



The   
Nation's  
Report Card

# Mathematics

## ABSTRACT *Report 2011*

The National Assessment of Educational Progress (NAEP) obtained a representative sample of 209,000 fourth graders and 175,200 eighth graders for this assessment for the Mathematics 2011 assessment report. Student at each grade responded to questions designed to measure what they know and can do across five mathematics content areas: a) number properties and operations; b) measurement; c) geometry; d) data analysis, statistics, and probability; and e) algebra. As part of NAEP's plan to assess as many students as possible, students with disabilities (SD) and English language learners (ELL) were included in this assessment. This practice ensured that NAEP results accurately reflect the educational performance of all students in its target population, serving as a meaningful measure of U.S. students' academic achievement over time. To that end, 85 percent of all students identified as SD or ELL were included in this assessment. Some of the results are as follows: Both fourth and eighth graders scored higher in 2011 than in previous assessment years; in grade 4 scores were higher in 2011 than in 2009 for white, black, and Hispanic students but did not change significantly for Asian/Pacific Islander or American Indian/Alaska Native students. There were no significant changes in the white-black or white-Hispanic score gaps from 2009 to 2011; scores were higher in 2011 than in 2009 for both male and female students. In grade 8 the average mathematics score in 2011 was 1 point higher than in 2009 and 21 points higher than in 1990; the average score for Hispanic students was higher in 2011 than in 2009, and the white-Hispanic score gap was smaller than in 2009; there were no significant changes from 2009 to 2011 in the scores for other racial/ethnic groups; and female students scored higher in 2011 than in 2009, but the score for male students was not significantly different from the score in 2009.



**NATIONAL ASSESSMENT OF  
EDUCATIONAL PROGRESS  
AT GRADES 4 AND 8**