

Table 121. Average mathematics scale score, by age and by selected student and school characteristics: Selected years, 1973 to 1999

Selected student and school characteristics	1973	1978	1982	1986	1990	1992	1994	1996	1999
1	2	3	4	5	6	7	8	9	10
9-year-olds									
Total	219.0 (0.8)	218.6 (0.8)	219.0 (1.1)	221.7 (1.0)	229.6 (0.8)	229.6 (0.8)	231.1 (0.8)	231.0 (0.8)	232.0 (0.8)
Sex									
Male	218.0 (0.7)	217.4 (0.7)	217.1 (1.2)	221.7 (1.1)	229.1 (0.9)	230.8 (1.0)	232.2 (1.0)	232.9 (1.2)	232.9 (1.0)
Female	220.0 (1.1)	219.9 (1.0)	220.8 (1.2)	221.7 (1.2)	230.2 (1.1)	228.4 (1.0)	230.0 (0.9)	229.0 (0.7)	231.2 (0.9)
Race/ethnicity									
White, non-Hispanic	225.0 (1.0)	224.1 (0.9)	224.0 (1.1)	226.9 (1.1)	235.2 (0.8)	235.1 (0.8)	236.8 (1.0)	236.9 (1.0)	238.8 (0.9)
Black, non-Hispanic	190.0 (1.8)	192.4 (1.1)	194.9 (1.6)	201.6 (1.6)	208.4 (2.2)	208.0 (2.0)	212.1 (1.6)	211.6 (1.4)	210.9 (1.6)
Hispanic	202.0 (2.4)	202.9 (2.2)	204.0 (1.3)	205.4 (2.1)	213.8 (2.1)	211.9 (2.3)	209.9 (2.3)	214.7 (1.7)	212.9 (1.9)
Control of school									
Public	— (—)	217.2 (0.8)	217.0 (1.1)	220.1 (1.2)	228.6 (0.9)	227.7 (0.9)	229.3 (0.9)	229.7 (0.8)	230.6 (0.9)
Private	— (—)	230.5 (1.7)	231.8 (2.1)	230.0 (2.5)	238.1 (2.3)	241.5 (1.7)	244.5 (2.3)	239.1 (2.1)	242.0 (1.9)
Region									
Northeast	227.0 (1.9)	226.9 (1.9)	225.7 (1.8)	226.0 (2.7)	235.8 (2.1)	234.8 (1.9)	237.6 (2.2)	236.4 (2.0)	241.5 (1.7)
Southeast	208.0 (1.3)	208.9 (1.2)	210.4 (2.5)	217.8 (2.5)	223.9 (2.4)	221.0 (1.7)	229.0 (1.4)	226.9 (2.0)	226.5 (2.6)
Central	224.0 (1.5)	224.0 (1.5)	221.1 (2.7)	226.0 (2.3)	230.7 (1.3)	233.7 (1.6)	233.1 (1.8)	233.0 (2.3)	233.0 (1.4)
West	216.0 (2.2)	213.5 (1.3)	219.3 (1.8)	217.2 (2.4)	228.5 (1.8)	229.0 (2.3)	226.0 (1.6)	228.6 (1.3)	228.1 (1.7)
13-year-olds									
Total	266.0 (1.1)	264.1 (1.1)	268.6 (1.1)	269.0 (1.2)	270.4 (0.9)	273.1 (0.9)	274.3 (1.0)	274.3 (0.8)	275.8 (0.8)
Sex									
Male	265.0 (1.3)	263.6 (1.3)	269.2 (1.4)	270.0 (1.1)	271.2 (1.2)	274.1 (1.1)	276.0 (1.3)	276.3 (0.9)	277.2 (0.9)
Female	267.0 (1.1)	264.7 (1.1)	268.0 (1.1)	267.9 (1.5)	269.6 (0.9)	272.0 (1.0)	272.7 (1.0)	272.4 (1.0)	274.5 (1.1)
Race/ethnicity									
White, non-Hispanic	274.0 (0.9)	271.6 (0.8)	274.4 (1.0)	273.6 (1.3)	276.3 (1.1)	278.9 (0.9)	280.8 (0.9)	281.2 (0.9)	283.1 (0.8)
Black, non-Hispanic	228.0 (1.9)	229.6 (1.9)	240.4 (1.6)	249.2 (2.3)	249.1 (2.3)	250.2 (1.9)	251.5 (3.5)	252.1 (1.3)	251.0 (2.6)
Hispanic	239.0 (2.2)	238.0 (2.0)	252.4 (1.7)	254.3 (2.9)	254.6 (1.8)	259.3 (1.8)	256.0 (1.9)	255.7 (1.6)	259.2 (1.7)
Parents' highest level of education									
Not high school graduate	— (—)	244.7 (1.2)	251.0 (1.4)	252.3 (2.3)	253.4 (1.8)	255.5 (1.0)	254.5 (2.1)	253.7 (2.4)	256.2 (2.8)
Graduated high school	— (—)	263.1 (1.0)	262.9 (0.8)	262.7 (1.2)	262.6 (1.2)	263.2 (1.2)	265.7 (1.1)	266.8 (1.1)	264.0 (1.1)
Some education after high school	— (—)	273.1 (1.2)	275.1 (0.9)	273.7 (0.8)	277.1 (1.0)	277.6 (1.0)	277.3 (1.6)	277.5 (1.4)	279.4 (0.9)
Graduated college	— (—)	283.8 (1.2)	282.3 (1.5)	279.9 (1.4)	280.4 (1.0)	282.8 (1.0)	284.9 (1.2)	282.9 (1.2)	285.8 (1.0)
Control of school									
Public	— (—)	262.6 (1.2)	267.1 (1.3)	268.7 (1.2)	269.3 (1.0)	271.7 (1.0)	273.0 (1.1)	272.9 (0.9)	274.2 (1.2)
Private	— (—)	279.2 (1.4)	281.1 (2.1)	275.7 (4.9)	279.9 (1.7)	283.3 (2.5)	284.6 (2.4)	285.5 (3.6)	288.5 (2.6)
Region									
Northeast	275.0 (2.4)	272.7 (2.4)	276.9 (2.0)	276.6 (2.2)	274.7 (2.3)	273.6 (2.2)	284.2 (1.5)	275.1 (2.1)	278.7 (2.7)
Southeast	255.0 (3.2)	252.7 (3.3)	258.1 (2.2)	263.5 (1.4)	265.7 (1.9)	271.0 (2.5)	268.6 (2.0)	270.0 (1.8)	270.2 (2.3)
Central	271.0 (1.8)	269.4 (1.8)	272.8 (2.1)	266.1 (4.5)	272.2 (2.4)	275.4 (1.5)	275.0 (3.4)	280.4 (1.3)	277.8 (1.8)
West	262.0 (1.9)	260.0 (1.9)	266.0 (2.4)	270.4 (2.1)	269.1 (1.6)	272.3 (1.4)	271.5 (1.7)	272.6 (1.9)	276.1 (1.4)
17-year-olds									
Total	304.0 (1.1)	300.4 (1.0)	298.5 (0.9)	302.0 (0.9)	304.6 (0.9)	306.7 (0.9)	306.2 (1.0)	307.2 (1.2)	308.2 (1.0)
Sex									
Male	309.0 (1.2)	303.8 (1.0)	301.5 (1.0)	304.7 (1.2)	306.3 (1.1)	308.9 (1.1)	308.5 (1.4)	309.5 (1.3)	309.8 (1.4)
Female	301.0 (1.1)	297.1 (1.0)	295.6 (1.0)	299.4 (1.0)	302.9 (1.1)	304.5 (1.1)	304.1 (1.1)	304.9 (1.4)	306.8 (1.0)
Race/ethnicity									
White, non-Hispanic	310.0 (1.1)	305.9 (0.9)	303.7 (0.9)	307.5 (1.0)	309.5 (1.0)	311.9 (0.8)	312.3 (1.1)	313.4 (1.4)	314.8 (1.1)
Black, non-Hispanic	270.0 (1.3)	268.4 (1.3)	271.8 (1.2)	278.6 (2.1)	288.5 (2.8)	285.8 (2.2)	285.5 (1.8)	286.4 (1.7)	283.3 (1.5)
Hispanic	277.0 (2.2)	276.3 (2.3)	276.7 (1.8)	283.1 (2.9)	283.5 (2.9)	292.2 (2.6)	290.8 (3.7)	292.0 (2.1)	292.7 (2.5)
Parents' highest level of education									
Not high school graduate	— (—)	279.6 (1.2)	279.3 (1.0)	279.3 (2.3)	285.4 (2.2)	285.5 (2.3)	283.7 (2.4)	280.5 (2.4)	289.2 (1.8)
Graduated high school	— (—)	293.9 (0.8)	293.4 (0.8)	293.1 (1.0)	293.7 (0.9)	297.6 (1.7)	295.3 (1.1)	297.3 (2.4)	299.1 (1.6)
Some education after high school	— (—)	305.3 (0.9)	303.9 (0.9)	305.2 (1.2)	307.7 (1.0)	307.5 (1.1)	305.0 (1.3)	306.7 (1.5)	307.6 (1.6)
Graduated college	— (—)	316.8 (1.0)	312.4 (1.0)	313.9 (1.4)	316.2 (1.3)	315.9 (1.0)	317.6 (1.4)	316.6 (1.3)	316.5 (1.2)
Control of school									
Public	— (—)	299.6 (1.0)	297.3 (0.9)	301.2 (1.0)	303.5 (0.8)	305.3 (0.9)	304.4 (0.9)	306.4 (1.1)	306.7 (1.0)
Private	— (—)	314.3 (3.2)	311.4 (1.7)	320.1 (9.8)	317.7 (6.6)	320.4 (3.0)	319.4 (4.0)	315.5 (4.5)	320.6 (4.1)
Region									
Northeast	312.0 (1.8)	306.7 (1.8)	304.0 (2.0)	307.4 (1.9)	303.8 (2.1)	311.4 (2.0)	312.7 (2.9)	308.7 (3.0)	312.9 (2.4)
Southeast	296.0 (1.8)	292.3 (1.7)	292.3 (2.1)	297.3 (1.4)	301.0 (2.3)	301.3 (1.9)	300.9 (1.6)	302.7 (2.1)	299.5 (1.4)
Central	306.0 (1.8)	305.2 (1.9)	302.0 (1.4)	303.6 (1.9)	311.2 (2.1)	312.2 (2.0)	307.0 (2.2)	314.0 (2.0)	309.6 (2.0)
West	303.0 (2.0)	295.5 (1.8)	294.1 (1.9)	299.3 (2.7)	302.1 (1.5)	303.1 (1.5)	304.8 (2.4)	303.8 (2.3)	310.4 (2.0)

—Not available.

NOTE: Excludes persons not enrolled in school and those who were unable to be tested due to limited proficiency in English or due to a disability. These test scores are from the National Assessment of Educational Progress (NAEP). A score of 150 implies the knowledge of some basic addition and subtraction facts, and most can add 2-digit numbers without regrouping. They recognize simple situations in which addition and subtraction apply. A score of 200 implies considerable understanding of 2-digit numbers and know some basic multiplication and division facts. A score of 250 implies an initial understanding of the four basic operations. They can also compare information from graphs and charts, and are developing an ability to analyze simple logical relations. A score of 300 implies an ability to compute decimals, simple fractions and percents. They can

identify geometric figures, measure lengths and angles, and calculate areas of rectangles. They are developing the skills to operate with signed numbers, exponents, and square roots. A score of 350 implies an ability to apply a range of reasoning skills to solve multistep problems. They can solve routine problems involving fractions and percents, recognize properties of basic geometric figures, and work with exponents and square roots. Scale ranges from 0 to 500. Totals include other racial/ethnic groups not shown separately. Standard errors appear in parentheses.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, *NAEP Trends in Academic Progress*, various years, by Educational Testing Service. (This table was prepared November 2001.)