

**Table 125.—Percent of students at or above selected mathematics proficiency levels, by sex, race/ethnicity, control of school, and age: 1978 to 1999**

Sex, race/ethnicity, control, and year	9-year-olds <sup>1</sup>				13-year-olds <sup>2</sup>				17-year-olds <sup>2</sup>			
	Simple arithmetic facts <sup>3</sup>	Beginning skills and understanding <sup>4</sup>	Numerical operations and beginning problem solving <sup>5</sup>	Moderately complex procedures and reasoning <sup>6</sup>	Beginning skills and understanding <sup>4</sup>	Numerical operations and beginning problem solving <sup>5</sup>	Moderately complex procedures and reasoning <sup>6</sup>	Multi-step problem solving and algebra <sup>7</sup>	Beginning skills and understanding <sup>4</sup>	Numerical operations and beginning problem solving <sup>5</sup>	Moderately complex procedures and reasoning <sup>6</sup>	Multi-step problem solving and algebra <sup>7</sup>
1	2	3	4	5	6	7	8	9	10	11	12	13
<b>Total</b>												
1978 .....	96.7 (0.3)	70.4 (0.9)	19.6 (0.7)	0.8 (0.1)	94.6 (0.5)	64.9 (1.2)	18.0 (0.7)	1.0 (0.2)	99.8 (0.1)	92.0 (0.5)	51.5 (1.1)	7.3 (0.4)
1982 .....	97.1 (0.3)	71.4 (1.2)	18.8 (1.0)	0.6 (0.1)	97.7 (0.4)	71.4 (1.2)	17.4 (0.9)	0.5 (0.1)	99.9 (0.0)	93.0 (0.5)	48.5 (1.3)	5.5 (0.4)
1986 .....	97.9 (0.3)	74.1 (1.2)	20.7 (0.9)	0.6 (0.2)	98.6 (0.2)	73.3 (1.6)	15.8 (1.0)	0.4 (0.1)	99.9 —	95.6 (0.5)	51.7 (1.4)	6.5 (0.5)
1990 .....	99.1 (0.2)	81.5 (1.0)	27.7 (0.9)	1.2 (0.3)	98.5 (0.2)	74.7 (1.0)	17.3 (1.0)	0.4 (0.1)	100.0 —	96.0 (0.5)	56.1 (1.4)	7.2 (0.6)
1992 .....	99.0 (0.2)	81.4 (0.8)	27.8 (0.9)	1.2 (0.3)	98.7 (0.3)	77.9 (1.1)	18.9 (1.0)	0.4 (0.2)	100.0 —	96.6 (0.5)	59.1 (1.3)	7.2 (0.6)
1994 .....	99.0 (0.2)	82.0 (0.7)	29.9 (1.1)	1.3 (0.4)	98.5 (0.3)	78.1 (1.1)	21.3 (1.4)	0.6 (0.2)	100.0 —	96.5 (0.5)	58.6 (1.4)	7.4 (0.8)
1996 .....	99.1 (0.2)	81.5 (0.8)	29.7 (1.0)	1.6 (0.3)	98.8 (0.2)	78.6 (0.9)	20.6 (1.2)	0.6 (0.1)	100.0 —	96.8 (0.4)	60.1 (1.7)	7.4 (0.8)
1999 .....	98.9 (0.2)	82.5 (0.8)	30.9 (1.1)	1.7 (0.3)	98.7 (0.2)	78.8 (1.0)	23.2 (1.0)	0.9 (0.2)	100.0 —	96.8 (0.5)	60.7 (1.6)	8.4 (0.8)
<b>Male</b>												
1978 .....	96.2 (0.5)	68.9 (1.0)	19.2 (0.6)	0.7 (0.2)	93.9 (0.5)	63.9 (1.3)	18.4 (0.9)	1.1 (0.2)	99.9 (0.1)	93.0 (0.5)	55.1 (1.2)	9.5 (0.6)
1982 .....	96.5 (0.5)	68.8 (1.3)	18.1 (1.1)	0.6 (0.1)	97.5 (0.6)	71.3 (1.4)	18.9 (1.2)	0.7 (0.2)	100.0 —	93.9 (0.6)	51.9 (1.5)	6.9 (0.7)
1986 .....	98.0 (0.5)	74.0 (1.4)	20.9 (1.1)	0.7 (0.3)	98.5 (0.3)	73.8 (1.8)	17.6 (1.1)	0.5 (0.2)	99.9 —	96.1 (0.6)	54.6 (1.8)	8.4 (0.9)
1990 .....	99.0 (0.3)	80.6 (1.0)	27.5 (1.0)	1.3 (0.4)	98.2 (0.3)	75.1 (1.8)	19.0 (1.2)	0.5 (0.2)	99.9 —	95.8 (0.8)	57.6 (1.4)	8.8 (0.8)
1992 .....	99.0 (0.3)	81.9 (1.0)	29.4 (1.2)	1.4 (0.3)	98.8 (0.4)	78.1 (1.6)	20.7 (1.1)	0.5 (0.2)	100.0 —	96.9 (0.6)	60.5 (1.8)	9.1 (0.7)
1994 .....	99.1 (0.3)	82.3 (0.9)	31.5 (1.6)	1.4 (0.4)	98.3 (0.4)	78.9 (1.5)	23.9 (1.6)	0.8 (0.3)	100.0 —	97.3 (0.6)	60.2 (2.1)	9.3 (1.0)
1996 .....	99.1 (0.2)	82.5 (1.1)	32.7 (1.7)	2.0 (0.5)	98.7 (0.3)	79.8 (1.4)	23.0 (1.6)	0.8 (0.2)	100.0 —	97.0 (0.7)	62.7 (1.8)	9.5 (1.3)
1999 .....	98.8 (0.3)	82.6 (0.9)	32.4 (1.3)	1.9 (0.4)	98.5 (0.3)	79.3 (1.1)	25.4 (1.2)	1.2 (0.2)	100.0 —	96.5 (0.8)	63.1 (2.1)	9.8 (1.1)
<b>Female</b>												
1978 .....	97.2 (0.3)	72.0 (1.1)	19.9 (1.0)	0.8 (0.2)	95.2 (0.5)	65.9 (1.2)	17.5 (0.7)	0.9 (0.2)	99.7 (0.1)	91.0 (0.6)	48.2 (1.3)	5.2 (0.7)
1982 .....	97.6 (0.3)	74.0 (1.3)	19.6 (1.1)	0.5 (0.1)	98.0 (0.3)	71.4 (1.3)	15.9 (1.0)	0.4 (0.2)	99.9 (0.0)	92.1 (0.6)	45.3 (1.4)	4.1 (0.4)
1986 .....	97.8 (0.4)	74.3 (1.3)	20.6 (1.3)	0.6 (0.3)	98.6 (0.3)	72.7 (1.9)	14.1 (1.3)	0.3 (0.1)	100.0 —	95.1 (0.7)	48.9 (1.7)	4.7 (0.6)
1990 .....	99.1 (0.3)	82.3 (1.3)	27.9 (1.3)	1.0 (0.3)	98.9 (0.2)	74.4 (1.3)	15.7 (1.0)	0.2 (0.1)	100.0 —	96.2 (0.8)	54.7 (1.8)	5.6 (0.8)
1992 .....	99.0 (0.3)	80.9 (1.1)	26.3 (1.5)	1.0 (0.4)	98.6 (0.2)	77.7 (1.1)	17.2 (1.4)	0.3 —	100.0 —	96.3 (0.8)	57.7 (1.6)	5.2 (0.8)
1994 .....	98.9 (0.3)	81.7 (0.9)	28.3 (1.3)	1.1 (0.4)	98.7 (0.3)	77.3 (1.0)	18.7 (1.4)	0.5 (0.3)	100.0 —	96.0 (0.6)	57.2 (1.4)	5.5 (0.9)
1996 .....	99.1 (0.4)	80.7 (0.9)	26.7 (1.1)	1.2 (0.4)	98.8 (0.3)	77.4 (1.1)	18.4 (1.5)	0.5 (0.2)	100.0 —	96.7 (0.6)	57.6 (2.2)	5.3 (0.8)
1999 .....	99.0 (0.2)	82.5 (1.2)	29.4 (1.4)	1.6 (0.4)	99.0 (0.4)	78.4 (1.2)	21.0 (1.4)	0.6 (0.3)	100.0 —	97.2 (0.4)	58.5 (1.9)	7.1 (1.1)
<b>White, non-Hispanic</b>												
1978 .....	98.3 (0.2)	76.3 (1.0)	22.9 (0.9)	0.9 (0.2)	97.6 (0.3)	72.9 (0.9)	21.4 (0.7)	1.2 (0.2)	100.0 —	95.6 (0.3)	57.6 (1.1)	8.5 (0.5)
1982 .....	98.5 (0.3)	76.8 (1.2)	21.8 (1.1)	0.6 (0.1)	99.1 (0.1)	78.3 (0.9)	20.5 (1.0)	0.6 (0.1)	100.0 —	96.2 (0.3)	54.7 (1.4)	6.4 (0.5)
1986 .....	98.8 (0.2)	79.6 (1.3)	24.6 (1.0)	0.8 (0.3)	99.3 (0.3)	78.9 (1.7)	18.6 (1.2)	0.4 (0.1)	100.0 —	98.0 (0.4)	59.1 (1.7)	7.9 (0.7)
1990 .....	99.6 (0.2)	86.9 (0.9)	32.7 (1.0)	1.5 (0.4)	99.4 (0.1)	82.0 (1.0)	21.0 (1.2)	0.4 (0.2)	100.0 —	97.6 (0.3)	63.2 (1.6)	8.3 (0.7)
1992 .....	99.6 (0.1)	86.9 (0.7)	32.4 (1.0)	1.4 (0.3)	99.6 (0.2)	84.9 (1.1)	22.8 (1.3)	0.4 (0.2)	100.0 —	98.3 (0.4)	66.4 (1.4)	8.7 (0.9)
1994 .....	99.6 (0.2)	87.0 (0.8)	35.3 (1.3)	1.5 (0.4)	99.3 (0.2)	85.5 (0.9)	25.6 (1.6)	0.7 (0.3)	100.0 —	98.4 (0.4)	67.0 (1.4)	9.4 (1.1)
1996 .....	99.6 (0.1)	86.6 (0.8)	35.7 (1.4)	2.0 (0.4)	99.6 (0.2)	86.4 (1.0)	25.4 (1.5)	0.8 (0.2)	100.0 —	98.7 (0.4)	68.7 (2.2)	9.2 (1.0)
1999 .....	99.6 (0.1)	88.6 (0.8)	37.1 (1.4)	2.2 (0.4)	99.4 (0.3)	86.7 (0.9)	29.0 (1.3)	1.2 (0.3)	100.0 —	98.7 (0.4)	69.9 (2.0)	10.4 (1.1)
<b>Black, non-Hispanic</b>												
1978 .....	88.4 (1.0)	42.0 (1.4)	4.1 (0.6)	0.0 —	79.7 (1.5)	28.7 (2.1)	2.3 (0.5)	0.0 —	98.8 (0.3)	70.7 (1.7)	16.8 (1.6)	0.5 (0.2)
1982 .....	90.2 (1.0)	46.1 (2.4)	4.4 (0.8)	0.0 —	90.2 (1.6)	37.9 (2.5)	2.9 (1.0)	0.0 —	99.7 (0.2)	76.4 (1.5)	17.1 (1.5)	0.5 (0.3)
1986 .....	93.9 (1.4)	53.4 (2.5)	5.6 (0.9)	0.1 —	95.4 (0.9)	49.0 (3.7)	4.0 (1.4)	0.1 —	100.0 —	85.6 (2.5)	20.8 (2.8)	0.2 —
1990 .....	96.9 (0.9)	60.0 (2.8)	9.4 (1.7)	0.1 —	95.4 (1.1)	48.7 (3.6)	3.9 (1.6)	0.1 —	99.9 —	92.4 (2.2)	32.8 (4.5)	2.0 (1.0)
1992 .....	96.6 (1.1)	59.8 (2.8)	9.6 (1.4)	0.1 —	95.0 (1.4)	51.0 (2.7)	4.0 (0.7)	0.1 —	100.0 —	89.6 (2.5)	29.8 (3.9)	0.9 —
1994 .....	97.4 (1.0)	65.9 (2.6)	11.1 (1.7)	0.0 —	95.6 (1.6)	51.0 (3.9)	6.4 (2.4)	0.3 —	100.0 —	90.6 (1.8)	29.8 (3.4)	0.4 —
1996 .....	97.3 (0.8)	65.3 (2.4)	10.0 (1.2)	0.1 —	96.2 (1.3)	53.7 (2.6)	4.8 (1.1)	0.1 —	100.0 —	90.6 (1.3)	31.2 (2.5)	0.9 —
1999 .....	96.4 (0.6)	63.3 (2.1)	12.3 (1.5)	0.2 —	96.5 (1.1)	50.8 (4.0)	4.4 (1.4)	0.0 —	99.9 —	88.6 (2.0)	26.6 (2.7)	1.0 —
<b>Hispanic</b>												
1978 .....	93.0 (1.2)	54.2 (2.8)	9.2 (2.5)	0.2 —	86.4 (0.9)	36.0 (2.9)	4.0 (1.0)	0.1 —	99.3 (0.4)	78.3 (2.3)	23.4 (2.7)	1.4 (0.6)
1982 .....	94.3 (1.2)	55.7 (2.3)	7.8 (1.7)	0.0 —	95.9 (0.9)	52.2 (2.5)	6.3 (1.0)	0.0 —	99.8 —	81.4 (1.9)	21.6 (2.2)	0.7 (0.4)
1986 .....	96.4 (1.3)	57.6 (2.9)	7.3 (2.8)	0.1 —	96.9 (1.4)	56.0 (5.0)	5.5 (1.1)	0.2 —	99.4 —	89.3 (2.5)	26.5 (4.5)	1.1 —
1990 .....	98.0 (0.8)	68.4 (3.0)	11.3 (3.5)	0.2 —	96.8 (1.1)	56.7 (3.3)	6.4 (1.7)	0.1 —	99.6 —	85.8 (4.2)	30.1 (3.1)	1.9 (0.8)
1992 .....	97.2 (1.3)	65.0 (2.9)	11.7 (2.5)	0.1 —	98.1 (0.7)	63.3 (2.7)	7.0 (1.2)	0.0 —	100.0 —	94.1 (2.2)	39.2 (4.9)	1.2 —
1994 .....	97.2 (1.2)	63.5 (3.1)	9.7 (1.8)	0.0 —	97.1 (1.3)	59.2 (2.2)	6.4 (1.8)	0.0 —	100.0 —	91.8 (3.6)	38.3 (5.5)	1.4 —
1996 .....	98.1 (0.7)	67.1 (2.1)	13.8 (2.3)	0.2 —	96.2 (0.8)	58.3 (2.3)	6.7 (1.2)	0.0 —	99.9 —	92.2 (2.2)	40.1 (3.5)	1.8 —
1999 .....	98.1 (0.7)	67.5 (2.5)	10.5 (1.6)	0.1 —	97.2 (0.6)	62.9 (2.5)	8.2 (1.4)	0.1 —	99.9 —	93.6 (2.2)	37.7 (4.1)	3.1 (1.1)
<b>Public</b>												
1978 .....	96.4 (0.3)	68.8 (0.9)	18.5 (0.7)	0.7 (0.2)	94.1 (0.5)	63.3 (1.2)	17.0 (0.8)	0.9 (0.2)	99.8 (0.1)	91.7 (0.5)	50.6 (1.2)	7.0 (0.4)
1982 .....	96.8 (0.4)	69.4 (1.2)	17.3 (0.9)	0.5 (0.1)	97.5 (0.4)	69.7 (1.3)	16.4 (1.0)	0.5 (0.1)	99.9 (0.0)	92.5 (0.6)	46.9 (1.3)	5.2 (0.4)
1986 .....	97.7 (0.3)	72.7 (1.4)	19.1 (1.1)	0.6 (0.2)	98.5 (0.3)	72.9 (1.7)	15.6 (1.0)	0.4 (0.1)	99.9 —	95.5 (0.5)	50.7 (1.6)	6.1 (0.5)
1990 .....	99.0 (0.2)	80.5 (1.1)	26.8 (1.0)	1.1 (0.3)	98.4 (0.2)	73.3 (1.2)	16.7 (1.1)	0.3 (0.1)	100.0 —	95.8 (0.6)	55.0 (1.3)	6.5 (0.5)
1992 .....	98.8 (0.3)	79.7 (0.9)	26.1 (0.9)	1.1 (0.3)	98.5 (0.3)	76.3 (1.2)	18.0 (1.0)	0.3 (0.2)	100.0 —	96.3 (0.6)	56.9 (1.2)	6.7 (0.7)
1994 .....	98.9 (0.3)	80.6 (0.8)	27.9 (1.2)	1.1 (0.4)	98.5 (0.3)	76.7 (1.2)	20.0 (1.4)	0.6 (0.2)	100.0 —	96.2 (0.5)	56.2 (1.3)	6.4 (0.7)
1996 .....	99.0 (0.2)	80.7 (0.8)	28.3 (1.1)	1.5 (0.3)	98.6 (0.2)	77.2 (0.9)	19.2 (1.3)	0.6 (0.1)	100.0 —	96.7 (0.5)	59.0 (1.8)	7.1 (0.7)
1999 .....	98.8 (0.2)	81.4 (1.0)	29.4 (1.2)	1.6 (0.3)	98.7 (0.2)	77.3 (1.3)	21.6 (1.3)	0.8 (0.2)	100.0 —	96.4 (0.5)	58.6 (1.6)	7.9 (0.7)
<b>Private</b>												
1978 .....	99.0 —	83.3 (1.9)	28.4 (2.0)	1.2 (0.4)	99.0 (0.4)	80.8 (1.7)	26.9 (1.8)	1.4 (0.4)	100.0 —	97.1 (0.6)	67.7 (3.3)	12.9 (2.7)
1982 .....	99.0 (0.4)	84.3 (2.1)	28.6 (2.6)	1.0 (0.6)	99.5 (0.3)	85.1 (1.6)	26.3 (3.1)	1.0 (0.3)	100.0 —	98.1 (0.5)	66.3 (2.4)	8.2 (1.4)
1986 .....	98.7 (0.8)	81.8 (2.3)	28.9 (2.7)	1.1 (0.6)	98.9 (0.6)	81.9 (3.3)	22.0 (6.8)	0.1 —	100.0 —	99.4 —	75.1 (10.6)	16.3 (9.1)
1990 .....	99.7 —	89.3 (1.8)	35.2 (3.3)	1.8 (1.2)	99.7 —	87.0 (2.0)	23.2 (2.5)	0.7 (0.4)	100.0 —	98.2 (1.2)	71.0 (7.9)	15.7 (5.3)
1992 .....	99.8 (0.1)	92.2 (1.2)	38.6 (2.7)	1.9 (0.7)	99.9 —	89.7 (2.1)	25.9 (3.7)	0.7 (0.4)	100.0 —	99.5 —	79.5 (3.7)	12.2 (2.7)
1994 .....	99.8 —	92.3 (1.3)	44.4 (4.0)	2.2 (0.8)	98.7 —	88.5 (2.6)	30.7 (3.7)	1.0 —	100.0 —	98.8 (0.6)	75.7 (4.3)	14.5 (3.5)
1996 .....	99.6 —	87.1 (1.5)	38.7 (3.0)	2.1 (1.1)	99.6 —	89.3 (3.5)	31.6 (4.8)	1.0 (0.				