
| Two or More Ra               | aces            |                        |                     |                     |                           |                                   |                        |  |
| 2011                         | Nation (public) | 2*                     | 286                 | 24                  | 76                        | 37                                | 10                     |  |
|                              | Illinois        | 2                      | 281                 | 30                  | 70                        | 33                                | 7                      |  |
| 2013                         | Nation (public) | 2*                     | 286                 | 24                  | 76                        | 37                                | 10                     |  |
|                              | Illinois        | 3                      | 285                 | 26                  | 74                        | 33                                | 12                     |  |
| 2015                         | Nation (public) | 2*                     | 283                 | 28                  | 72                        | 35                                | 9                      |  |
|                              | Illinois        | 2                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |  |
| 2017                         | Nation (public) | 3*                     | 285                 | 28                  | 72                        | 36                                | 12                     |  |
|                              | Illinois        | 3                      | 287                 | 32                  | 68                        | 39                                | 19                     |  |
| 2019                         | Nation (public) | 3                      | 285                 | 28                  | 72                        | 36                                | 11                     |  |
| # Dayanda ta Bara            | Illinois        | 3                      | 286                 | 29                  | 71                        | 38                                | 17                     |  |

<sup>#</sup> 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. NAEP 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.

<sup>‡</sup> Reporting standards not met.

### Gender

Results are reported separately for male and female students.

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

### Grade 4 Average Scale Score Results by Gender

- In 2019, male students in Illinois had an average scale score in mathematics (239) that was not significantly different from that of female students (236). In 2000, male students in Illinois had an average scale score in mathematics (224) that was not significantly different from that of female students (222).
- In 2019, male students in Illinois had an average scale score in mathematics (239) that was lower than that of male students in public schools across the nation (242). However, female students in Illinois had an average scale score (236) that was not significantly different from that of female students across the nation (238).
- In Illinois, the average scale score of male students in 2019 was higher than the scores of male students in 2000, 2003, and 2005, but not significantly different from the scores of male students in 2007, 2009, 2011, 2013, 2015, and 2017.
- In Illinois, the average scale score of female students in 2019 was higher than the scores of female students in 2000, 2003, and 2005, but not significantly different from the scores of female students in 2007, 2009, 2011, 2013, 2015, and 2017.

### Grade 4 NAEP Achievement-Level Results by Gender

- In the 2019 assessment, 41 percent of male students and 36 percent of female students performed at or above NAEP Proficient in Illinois. The difference between these percentages was not statistically significant.
- The percentage of male students in Illinois' public schools who were at or above *NAEP Proficient* in 2019 (41 percent) was not significantly different from that of male students in the nation (43 percent).
- The percentage of female students in Illinois' public schools who were at or above *NAEP Proficient* in 2019 (36 percent) was not significantly different from that of female students in the nation (38 percent).
- In Illinois, the percentage of male students performing at or above *NAEP Proficient* in 2019 was greater than the corresponding percentages of students in 2000, 2003, and 2005, but not significantly different from the corresponding percentages of students in 2007, 2009, 2011, 2013, 2015, and 2017.
- In Illinois, the percentage of female students performing at or above *NAEP Proficient* in 2019 was greater than the corresponding percentages of students in 2000, 2003, and 2005, but not significantly different from the corresponding percentages of students in 2007, 2009, 2011, 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, 2000–2019

|                     |                                |     |                     |                     | Perc                      | ent                               |                        |
|---------------------|--------------------------------|-----|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| Gender, year,       | Gender, year, and jurisdiction |     | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| Male                |                                |     |                     |                     |                           |                                   |                        |
| 2000 <sup>1</sup>   | Nation (public)                | 51  | 227*                | 32*                 | 68*                       | 27*                               | 3*                     |
|                     | Illinois                       | 50  | 227*                | 32*                 | 68*                       | 25*                               | 2*                     |
| 2000                | Nation (public)                | 51  | 225*                | 35*                 | 65*                       | 25*                               | 3*                     |
|                     | Illinois                       | 52  | 224*                | 36*                 | 64*                       | 23*                               | 2*                     |
| 2003                | Nation (public)                | 51  | 235*                | 23*                 | 77*                       | 34*                               | 5*                     |
|                     | Illinois                       | 52* | 234*                | 26                  | 74                        | 34*                               | 5*                     |
| 2005                | Nation (public)                | 51  | 238*                | 20                  | 80                        | 37*                               | 6*                     |
|                     | Illinois                       | 51  | 234*                | 25                  | 75                        | 33*                               | 5*                     |
| 2007                | Nation (public)                | 51  | 240*                | 18*                 | 82*                       | 41*                               | 7*                     |
|                     | Illinois                       | 50  | 239                 | 21                  | 79                        | 40                                | 7                      |
| 2009                | Nation (public)                | 51  | 240*                | 19                  | 81                        | 40*                               | 7*                     |
|                     | Illinois                       | 50  | 240                 | 20                  | 80                        | 41                                | 7                      |
| 2011                | Nation (public)                | 51  | 241                 | 18*                 | 82*                       | 41*                               | 7*                     |
|                     | Illinois                       | 52* | 240                 | 19                  | 81                        | 39                                | 8                      |
| 2013                | Nation (public)                | 51  | 242                 | 18*                 | 82*                       | 42                                | 8*                     |
|                     | Illinois                       | 51  | 239                 | 22                  | 78                        | 39                                | 9                      |
| 2015                | Nation (public)                | 51  | 241                 | 19                  | 81                        | 41*                               | 8*                     |
|                     | Illinois                       | 51  | 238                 | 24                  | 76                        | 38                                | 9                      |
| 2017                | Nation (public)                | 51  | 240*                | 21*                 | 79*                       | 41*                               | 9*                     |
|                     | Illinois                       | 50  | 240                 | 24                  | 76                        | 41                                | 11                     |
| 2019                | Nation (public)                | 51  | 242                 | 20                  | 80                        | 43                                | 10                     |
| Con notes at and of | Illinois                       | 50  | 239                 | 22                  | 78                        | 41                                | 10                     |

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, 2000–2019—Continued

|                   |                  |                        |                     |                     | Perc                      | ent                               |                        |
|-------------------|------------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| Gender, year,     | and jurisdiction | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| Female            |                  |                        |                     |                     |                           |                                   |                        |
| 2000 <sup>1</sup> | Nation (public)  | 49                     | 225*                | 34*                 | 66*                       | 22*                               | 2*                     |
|                   | Illinois         | 50                     | 222*                | 37*                 | 63*                       | 17*                               | 1*                     |
| 2000              | Nation (public)  | 49                     | 223*                | 38*                 | 62*                       | 20*                               | 1*                     |
|                   | Illinois         | 48                     | 222*                | 39*                 | 61*                       | 17*                               | 1*                     |
| 2003              | Nation (public)  | 49                     | 233*                | 25*                 | 75*                       | 29*                               | 3*                     |
|                   | Illinois         | 48*                    | 232*                | 28*                 | 72*                       | 29*                               | 4                      |
| 2005              | Nation (public)  | 49                     | 236*                | 21                  | 79                        | 33*                               | 4*                     |
|                   | Illinois         | 49                     | 232*                | 28                  | 72                        | 30*                               | 4*                     |
| 2007              | Nation (public)  | 49                     | 238                 | 19*                 | 81*                       | 36                                | 4*                     |
|                   | Illinois         | 50                     | 235                 | 22                  | 78                        | 33                                | 4                      |
| 2009              | Nation (public)  | 49                     | 238                 | 19                  | 81                        | 37                                | 5*                     |
|                   | Illinois         | 50                     | 237                 | 21                  | 79                        | 35                                | 6                      |
| 2011              | Nation (public)  | 49                     | 239*                | 18*                 | 82*                       | 39                                | 6*                     |
|                   | Illinois         | 48*                    | 238                 | 21                  | 79                        | 37                                | 6                      |
| 2013              | Nation (public)  | 49                     | 241*                | 18*                 | 82*                       | 40*                               | 7                      |
|                   | Illinois         | 49                     | 239                 | 21                  | 79                        | 39                                | 8                      |
| 2015              | Nation (public)  | 49                     | 239                 | 19*                 | 81*                       | 38                                | 6*                     |
|                   | Illinois         | 49                     | 237                 | 22                  | 78                        | 36                                | 6                      |
| 2017              | Nation (public)  | 49                     | 238                 | 21                  | 79                        | 38                                | 7                      |
|                   | Illinois         | 50                     | 237                 | 24                  | 76                        | 36                                | 7                      |
| 2019              | Nation (public)  | 49                     | 238                 | 20                  | 80                        | 38                                | 7                      |
|                   | Illinois         | 50                     | 236                 | 23                  | 77                        | 36                                | 6                      |

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

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.

 $<sup>^{\</sup>rm 1}$  Accommodations were not permitted for this assessment.

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. NAEP 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*. Detail may not sum to totals because of rounding. All differences were calculated and tested using unrounded numbers.

### Grade 8 Average Scale Score Results by Gender

- In 2019, male students in Illinois had an average scale score in mathematics (283) that was not significantly different from that of female students (282). In 1990, male students in Illinois had an average scale score in mathematics (261) that was not significantly different from that of female students (260).
- In 2019, male students in Illinois had an average scale score in mathematics (283) that was higher than that of male students in public schools across the nation (280). However, female students in Illinois had an average scale score (282) that was not significantly different from that of female students across the nation (282).
- In Illinois, the average scale score of male students in 2019 was higher than the scores of male students in 1990, 2000, 2003, and 2005, but not significantly different from the scores of male students in 2007, 2009, 2011, 2013, 2015, and 2017.
- In Illinois, the average scale score of female students in 2019 was higher than the scores of female students in 1990, 2003, and 2005, but not significantly different from the scores of female students in 2000, 2007, 2009, 2011, 2013, 2015, and 2017.

### Grade 8 NAEP Achievement-Level Results by Gender

- In the 2019 assessment, 35 percent of male students and 32 percent of female students performed at or above *NAEP Proficient* in Illinois. The difference between these percentages was not statistically significant.
- The percentage of male students in Illinois' 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 Illinois' public schools who were at or above *NAEP Proficient* in 2019 (32 percent) was not significantly different from that of female students in the nation (33 percent).
- In Illinois, the percentage of male students performing at or above *NAEP Proficient* in 2019 was greater than the corresponding percentages of students in 1990, 2000, and 2005, but not significantly different from the corresponding percentages of students in 2003, 2007, 2009, 2011, 2013, 2015, and 2017.
- In Illinois, the percentage of female students performing at or above *NAEP Proficient* in 2019 was greater than the corresponding percentages of students in 1990 and 2005, but not significantly different from the corresponding percentages of students in 2000, 2003, 2007, 2009, 2011, 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

|                   |                                |     |                     |                     | Perc                      | ent                               |                        |
|-------------------|--------------------------------|-----|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| Gender, year,     | Gender, year, and jurisdiction |     | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| Male              |                                |     |                     |                     |                           |                                   |                        |
| 1990 <sup>1</sup> | Nation (public)                | 51  | 262*                | 49*                 | 51*                       | 17*                               | 2*                     |
|                   | Illinois                       | 52  | 261*                | 50*                 | 50*                       | 15*                               | 2*                     |
| 2000 <sup>1</sup> | Nation (public)                | 50  | 276*                | 34                  | 66                        | 29*                               | 6*                     |
|                   | Illinois                       | 51  | 276*                | 33                  | 67                        | 26*                               | 4*                     |
| 2000              | Nation (public)                | 50  | 273*                | 38*                 | 62*                       | 26*                               | 5*                     |
|                   | Illinois                       | 52  | 272*                | 35                  | 65                        | 24*                               | 3*                     |
| 2003              | Nation (public)                | 50* | 277*                | 33                  | 67                        | 29*                               | 6*                     |
|                   | Illinois                       | 50  | 278*                | 33                  | 67                        | 31                                | 7*                     |
| 2005              | Nation (public)                | 51* | 278*                | 32*                 | 68*                       | 30*                               | 6*                     |
|                   | Illinois                       | 51  | 279*                | 30                  | 70                        | 30*                               | 6*                     |
| 2007              | Nation (public)                | 51* | 281                 | 29*                 | 71*                       | 33                                | 8*                     |
|                   | Illinois                       | 50  | 282                 | 29                  | 71                        | 33                                | 8*                     |
| 2009              | Nation (public)                | 51* | 283*                | 28*                 | 72*                       | 34*                               | 8*                     |
|                   | Illinois                       | 51  | 284                 | 26*                 | 74*                       | 35                                | 9*                     |
| 2011              | Nation (public)                | 51* | 283*                | 28*                 | 72*                       | 34                                | 9*                     |
|                   | Illinois                       | 51  | 283                 | 28                  | 72                        | 33                                | 10                     |
| 2013              | Nation (public)                | 51  | 284*                | 27*                 | 73*                       | 35*                               | 9*                     |
|                   | Illinois                       | 51  | 285                 | 27                  | 73                        | 37                                | 10                     |
| 2015              | Nation (public)                | 51  | 281                 | 30*                 | 70*                       | 32                                | 8*                     |
|                   | Illinois                       | 51  | 282                 | 28                  | 72                        | 34                                | 8                      |
| 2017              | Nation (public)                | 51  | 282*                | 31*                 | 69*                       | 34*                               | 11                     |
|                   | Illinois                       | 51  | 284                 | 30                  | 70                        | 36                                | 12                     |
| 2019              | Nation (public)                | 51  | 280                 | 33                  | 67                        | 33                                | 10                     |
|                   | Illinois                       | 51  | 283                 | 31                  | 69                        | 35                                | 12                     |

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

|                   |                  |                        |                        |                     | Perc                      | ent                               |                        |
|-------------------|------------------|------------------------|------------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| Gender, year,     | and jurisdiction | Percentage of students | Average<br>scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| Female            |                  |                        |                        |                     |                           |                                   |                        |
| 1990 <sup>1</sup> | Nation (public)  | 49                     | 261*                   | 49*                 | 51*                       | 14*                               | 2*                     |
|                   | Illinois         | 48                     | 260*                   | 49*                 | 51*                       | 14*                               | 1*                     |
| 2000 <sup>1</sup> | Nation (public)  | 50                     | 273*                   | 36*                 | 64*                       | 24*                               | 4*                     |
|                   | Illinois         | 49                     | 278                    | 31                  | 69                        | 28                                | 4*                     |
| 2000              | Nation (public)  | 50                     | 271*                   | 38*                 | 62*                       | 23*                               | 4*                     |
|                   | Illinois         | 48                     | 278                    | 31                  | 69                        | 28                                | 4*                     |
| 2003              | Nation (public)  | 50*                    | 275*                   | 34*                 | 66*                       | 26*                               | 4*                     |
|                   | Illinois         | 50                     | 276*                   | 34                  | 66                        | 28                                | 5*                     |
| 2005              | Nation (public)  | 49*                    | 277*                   | 33*                 | 67*                       | 27*                               | 5*                     |
|                   | Illinois         | 49                     | 276*                   | 34                  | 66                        | 27*                               | 5*                     |
| 2007              | Nation (public)  | 49*                    | 279*                   | 30                  | 70                        | 29*                               | 6*                     |
|                   | Illinois         | 50                     | 279                    | 31                  | 69                        | 29                                | 6                      |
| 2009              | Nation (public)  | 49*                    | 281                    | 29*                 | 71*                       | 31*                               | 7*                     |
|                   | Illinois         | 49                     | 280                    | 29                  | 71                        | 31                                | 6*                     |
| 2011              | Nation (public)  | 49*                    | 282                    | 28*                 | 72*                       | 33                                | 7*                     |
|                   | Illinois         | 49                     | 283                    | 26                  | 74                        | 32                                | 7                      |
| 2013              | Nation (public)  | 49                     | 283*                   | 27*                 | 73*                       | 34                                | 7*                     |
|                   | Illinois         | 49                     | 285                    | 26                  | 74                        | 36                                | 9                      |
| 2015              | Nation (public)  | 49                     | 281                    | 29*                 | 71*                       | 32                                | 7*                     |
|                   | Illinois         | 49                     | 282                    | 27                  | 73                        | 31                                | 6                      |
| 2017              | Nation (public)  | 49                     | 282                    | 31                  | 69                        | 33                                | 9                      |
|                   | Illinois         | 49                     | 279                    | 33                  | 67                        | 29                                | 8                      |
| 2019              | Nation (public)  | 49                     | 282                    | 31                  | 69                        | 33                                | 9                      |
|                   | Illinois         | 49                     | 282                    | 30                  | 70                        | 32                                | 9                      |

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

<sup>&</sup>lt;sup>1</sup> Accommodations were not permitted for this assessment.

NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500. NAEP 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.

## **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 Illinois 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 Illinois eligible for free/reduced-price lunch had an average mathematics scale score of 226. This was lower than that of students in Illinois not eligible for this program (249).
- In 2019, students in Illinois 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 23 points. In 2000, the average scale score for students in Illinois who were eligible for free/reduced-price school lunch was lower than the score of those not eligible by 25 points.
- Students in Illinois eligible for free/reduced-price lunch had an average scale score (226) in 2019 that was not significantly different from that of students in the nation who were eligible (229).
- In Illinois, students eligible for free/reduced-price lunch had an average mathematics scale score in 2019 that was higher than that of eligible students in 2000, 2003, and 2005, but not significantly different from that of eligible students in 2007, 2009, 2011, 2013, 2015, and 2017.

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

- In Illinois, 24 percent of students who were eligible for free/reduced-price lunch and 54 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 Illinois in 2019 who were eligible for free/reduced-price lunch, the percentage at or above *NAEP Proficient* (24 percent) was not significantly different from the corresponding percentage for their counterparts around the nation (26 percent).
- In Illinois, 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 2000, 2003, 2005, 2007, and 2009, but not significantly different from the corresponding percentages in 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, 2000–2019

|  |                 |                        |                     |                     | Perc                      | ent                               |                        |
|--|-----------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| Eligibility status, year, and jurisdiction |                 | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| Eligible                                   |                 |                        |                     |                     |                           |                                   |                        |
| 2000 <sup>1</sup>                          | Nation (public) | 35*                    | 210*                | 54*                 | 46*                       | 9*                                | #*                     |
|  | Illinois        | 37*                    | 209*                | 57*                 | 43*                       | 7*                                | #*                     |
| 2000                                       | Nation (public) | 40*                    | 208*                | 57*                 | 43*                       | 7*                                | #*                     |
|  | Illinois        | 38*                    | 208*                | 60*                 | 40*                       | 6*                                | #                      |
| 2003                                       | Nation (public) | 44*                    | 222*                | 38*                 | 62*                       | 15*                               | 1*                     |
|  | Illinois        | 41*                    | 216*                | 48*                 | 52*                       | 11*                               | 1*                     |
| 2005                                       | Nation (public) | 46*                    | 225*                | 33*                 | 67*                       | 19*                               | 1*                     |
|  | Illinois        | 45*                    | 218*                | 44*                 | 56*                       | 15*                               | 1                      |
| 2007                                       | Nation (public) | 46*                    | 227*                | 30                  | 70                        | 22*                               | 1*                     |
|  | Illinois        | 44*                    | 223                 | 36                  | 64                        | 17*                               | 1*                     |
| 2009                                       | Nation (public) | 48*                    | 228*                | 29                  | 71                        | 22*                               | 1*                     |
|  | Illinois        | 46*                    | 224                 | 34                  | 66                        | 18*                               | 1                      |
| 2011                                       | Nation (public) | 52*                    | 229                 | 27*                 | 73*                       | 24*                               | 2*                     |
|  | Illinois        | 49                     | 225                 | 33                  | 67                        | 20                                | 1                      |
| 2013                                       | Nation (public) | 54                     | 230*                | 27*                 | 73*                       | 26                                | 2*                     |
|  | Illinois        | 51                     | 226                 | 33                  | 67                        | 22                                | 2                      |
| 2015                                       | Nation (public) | 55*                    | 229                 | 28                  | 72                        | 24                                | 2*                     |
|  | Illinois        | 56                     | 225                 | 34                  | 66                        | 21                                | 2                      |
| 2017                                       | Nation (public) | 54                     | 228*                | 31*                 | 69*                       | 25                                | 3                      |
|  | Illinois        | 50                     | 224                 | 37                  | 63                        | 20                                | 2                      |
| 2019                                       | Nation (public) | 54                     | 229                 | 29                  | 71                        | 26                                | 3                      |
|  | Illinois        | 52                     | 226                 | 33                  | 67                        | 24                                | 3                      |

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, 2000–2019—Continued

|                         |  |     |                     | Percent             |                           |                                   |                        |  |
|-------------------------|--|-----|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|--|
| Eligibility statu       | Eligibility status, year, and jurisdiction |     | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |  |
| Not eligible            |  |     |                     |                     |                           |                                   |                        |  |
| 20001                   | Nation (public)                            | 52* | 236*                | 21*                 | 79*                       | 33*                               | 4*                     |  |
|                         | Illinois                                   | 52  | 235*                | 20*                 | 80*                       | 30*                               | 2*                     |  |
| 2000                    | Nation (public)                            | 49  | 235*                | 23*                 | 77*                       | 32*                               | 4*                     |  |
|                         | Illinois                                   | 49  | 234*                | 21*                 | 79*                       | 29*                               | 2*                     |  |
| 2003                    | Nation (public)                            | 52* | 244*                | 12*                 | 88*                       | 45*                               | 6*                     |  |
|                         | Illinois                                   | 55* | 246                 | 11                  | 89                        | 48                                | 8*                     |  |
| 2005                    | Nation (public)                            | 52* | 248*                | 10                  | 90                        | 50*                               | 8*                     |  |
|                         | Illinois                                   | 55* | 245*                | 12                  | 88                        | 45*                               | 7*                     |  |
| 2007                    | Nation (public)                            | 53* | 249*                | 9                   | 91                        | 53*                               | 9*                     |  |
|                         | Illinois                                   | 56* | 249                 | 10                  | 90                        | 51                                | 9*                     |  |
| 2009                    | Nation (public)                            | 51* | 250*                | 9                   | 91                        | 54*                               | 10*                    |  |
|                         | Illinois                                   | 54* | 251                 | 9                   | 91                        | 54                                | 11                     |  |
| 2011                    | Nation (public)                            | 47* | 252                 | 8*                  | 92*                       | 57                                | 12*                    |  |
|                         | Illinois                                   | 51  | 252                 | 8                   | 92                        | 56                                | 12                     |  |
| 2013                    | Nation (public)                            | 46  | 254                 | 7*                  | 93*                       | 60*                               | 14*                    |  |
|                         | Illinois                                   | 49  | 252                 | 10                  | 90                        | 57                                | 15                     |  |
| 2015                    | Nation (public)                            | 44* | 253                 | 8*                  | 92*                       | 58                                | 13*                    |  |
|                         | Illinois                                   | 44  | 252                 | 9                   | 91                        | 56                                | 15                     |  |
| 2017                    | Nation (public)                            | 45  | 253                 | 9                   | 91                        | 57                                | 14                     |  |
|                         | Illinois                                   | 49  | 253                 | 10                  | 90                        | 57                                | 17                     |  |
| 2019                    | Nation (public)                            | 45  | 253                 | 9                   | 91                        | 58                                | 15                     |  |
| Con notes at and of the | Illinois                                   | 48  | 249                 | 12                  | 88                        | 54                                | 14                     |  |

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, 2000–2019—Continued

|  |                 |                        |                     |                     | Perc                      | ent                               |                        |
|--|-----------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| Eligibility status, year, and jurisdiction |                 | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| Information n                              | ot available    |                        |                     |                     |                           |                                   |                        |
| 2000 <sup>1</sup>                          | Nation (public) | 13*                    | 235                 | 23                  | 77                        | 35                                | 3*                     |
|  | Illinois        | 12*                    | 231                 | 29                  | 71                        | 31                                | 4                      |
| 2000                                       | Nation (public) | 11*                    | 236                 | 22                  | 78                        | 35                                | 4*                     |
|  | Illinois        | 12*                    | 224                 | 35                  | 65                        | 26                                | 3                      |
| 2003                                       | Nation (public) | 4*                     | 235                 | 23                  | 77                        | 34                                | 4*                     |
|  | Illinois        | 4                      | 220                 | 41                  | 59                        | 15                                | 2                      |
| 2005                                       | Nation (public) | 2*                     | 237                 | 21                  | 79                        | 36                                | 5*                     |
|  | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2007                                       | Nation (public) | 1                      | 243                 | 17                  | 83                        | 44                                | 8                      |
|  | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2009                                       | Nation (public) | 1                      | 240                 | 22                  | 78                        | 42                                | 7                      |
|  | Illinois        | #*                     | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2011                                       | Nation (public) | #*                     | 247                 | 12*                 | 88*                       | 49                                | 10                     |
|  | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2013                                       | Nation (public) | 1                      | 255                 | 9*                  | 91*                       | 60*                               | 18                     |
|  | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2015                                       | Nation (public) | 1                      | 246                 | 15                  | 85                        | 49                                | 11                     |
|  | Illinois        | #*                     | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2017                                       | Nation (public) | 1                      | 238                 | 22                  | 78                        | 38                                | 8                      |
|  | Illinois        | 1                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2019                                       | Nation (public) | 1                      | 239                 | 20                  | 80                        | 40                                | 9                      |
| " Davida ta assa                           | Illinois        | 1                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |

<sup>#</sup> Rounds to zero.

<sup>‡</sup> Reporting standards not met.

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

<sup>&</sup>lt;sup>1</sup> Accommodations were not permitted for this assessment.

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. NAEP 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. 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.

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

- In 2019, students in Illinois eligible for free/reduced-price lunch had an average mathematics scale score of 269. This was lower than that of students in Illinois not eligible for this program (295).
- In 2019, students in Illinois 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 26 points. In 2000, the average scale score for students in Illinois who were eligible for free/reduced-price school lunch was lower than the score of those not eligible by 30 points.
- Students in Illinois eligible for free/reduced-price lunch had an average scale score (269) in 2019 that was higher than that of students in the nation who were eligible (266).
- In Illinois, students eligible for free/reduced-price lunch had an average mathematics scale score in 2019 that was higher than that of eligible students in 2000, 2003, 2005, 2007, and 2009, but not significantly different from that of eligible students in 2011, 2013, 2015, and 2017.

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

- In Illinois, 20 percent of students who were eligible for free/reduced-price lunch and 46 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 Illinois in 2019 who were eligible for free/reduced-price lunch, the percentage at or above *NAEP Proficient* (20 percent) was not significantly different from the corresponding percentage for their counterparts around the nation (18 percent).
- In Illinois, 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 2000, 2003, 2005, 2007, and 2009, but not significantly different from the corresponding percentages in 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, 2000–2019

|                               |  |     |                     |                     | Perc                      | ent                               |                        |
|-------------------------------|--|-----|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| Eligibility stat jurisdiction | Eligibility status, year, and jurisdiction |     | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| Eligible                      |  |     |                     |                     |                           |                                   |                        |
| 20001                         | Nation (public)                            | 28* | 255*                | 56*                 | 44*                       | 10*                               | 1*                     |
|                               | Illinois                                   | 30* | 259*                | 53                  | 47                        | 12*                               | 1*                     |
| 2000                          | Nation (public)                            | 31* | 253*                | 59*                 | 41*                       | 10*                               | 1*                     |
|                               | Illinois                                   | 31* | 255*                | 55*                 | 45*                       | 12*                               | 1                      |
| 2003                          | Nation (public)                            | 36* | 258*                | 53*                 | 47*                       | 11*                               | 1*                     |
|                               | Illinois                                   | 37* | 256*                | 57*                 | 43*                       | 10*                               | 1*                     |
| 2005                          | Nation (public)                            | 39* | 261*                | 49*                 | 51*                       | 13*                               | 1*                     |
|                               | Illinois                                   | 38* | 258*                | 54*                 | 46*                       | 10*                               | 1*                     |
| 2007                          | Nation (public)                            | 41* | 265                 | 45                  | 55                        | 15*                               | 2*                     |
|                               | Illinois                                   | 39* | 262*                | 49                  | 51                        | 13*                               | 2*                     |
| 2009                          | Nation (public)                            | 43* | 266                 | 43*                 | 57*                       | 17*                               | 2*                     |
|                               | Illinois                                   | 39* | 264*                | 47                  | 53                        | 14*                               | 2*                     |
| 2011                          | Nation (public)                            | 48* | 269*                | 41*                 | 59*                       | 19                                | 2*                     |
|                               | Illinois                                   | 48  | 269                 | 39                  | 61                        | 17                                | 2*                     |
| 2013                          | Nation (public)                            | 50  | 270*                | 39*                 | 61*                       | 20                                | 3*                     |
|                               | Illinois                                   | 46  | 268                 | 42                  | 58                        | 18                                | 2                      |
| 2015                          | Nation (public)                            | 52* | 268*                | 42*                 | 58*                       | 18                                | 2*                     |
|                               | Illinois                                   | 51  | 269                 | 40                  | 60                        | 18                                | 2                      |
| 2017                          | Nation (public)                            | 49  | 267                 | 45                  | 55                        | 18                                | 3                      |
|                               | Illinois                                   | 49  | 267                 | 45                  | 55                        | 18                                | 3                      |
| 2019                          | Nation (public)                            | 50  | 266                 | 46                  | 54                        | 18                                | 3                      |
| See notes at end of           | Illinois                                   | 48  | 269                 | 44                  | 56                        | 20                                | 4                      |

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, 2000–2019—Continued

|                                |  |     |                     | Percent             |                           |                                   |                        |  |
|--------------------------------|--|-----|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|--|
| Eligibility statu jurisdiction | Eligibility status, year, and jurisdiction |     | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |  |
| Not eligible                   |  |     |                     |                     |                           |                                   |                        |  |
| 20001                          | Nation (public)                            | 55* | 285*                | 24*                 | 76*                       | 35*                               | 7*                     |  |
|                                | Illinois                                   | 65* | 285*                | 23                  | 77                        | 34*                               | 5*                     |  |
| 2000                           | Nation (public)                            | 54* | 283*                | 26*                 | 74*                       | 34*                               | 7*                     |  |
|                                | Illinois                                   | 63* | 284*                | 23                  | 77                        | 34*                               | 5*                     |  |
| 2003                           | Nation (public)                            | 58* | 287*                | 22*                 | 78*                       | 37*                               | 7*                     |  |
|                                | Illinois                                   | 60* | 290                 | 19                  | 81                        | 41                                | 9*                     |  |
| 2005                           | Nation (public)                            | 59* | 288*                | 21*                 | 79*                       | 39*                               | 8*                     |  |
|                                | Illinois                                   | 62* | 290*                | 18                  | 82                        | 40*                               | 8*                     |  |
| 2007                           | Nation (public)                            | 58* | 291*                | 19                  | 81                        | 42*                               | 10*                    |  |
|                                | Illinois                                   | 61* | 292                 | 17                  | 83                        | 42                                | 10*                    |  |
| 2009                           | Nation (public)                            | 56* | 293*                | 17                  | 83                        | 45*                               | 12*                    |  |
|                                | Illinois                                   | 61* | 294                 | 15                  | 85                        | 45                                | 11*                    |  |
| 2011                           | Nation (public)                            | 52* | 295                 | 16*                 | 84*                       | 47                                | 13*                    |  |
|                                | Illinois                                   | 52  | 296                 | 16                  | 84                        | 47                                | 14                     |  |
| 2013                           | Nation (public)                            | 50  | 297                 | 14*                 | 86*                       | 49                                | 14*                    |  |
|                                | Illinois                                   | 54  | 299                 | 13*                 | 87*                       | 52                                | 15                     |  |
| 2015                           | Nation (public)                            | 47* | 296                 | 16*                 | 84*                       | 48                                | 13*                    |  |
|                                | Illinois                                   | 49  | 296                 | 15                  | 85                        | 47                                | 12                     |  |
| 2017                           | Nation (public)                            | 50  | 297                 | 17                  | 83                        | 48                                | 16                     |  |
|                                | Illinois                                   | 51  | 296                 | 19                  | 81                        | 46                                | 16                     |  |
| 2019                           | Nation (public)                            | 49  | 296                 | 18                  | 82                        | 48                                | 16                     |  |
| See notes at end of t          | Illinois                                   | 52  | 295                 | 18                  | 82                        | 46                                | 15                     |  |

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, 2000–2019—Continued

|  |                 |                        |                     |                     | Perc                      | ent                               |                        |
|--|-----------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| Eligibility status, year, and jurisdiction |                 | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| Information no                             | ot available    |                        |                     |                     |                           |                                   |                        |
| 2000 <sup>1</sup>                          | Nation (public) | 16*                    | 273*                | 37                  | 63                        | 26*                               | 4*                     |
|  | Illinois        | 5*                     | 278                 | 30                  | 70                        | 25                                | 3                      |
| 2000                                       | Nation (public) | 15*                    | 271*                | 38*                 | 62*                       | 24*                               | 4*                     |
|  | Illinois        | 5*                     | 278                 | 30                  | 70                        | 23                                | 4                      |
| 2003                                       | Nation (public) | 6*                     | 278                 | 32                  | 68                        | 29*                               | 6*                     |
|  | Illinois        | 3                      | 269                 | 43                  | 57                        | 24                                | 4                      |
| 2005                                       | Nation (public) | 3*                     | 277*                | 34                  | 66                        | 28*                               | 6*                     |
|  | Illinois        | 1                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2007                                       | Nation (public) | 1                      | 274*                | 36                  | 64                        | 28                                | 6*                     |
|  | Illinois        | #*                     | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2009                                       | Nation (public) | 1                      | 284                 | 28                  | 72                        | 35                                | 10                     |
|  | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2011                                       | Nation (public) | #*                     | 275                 | 37                  | 63                        | 26                                | 6*                     |
|  | Illinois        | #*                     | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2013                                       | Nation (public) | 1*                     | 285                 | 29                  | 71                        | 39                                | 13                     |
|  | Illinois        | #*                     | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2015                                       | Nation (public) | 1                      | 293                 | 21                  | 79                        | 45                                | 17                     |
|  | Illinois        | #                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2017                                       | Nation (public) | 1                      | 293                 | 23                  | 77                        | 46                                | 17                     |
|  | Illinois        | #*                     | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2019                                       | Nation (public) | 1                      | 286                 | 29                  | 71                        | 38                                | 15                     |
|  | Illinois        | 1                      | 278                 | 36                  | 64                        | 31                                | 8                      |

<sup>#</sup> Rounds to zero.

<sup>‡</sup> Reporting standards not met.

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

 $<sup>^{\</sup>rm 1}$  Accommodations were not permitted for this assessment.

NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500. NAEP 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. 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.

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

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

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

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

|                                |                 |                        |                     |                     | Perc                      | ent                               |                        |
|--------------------------------|-----------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| Type of locati<br>jurisdiction | on, year, and   | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| City                           |                 |                        |                     |                     |                           |                                   |                        |
| 2007                           | Nation (public) | 29                     | 233*                | 26                  | 74                        | 32*                               | 5*                     |
|                                | Illinois        | 29                     | 225                 | 36                  | 64                        | 22*                               | 3*                     |
| 2009                           | Nation (public) | 30                     | 234                 | 25                  | 75                        | 32                                | 5*                     |
|                                | Illinois        | 31                     | 230                 | 30                  | 70                        | 28                                | 5                      |
| 2011                           | Nation (public) | 29*                    | 235                 | 24                  | 76                        | 33                                | 5*                     |
|                                | Illinois        | 30                     | 233                 | 28                  | 72                        | 33                                | 7                      |
| 2013                           | Nation (public) | 30                     | 236                 | 24                  | 76                        | 35                                | 7                      |
|                                | Illinois        | 32                     | 234                 | 27                  | 73                        | 33                                | 7                      |
| 2015                           | Nation (public) | 31                     | 236                 | 24                  | 76                        | 35                                | 7                      |
|                                | Illinois        | 31                     | 232                 | 29                  | 71                        | 30                                | 6                      |
| 2017                           | Nation (public) | 30                     | 234                 | 27*                 | 73*                       | 33                                | 7                      |
|                                | Illinois        | 31                     | 235                 | 28                  | 72                        | 34                                | 9                      |
| 2019                           | Nation (public) | 30                     | 235                 | 26                  | 74                        | 35                                | 7                      |
|                                | Illinois        | 31                     | 232                 | 29                  | 71                        | 33                                | 8                      |
| Suburb                         |                 |                        |                     |                     |                           |                                   |                        |
| 2007                           | Nation (public) | 37*                    | 243                 | 15*                 | 85*                       | 44                                | 7*                     |
|                                | Illinois        | 46                     | 242                 | 17                  | 83                        | 42                                | 7                      |
| 2009                           | Nation (public) | 36*                    | 243                 | 16                  | 84                        | 44                                | 7*                     |
|                                | Illinois        | 45                     | 243                 | 17                  | 83                        | 43                                | 9                      |
| 2011                           | Nation (public) | 36*                    | 244                 | 15                  | 85                        | 45                                | 8*                     |
|                                | Illinois        | 44*                    | 241                 | 18                  | 82                        | 41                                | 8                      |
| 2013                           | Nation (public) | 35*                    | 244                 | 15                  | 85                        | 46                                | 9                      |
|                                | Illinois        | 43*                    | 242                 | 20                  | 80                        | 44                                | 12                     |
| 2015                           | Nation (public) | 41                     | 243                 | 16                  | 84                        | 44                                | 9*                     |
|                                | Illinois        | 51                     | 242                 | 20                  | 80                        | 43                                | 11                     |
| 2017                           | Nation (public) | 40                     | 243                 | 18                  | 82                        | 45                                | 10                     |
|                                | Illinois        | 49                     | 240                 | 23                  | 77                        | 41                                | 11                     |
| 2019                           | Nation (public) | 40                     | 244                 | 16                  | 84                        | 46                                | 11                     |
|                                | Illinois        | 51                     | 242                 | 19                  | 81                        | 43                                | 10                     |

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

—Continued

|                  |                 |                        |                     |                     | Perc                      | ent                               |                        |
|------------------|-----------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| Type of location | on, year, and   | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| Town             |                 |                        |                     |                     |                           |                                   |                        |
| 2007             | Nation (public) | 12*                    | 238                 | 18*                 | 82*                       | 36                                | 4*                     |
|                  | Illinois        | 11                     | 239                 | 15                  | 85                        | 34                                | 4                      |
| 2009             | Nation (public) | 12*                    | 237                 | 19                  | 81                        | 35                                | 4*                     |
|                  | Illinois        | 10                     | 240                 | 16                  | 84                        | 39                                | 4                      |
| 2011             | Nation (public) | 13*                    | 237                 | 19                  | 81                        | 35                                | 4*                     |
|                  | Illinois        | 9                      | 240                 | 15                  | 85                        | 37                                | 4                      |
| 2013             | Nation (public) | 11                     | 240*                | 17*                 | 83*                       | 39                                | 6                      |
|                  | Illinois        | 10                     | 239                 | 17                  | 83                        | 38                                | 4                      |
| 2015             | Nation (public) | 11                     | 237                 | 20                  | 80                        | 35                                | 5                      |
|                  | Illinois        | 7                      | 232                 | 26                  | 74                        | 27                                | 4                      |
| 2017             | Nation (public) | 11                     | 237                 | 21                  | 79                        | 36                                | 6                      |
|                  | Illinois        | 11                     | 238                 | 19                  | 81                        | 39                                | 3                      |
| 2019             | Nation (public) | 10                     | 237                 | 21                  | 79                        | 37                                | 6                      |
|                  | Illinois        | 9                      | 234                 | 23                  | 77                        | 35                                | 4                      |
| Rural            |                 |                        |                     |                     |                           |                                   |                        |
| 2007             | Nation (public) | 22*                    | 240                 | 16*                 | 84*                       | 39                                | 5*                     |
|                  | Illinois        | 13                     | 248                 | 9                   | 91                        | 50                                | 8                      |
| 2009             | Nation (public) | 22*                    | 240                 | 16*                 | 84*                       | 39                                | 5*                     |
|                  | Illinois        | 14                     | 242                 | 13                  | 87                        | 41                                | 6                      |
| 2011             | Nation (public) | 23*                    | 243*                | 15*                 | 85*                       | 42                                | 6                      |
|                  | Illinois        | 18*                    | 241                 | 15                  | 85                        | 40                                | 5                      |
| 2013             | Nation (public) | 25*                    | 243*                | 14*                 | 86*                       | 44*                               | 7                      |
|                  | Illinois        | 15*                    | 240                 | 18                  | 82                        | 39                                | 5                      |
| 2015             | Nation (public) | 18                     | 241                 | 16                  | 84                        | 40                                | 6                      |
|                  | Illinois        | 11                     | 237                 | 17                  | 83                        | 34                                | 4                      |
| 2017             | Nation (public) | 19                     | 240                 | 18                  | 82                        | 41                                | 7                      |
|                  | Illinois        | 10                     | 240                 | 18                  | 82                        | 40                                | 6                      |
| 2019             | Nation (public) | 19                     | 240                 | 18                  | 82                        | 40                                | 7                      |
|                  | Illinois        | 9                      | 236                 | 20                  | 80                        | 35                                | 3                      |

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

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

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

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

|                                |                 |                        |                     | Percent             |                           |                                   |                        |  |
|--------------------------------|-----------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|--|
| Type of locati<br>jurisdiction | on, year, and   | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |  |
| City                           |                 |                        |                     |                     |                           |                                   |                        |  |
| 2007                           | Nation (public) | 28                     | 273*                | 38                  | 62                        | 25*                               | 5*                     |  |
|                                | Illinois        | 27                     | 269*                | 41                  | 59                        | 20*                               | 4*                     |  |
| 2009                           | Nation (public) | 27*                    | 276                 | 36*                 | 64*                       | 28                                | 6*                     |  |
|                                | Illinois        | 28                     | 272*                | 39                  | 61                        | 24*                               | 5*                     |  |
| 2011                           | Nation (public) | 29                     | 277                 | 34*                 | 66*                       | 29                                | 7*                     |  |
|                                | Illinois        | 30                     | 278                 | 33                  | 67                        | 28                                | 7                      |  |
| 2013                           | Nation (public) | 28*                    | 278*                | 34*                 | 66*                       | 29                                | 7*                     |  |
|                                | Illinois        | 30                     | 274                 | 37                  | 63                        | 26                                | 6                      |  |
| 2015                           | Nation (public) | 29                     | 276                 | 35*                 | 65*                       | 28                                | 7*                     |  |
|                                | Illinois        | 28                     | 277                 | 35                  | 65                        | 27                                | 8                      |  |
| 2017                           | Nation (public) | 29                     | 277                 | 37                  | 63                        | 29                                | 9                      |  |
|                                | Illinois        | 27                     | 277                 | 38                  | 62                        | 28                                | 10                     |  |
| 2019                           | Nation (public) | 29                     | 276                 | 38                  | 62                        | 28                                | 9                      |  |
|                                | Illinois        | 28                     | 278                 | 36                  | 64                        | 30                                | 9                      |  |
| Suburb                         |                 |                        |                     |                     |                           |                                   |                        |  |
| 2007                           | Nation (public) | 36*                    | 285                 | 26*                 | 74*                       | 36                                | 9*                     |  |
|                                | Illinois        | 42                     | 285                 | 26                  | 74                        | 37                                | 9                      |  |
| 2009                           | Nation (public) | 36*                    | 286                 | 25*                 | 75*                       | 37                                | 10*                    |  |
|                                | Illinois        | 48                     | 287                 | 24                  | 76                        | 39                                | 10                     |  |
| 2011                           | Nation (public) | 36*                    | 286                 | 25*                 | 75*                       | 37                                | 9*                     |  |
|                                | Illinois        | 47                     | 285                 | 26                  | 74                        | 36                                | 9                      |  |
| 2013                           | Nation (public) | 35*                    | 288*                | 24*                 | 76*                       | 39                                | 10*                    |  |
|                                | Illinois        | 46                     | 290                 | 22*                 | 78*                       | 42                                | 12                     |  |
| 2015                           | Nation (public) | 41                     | 285                 | 26                  | 74                        | 37                                | 10*                    |  |
|                                | Illinois        | 53                     | 285                 | 24                  | 76                        | 36                                | 8                      |  |
| 2017                           | Nation (public) | 41                     | 287                 | 27                  | 73                        | 39                                | 12                     |  |
|                                | Illinois        | 50                     | 283                 | 31                  | 69                        | 34                                | 11                     |  |
| 2019                           | Nation (public) | 40                     | 286                 | 28                  | 72                        | 38                                | 12                     |  |
|                                | Illinois        | 49                     | 286                 | 29                  | 71                        | 38                                | 12                     |  |

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

—Continued

|                  |                 |                        |                     |                     | Perc                      | ent                               |                        |
|------------------|-----------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| Type of location | on, year, and   | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| Town             |                 |                        |                     |                     |                           |                                   |                        |
| 2007             | Nation (public) | 13*                    | 280*                | 29*                 | 71*                       | 29                                | 5*                     |
|                  | Illinois        | 15                     | 283                 | 25                  | 75                        | 29                                | 7                      |
| 2009             | Nation (public) | 14*                    | 279                 | 30*                 | 70*                       | 29                                | 5*                     |
|                  | Illinois        | 10                     | 282                 | 22                  | 78                        | 29                                | 4                      |
| 2011             | Nation (public) | 13*                    | 281*                | 28*                 | 72*                       | 31*                               | 6                      |
|                  | Illinois        | 11                     | 283                 | 24                  | 76                        | 31                                | 7                      |
| 2013             | Nation (public) | 13*                    | 281*                | 28*                 | 72*                       | 32*                               | 6                      |
|                  | Illinois        | 10                     | 284                 | 24                  | 76                        | 34                                | 5                      |
| 2015             | Nation (public) | 12                     | 279                 | 30*                 | 70*                       | 28                                | 5*                     |
|                  | Illinois        | 10                     | 275                 | 32                  | 68                        | 21                                | 3                      |
| 2017             | Nation (public) | 11                     | 278                 | 33                  | 67                        | 28                                | 6                      |
|                  | Illinois        | 11                     | 279                 | 31                  | 69                        | 30                                | 6                      |
| 2019             | Nation (public) | 12                     | 276                 | 35                  | 65                        | 28                                | 6                      |
|                  | Illinois        | 10                     | 278                 | 32                  | 68                        | 29                                | 8                      |
| Rural            |                 |                        |                     |                     |                           |                                   |                        |
| 2007             | Nation (public) | 22*                    | 282                 | 26*                 | 74*                       | 32                                | 6*                     |
|                  | Illinois        | 15                     | 285                 | 24                  | 76                        | 34                                | 6                      |
| 2009             | Nation (public) | 23*                    | 284                 | 25*                 | 75*                       | 33                                | 7*                     |
|                  | Illinois        | 15                     | 286                 | 21                  | 79                        | 35                                | 7                      |
| 2011             | Nation (public) | 23*                    | 286*                | 23*                 | 77*                       | 35*                               | 7                      |
|                  | Illinois        | 12                     | 289                 | 18                  | 82                        | 37                                | 7                      |
| 2013             | Nation (public) | 24*                    | 286*                | 24*                 | 76*                       | 36*                               | 8                      |
|                  | Illinois        | 14                     | 291                 | 19                  | 81                        | 42                                | 11                     |
| 2015             | Nation (public) | 19                     | 282                 | 27                  | 73                        | 31                                | 6*                     |
|                  | Illinois        | 10                     | 285                 | 23                  | 77                        | 38                                | 5                      |
| 2017             | Nation (public) | 19                     | 282                 | 29                  | 71                        | 32                                | 8                      |
|                  | Illinois        | 12                     | 289                 | 21                  | 79                        | 38                                | 11                     |
| 2019             | Nation (public) | 19                     | 282                 | 29                  | 71                        | 33                                | 8                      |
|                  | Illinois        | 13                     | 283                 | 26                  | 74                        | 30                                | 6                      |

<sup>\*</sup> 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. NAEP 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. 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.

## **Parents' Highest Level of Education**

Parents' highest level of education is defined by the highest level reported by eighth-graders for either parent. Fourth-graders were not asked to indicate their parents' highest level of education because their responses in previous studies were were not reliable, and a large percentage of them chose the "I don't know" option. Parental education attainment is one component used to measure student's socioeconomic status (SES).

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

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

- In 2019, students in Illinois who reported that a parent had graduated from college had an average scale score that was higher than the average scores of students with a parent in any of the following education categories: some education after high school, graduated from high school, and did not finish high school.
- In 2019, the average scale scores for students in Illinois who reported that a parent had graduated from college, had some education after high school, had graduated from high school, or had not finished high school were not significantly different from the corresponding scores of students in the nation.
- In 2019, the average scale score for students in Illinois who reported that a parent had graduated from college was higher than the score of students in 1990, 2000, and 2003, but not significantly different from the score of students in 2005, 2007, 2009, 2011, 2013, 2015, and 2017.
- In 2019, the average scale score for students in Illinois who reported that a parent had some education after high school was higher than the score of students in 1990, but lower than the score of students in 2011 and 2013, and not significantly different from the score of students in 2000, 2003, 2005, 2007, 2009, 2015, and 2017.
- In 2019, the average scale score for students in Illinois who reported that a parent had graduated from high school was higher than the score of students in 1990, but not significantly different from the score of students in 2000, 2003, 2005, 2007, 2009, 2011, 2013, 2015, and 2017.
- In 2019, the average scale score for students in Illinois who reported that a parent had not finished high school was higher than the score of students in 1990, 2000, 2003, and 2005, but not significantly different from the score of students in 2007, 2009, 2011, 2013, 2015, and 2017.

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

- In 2019, the percentage of students performing at or above *NAEP Proficient* in Illinois who reported that a parent had graduated from college was greater than the percentage for students whose parents' highest level of education was in any of the following education categories: some education after high school, graduated from high school, and did not finish high school.
- In 2019, the percentages of students in Illinois reporting that a parent had graduated from college, had some education after high school, had graduated from high school, or had not finished high school and who performed at or above *NAEP Proficient* were not significantly different from the corresponding percentages of students in the nation.
- In 2019 in Illinois, the respective percentages of students reporting that a parent had graduated from
  college, had some education after high school, or had graduated from high school and who performed at
  or above NAEP Proficient were greater than the corresponding percentages of students in 1990, but were
  not significantly different from the corresponding percentages of students in 2000, 2003, 2005, 2007,
  2009, 2011, 2013, 2015, and 2017.
- In 2019 in Illinois, the percentage of students reporting that a parent had not finished high school and who performed at or above *NAEP Proficient* was greater than the percentage of students in 1990 and 2005, but was not significantly different from the percentage of students in 2000, 2003, 2007, 2009, 2011, 2013, 2015, and 2017.

# 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 highest parental education level, year, and jurisdiction: Various years, 1990–2019

|  |                 |                        |                     |                     | Perc                      | ent   |                        |
|--|-----------------|------------------------|---------------------|---------------------|---------------------------|---|------------------------|
| Highest parental education level, year, and jurisdiction |                 | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br><i>NAEP</i><br><i>Proficient</i> | At<br>NAEP<br>Advanced |
| Did not finish   | high school     |                        |                     |                     |                           |   |                        |
| 1990 <sup>1</sup>  | Nation (public) | 10*                    | 241*                | 76*                 | 24*                       | 3*  | #                      |
|  | Illinois        | 8                      | 242*                | 71*                 | 29*                       | 4*  | #                      |
| 2000 <sup>1</sup>  | Nation (public) | 7                      | 255*                | 55                  | 45                        | 8*  | 1*                     |
|  | Illinois        | 8                      | 256                 | 55                  | 45                        | 6*  | #                      |
| 2000   | Nation (public) | 8                      | 253*                | 57*                 | 43*                       | 7*  | #*                     |
|  | Illinois        | 8                      | 254*                | 51                  | 49                        | 8   | #                      |
| 2003   | Nation (public) | 7                      | 256*                | 56*                 | 44*                       | 9*  | 1*                     |
|  | Illinois        | 6                      | 256*                | 60                  | 40                        | 8   | #                      |
| 2005   | Nation (public) | 8*                     | 259*                | 52*                 | 48*                       | 11*   | 1*                     |
|  | Illinois        | 7                      | 255*                | 59                  | 41                        | 6*  | #                      |
| 2007   | Nation (public) | 8*                     | 263                 | 48                  | 52                        | 12*   | 1*                     |
|  | Illinois        | 8                      | 262                 | 50                  | 50                        | 10  | 1                      |
| 2009   | Nation (public) | 8*                     | 265                 | 45                  | 55                        | 14  | 1*                     |
|  | Illinois        | 6                      | 266                 | 43                  | 57                        | 15  | #                      |
| 2011   | Nation (public) | 8*                     | 265                 | 44*                 | 56*                       | 15  | 2                      |
|  | Illinois        | 7                      | 271                 | 36                  | 64                        | 16  | 2                      |
| 2013   | Nation (public) | 8*                     | 267*                | 42*                 | 58*                       | 16  | 2                      |
|  | Illinois        | 8                      | 267                 | 41                  | 59                        | 15  | 1                      |
| 2015   | Nation (public) | 8*                     | 265                 | 44*                 | 56*                       | 14  | 1*                     |
|  | Illinois        | 8                      | 270                 | 38                  | 62                        | 18  | 2                      |
| 2017   | Nation (public) | 7                      | 265                 | 48                  | 52                        | 16  | 2                      |
|  | Illinois        | 6                      | 264                 | 51                  | 49                        | 18  | 3                      |
| 2019   | Nation (public) | 7                      | 264                 | 48                  | 52                        | 15  | 2                      |
| Soo notes at and of                                      | Illinois        | 7                      | 268                 | 45                  | 55                        | 19  | 4                      |

# 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 highest parental education level, year, and jurisdiction: Various years, 1990–2019—Continued

|                                  |                      |                        |                     |                     | Perc                      | ent                               |                        |
|----------------------------------|----------------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| Highest paren<br>year, and juris | tal education level, | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| Graduated from high school       |                      |                        |                     |                     |                           |                                   |                        |
| 1990 <sup>1</sup>                | Nation (public)      | 25*                    | 255*                | 59*                 | 41*                       | 8*                                | #                      |
|                                  | Illinois             | 25*                    | 252*                | 59*                 | 41*                       | 7*                                | #*                     |
| 2000 <sup>1</sup>                | Nation (public)      | 21*                    | 263                 | 47                  | 53                        | 16                                | 1*                     |
|                                  | Illinois             | 19*                    | 268                 | 42                  | 58                        | 16                                | 1                      |
| 2000                             | Nation (public)      | 21*                    | 260*                | 49                  | 51                        | 15                                | 1*                     |
|                                  | Illinois             | 20*                    | 263                 | 44                  | 56                        | 15                                | 2                      |
| 2003                             | Nation (public)      | 18*                    | 267                 | 42*                 | 58*                       | 16                                | 2*                     |
|                                  | Illinois             | 17*                    | 269                 | 40                  | 60                        | 19                                | 2                      |
| 2005                             | Nation (public)      | 18*                    | 267*                | 42*                 | 58*                       | 17                                | 2*                     |
|                                  | Illinois             | 17*                    | 265                 | 44                  | 56                        | 15                                | 1                      |
| 2007                             | Nation (public)      | 18*                    | 270*                | 40*                 | 60*                       | 19                                | 2*                     |
|                                  | Illinois             | 15                     | 267                 | 44                  | 56                        | 16                                | 2                      |
| 2009                             | Nation (public)      | 17*                    | 270*                | 38*                 | 62*                       | 19                                | 2*                     |
|                                  | Illinois             | 16*                    | 269                 | 40                  | 60                        | 17                                | 1                      |
| 2011                             | Nation (public)      | 17*                    | 271*                | 38*                 | 62*                       | 20*                               | 2                      |
|                                  | Illinois             | 15                     | 268                 | 41                  | 59                        | 15                                | 2                      |
| 2013                             | Nation (public)      | 17*                    | 270*                | 39*                 | 61*                       | 19*                               | 2                      |
|                                  | Illinois             | 15                     | 272                 | 38                  | 62                        | 22                                | 3                      |
| 2015                             | Nation (public)      | 16*                    | 268*                | 42*                 | 58*                       | 17                                | 2*                     |
|                                  | Illinois             | 15                     | 268                 | 41                  | 59                        | 17                                | 2                      |
| 2017                             | Nation (public)      | 15                     | 266                 | 45                  | 55                        | 17                                | 3                      |
|                                  | Illinois             | 14                     | 266                 | 46                  | 54                        | 16                                | 2                      |
| 2019                             | Nation (public)      | 15                     | 265                 | 46                  | 54                        | 17                                | 3                      |
| Soo notes at and of              | Illinois             | 13                     | 269                 | 43                  | 57                        | 22                                | 5                      |

# 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 highest parental education level, year, and jurisdiction: Various years, 1990–2019—Continued

|                                  |                                 |                        |                     |                     | Perc                      | ent                               |                        |
|----------------------------------|---------------------------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| Highest paren<br>year, and juris | tal education level,<br>diction | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| Some educati                     | on after high                   |                        |                     |                     |                           |                                   |                        |
| school                           |                                 |                        |                     |                     |                           |                                   |                        |
| 1990 <sup>1</sup>                | Nation (public)                 | 17*                    | 267*                | 43*                 | 57*                       | 15*                               | 3*                     |
|                                  | Illinois                        | 19*                    | 263*                | 47*                 | 53*                       | 13*                               | 1*                     |
| 2000 <sup>1</sup>                | Nation (public)                 | 18*                    | 279                 | 28                  | 72                        | 27                                | 3*                     |
|                                  | Illinois                        | 19*                    | 280                 | 26                  | 74                        | 28                                | 2                      |
| 2000                             | Nation (public)                 | 18*                    | 277                 | 30                  | 70                        | 26                                | 3*                     |
|                                  | Illinois                        | 18*                    | 282                 | 24                  | 76                        | 30                                | 2                      |
| 2003                             | Nation (public)                 | 18*                    | 280                 | 27*                 | 73*                       | 28                                | 4*                     |
|                                  | Illinois                        | 17*                    | 278                 | 30                  | 70                        | 27                                | 5                      |
| 2005                             | Nation (public)                 | 18*                    | 280                 | 27*                 | 73*                       | 28                                | 4*                     |
|                                  | Illinois                        | 18*                    | 279                 | 28                  | 72                        | 27                                | 4                      |
| 2007                             | Nation (public)                 | 17*                    | 283*                | 24*                 | 76*                       | 32*                               | 5*                     |
|                                  | Illinois                        | 17*                    | 282                 | 26                  | 74                        | 30                                | 4                      |
| 2009                             | Nation (public)                 | 17*                    | 283*                | 24*                 | 76*                       | 32*                               | 5*                     |
|                                  | Illinois                        | 17*                    | 280                 | 26                  | 74                        | 29                                | 3                      |
| 2011                             | Nation (public)                 | 16*                    | 285*                | 22*                 | 78*                       | 33*                               | 5                      |
|                                  | Illinois                        | 17*                    | 285*                | 21*                 | 79*                       | 33                                | 5                      |
| 2013                             | Nation (public)                 | 15*                    | 285*                | 22*                 | 78*                       | 33*                               | 6                      |
|                                  | Illinois                        | 14                     | 285*                | 22*                 | 78*                       | 31                                | 6                      |
| 2015                             | Nation (public)                 | 15*                    | 282*                | 25*                 | 75*                       | 30                                | 5*                     |
|                                  | Illinois                        | 15                     | 282                 | 24                  | 76                        | 28                                | 4                      |
| 2017                             | Nation (public)                 | 14                     | 281                 | 29                  | 71                        | 30                                | 6                      |
|                                  | Illinois                        | 13                     | 280                 | 29                  | 71                        | 28                                | 6                      |
| 2019                             | Nation (public)                 | 14                     | 279                 | 30                  | 70                        | 29                                | 6                      |
| See notes at end of              | Illinois                        | 14                     | 276                 | 33                  | 67                        | 26                                | 4                      |

# 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 highest parental education level, year, and jurisdiction: Various years, 1990–2019—Continued

|  |                 |                        |                     | Percent             |                           |                                   |                        |  |
|--|-----------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|--|
| Highest parental education level, year, and jurisdiction |                 | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |  |
| Graduated from college                                   |                 |                        |                     |                     |                           |                                   |                        |  |
| 1990 <sup>1</sup>  | Nation (public) | 39*                    | 274*                | 34*                 | 66*                       | 25*                               | 4*                     |  |
|  | Illinois        | 39*                    | 273*                | 36*                 | 64*                       | 24*                               | 4*                     |  |
| 2000 <sup>1</sup>  | Nation (public) | 43*                    | 286*                | 24                  | 76                        | 39*                               | 9*                     |  |
|  | Illinois        | 42*                    | 287                 | 22                  | 78                        | 39                                | 7*                     |  |
| 2000   | Nation (public) | 41*                    | 285*                | 25*                 | 75*                       | 38*                               | 9*                     |  |
|  | Illinois        | 42*                    | 284*                | 25                  | 75                        | 37                                | 7*                     |  |
| 2003   | Nation (public) | 45*                    | 287*                | 23*                 | 77*                       | 39*                               | 8*                     |  |
|  | Illinois        | 48*                    | 288*                | 23                  | 77                        | 41                                | 10*                    |  |
| 2005   | Nation (public) | 45*                    | 289*                | 22                  | 78                        | 41*                               | 10*                    |  |
|  | Illinois        | 47*                    | 289                 | 20                  | 80                        | 41                                | 9*                     |  |
| 2007   | Nation (public) | 46*                    | 291*                | 20*                 | 80*                       | 43                                | 11*                    |  |
|  | Illinois        | 46*                    | 293                 | 18                  | 82                        | 45                                | 12                     |  |
| 2009   | Nation (public) | 46*                    | 294                 | 18*                 | 82*                       | 46                                | 13*                    |  |
|  | Illinois        | 50                     | 294                 | 18                  | 82                        | 46                                | 13                     |  |
| 2011   | Nation (public) | 47*                    | 294*                | 18*                 | 82*                       | 46                                | 13*                    |  |
|  | Illinois        | 48*                    | 294                 | 19                  | 81                        | 46                                | 14                     |  |
| 2013   | Nation (public) | 49*                    | 295*                | 17*                 | 83*                       | 47*                               | 14*                    |  |
|  | Illinois        | 51                     | 297                 | 17                  | 83                        | 50                                | 15                     |  |
| 2015   | Nation (public) | 49*                    | 293                 | 19*                 | 81*                       | 45                                | 13*                    |  |
|  | Illinois        | 51                     | 293                 | 18                  | 82                        | 44                                | 12                     |  |
| 2017   | Nation (public) | 53                     | 294                 | 21                  | 79                        | 45                                | 16                     |  |
|  | Illinois        | 54                     | 293                 | 21                  | 79                        | 44                                | 15                     |  |
| 2019   | Nation (public) | 52                     | 293                 | 22                  | 78                        | 45                                | 15                     |  |
| See notes at end of                                      | Illinois        | 54                     | 294                 | 21                  | 79                        | 45                                | 16                     |  |

## 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 highest parental education level, year, and jurisdiction: Various years, 1990–2019—Continued

|  |                 |                        |                     | Percent             |                           |                                   |                        |
|--|-----------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| Highest parental education level, year, and jurisdiction |                 | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| Unknown  |                 |                        |                     |                     |                           |                                   |                        |
| 1990 <sup>1</sup>  | Nation (public) | 9*                     | 240*                | 71*                 | 29*                       | 5*                                | #                      |
|  | Illinois        | 9*                     | 241*                | 70*                 | 30*                       | 4*                                | #                      |
| 2000 <sup>1</sup>  | Nation (public) | 11*                    | 255*                | 55                  | 45                        | 11*                               | 1*                     |
|  | Illinois        | 12                     | 264                 | 47                  | 53                        | 15                                | 1                      |
| 2000   | Nation (public) | 12                     | 253*                | 59*                 | 41*                       | 9*                                | 1*                     |
|  | Illinois        | 12                     | 262                 | 48                  | 52                        | 14                                | 2                      |
| 2003   | Nation (public) | 11*                    | 258*                | 53*                 | 47*                       | 12*                               | 1*                     |
|  | Illinois        | 12                     | 257*                | 57                  | 43                        | 11                                | 1                      |
| 2005   | Nation (public) | 11*                    | 260*                | 51                  | 49                        | 13*                               | 1*                     |
|  | Illinois        | 11                     | 261                 | 49                  | 51                        | 13                                | 2                      |
| 2007   | Nation (public) | 12*                    | 263                 | 48                  | 52                        | 15*                               | 2*                     |
|  | Illinois        | 13                     | 266                 | 45                  | 55                        | 15                                | 3                      |
| 2009   | Nation (public) | 12*                    | 264                 | 47*                 | 53*                       | 16                                | 2*                     |
|  | Illinois        | 11                     | 266                 | 43                  | 57                        | 14                                | 3                      |
| 2011   | Nation (public) | 12*                    | 265*                | 46*                 | 54*                       | 16                                | 2                      |
|  | Illinois        | 13                     | 268                 | 42                  | 58                        | 16                                | 2                      |
| 2013   | Nation (public) | 12*                    | 266*                | 45*                 | 55*                       | 17                                | 2                      |
|  | Illinois        | 13                     | 267                 | 43                  | 57                        | 18                                | 3                      |
| 2015   | Nation (public) | 12*                    | 263                 | 49                  | 51                        | 15                                | 2                      |
|  | Illinois        | 12                     | 263                 | 50                  | 50                        | 17                                | 2                      |
| 2017   | Nation (public) | 11*                    | 263                 | 50                  | 50                        | 16                                | 3                      |
|  | Illinois        | 13                     | 263                 | 50                  | 50                        | 16                                | 4                      |
| 2019   | Nation (public) | 13                     | 263                 | 50                  | 50                        | 16                                | 3                      |
|  | Illinois        | 11                     | 265                 | 46                  | 54                        | 17                                | 4                      |

<sup>#</sup> Rounds to zero.

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

 $<sup>^{\</sup>rm 1}$  Accommodations were not permitted for this assessment.

NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500. NAEP 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. 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.

# 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 Illinois who were identified as SD and/or ELL, by whether they were excluded, assessed with accommodations, or assessed under standard conditions, as a percent of all grades 4 and 8 students in the state.

Tables 10-A and 10-B show the percentages of students assessed in Illinois 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 11-A and 11-B present the percentages of students assessed in Illinois 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 12-A and 12-B present the total number of grades 4 and 8 students assessed in each of the participating states and the percentage of students sampled who were excluded.

Table 9-A

# The Nation's Report Card 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, 2000–2019

|               |                                 | SD a     | nd/or ELL          |          | SD                 |          | ELL                |
|---------------|---------------------------------|----------|--------------------|----------|--------------------|----------|--------------------|
| Year and test | ting status                     | Illinois | Nation<br>(public) | Illinois | Nation<br>(public) | Illinois | Nation<br>(public) |
| 2000          | Identified                      | 17       | 19                 | 11       | 13                 | 7        | 7                  |
|               | Excluded                        | 3        | 4                  | 2        | 3                  | 2        | 1                  |
|               | Assessed without accommodations | 5        | 10                 | 3        | 5                  | 2        | 5                  |
|               | Assessed with accommodations    | 9        | 5                  | 6        | 4                  | 3        | 1                  |
| 2003          | Identified                      | 23       | 22                 | 15       | 14                 | 9        | 11                 |
|               | Excluded                        | 4        | 4                  | 3        | 3                  | 2        | 1                  |
|               | Assessed without accommodations | 7        | 10                 | 4        | 4                  | 4        | 7                  |
|               | Assessed with accommodations    | 11       | 8                  | 9        | 7                  | 3        | 2                  |
| 2005          | Identified                      | 22       | 23                 | 14       | 14                 | 9        | 10                 |
|               | Excluded                        | 3        | 3                  | 2        | 3                  | 1        | 1                  |
|               | Assessed without accommodations | 9        | 10                 | 4        | 4                  | 6        | 7                  |
|               | Assessed with accommodations    | 10       | 10                 | 8        | 8                  | 3        | 3                  |
| 2007          | Identified                      | 23       | 23                 | 15       | 14                 | 9        | 11                 |
|               | Excluded                        | 5        | 3                  | 3        | 3                  | 1        | 1                  |
|               | Assessed without accommodations | 8        | 10                 | 4        | 3                  | 4        | 7                  |
|               | Assessed with accommodations    | 10       | 10                 | 8        | 8                  | 3        | 3                  |
| 2009          | Identified                      | 22       | 23                 | 15       | 13                 | 8        | 10                 |
|               | Excluded                        | 3        | 2                  | 2        | 2                  | 1        | 1                  |
|               | Assessed without accommodations | 6        | 9                  | 4        | 3                  | 2        | 6                  |
|               | Assessed with accommodations    | 13       | 11                 | 9        | 8                  | 5        | 4                  |
| 2011          | Identified                      | 21       | 23                 | 14       | 13                 | 8        | 11                 |
|               | Excluded                        | 2        | 2                  | 2        | 2                  | 1        | #                  |
|               | Assessed without accommodations | 6        | 9                  | 4        | 3                  | 2        | 6                  |
|               | Assessed with accommodations    | 13       | 12                 | 8        | 9                  | 6        | 4                  |
| 2013          | Identified                      | 20       | 23                 | 14       | 14                 | 9        | 11                 |
|               | Excluded                        | 1        | 2                  | 1        | 1                  | #        | #                  |
|               | Assessed without accommodations | 4        | 7                  | 2        | 2                  | 1        | 5                  |
|               | Assessed with accommodations    | 15       | 14                 | 11       | 10                 | 7        | 5                  |
| 2015          | Identified                      | 22       | 24                 | 13       | 14                 | 10       | 12                 |
|               | Excluded                        | 1        | 2                  | 1        | 1                  | 1        | 1                  |
|               | Assessed without accommodations | 6        | 8                  | 3        | 3                  | 3        | 6                  |
|               | Assessed with accommodations    | 14       | 14                 | 9        | 11                 | 6        | 5                  |
| 2017          | Identified                      | 24       | 25                 | 15       | 15                 | 12       | 12                 |
|               | Excluded                        | 2        | 2                  | 1        | 2                  | 1        | 1                  |
|               | Assessed without accommodations | 7        | 10                 | 2        | 4                  | 5        | 7                  |
|               | Assessed with accommodations    | 16       | 13                 | 12       | 9                  | 6        | 5                  |
| 2019          | Identified                      | 28       | 27                 | 15       | 16                 | 16       | 13                 |
|               | Excluded                        | 1        | 2                  | 1        | 2                  | #        | 1                  |
|               | Assessed without accommodations | 12       | 10                 | 3        | 3                  | 9        | 7                  |
|               | Assessed with accommodations    | 16       | 15                 | 11       | 11                 | 7        | 6                  |

<sup>#</sup> Rounds to zero.

NOTE: Students identified as both SD and ELL were counted only once under the combined SD and/or ELL category, but were counted separately under the SD and ELL categories. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 2000–2019 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

|                   |                                 | SD aı    | nd/or ELL          |          | SD                 |          | ELL                |
|-------------------|---------------------------------|----------|--------------------|----------|--------------------|----------|--------------------|
| Year and tes      | sting status                    | Illinois | Nation<br>(public) | Illinois | Nation<br>(public) | Illinois | Nation<br>(public) |
| 1990 <sup>1</sup> | Identified                      | 9        | _                  | 8        | _                  | 1        | _                  |
|                   | Excluded                        | 5        | _                  | 4        | _                  | 1        | _                  |
|                   | Assessed without accommodations | 4        | _                  | 4        | _                  | #        | _                  |
| 2000              | Identified                      | 15       | 14                 | 11       | 11                 | 5        | 4                  |
|                   | Excluded                        | 5        | 4                  | 3        | 3                  | 2        | 1                  |
|                   | Assessed without accommodations | 7        | 7                  | 5        | 5                  | 3        | 3                  |
|                   | Assessed with accommodations    | 3        | 3                  | 3        | 2                  | #        | 1                  |
| 2003              | Identified                      | 18       | 19                 | 15       | 14                 | 4        | 6                  |
|                   | Excluded                        | 4        | 4                  | 4        | 3                  | 1        | 1                  |
|                   | Assessed without accommodations | 4        | 8                  | 3        | 5                  | i        | 4                  |
|                   | Assessed with accommodations    | 9        | 7                  | 8        | 6                  | 2        | 1                  |
| 2005              | Identified                      | 18       | 19                 | 15       | 13                 | 3        | 6                  |
| 2005              | Excluded                        | 3        | 4                  | 3        | 3                  | 1        | 1                  |
|                   | Assessed without accommodations | 4        | 7                  | 2        | 3                  | 1        | 4                  |
|                   |                                 | 11       |                    | 10       | 7                  |          |                    |
| 2007              | Assessed with accommodations    |          | 8                  |          |                    | 1        | 1                  |
| 2007              | Identified                      | 18       | 18                 | 14       | 13                 | 4        | 7                  |
|                   | Excluded                        | 6        | 4                  | 5        | 4                  | 1        | 1                  |
|                   | Assessed without accommodations | 3        | 6                  | 2        | 2                  | 2        | 4                  |
|                   | Assessed with accommodations    | 9        | 8                  | 8        | 6                  | 1        | 2                  |
| 2009              | Identified                      | 16       | 18                 | 14       | 13                 | 3        | 6                  |
|                   | Excluded                        | 3        | 3                  | 3        | 3                  | 1        | #                  |
|                   | Assessed without accommodations | 3        | 5                  | 2        | 2                  | 1        | 3                  |
|                   | Assessed with accommodations    | 11       | 10                 | 9        | 8                  | 2        | 2                  |
| 2011              | Identified                      | 17       | 18                 | 14       | 13                 | 4        | 6                  |
|                   | Excluded                        | 2        | 3                  | 2        | 2                  | #        | #                  |
|                   | Assessed without accommodations | 3        | 5                  | 1        | 2                  | 2        | 3                  |
|                   | Assessed with accommodations    | 12       | 10                 | 10       | 9                  | 2        | 2                  |
| 2013              | Identified                      | 17       | 17                 | 13       | 13                 | 5        | 6                  |
|                   | Excluded                        | 1        | 2                  | 1        | 1                  | #        | #                  |
|                   | Assessed without accommodations | 2        | 3                  | 1        | 1                  | 1        | 2                  |
|                   | Assessed with accommodations    | 14       | 12                 | 12       | 10                 | 3        | 3                  |
| 2015              | Identified                      | 17       | 19                 | 13       | 13                 | 5        | 7                  |
| 2015              | Excluded                        | 1        | 2                  | #        | 1                  | #        | #                  |
|                   | Assessed without accommodations | 3        | 5                  | 1        | 1                  | 2        | 3                  |
|                   |                                 | 13       |                    | 11       |                    |          |                    |
| 2017              | Assessed with accommodations    |          | 13                 | 14       | 11                 | 3        | 3                  |
| 2017              | Identified                      | 18       | 20                 | 14       | 14                 | 5        | 7                  |
|                   | Excluded                        | 1        | 2                  | 1        | 1                  | 1        | 1                  |
|                   | Assessed without accommodations | 3        | 6                  | 10       | 3                  | 2        | 3                  |
| 2040              | Assessed with accommodations    | 14       | 12                 | 12       | 10                 | 3        | 3                  |
| 2019              | Identified                      | 19       | 21                 | 14       | 15                 | 7        | 8                  |
|                   | Excluded                        | 1        | 2                  | 1        | 1                  | #        | 1                  |
|                   | Assessed without accommodations | 3        | 6                  | 1        | 2                  | 2        | 4                  |
|                   | Assessed with accommodations    | 15       | 13                 | 12       | 11                 | 4        | 3                  |

Not available.

<sup>#</sup> Rounds to zero.

<sup>&</sup>lt;sup>1</sup> Accommodations were not permitted for this assessment year.

NOTE: Students identified as both SD and ELL were counted only once under the combined SD and/or ELL category, but were counted separately under the SD and ELL categories. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2019 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 students with disabilities (SD) status, year, and jurisdiction: Various years, 2000–2019

|                      |                      |                        |                     |                     | Perc                      | ent                               |                        |
|----------------------|----------------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| SD status, yea       | ır, and jurisdiction | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| SD                   |                      |                        |                     |                     |                           |                                   |                        |
| 2000                 | Nation (public)      | 10*                    | 198*                | 71*                 | 29*                       | 6*                                | 1*                     |
|                      | Illinois             | 9*                     | 208                 | 50                  | 50                        | 7                                 | #                      |
| 2003                 | Nation (public)      | 11*                    | 214                 | 50                  | 50                        | 12*                               | 1*                     |
|                      | Illinois             | 13                     | 215*                | 49*                 | 51*                       | 14                                | 2                      |
| 2005                 | Nation (public)      | 12*                    | 218*                | 44*                 | 56*                       | 16                                | 2*                     |
|                      | Illinois             | 12*                    | 218*                | 43*                 | 57*                       | 16                                | 1                      |
| 2007                 | Nation (public)      | 11*                    | 220*                | 40*                 | 60*                       | 19*                               | 2                      |
|                      | Illinois             | 12*                    | 221*                | 41*                 | 59*                       | 22*                               | 4                      |
| 2009                 | Nation (public)      | 12*                    | 220*                | 41*                 | 59*                       | 19*                               | 2                      |
|                      | Illinois             | 13                     | 223*                | 38*                 | 62*                       | 23*                               | 4                      |
| 2011                 | Nation (public)      | 12*                    | 218*                | 45*                 | 55*                       | 17                                | 2*                     |
|                      | Illinois             | 12*                    | 218*                | 43*                 | 57*                       | 19*                               | 2                      |
| 2013                 | Nation (public)      | 13*                    | 218*                | 45*                 | 55*                       | 18                                | 2                      |
|                      | Illinois             | 13                     | 213*                | 53                  | 47                        | 16                                | 3                      |
| 2015                 | Nation (public)      | 13*                    | 217*                | 46*                 | 54*                       | 16                                | 2                      |
|                      | Illinois             | 13*                    | 210                 | 55                  | 45                        | 13                                | 2                      |
| 2017                 | Nation (public)      | 13*                    | 214                 | 52                  | 48                        | 16                                | 2                      |
|                      | Illinois             | 14                     | 209                 | 59                  | 41                        | 14                                | 3                      |
| 2019                 | Nation (public)      | 14                     | 214                 | 51                  | 49                        | 16                                | 3                      |
| Cooperator at and of | Illinois             | 14                     | 202                 | 63                  | 37                        | 12                                | 2                      |

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 students with disabilities (SD) status, year, and jurisdiction: Various years, 2000–2019—Continued

|                                   |                 |                        |                     |                     | Perc                      | ent                               |                        |
|-----------------------------------|-----------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| SD status, year, and jurisdiction |                 | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| Not SD                            |                 |                        |                     |                     |                           |                                   |                        |
| 2000                              | Nation (public) | 90*                    | 227*                | 33*                 | 67*                       | 24*                               | 3*                     |
|                                   | Illinois        | 91*                    | 225*                | 36*                 | 64*                       | 21*                               | 2*                     |
| 2003                              | Nation (public) | 89*                    | 236*                | 21*                 | 79*                       | 34*                               | 4*                     |
|                                   | Illinois        | 87                     | 236*                | 24*                 | 76*                       | 34*                               | 5*                     |
| 2005                              | Nation (public) | 88*                    | 240*                | 17*                 | 83*                       | 38*                               | 5*                     |
|                                   | Illinois        | 88*                    | 235*                | 24*                 | 76*                       | 34*                               | 5*                     |
| 2007                              | Nation (public) | 89*                    | 241*                | 16*                 | 84*                       | 41*                               | 6*                     |
|                                   | Illinois        | 88*                    | 239*                | 19                  | 81                        | 38                                | 6*                     |
| 2009                              | Nation (public) | 88*                    | 242*                | 16*                 | 84*                       | 41*                               | 6*                     |
|                                   | Illinois        | 87                     | 241                 | 18                  | 82                        | 40                                | 7                      |
| 2011                              | Nation (public) | 88*                    | 243*                | 15                  | 85                        | 43*                               | 7*                     |
|                                   | Illinois        | 88*                    | 242                 | 17                  | 83                        | 41                                | 8                      |
| 2013                              | Nation (public) | 87*                    | 244                 | 14                  | 86                        | 45                                | 8*                     |
|                                   | Illinois        | 87                     | 243                 | 17                  | 83                        | 43                                | 9                      |
| 2015                              | Nation (public) | 87*                    | 243*                | 15                  | 85                        | 43                                | 8*                     |
|                                   | Illinois        | 87*                    | 241                 | 18                  | 82                        | 40                                | 9                      |
| 2017                              | Nation (public) | 87*                    | 243*                | 16*                 | 84*                       | 43*                               | 9                      |
|                                   | Illinois        | 86                     | 243                 | 18                  | 82                        | 43                                | 10                     |
| 2019                              | Nation (public) | 86                     | 244                 | 15                  | 85                        | 45                                | 10                     |
|                                   | Illinois        | 86                     | 243                 | 16                  | 84                        | 43                                | 9                      |

<sup>#</sup> Rounds to zero.

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. NAEP 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. 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.

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

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 students with disabilities (SD) status, year, and jurisdiction: Various years, 2000–2019

|                                   |                 |                        |                     |                     | Perc                      | ent                               |                        |
|-----------------------------------|-----------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| SD status, year, and jurisdiction |                 | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| SD                                |                 |                        |                     |                     |                           |                                   |                        |
| 2000                              | Nation (public) | 8*                     | 229*                | 80*                 | 20*                       | 4*                                | #*                     |
|                                   | Illinois        | 8*                     | 223*                | 77                  | 23                        | 2                                 | #                      |
| 2003                              | Nation (public) | 11*                    | 242*                | 71*                 | 29*                       | 6*                                | 1*                     |
|                                   | Illinois        | 12                     | 241                 | 72                  | 28                        | 5                                 | 1                      |
| 2005                              | Nation (public) | 11*                    | 244*                | 69                  | 31                        | 7*                                | 1*                     |
|                                   | Illinois        | 13                     | 244                 | 69                  | 31                        | 5                                 | #                      |
| 2007                              | Nation (public) | 9*                     | 246                 | 67                  | 33                        | 8                                 | 1*                     |
|                                   | Illinois        | 10*                    | 246                 | 68                  | 32                        | 7                                 | #                      |
| 2009                              | Nation (public) | 10*                    | 249                 | 64*                 | 36*                       | 9                                 | 1*                     |
|                                   | Illinois        | 11*                    | 250*                | 62*                 | 38*                       | 8                                 | 1                      |
| 2011                              | Nation (public) | 11*                    | 249*                | 65*                 | 35*                       | 9                                 | 2                      |
|                                   | Illinois        | 12*                    | 252*                | 64                  | 36                        | 10                                | 2                      |
| 2013                              | Nation (public) | 12*                    | 248                 | 66*                 | 34*                       | 8                                 | 1*                     |
|                                   | Illinois        | 13                     | 248                 | 67                  | 33                        | 10                                | 3                      |
| 2015                              | Nation (public) | 12*                    | 246                 | 68                  | 32                        | 8*                                | 1*                     |
|                                   | Illinois        | 13                     | 241                 | 76                  | 24                        | 7                                 | 2                      |
| 2017                              | Nation (public) | 13*                    | 246                 | 70                  | 30                        | 8                                 | 2                      |
|                                   | Illinois        | 13                     | 242                 | 76                  | 24                        | 7                                 | 1                      |
| 2019                              | Nation (public) | 14                     | 247                 | 68                  | 32                        | 9                                 | 2                      |
| Soo notes at and of               | Illinois        | 14                     | 242                 | 75                  | 25                        | 7                                 | #                      |

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 students with disabilities (SD) status, year, and jurisdiction: Various years, 2000–2019—Continued

|                |                     |                        |                     |                     | Perc                      | ent                               |                        |
|----------------|---------------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| SD status, yea | r, and jurisdiction | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| Not SD         |                     |                        |                     |                     |                           |                                   |                        |
| 2000           | Nation (public)     | 92*                    | 275*                | 35*                 | 65*                       | 26*                               | 5*                     |
|                | Illinois            | 92*                    | 279*                | 30*                 | 70*                       | 28*                               | 4*                     |
| 2003           | Nation (public)     | 89*                    | 280*                | 29*                 | 71*                       | 30*                               | 5*                     |
|                | Illinois            | 88                     | 282*                | 28*                 | 72*                       | 33*                               | 7*                     |
| 2005           | Nation (public)     | 89*                    | 281*                | 28*                 | 72*                       | 31*                               | 6*                     |
|                | Illinois            | 87                     | 283*                | 26                  | 74                        | 32*                               | 6*                     |
| 2007           | Nation (public)     | 91*                    | 284*                | 26                  | 74                        | 33*                               | 7*                     |
|                | Illinois            | 90*                    | 284*                | 26                  | 74                        | 33                                | 8*                     |
| 2009           | Nation (public)     | 90*                    | 285                 | 24*                 | 76*                       | 35                                | 8*                     |
|                | Illinois            | 89*                    | 287                 | 23                  | 77                        | 36                                | 8*                     |
| 2011           | Nation (public)     | 89*                    | 287                 | 23*                 | 77*                       | 36                                | 9*                     |
|                | Illinois            | 88*                    | 288                 | 22                  | 78                        | 36                                | 9                      |
| 2013           | Nation (public)     | 88*                    | 288*                | 22*                 | 78*                       | 38                                | 9*                     |
|                | Illinois            | 87                     | 290                 | 20                  | 80                        | 40                                | 10                     |
| 2015           | Nation (public)     | 88*                    | 286                 | 24*                 | 76*                       | 36                                | 9*                     |
|                | Illinois            | 87                     | 288                 | 21                  | 79                        | 36                                | 8*                     |
| 2017           | Nation (public)     | 87*                    | 287                 | 25                  | 75                        | 37                                | 11                     |
|                | Illinois            | 87                     | 288                 | 25                  | 75                        | 36                                | 11                     |
| 2019           | Nation (public)     | 86                     | 286                 | 26                  | 74                        | 37                                | 11                     |
|                | Illinois            | 86                     | 289                 | 24                  | 76                        | 38                                | 12                     |

<sup>#</sup> Rounds to zero.

NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500. NAEP 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. 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.

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

Table 11-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, 2000–2019

|                 |                      |                        |                     |                     | Perc                      | ent                               |                        |
|-----------------|----------------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| ELL status, yea | ar, and jurisdiction | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| ELL             |                      |                        |                     |                     |                           |                                   |                        |
| 2000            | Nation (public)      | 6*                     | 199*                | 70*                 | 30*                       | 4*                                | #                      |
|                 | Illinois             | 6*                     | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2003            | Nation (public)      | 9*                     | 214*                | 51*                 | 49*                       | 9*                                | #*                     |
|                 | Illinois             | 7*                     | 204*                | 66*                 | 34*                       | 5*                                | #                      |
| 2005            | Nation (public)      | 10*                    | 216*                | 46*                 | 54*                       | 11*                               | 1                      |
|                 | Illinois             | 9*                     | 204*                | 64*                 | 36*                       | 5*                                | 1                      |
| 2007            | Nation (public)      | 10*                    | 217*                | 44*                 | 56*                       | 13*                               | 1                      |
|                 | Illinois             | 8*                     | 213*                | 50*                 | 50*                       | 9*                                | 1                      |
| 2009            | Nation (public)      | 10*                    | 218*                | 43                  | 57                        | 12*                               | 1*                     |
|                 | Illinois             | 7*                     | 215*                | 47                  | 53                        | 11                                | 1                      |
| 2011            | Nation (public)      | 11*                    | 219                 | 42                  | 58                        | 14                                | 1                      |
|                 | Illinois             | 7*                     | 215                 | 46                  | 54                        | 12                                | 1                      |
| 2013            | Nation (public)      | 11*                    | 219                 | 41                  | 59                        | 14                                | 1                      |
|                 | Illinois             | 8*                     | 211*                | 54*                 | 46*                       | 7*                                | #                      |
| 2015            | Nation (public)      | 11*                    | 218                 | 43                  | 57                        | 15                                | 1                      |
|                 | Illinois             | 10*                    | 211*                | 53*                 | 47*                       | 8*                                | #                      |
| 2017            | Nation (public)      | 12*                    | 217*                | 47*                 | 53*                       | 14                                | 2                      |
|                 | Illinois             | 11*                    | 209*                | 59*                 | 41*                       | 8*                                | 1                      |
| 2019            | Nation (public)      | 13                     | 219                 | 41                  | 59                        | 16                                | 1                      |
|                 | Illinois             | 16                     | 221                 | 36                  | 64                        | 16                                | 1                      |

Table 11-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, 2000–2019—Continued

|                                    |                 |                        |                     |                     | Perc                      | ent                               |                        |
|------------------------------------|-----------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| ELL status, year, and jurisdiction |                 | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| Not ELL                            |                 |                        |                     |                     |                           |                                   |                        |
| 2000                               | Nation (public) | 94*                    | 226*                | 34*                 | 66*                       | 24*                               | 3*                     |
|                                    | Illinois        | 94*                    | 224*                | 35*                 | 65*                       | 21*                               | 2*                     |
| 2003                               | Nation (public) | 91*                    | 236*                | 21*                 | 79*                       | 34*                               | 4*                     |
|                                    | Illinois        | 93*                    | 235*                | 24*                 | 76*                       | 34*                               | 5*                     |
| 2005                               | Nation (public) | 90*                    | 239*                | 18*                 | 82*                       | 38*                               | 5*                     |
|                                    | Illinois        | 91*                    | 236*                | 22                  | 78                        | 34*                               | 5*                     |
| 2007                               | Nation (public) | 90*                    | 242*                | 16*                 | 84*                       | 42*                               | 6*                     |
|                                    | Illinois        | 92*                    | 239                 | 19                  | 81                        | 39                                | 6*                     |
| 2009                               | Nation (public) | 90*                    | 242*                | 16                  | 84                        | 41*                               | 6*                     |
|                                    | Illinois        | 93*                    | 240                 | 18                  | 82                        | 40                                | 7                      |
| 2011                               | Nation (public) | 89*                    | 243                 | 15*                 | 85*                       | 43                                | 7*                     |
|                                    | Illinois        | 93*                    | 241                 | 18                  | 82                        | 40                                | 7                      |
| 2013                               | Nation (public) | 89*                    | 244                 | 15*                 | 85*                       | 45                                | 8*                     |
|                                    | Illinois        | 92*                    | 242                 | 19                  | 81                        | 42                                | 9                      |
| 2015                               | Nation (public) | 89*                    | 243                 | 16                  | 84                        | 43                                | 8*                     |
|                                    | Illinois        | 90*                    | 240                 | 20                  | 80                        | 40                                | 9                      |
| 2017                               | Nation (public) | 88*                    | 242*                | 18*                 | 82*                       | 43                                | 9*                     |
|                                    | Illinois        | 89*                    | 242                 | 19                  | 81                        | 42                                | 10                     |
| 2019                               | Nation (public) | 87                     | 243                 | 17                  | 83                        | 44                                | 10                     |
|                                    | Illinois        | 84                     | 240                 | 20                  | 80                        | 43                                | 9                      |

<sup>#</sup> Rounds to zero.

NOTE: The NAEP grade 4 mathematics scale ranges from 0 to 500. NAEP 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.

<sup>‡</sup> Reporting standards not met.

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

Table 11-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, 2000–2019

|                                    |                 |                        |                     |                     | Perc                      | ent                               |                        |
|------------------------------------|-----------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| ELL status, year, and jurisdiction |                 | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| ELL                                |                 |                        |                     |                     |                           |                                   |                        |
| 2000                               | Nation (public) | 3*                     | 234*                | 80                  | 20                        | 2*                                | #                      |
|                                    | Illinois        | 3                      | ‡                   | ‡                   | ‡                         | ‡                                 | ‡                      |
| 2003                               | Nation (public) | 5*                     | 241                 | 74                  | 26                        | 5                                 | 1                      |
|                                    | Illinois        | 3*                     | 237                 | 80                  | 20                        | 4                                 | #                      |
| 2005                               | Nation (public) | 6*                     | 244                 | 71                  | 29                        | 6                                 | 1                      |
|                                    | Illinois        | 2*                     | 249                 | 70                  | 30                        | 8                                 | 3                      |
| 2007                               | Nation (public) | 6*                     | 245                 | 70*                 | 30*                       | 6                                 | 1                      |
|                                    | Illinois        | 3*                     | 257*                | 56*                 | 44*                       | 12                                | 3                      |
| 2009                               | Nation (public) | 6*                     | 243                 | 72                  | 28                        | 5                                 | 1                      |
|                                    | Illinois        | 3*                     | 249                 | 68                  | 32                        | 7                                 | #                      |
| 2011                               | Nation (public) | 6*                     | 244                 | 72                  | 28                        | 5                                 | 1                      |
|                                    | Illinois        | 4*                     | 243                 | 70                  | 30                        | 4                                 | #                      |
| 2013                               | Nation (public) | 5*                     | 245                 | 69                  | 31                        | 5                                 | 1                      |
|                                    | Illinois        | 5*                     | 241                 | 74                  | 26                        | 3                                 | 1                      |
| 2015                               | Nation (public) | 6*                     | 246                 | 69*                 | 31*                       | 5                                 | 1                      |
|                                    | Illinois        | 5                      | 247                 | 70                  | 30                        | 7                                 | #                      |
| 2017                               | Nation (public) | 6*                     | 245                 | 72                  | 28                        | 6                                 | 1                      |
|                                    | Illinois        | 5                      | 247                 | 73                  | 27                        | 6                                 | 1                      |
| 2019                               | Nation (public) | 7                      | 243                 | 73                  | 27                        | 5                                 | 1                      |
|                                    | Illinois        | 6                      | 244                 | 72                  | 28                        | 5                                 | #                      |

Table 11-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, 2000–2019—Continued

|                                    |                 |                        |                     |                     | Perc                      | ent                               |                        |
|------------------------------------|-----------------|------------------------|---------------------|---------------------|---------------------------|-----------------------------------|------------------------|
| ELL status, year, and jurisdiction |                 | Percentage of students | Average scale score | Below<br>NAEP Basic | At or above<br>NAEP Basic | At or above<br>NAEP<br>Proficient | At<br>NAEP<br>Advanced |
| Not ELL                            |                 |                        |                     |                     |                           |                                   |                        |
| 2000                               | Nation (public) | 97*                    | 273*                | 37*                 | 63*                       | 26*                               | 5*                     |
|                                    | Illinois        | 97                     | 275*                | 33*                 | 67*                       | 27*                               | 4*                     |
| 2003                               | Nation (public) | 95*                    | 278*                | 31*                 | 69*                       | 29*                               | 5*                     |
|                                    | Illinois        | 97*                    | 279*                | 31                  | 69                        | 30*                               | 6*                     |
| 2005                               | Nation (public) | 94*                    | 280*                | 30                  | 70                        | 30*                               | 6*                     |
|                                    | Illinois        | 98*                    | 278*                | 31                  | 69                        | 29*                               | 5*                     |
| 2007                               | Nation (public) | 94*                    | 282*                | 27*                 | 73*                       | 33*                               | 7*                     |
|                                    | Illinois        | 97*                    | 281*                | 29                  | 71                        | 31                                | 7*                     |
| 2009                               | Nation (public) | 94*                    | 284                 | 26*                 | 74*                       | 34                                | 8*                     |
|                                    | Illinois        | 97*                    | 283                 | 26                  | 74                        | 34                                | 7*                     |
| 2011                               | Nation (public) | 94*                    | 285                 | 25*                 | 75*                       | 35                                | 8*                     |
|                                    | Illinois        | 96*                    | 285                 | 25                  | 75                        | 34                                | 8                      |
| 2013                               | Nation (public) | 95*                    | 286*                | 25*                 | 75*                       | 36                                | 9*                     |
|                                    | Illinois        | 95*                    | 287                 | 24                  | 76                        | 38                                | 10                     |
| 2015                               | Nation (public) | 94*                    | 284                 | 27*                 | 73*                       | 34                                | 8*                     |
|                                    | Illinois        | 95                     | 284                 | 25                  | 75                        | 34                                | 8*                     |
| 2017                               | Nation (public) | 94*                    | 284                 | 28                  | 72                        | 35                                | 10                     |
|                                    | Illinois        | 95                     | 283                 | 30                  | 70                        | 34                                | 10                     |
| 2019                               | Nation (public) | 93                     | 284                 | 29                  | 71                        | 35                                | 10                     |
|                                    | Illinois        | 94                     | 285                 | 28                  | 72                        | 36                                | 11                     |

<sup>#</sup> Rounds to zero.

NOTE: The NAEP grade 8 mathematics scale ranges from 0 to 500. NAEP 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.

<sup>‡</sup> Reporting standards not met.

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

Table 12-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<br>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                |                 | 1                               |
|                      | 2,400           |                                 |
| Illinois             | 3,500           | 1                               |
| Indiana              | 2,300           | 1                               |
| lowa                 | 2,200           | 11                              |
| 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                               |
|                      | 2,500           |                                 |
| 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           |                                 |
| Utah                 | 2,400           | 3 2                             |
| Vermont              | 2,400           | 1                               |
| Virginia             | 2,300           | 1                               |
| Washington           |                 |                                 |
|                      | 2,400           | 3                               |
| West Virginia        | 2,300           |                                 |
| Wisconsin            | 3,400           | 1                               |
| Wyoming              | 2,100           | 1                               |
| Other jurisdictions  |                 |                                 |
| District of Columbia | 2,500           | 2                               |
| DoDEA <sup>1</sup>   | 2,400           | 2                               |

<sup>&</sup>lt;sup>1</sup> 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.

Table 12-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<br>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           |                                 |
| Georgia              | 3,600           | 2 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           |                                 |
| 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  | 2,200           |                                 |
| District of Columbia | 1,900           | 2                               |
|                      | 1,800           | 1                               |
| DoDEA <sup>1</sup>   | 1,000           |                                 |

<sup>&</sup>lt;sup>1</sup> 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.

## 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 <a href="https://nces.ed.gov/nationsreportcard/mathematics">https://nces.ed.gov/nationsreportcard/mathematics</a>. The individual snapshot reports for each participating state and other jurisdictions are also available in the state results section of the website at <a href="https://nces.ed.gov/nationsreportcard/states/">https://nces.ed.gov/nationsreportcard/states/</a>.

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 <a href="https://www.nagb.gov/naep-frameworks">https://www.nagb.gov/naep-frameworks</a>/mathematics.html.

## The NAEP Data Explorer (NDE)

The NAEP Data Explorer (NDE), available at <a href="https://nces.ed.gov/nationsreportcard/naepdata/">https://nces.ed.gov/nationsreportcard/naepdata/</a>, 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 <u>Technical Documentation on the Web (TDW)</u> 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: <a href="https://ies.ed.gov/pubsearch/">https://ies.ed.gov/pubsearch/</a>. Publications can also be ordered from:

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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.

## What is the Nation's Report Card™?

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

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

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

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