The National Assessment of Educational Progress (NAEP) assesses mathematics in five content areas: number properties and operations; measurement; geometry; data analysis and probability; and algebra. The NAEP mathematics scale ranges from 0 to 500.

## Overall Mathematics Results for Montana

- In 2007, the average scale score for eighth-grade students in Montana was 287. This was not significantly different from their average score in 2005 (286) and was higher than their average score in 1990 (280). ${ }^{1}$
- Montana's average score (287) in 2007 was higher than that of the nation's public schools (280).
- Of the 52 states and other jurisdictions that participated in the 2007 eighth-grade assessment, students' average scale score in Montana was higher than those in 30 jurisdictions, not significantly different from those in 16 jurisdictions, and lower than those in 5 jurisdictions. ${ }^{2}$
- The percentage of students in Montana who performed at or above the NAEP Proficient level was 38 percent in 2007. This percentage was not significantly different from that in 2005 ( 36 percent) and was greater than that in 1990 (27 percent).
- The percentage of students in Montana who performed at or above the NAEP Basic level was 79 percent in 2007. This percentage was not significantly different from that in 2005 ( 80 percent) and was greater than that in 1990 ( 74 percent).

Percentages at NAEP Achievement Levels and Average Score

| Montana (public) |  |  |  |  | Average Score |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1990{ }^{\text {a }}$ | 26* | 48* |  | 23* | 4* | 280* |
| $1996{ }^{\text {a }}$ | 25 | 43 |  | 27 | 5* | 283* |
| $2000{ }^{\text {a }}$ | 20 | 43 |  | 32 |  | 287 |
| 2000 | 21 | 42 |  | 31 | 5 | 285 |
| 2003 | 21 | 44 |  | 29 | 6 | 286 |
| 2005 | 20 | 44 |  | 30 |  | 286 |
| 2007 | 21 | 42 |  | 30 | 7 | 287 |
| Nation (public) |  |  |  |  |  |  |
| 2007 | 30 | 39 | 24 |  |  | 280 |
| Percent below Basic Percent at Basic, Proficient, and Advanced |  |  |  |  |  |  |
| $\square$ Below Basic $\quad \square$ Basic $\quad \square$ Proficient $\quad \square$ Advanced |  |  |  |  |  |  |

${ }^{a}$ Accommodations were not permitted for this assessment.
NOTE: The NAEP grade 8 mathematics achievement levels correspond to the following scale points: Below Basic, 261 or lower; Basic, 262-298;
Proficient, 299-332; Advanced, 333 or above.

Performance of NAEP Reporting Groups in Montana: 2007

| Reporting groups | Percent of students | Average score | Percent below Basic | Percent of students at or above Basic <br> Proficient |  | Percent Advanced |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Male | 50 | 287 | 22 | 78 | 39 | 8 |
| Female | 50 | 287 | 20 | 80 | 36 | 7 |
| White | 85 | 291 | 17 | 83 | 41 | $8 \uparrow$ |
| Black | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Hispanic | 2 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| Asian/Pacific Islander | 1 | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ | $\ddagger$ |
| American Indian/Alaska Native | 11 | 260 | 50 | 50 | 15 | 2 |
| Eligible for National School Lunch Program | 34 | 272 | 36 | 64 | 22 | 2 |
| Not eligible for National School Lunch Program | 65 | 295 | 13 | 87 | 46 | $10 \uparrow$ |

## Average Score Gaps Between Selected Groups

- In 2007, male students in Montana had an average score that was not significantly different from that of female students. In 1990, the average score for male students was higher than that of female students by 6 points.
- Data are not reported for Black students in 2007, because reporting standards were not met. Therefore, the performance gap results are not reported.
- Data are not reported for Hispanic students in 2007, because reporting standards were not met. Therefore, the performance gap results are not reported.
- In 2007, students who were eligible for free/reduced-price school lunch, a proxy for poverty, had an average score that was lower than that of students who were not eligible for free/reduced-price school lunch by 23 points. In 1996, the average score for students who were eligible for free/reduced-price school lunch was lower than the score of those not eligible by 24 points.
- In 2007, the score gap between students at the 75 th percentile and students at the 25th percentile was 43 points. In 1990, the score gap between students at the 75th percentile and students at the 25 th percentile was 39 points.

Mathematics Scores at Selected Percentiles


NOTE: Scores at selected percentiles on the NAEP mathematics scale indicate how well students at lower, middle, and higher levels performed.
\# Rounds to zero.

* Significantly different from 2007.
$\uparrow$ Significantly higher than 2005. $\downarrow$ Significantly lower than 2005. calculated on the basis of unrounded scale scores or percentages. Comparisons across jurisdictions and comparisons with the nation or within a jurisdiction across years may be affected by differences in exclusion rates for students with disabilities (SD) and English language learners (ELL). The exclusion rates for SD and ELL in Montana were 3 percent and "percentage rounds to zero" in 2007, respectively.For more intormation on NAEP significance testing see
http://nces.ed.gov/nationsreportcard/mathematics/interpret-results.asp\#statistical.
2 "Jurisdictions" refers to states and the District of Columbia and the Department of Defense Education Activity schools.
NOTE: Detail may not sum to totals because of rounding and because the "Information not available" category for the National School Lunch Program, which provides free and reduced-price lunches, and the "Unclassified" category for race/ethnicity are not displayed. Visit http://nces.ed.gov/nationsreportcard/states/ for additional results and detailed information.
SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990-2007 Mathematics Assessments.

