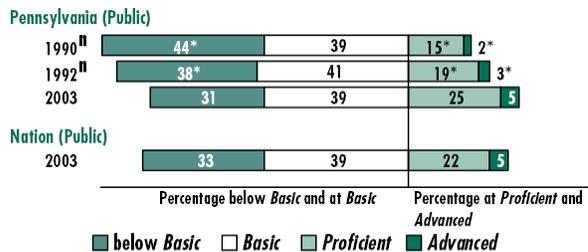


The National Assessment of Educational Progress (NAEP) assesses mathematics in five content areas: number sense, properties, and operations; measurement; geometry and spatial sense; data analysis, statistics and probability; and algebra and functions. The NAEP mathematics scale ranges from 0 to 500.

Overall Mathematics Results for Pennsylvania

- In 2003, the average scale score for eighth-grade students in Pennsylvania was 279. This was higher¹ than the average score in 1992 (271), and was higher than the average score in 1990 (266).
- Pennsylvania's average score (279) in 2003 was higher than that of the nation's public schools (276).
- Of the 53 states and jurisdictions² that participated in the 2003 eighth-grade assessment, students' average scale scores in Pennsylvania were higher than those in 17 jurisdictions, not significantly different from those in 19 jurisdictions, and lower than those in 16 jurisdictions.
- The percentage of students in Pennsylvania who performed at or above the NAEP *Proficient* level was 30 percent in 2003. This percentage was greater than that in 1992 (21 percent), and was greater than that in 1990 (17 percent).

Student Percentage at NAEP Achievement Levels



[¶] Accommodations were not permitted for this assessment.

NOTE: The NAEP mathematics scale ranges from 0 to 500, with the achievement levels corresponding to the following points: *Below Basic*, 261 or lower; *Basic*, 262-298; *Proficient*, 299-332; *Advanced*, 333 or above.

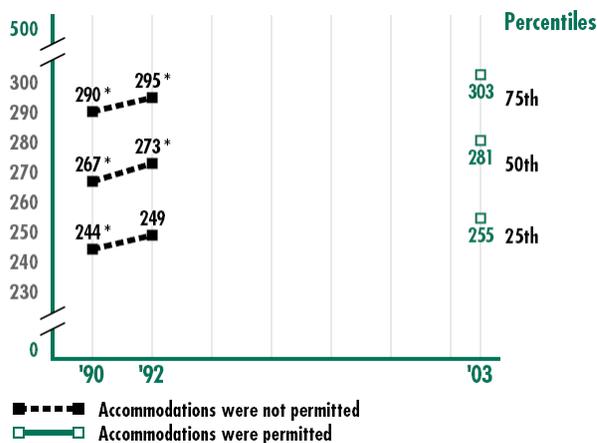
Performance of NAEP Reporting Groups in Pennsylvania

Reporting groups	Percentage of students	Average Score	Percentage of students at			
			Below <i>Basic</i>	<i>Basic</i>	<i>Proficient</i>	<i>Advanced</i>
Male	50	280 ↑	30	37	26 ↑	6 ↑
Female	50	277 ↑	32 ↓	40	23 ↑	4
White	80	285 ↑	24 ↓	41	29 ↑	6 ↑
Black	15	247	68	28 ↑	4	#
Hispanic	3	253	58	36	6	#
Asian/Pacific Islander	2	---	---	---	---	---
American Indian/Alaska Native	#	---	---	---	---	---
Free/reduced-price school lunch						
Eligible	28	257	55	35	10	1
Not eligible	69	288	21	41	31	7

Average Score Gaps Between Selected Groups

- In 2003, male students in Pennsylvania had an average score that was not found to be significantly different from that of female students. In 1990, male students had an average score that was higher than that of female students.
- In 2003, White students had an average score that was higher than that of Black students (38 points). This performance gap was not significantly different from that of 1990 (36 points).
- The sample size was not sufficient to permit a reliable estimate for Hispanic students in Pennsylvania in 1990.
- In 2003, students who were not eligible for free/reduced-price school lunch had an average score that was higher than that of students who were eligible (31 points). This performance gap was not significantly different from that of the Nation (28 points).

Mathematics Scale Scores at Selected Percentiles



An examination of scores at different percentiles on the 0–500 NAEP mathematics scale at each grade indicates how well students at lower, middle, and higher levels of the distribution performed.

The estimate rounds to zero.

--- Reporting standards not met; sample size insufficient to permit a reliable estimate.

* Significantly different from 2003.

↑ Significantly higher than, ↓ lower than 1992.

¹ Comparisons (higher/lower/not different) are based on statistical tests. The .05 level was used for testing statistical significance. Performance comparisons may be affected by differences in exclusion rates for students with disabilities and limited-English-proficient students in the NAEP samples and changes in sample sizes. NAEP sample sizes have increased in 2003 compared to previous years, resulting in smaller detectable differences than in previous assessments.

² "Jurisdictions" includes participating states and other jurisdictions (such as the District of Columbia and the Department of Defense Dependents Schools). NOTE: Detail may not sum to totals because of rounding, and because the "Information not available" category for Free/reduced-price lunch is not displayed. Statistical comparisons are calculated on the basis of unrounded scale scores or percentages.

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), 1990, 1992, and 2003 Mathematics Assessments.