

| ITEM DESCRIPTION | YEAR | NATION | MALE | FEMALE | WHITE | BLACK | HISPANIC |
|------------------------------|------|-----------|-----------|-----------|-----------|-----------|-----------|
| Find area of irregular shape | 1996 | 27.1(1.7) | 31.2(2.3) | 23.3(2.1) | 32.7(2.2) | 6.0(1.9) | 9.9(1.8) |
| | 1994 | 21.6(2.0) | 26.1(2.8) | 17.1(1.7) | 25.2(2.3) | 5.8(1.9) | 17.7(5.2) |
| | 1992 | 23.6(1.8) | 28.4(2.6) | 18.6(1.5) | 27.2(2.0) | 6.0(1.9) | 17.8(3.0) |
| | 1990 | 22.2(1.8) | 25.8(2.2) | 18.6(2.0) | 24.3(2.1) | 11.2(3.5) | 13.6(3.7) |
| | 1986 | 19.5(1.2) | 24.7(2.0) | 14.6(1.5) | 22.5(1.3) | 5.3(1.9) | 6.2(2.6) |
| | 1982 | 13.9(1.2) | 17.2(1.7) | 10.8(1.2) | 16.1(1.3) | 3.1(0.9) | 3.2(1.8) |
| | 1978 | 16.1(1.3) | 22.1(1.8) | 10.7(1.3) | 17.8(1.4) | 3.3(1.1) | 6.8(2.9) |
| Relate square to circle | 1996 | 69.3(1.6) | 71.0(1.8) | 67.6(1.8) | 72.8(1.6) | 57.8(3.8) | 56.6(3.5) |
| | 1994 | 63.3(1.4) | 63.6(1.8) | 63.3(2.0) | 68.5(1.6) | 45.9(4.4) | 48.9(4.2) |
| | 1992 | 63.9(1.4) | 64.9(2.1) | 62.8(1.9) | 67.6(1.6) | 46.6(3.2) | 52.5(4.8) |
| | 1990 | 63.6(1.7) | 64.6(1.9) | 62.6(2.1) | 66.2(1.9) | 56.3(4.5) | 52.1(6.8) |
| | 1986 | 54.6(1.6) | 59.5(2.3) | 50.2(1.8) | 57.1(1.9) | 44.0(3.2) | 42.4(4.6) |
| | 1982 | 57.7(1.5) | 61.9(2.5) | 53.6(2.2) | 61.6(1.6) | 35.1(3.5) | 46.4(3.9) |
| | 1978 | | | | | | |
| Use properties of triangles | 1996 | 73.9(2.0) | 74.6(2.0) | 73.3(2.6) | 77.7(2.5) | 63.6(2.9) | 57.8(4.2) |
| | 1994 | 69.5(1.7) | 70.2(2.3) | 68.8(2.1) | 73.8(1.6) | 53.1(5.2) | 64.2(5.5) |
| | 1992 | 70.4(1.2) | 70.0(1.4) | 70.8(1.7) | 74.4(1.4) | 55.6(3.3) | 54.9(4.4) |
| | 1990 | 68.3(1.8) | 68.1(2.0) | 68.4(2.0) | 70.9(2.1) | 58.2(4.5) | 55.6(3.9) |
| | 1986 | 62.7(1.9) | 64.6(2.1) | 61.0(2.2) | 66.5(1.9) | 48.7(4.2) | 43.0(4.2) |
| | 1982 | 58.2(1.5) | 59.1(1.8) | 57.3(1.6) | 61.9(1.8) | 40.4(3.4) | 32.8(4.1) |
| | 1978 | 60.3(1.6) | 63.0(1.9) | 57.8(2.1) | 63.4(1.8) | 41.1(3.6) | 50.5(5.6) |
| Use properties of triangles | 1996 | 61.8(1.6) | 62.2(1.9) | 61.6(2.6) | 64.8(1.9) | 53.2(2.2) | 49.1(3.8) |
| | 1994 | 60.2(1.4) | 61.2(1.6) | 59.2(2.3) | 63.6(1.7) | 46.7(3.0) | 57.0(5.6) |
| | 1992 | 57.7(1.5) | 57.3(1.7) | 58.2(2.1) | 60.7(1.4) | 47.5(2.8) | 43.3(6.4) |
| | 1990 | 57.4(1.6) | 57.2(2.1) | 57.5(1.7) | 58.5(1.8) | 51.9(3.2) | 49.4(***) |
| | 1986 | 57.2(1.5) | 57.6(1.5) | 56.8(2.3) | 61.1(1.7) | 42.0(3.4) | 46.3(4.3) |
| | 1982 | 54.3(1.2) | 54.3(1.7) | 54.3(1.7) | 56.6(1.3) | 44.0(3.2) | 38.1(5.1) |
| | 1978 | 53.2(1.5) | 55.3(1.9) | 51.3(1.9) | 55.6(1.6) | 42.2(3.2) | 38.4(5.1) |
| Use properties of triangles | 1996 | 57.0(2.0) | 59.3(2.1) | 54.7(2.5) | 60.1(2.5) | 42.5(3.1) | 48.9(4.0) |
| | 1994 | 51.9(1.5) | 54.8(2.3) | 49.2(1.7) | 54.4(1.8) | 41.6(3.4) | 46.6(4.9) |
| | 1992 | 53.9(1.2) | 55.8(1.9) | 51.9(1.4) | 56.1(1.5) | 42.7(2.9) | 45.3(3.6) |
| | 1990 | 49.6(2.0) | 52.4(2.7) | 46.7(2.3) | 51.4(1.9) | 43.9(6.2) | 35.4(5.3) |
| | 1986 | 45.7(1.7) | 47.3(2.3) | 44.3(1.8) | 49.3(2.0) | 30.1(3.9) | 34.3(5.1) |
| | 1982 | 44.9(1.8) | 46.1(2.2) | 43.8(1.8) | 48.1(2.2) | 26.1(2.7) | 32.8(5.9) |
| | 1978 | 47.4(1.4) | 53.4(1.9) | 41.9(1.8) | 49.9(1.6) | 37.8(3.9) | 25.0(3.6) |
| Use properties of triangles | 1996 | 59.5(1.7) | 62.5(2.3) | 56.6(2.4) | 63.0(2.2) | 46.9(3.0) | 47.2(4.6) |
| | 1994 | 54.2(1.5) | 55.4(2.1) | 53.1(1.7) | 56.9(1.7) | 44.3(3.1) | 45.2(4.4) |
| | 1992 | 55.8(1.2) | 56.2(1.7) | 55.4(1.6) | 58.2(1.3) | 45.2(2.8) | 47.5(5.2) |
| | 1990 | 54.3(1.5) | 56.2(1.6) | 52.3(2.1) | 56.4(1.6) | 43.7(3.4) | 47.7(6.0) |
| | 1986 | 50.2(1.5) | 53.6(1.6) | 47.0(2.1) | 53.0(1.6) | 38.0(3.0) | 36.3(6.6) |
| | 1982 | 50.9(1.6) | 52.2(2.0) | 49.6(1.9) | 53.7(1.9) | 33.0(2.5) | 43.3(6.0) |
| | 1978 | 54.7(1.8) | 60.1(1.9) | 49.8(2.2) | 57.4(1.9) | 42.3(3.8) | 33.8(5.9) |

(***) STANDARD ERROR ESTIMATE IS GREATER THAN 9.9

| ITEM DESCRIPTION | YEAR | NATION | MALE | FEMALE | WHITE | BLACK | HISPANIC |
|-------------------------------|------|-----------|-----------|-----------|-----------|-----------|-----------|
| Identify a sphere | 1996 | 83.5(1.1) | 86.3(1.4) | 81.0(1.5) | 86.5(1.3) | 71.1(3.1) | 74.4(2.7) |
| | 1994 | 80.7(1.1) | 84.9(1.4) | 76.5(1.6) | 85.5(1.0) | 65.3(4.9) | 69.5(5.3) |
| | 1992 | 82.3(1.3) | 86.0(1.7) | 78.3(1.6) | 84.1(1.3) | 74.2(4.8) | 77.9(3.5) |
| | 1990 | 80.0(1.4) | 82.4(1.8) | 77.6(1.5) | 83.7(1.1) | 65.9(5.1) | 67.8(7.6) |
| | 1986 | 77.2(1.3) | 79.4(2.1) | 75.1(1.7) | 81.8(1.4) | 62.2(3.9) | 54.9(4.8) |
| | 1982 | 76.1(1.5) | 77.5(1.7) | 74.8(1.8) | 81.6(1.4) | 49.4(4.7) | 55.6(4.6) |
| | 1978 | 79.1(1.3) | 81.0(1.5) | 77.5(1.6) | 83.4(1.2) | 51.6(3.1) | 65.2(4.2) |
| Apply angle addition property | 1996 | 62.6(1.6) | 64.9(2.0) | 60.4(2.2) | 66.1(2.1) | 48.9(3.5) | 52.6(3.1) |
| | 1994 | 61.2(1.1) | 61.8(1.6) | 60.9(1.6) | 64.7(1.6) | 50.5(4.0) | 52.2(5.2) |
| | 1992 | 59.6(1.5) | 61.7(1.6) | 57.4(2.1) | 62.3(1.4) | 46.4(3.4) | 51.1(5.5) |
| | 1990 | 59.8(1.8) | 60.5(1.9) | 59.0(2.2) | 61.9(2.2) | 51.5(3.1) | 51.8(5.5) |
| | 1986 | 60.2(1.6) | 62.3(2.4) | 58.3(2.1) | 64.0(1.6) | 41.6(5.4) | 51.8(5.3) |
| | 1982 | 63.7(1.6) | 65.3(1.9) | 62.3(2.1) | 67.4(1.5) | 48.0(3.4) | 43.9(4.3) |
| | 1978 | 63.4(1.4) | 63.6(2.2) | 63.2(1.5) | 66.3(1.5) | 44.9(2.8) | 55.6(6.8) |
| Identify parallel lines | 1996 | 96.6(0.4) | 96.0(0.7) | 97.1(0.6) | 97.2(0.5) | 95.5(1.2) | 93.2(1.3) |
| | 1994 | 96.2(0.6) | 96.0(0.7) | 96.4(0.7) | 97.1(0.7) | 93.2(2.0) | 94.4(2.2) |
| | 1992 | 96.4(0.4) | 95.7(0.7) | 97.2(0.6) | 97.6(0.4) | 91.8(2.2) | 93.2(2.5) |
| | 1990 | 97.1(0.5) | 96.8(0.8) | 97.5(0.6) | 98.0(0.4) | 95.7(1.0) | 91.1(5.2) |
| | 1986 | 95.8(0.6) | 96.2(0.7) | 95.4(0.8) | 97.9(0.4) | 87.5(2.4) | 90.9(3.2) |
| | 1982 | 96.3(0.6) | 97.0(0.7) | 95.6(0.9) | 97.8(0.5) | 89.5(2.2) | 87.3(2.3) |
| | 1978 | 94.8(0.7) | 94.3(1.0) | 95.2(0.7) | 96.8(0.6) | 83.3(2.3) | 85.0(7.8) |
| Identify perpendicular lines | 1996 | 68.8(1.9) | 67.7(2.0) | 69.9(2.9) | 73.2(2.6) | 58.7(3.1) | 45.2(3.5) |
| | 1994 | 68.9(1.9) | 68.3(2.1) | 69.9(2.5) | 73.0(2.1) | 56.2(3.0) | 58.1(7.6) |
| | 1992 | 68.3(1.3) | 64.9(1.6) | 71.9(1.7) | 71.4(1.3) | 57.6(4.1) | 52.9(3.2) |
| | 1990 | 65.8(1.8) | 64.1(2.4) | 67.6(1.8) | 68.9(2.2) | 55.7(4.5) | 46.9(4.2) |
| | 1986 | 65.4(1.7) | 65.8(2.0) | 65.0(2.2) | 70.1(1.7) | 46.8(3.9) | 48.7(5.1) |
| | 1982 | 70.3(1.7) | 73.8(2.3) | 67.2(2.0) | 74.6(1.7) | 49.1(3.9) | 53.1(4.7) |
| | 1978 | 70.1(1.5) | 72.8(1.8) | 67.7(1.9) | 74.6(1.3) | 46.0(4.1) | 42.8(5.4) |
| Apply concept of inequality | 1996 | 25.2(1.1) | 30.1(1.5) | 20.5(1.6) | 25.8(1.3) | 22.3(1.9) | 22.2(2.5) |
| | 1994 | 25.3(1.4) | 28.1(1.9) | 22.6(1.7) | 27.0(1.6) | 20.4(2.8) | 18.8(3.3) |
| | 1992 | 23.8(1.0) | 25.6(1.6) | 21.9(1.6) | 24.0(1.1) | 21.5(2.9) | 23.2(3.4) |
| | 1990 | 25.5(1.3) | 30.0(1.9) | 21.0(1.3) | 24.7(1.6) | 25.1(2.4) | 28.9(5.4) |
| | 1986 | 25.5(1.2) | 28.2(2.2) | 23.1(1.3) | 26.1(1.4) | 19.4(2.3) | 27.8(4.2) |
| | 1982 | 35.4(1.2) | 37.0(2.0) | 34.0(1.3) | 36.9(1.5) | 25.7(3.0) | 35.9(4.5) |
| | 1978 | 34.3(1.4) | 38.9(2.2) | 30.2(1.3) | 36.0(1.6) | 23.3(3.4) | 24.8(4.9) |
| Define equivalent equations | 1996 | 56.5(1.6) | 55.3(2.1) | 57.7(2.2) | 63.7(2.0) | 41.3(2.8) | 42.0(3.8) |
| | 1994 | 55.6(1.8) | 53.9(2.1) | 57.4(2.7) | 61.0(1.9) | 37.3(4.1) | 40.5(3.9) |
| | 1992 | 57.0(1.3) | 56.2(1.8) | 57.8(1.6) | 62.5(1.5) | 38.7(3.0) | 46.7(4.4) |
| | 1990 | 55.1(1.6) | 55.0(1.8) | 55.1(2.3) | 58.6(1.5) | 40.2(3.8) | 50.6(4.5) |
| | 1986 | 56.5(2.8) | 56.0(3.4) | 57.0(3.2) | 59.4(3.1) | 44.0(4.4) | 45.8(4.4) |
| | 1982 | 52.5(2.2) | 53.7(2.6) | 51.3(2.6) | 55.8(2.5) | 38.4(3.7) | 31.5(5.0) |
| | 1978 | 60.2(1.4) | 60.7(1.9) | 59.7(2.1) | 63.2(1.4) | 42.9(4.7) | 46.1(4.8) |

(***) STANDARD ERROR ESTIMATE IS GREATER THAN 9.9

| ITEM DESCRIPTION | YEAR | NATION | MALE | FEMALE | WHITE | BLACK | HISPANIC |
|-------------------------------|------|-----------|-----------|-----------|-----------|-----------|-----------|
| Identify valid identity | 1996 | 36.1(1.4) | 38.1(1.8) | 34.2(2.1) | 38.1(1.6) | 26.5(3.0) | 29.2(2.7) |
| | 1994 | 30.2(1.4) | 30.3(2.1) | 30.2(1.3) | 31.4(1.5) | 27.3(2.6) | 18.8(3.2) |
| | 1992 | 33.9(1.3) | 34.2(1.8) | 33.6(1.9) | 35.3(1.5) | 26.6(2.8) | 27.6(4.8) |
| | 1990 | 33.9(1.5) | 33.9(1.8) | 33.9(1.8) | 35.2(1.5) | 26.8(3.4) | 29.2(9.4) |
| | 1986 | 32.0(1.4) | 33.4(1.9) | 30.7(1.7) | 33.0(1.7) | 27.5(2.6) | 26.7(3.2) |
| | 1982 | 38.6(1.9) | 39.5(2.4) | 37.8(2.0) | 40.2(2.0) | 31.0(3.7) | 33.1(4.2) |
| | 1978 | 37.9(1.4) | 38.1(2.1) | 37.7(1.9) | 39.4(1.6) | 28.4(2.9) | 28.9(6.8) |
| Add monomials | 1996 | 83.4(1.5) | 81.6(1.4) | 85.3(1.8) | 86.7(1.9) | 68.9(2.5) | 74.8(4.6) |
| | 1994 | 82.2(1.2) | 81.0(1.8) | 84.0(1.6) | 84.6(1.5) | 75.5(2.3) | 74.6(4.3) |
| | 1992 | 79.5(1.2) | 77.0(1.4) | 82.1(1.8) | 82.7(1.2) | 67.0(3.8) | 63.6(3.8) |
| | 1990 | 78.3(1.5) | 75.0(1.9) | 81.6(1.6) | 81.1(1.7) | 68.0(5.3) | 61.4(5.6) |
| | 1986 | 73.3(1.7) | 71.6(2.0) | 74.9(1.9) | 77.4(1.8) | 55.8(3.9) | 58.5(5.3) |
| | 1982 | 64.4(1.3) | 63.0(1.8) | 65.7(1.7) | 67.7(1.5) | 46.4(3.4) | 45.7(3.2) |
| | 1978 | 63.3(1.8) | 61.8(2.3) | 64.7(2.0) | 68.1(1.7) | 36.4(3.1) | 38.4(3.7) |
| Simplify square root | 1996 | 14.7(1.3) | 17.4(2.1) | 12.2(1.2) | 16.4(1.6) | 6.7(1.7) | 8.9(2.4) |
| | 1994 | 15.5(1.2) | 19.9(2.2) | 11.1(1.4) | 17.3(1.4) | 9.6(2.9) | 5.0(1.3) |
| | 1992 | 16.4(1.0) | 18.2(1.6) | 14.6(1.3) | 18.4(1.1) | 6.1(2.0) | 9.0(2.8) |
| | 1990 | 15.2(1.1) | 17.9(1.4) | 12.4(1.3) | 16.1(1.2) | 11.0(2.7) | 8.7(4.4) |
| | 1986 | 15.0(1.3) | 18.2(1.8) | 12.1(1.4) | 16.6(1.5) | 4.8(1.8) | 7.1(3.0) |
| | 1982 | 11.8(1.3) | 13.2(1.8) | 10.5(1.3) | 12.8(1.4) | 3.9(1.3) | 11.1(3.8) |
| | 1978 | 11.3(1.2) | 14.4(1.5) | 8.4(1.3) | 12.2(1.2) | 5.2(1.9) | 4.8(2.8) |
| Evaluate function for value | 1996 | 56.1(1.7) | 53.0(2.1) | 59.2(2.0) | 61.9(2.1) | 37.6(3.1) | 49.5(4.1) |
| | 1994 | 58.1(1.8) | 55.8(2.5) | 60.3(2.1) | 62.7(1.9) | 46.2(3.2) | 42.2(4.9) |
| | 1992 | 56.3(1.6) | 55.4(2.1) | 57.2(2.1) | 61.6(1.8) | 36.4(3.0) | 40.6(5.7) |
| | 1990 | 50.4(1.5) | 47.9(2.0) | 52.5(1.9) | 53.2(1.5) | 44.9(5.4) | 34.6(4.6) |
| | 1986 | 53.4(1.8) | 52.5(2.6) | 54.3(2.4) | 56.4(1.8) | 38.7(5.2) | 43.1(4.0) |
| | 1982 | 48.8(1.8) | 49.6(1.9) | 48.1(2.3) | 50.8(1.7) | 38.7(4.5) | 34.1(7.3) |
| | 1978 | 43.7(1.7) | 44.3(2.7) | 43.1(2.4) | 46.4(1.9) | 27.8(3.3) | 29.5(3.7) |
| Evaluate algebraic expression | 1996 | 91.0(0.8) | 89.8(1.0) | 92.1(0.9) | 93.7(1.0) | 83.7(2.6) | 76.5(3.0) |
| | 1994 | 91.2(0.8) | 90.7(1.1) | 92.1(1.1) | 93.1(0.8) | 86.1(2.1) | 84.7(4.3) |
| | 1992 | 91.2(1.0) | 89.9(1.2) | 92.5(1.1) | 93.2(0.7) | 83.8(3.6) | 82.6(4.9) |
| | 1990 | 90.8(0.8) | 90.1(1.2) | 91.6(0.8) | 92.3(0.7) | 85.6(2.9) | 83.7(6.3) |
| | 1986 | 89.3(0.9) | 88.7(1.3) | 90.0(0.9) | 92.3(1.0) | 78.2(3.0) | 81.0(3.4) |
| | 1982 | 89.1(0.9) | 88.8(1.3) | 89.5(1.2) | 91.6(0.9) | 75.3(2.4) | 82.3(3.8) |
| | 1978 | 89.9(0.9) | 90.2(1.2) | 89.6(1.3) | 92.8(0.8) | 73.9(3.4) | 77.0(3.7) |
| Identify number line property | 1996 | 77.0(1.8) | 78.7(1.9) | 75.6(2.3) | 81.0(2.2) | 63.9(2.9) | 62.4(5.6) |
| | 1994 | 71.7(1.0) | 73.1(1.5) | 70.6(1.2) | 77.2(0.9) | 51.3(3.5) | 59.0(4.1) |
| | 1992 | 74.5(1.2) | 75.3(1.7) | 73.7(1.8) | 79.2(1.2) | 54.4(3.5) | 58.2(4.2) |
| | 1990 | 71.7(1.4) | 73.2(2.0) | 70.3(1.6) | 76.5(1.3) | 52.7(5.0) | 58.1(4.1) |
| | 1986 | 69.0(1.7) | 70.3(2.1) | 67.7(2.2) | 74.4(1.8) | 44.9(3.3) | 51.1(3.8) |
| | 1982 | 61.4(1.6) | 65.5(2.4) | 57.3(2.5) | 66.1(1.6) | 37.6(2.4) | 39.4(4.7) |
| | 1978 | 70.9(1.6) | 74.9(2.1) | 67.0(1.8) | 75.4(1.7) | 46.9(3.6) | 54.6(5.3) |

(***) STANDARD ERROR ESTIMATE IS GREATER THAN 9.9

| ITEM DESCRIPTION | YEAR | NATION | MALE | FEMALE | WHITE | BLACK | HISPANIC |
|-------------------------------|------|-----------|-----------|-----------|-----------|-----------|-----------|
| Identify linear inequality | 1996 | 34.7(1.1) | 35.5(2.0) | 33.9(1.8) | 37.3(1.3) | 30.6(2.6) | 23.5(3.3) |
| | 1994 | 33.5(1.2) | 36.2(1.4) | 31.1(1.9) | 35.7(1.5) | 28.2(3.0) | 27.5(3.6) |
| | 1992 | 34.4(1.2) | 34.7(1.8) | 34.1(1.9) | 35.2(0.9) | 29.3(5.9) | 29.8(4.5) |
| | 1990 | 35.1(1.7) | 37.4(2.0) | 33.1(2.0) | 36.6(1.8) | 30.3(4.2) | 29.4(3.2) |
| | 1986 | 35.4(1.9) | 38.1(2.5) | 32.7(2.0) | 35.5(2.2) | 33.8(3.5) | 34.8(5.5) |
| | 1982 | 32.0(1.7) | 31.9(2.1) | 32.0(1.7) | 33.0(2.1) | 28.0(3.0) | 25.5(4.7) |
| | 1978 | 33.6(1.0) | 36.3(1.4) | 30.9(1.4) | 34.9(1.2) | 27.7(3.4) | 22.3(3.8) |
| Find percent greater than 100 | 1996 | 76.0(1.3) | 81.3(1.4) | 71.0(1.8) | 80.7(1.6) | 57.2(3.2) | 63.6(3.0) |
| | 1994 | 71.3(1.6) | 78.1(1.8) | 64.8(2.1) | 77.4(1.6) | 48.2(4.5) | 57.9(6.5) |
| | 1992 | 73.6(1.6) | 78.3(2.3) | 68.6(1.7) | 77.0(1.6) | 58.4(3.6) | 62.8(4.4) |
| | 1990 | 72.8(1.6) | 76.0(1.9) | 69.7(2.1) | 77.4(1.8) | 55.7(3.8) | 55.2(8.0) |
| | 1986 | 70.6(1.4) | 75.2(1.7) | 66.5(1.9) | 74.4(1.6) | 57.4(3.6) | 56.1(5.1) |
| | 1982 | 65.0(1.6) | 67.4(2.1) | 62.6(1.8) | 68.0(1.7) | 49.5(3.5) | 54.4(4.8) |
| | 1978 | 58.2(1.5) | 66.7(1.7) | 50.6(2.1) | 60.0(1.6) | 41.7(2.8) | 60.4(9.1) |
| Understand concept of percent | 1996 | 73.4(1.5) | 79.7(1.7) | 67.5(2.1) | 79.0(1.9) | 52.7(3.5) | 54.7(4.4) |
| | 1994 | 70.9(1.2) | 76.0(1.5) | 65.9(1.8) | 76.7(1.2) | 50.4(3.0) | 58.6(5.9) |
| | 1992 | 71.0(1.6) | 75.2(2.3) | 66.5(1.7) | 75.8(1.3) | 51.3(5.3) | 50.6(4.1) |
| | 1990 | 70.5(1.8) | 75.1(2.2) | 65.9(1.9) | 75.8(1.7) | 54.4(6.8) | 43.1(8.0) |
| | 1986 | 69.6(1.4) | 74.1(1.9) | 65.5(1.9) | 75.8(1.2) | 46.3(4.3) | 47.7(7.6) |
| | 1982 | 71.4(1.8) | 76.2(1.8) | 66.6(2.3) | 76.3(1.5) | 46.8(5.0) | 51.5(6.1) |
| | 1978 | 67.9(1.5) | 75.2(1.6) | 61.4(2.1) | 72.0(1.5) | 45.3(3.3) | 43.0(6.0) |
| Convert decimal to percent | 1996 | 64.1(1.9) | 67.4(2.5) | 61.0(2.5) | 69.3(2.0) | 45.8(3.6) | 43.1(4.3) |
| | 1994 | 60.0(1.5) | 63.4(1.8) | 57.0(1.7) | 64.4(1.8) | 41.6(5.3) | 53.7(6.3) |
| | 1992 | 60.8(1.4) | 62.7(1.7) | 58.9(1.6) | 64.5(1.6) | 41.2(4.1) | 55.5(3.5) |
| | 1990 | 61.3(1.8) | 62.0(2.7) | 60.6(1.9) | 64.1(1.7) | 49.1(5.2) | 45.7(5.9) |
| | 1986 | 54.1(1.6) | 55.3(2.4) | 53.0(1.6) | 58.4(1.8) | 34.3(2.4) | 37.5(4.8) |
| | 1982 | 44.9(1.9) | 49.2(2.8) | 40.6(2.0) | 48.5(2.1) | 25.7(3.5) | 29.9(5.0) |
| | 1978 | 45.0(1.6) | 45.7(1.9) | 44.3(2.0) | 47.4(1.6) | 27.6(3.2) | 40.9(7.0) |
| Convert percent to decimal | 1996 | 93.5(0.8) | 93.7(1.0) | 93.4(1.0) | 94.9(0.8) | 91.5(2.1) | 86.3(1.9) |
| | 1994 | 92.7(0.7) | 92.0(0.9) | 93.5(1.1) | 93.8(0.8) | 88.8(2.4) | 89.4(2.9) |
| | 1992 | 93.3(1.0) | 92.8(1.1) | 93.8(1.1) | 94.5(1.0) | 89.1(2.8) | 88.0(2.6) |
| | 1990 | 94.9(0.6) | 94.3(0.9) | 95.5(0.7) | 95.6(0.5) | 90.1(2.1) | 96.2(1.9) |
| | 1986 | 92.6(0.6) | 91.1(1.1) | 94.0(0.7) | 94.0(0.5) | 87.1(2.6) | 88.2(2.8) |
| | 1982 | 81.6(0.9) | 81.7(1.6) | 81.6(1.3) | 83.4(1.1) | 74.7(2.3) | 71.9(5.5) |
| | 1978 | 78.2(1.1) | 77.8(1.6) | 78.5(1.2) | 79.0(1.1) | 74.0(3.0) | 72.1(6.9) |
| Use concept of percent | 1996 | 58.9(1.8) | 63.7(2.0) | 54.4(2.2) | 66.3(2.5) | 31.0(4.5) | 34.5(3.6) |
| | 1994 | 58.9(1.8) | 65.0(2.0) | 53.0(2.0) | 66.4(1.6) | 29.9(3.3) | 46.2(7.1) |
| | 1992 | 63.4(1.8) | 68.5(2.5) | 58.0(2.2) | 69.6(1.8) | 37.8(4.2) | 44.2(5.0) |
| | 1990 | 62.4(1.8) | 66.0(2.2) | 58.8(1.9) | 69.5(1.9) | 37.2(5.3) | 41.0(6.2) |
| | 1986 | 61.1(1.7) | 64.8(2.1) | 57.7(2.3) | 67.4(1.8) | 34.2(4.2) | 42.3(7.1) |
| | 1982 | 70.9(1.7) | 74.5(1.5) | 67.4(2.7) | 76.8(1.9) | 45.2(3.1) | 45.1(1.8) |
| | 1978 | 69.8(1.3) | 74.4(1.7) | 65.4(1.7) | 74.9(1.1) | 38.6(4.4) | 53.0(5.2) |

(***) STANDARD ERROR ESTIMATE IS GREATER THAN 9.9

| ITEM DESCRIPTION | YEAR | NATION | MALE | FEMALE | WHITE | BLACK | HISPANIC |
|------------------------|------|-----------|-----------|-----------|-----------|-----------|-----------|
| Find percent of number | 1996 | 66.1(1.7) | 69.6(1.9) | 62.8(2.1) | 69.8(2.1) | 51.5(2.8) | 53.5(5.5) |
| | 1994 | 64.0(1.5) | 66.7(2.1) | 61.1(2.0) | 68.2(1.6) | 47.1(3.5) | 57.8(5.1) |
| | 1992 | 71.1(1.0) | 73.8(1.5) | 68.4(1.5) | 74.0(1.0) | 62.2(3.0) | 56.4(4.7) |
| | 1990 | 69.2(1.6) | 74.1(1.8) | 64.2(2.2) | 72.8(1.7) | 58.1(5.1) | 46.4(4.8) |
| | 1986 | 68.4(1.4) | 71.9(1.6) | 65.2(1.9) | 72.9(1.3) | 49.5(3.5) | 54.9(5.3) |
| | 1982 | 69.6(1.4) | 75.1(1.6) | 64.2(2.0) | 73.5(1.5) | 49.4(2.7) | 49.1(4.6) |
| | 1978 | 69.3(1.4) | 76.0(1.7) | 63.1(1.8) | 73.6(1.4) | 45.8(4.0) | 50.8(5.7) |
| Solve percent problem | 1996 | 70.8(1.9) | 74.4(2.0) | 67.0(2.5) | 76.7(1.9) | 56.4(3.9) | 60.2(3.5) |
| | 1994 | 70.8(1.7) | 72.4(2.3) | 69.0(1.8) | 76.1(1.8) | 57.2(3.9) | 51.4(4.9) |
| | 1992 | 70.0(1.2) | 74.5(1.3) | 65.4(1.9) | 75.1(1.1) | 52.7(4.0) | 57.0(4.4) |
| | 1990 | 68.2(1.5) | 73.0(1.7) | 64.0(2.3) | 73.7(1.4) | 52.6(4.5) | 51.1(3.9) |
| | 1986 | 68.3(1.5) | 70.9(2.1) | 65.7(1.8) | 73.4(1.4) | 43.0(4.6) | 60.9(5.5) |
| | 1982 | 72.4(1.9) | 72.6(2.9) | 72.2(1.9) | 75.5(2.2) | 57.6(3.3) | 57.5(2.8) |
| | 1978 | 67.0(1.5) | 69.3(2.0) | 64.9(1.8) | 70.4(1.6) | 47.2(3.1) | 54.2(5.9) |
| Add integers | 1996 | 89.8(1.0) | 91.2(1.3) | 88.4(1.3) | 92.2(1.1) | 79.6(2.5) | 83.0(4.0) |
| | 1994 | 87.3(0.8) | 86.9(1.3) | 87.9(1.1) | 89.8(1.1) | 79.2(2.3) | 78.7(2.8) |
| | 1992 | 87.2(1.0) | 88.7(0.9) | 85.6(1.7) | 89.8(1.0) | 77.8(2.3) | 76.8(4.2) |
| | 1990 | 87.0(1.2) | 86.3(1.6) | 87.6(1.2) | 89.2(1.4) | 77.7(3.4) | 77.9(5.0) |
| | 1986 | 82.9(1.2) | 83.8(1.4) | 82.2(1.9) | 86.8(1.0) | 66.3(4.3) | 70.2(5.1) |
| | 1982 | 76.8(1.5) | 79.1(1.6) | 74.5(1.9) | 82.2(1.3) | 49.6(5.2) | 59.4(5.1) |
| | 1978 | 79.8(1.5) | 79.1(1.7) | 80.3(1.8) | 84.7(1.4) | 49.7(3.1) | 60.8(5.0) |
| Add integers | 1996 | 92.0(0.7) | 93.1(0.9) | 91.0(1.0) | 94.7(1.0) | 82.9(2.1) | 80.5(2.0) |
| | 1994 | 90.6(0.9) | 92.3(1.3) | 89.3(1.1) | 93.6(0.9) | 82.1(2.6) | 81.8(4.4) |
| | 1992 | 90.5(0.9) | 91.6(1.3) | 89.4(1.0) | 92.9(0.8) | 82.0(3.6) | 80.0(3.6) |
| | 1990 | 89.4(1.2) | 88.9(1.6) | 89.9(1.2) | 92.6(0.9) | 80.0(3.4) | 70.6(***) |
| | 1986 | 87.2(1.3) | 89.5(1.4) | 85.1(1.7) | 90.8(1.0) | 71.9(4.4) | 76.4(4.7) |
| | 1982 | 84.1(1.3) | 84.7(1.5) | 83.5(1.8) | 89.0(1.3) | 60.3(3.9) | 61.6(5.1) |
| | 1978 | 84.7(1.3) | 85.8(1.5) | 83.6(1.6) | 88.5(1.1) | 60.5(4.1) | 74.4(4.6) |
| Estimate square root | 1996 | 52.0(2.0) | 58.6(2.4) | 45.8(2.6) | 56.7(2.5) | 34.1(3.1) | 35.8(3.8) |
| | 1994 | 45.7(1.7) | 51.1(2.0) | 40.4(2.4) | 51.6(2.1) | 24.5(3.1) | 32.9(5.2) |
| | 1992 | 47.1(1.5) | 50.7(1.7) | 43.4(2.1) | 52.3(1.8) | 23.8(3.4) | 34.6(3.5) |
| | 1990 | 48.3(2.0) | 51.4(2.4) | 45.2(2.3) | 52.7(2.1) | 32.7(6.0) | 26.4(4.8) |
| | 1986 | 46.2(1.5) | 50.1(2.1) | 42.7(2.1) | 50.7(1.7) | 27.3(3.6) | 29.7(3.2) |
| | 1982 | 42.5(2.0) | 48.3(2.8) | 36.7(2.5) | 47.3(2.2) | 17.9(2.3) | 27.3(3.7) |
| | 1978 | 42.6(1.4) | 47.6(2.0) | 38.1(1.8) | 47.3(1.5) | 16.6(2.6) | 15.0(4.0) |
| Estimate square root | 1996 | 63.9(2.0) | 67.3(2.0) | 60.7(2.9) | 67.4(2.5) | 48.5(3.4) | 57.5(4.5) |
| | 1994 | 60.1(1.6) | 62.9(2.2) | 57.2(1.8) | 65.4(1.9) | 40.0(4.0) | 50.2(5.5) |
| | 1992 | 59.0(1.5) | 61.2(1.8) | 56.8(2.0) | 63.9(1.5) | 36.3(4.1) | 47.9(4.7) |
| | 1990 | 58.1(2.1) | 60.2(2.6) | 56.0(2.0) | 62.6(2.2) | 41.6(6.9) | 39.4(5.0) |
| | 1986 | 53.1(1.8) | 57.9(2.7) | 48.7(2.1) | 58.1(1.8) | 32.1(4.4) | 37.5(4.7) |
| | 1982 | 56.3(1.8) | 59.9(2.2) | 52.9(2.6) | 60.6(1.7) | 31.0(3.3) | 44.7(4.9) |
| | 1978 | 58.1(1.9) | 62.8(2.0) | 53.9(2.5) | 62.5(2.1) | 33.2(3.8) | 33.4(7.2) |

(***) STANDARD ERROR ESTIMATE IS GREATER THAN 9.9

| ITEM DESCRIPTION | YEAR | NATION | MALE | FEMALE | WHITE | BLACK | HISPANIC |
|-------------------------------|------|-----------|-----------|-----------|-----------|-----------|-----------|
| Solve number sentence | 1996 | 71.0(1.3) | 71.1(1.9) | 71.0(1.8) | 74.2(1.4) | 60.2(3.5) | 60.8(3.2) |
| | 1994 | 65.9(1.6) | 67.1(1.8) | 65.0(2.5) | 71.0(1.5) | 49.0(3.4) | 54.6(4.7) |
| | 1992 | 72.7(1.3) | 72.0(1.9) | 73.4(1.6) | 77.4(1.2) | 53.1(4.3) | 59.5(4.3) |
| | 1990 | 72.4(1.3) | 71.4(1.9) | 73.5(1.4) | 75.5(1.4) | 59.6(2.8) | 67.9(4.1) |
| | 1986 | 69.9(1.7) | 71.5(2.0) | 68.5(2.1) | 74.2(1.8) | 52.3(4.6) | 60.8(4.8) |
| | 1982 | 60.6(1.4) | 63.9(1.9) | 57.6(1.7) | 65.7(1.4) | 35.9(3.9) | 39.7(3.8) |
| | 1978 | 68.2(1.5) | 70.0(1.9) | 66.4(2.1) | 73.7(1.4) | 37.5(3.3) | 42.4(5.8) |
| Estimate weight | 1996 | 59.6(1.4) | 63.7(1.6) | 55.8(1.9) | 62.3(1.6) | 51.5(3.4) | 52.4(4.0) |
| | 1994 | 58.6(1.4) | 57.4(2.3) | 59.7(1.8) | 61.3(1.4) | 50.5(3.5) | 50.7(4.2) |
| | 1992 | 62.3(1.2) | 62.1(1.9) | 62.6(1.9) | 66.1(1.2) | 44.5(4.0) | 56.5(4.4) |
| | 1990 | 63.6(1.7) | 64.5(2.1) | 62.7(2.1) | 65.2(1.9) | 57.9(4.1) | 57.2(8.2) |
| | 1986 | 62.9(1.3) | 65.6(2.0) | 60.5(1.6) | 65.6(1.3) | 52.1(2.9) | 55.6(5.3) |
| | 1982 | 45.9(1.7) | 48.4(2.5) | 43.5(1.6) | 48.5(2.1) | 30.6(3.4) | 41.8(5.1) |
| Estimate total weight | 1996 | 55.6(1.8) | 58.5(2.5) | 52.9(1.7) | 59.8(2.2) | 35.7(3.8) | 49.5(5.7) |
| | 1994 | 54.6(1.5) | 57.7(2.1) | 51.8(1.5) | 58.7(1.5) | 40.1(4.7) | 46.4(4.4) |
| | 1992 | 53.6(1.8) | 54.9(2.3) | 52.2(2.1) | 57.9(1.8) | 36.8(4.3) | 43.8(3.4) |
| | 1990 | 53.3(1.8) | 56.3(2.4) | 50.3(2.0) | 55.8(2.1) | 43.7(4.1) | 45.3(5.1) |
| | 1986 | 50.0(1.4) | 51.6(2.1) | 48.6(1.9) | 53.7(1.6) | 34.6(3.3) | 36.1(3.5) |
| | 1982 | 41.0(1.5) | 44.9(1.8) | 37.4(2.0) | 43.0(1.5) | 27.4(2.8) | 40.7(2.6) |
| Estimate cost of pencils | 1996 | 90.2(0.7) | 92.6(1.0) | 87.8(1.2) | 91.4(0.8) | 84.1(3.0) | 87.3(2.0) |
| | 1994 | 89.4(0.7) | 90.6(1.0) | 88.2(1.2) | 91.4(0.9) | 82.4(1.9) | 85.4(2.2) |
| | 1992 | 89.9(0.7) | 91.3(0.9) | 88.4(0.9) | 91.6(0.8) | 85.0(1.6) | 82.7(3.1) |
| | 1990 | 91.1(0.7) | 92.1(0.9) | 90.1(0.9) | 91.9(0.9) | 89.2(1.8) | 84.0(3.6) |
| | 1986 | 89.4(0.7) | 89.8(1.2) | 89.0(1.1) | 91.8(0.7) | 77.9(2.7) | 85.5(3.8) |
| | 1982 | 78.6(1.0) | 81.8(1.3) | 75.7(1.7) | 80.8(1.0) | 69.0(3.0) | 65.9(5.8) |
| Estimate cost using percent | 1996 | 44.7(1.8) | 48.6(1.9) | 41.0(2.8) | 45.2(2.1) | 44.3(4.8) | 39.1(3.8) |
| | 1994 | 42.0(1.7) | 47.5(1.7) | 36.7(2.1) | 43.3(2.1) | 35.1(3.0) | 42.9(3.2) |
| | 1992 | 44.0(1.2) | 47.2(1.5) | 40.6(1.9) | 45.3(1.5) | 36.4(3.2) | 47.7(4.3) |
| | 1990 | 47.0(1.2) | 51.8(1.9) | 42.2(1.5) | 48.1(1.4) | 43.1(3.3) | 34.2(4.2) |
| | 1986 | 44.1(1.4) | 46.5(1.8) | 41.9(1.8) | 46.2(1.5) | 37.0(3.2) | 36.8(3.0) |
| | 1982 | 44.0(1.6) | 48.1(1.9) | 40.3(1.9) | 45.1(1.6) | 35.7(3.6) | 44.6(3.3) |
| Estimate difference in length | 1996 | 82.2(1.2) | 84.6(1.3) | 80.0(1.8) | 83.4(1.5) | 75.8(2.4) | 79.3(3.1) |
| | 1994 | 78.1(1.3) | 80.5(1.3) | 76.1(1.9) | 80.6(1.2) | 66.7(4.5) | 76.8(4.9) |
| | 1992 | 81.8(1.3) | 83.0(1.7) | 80.6(1.6) | 84.7(1.1) | 68.5(4.6) | 77.4(3.5) |
| | 1990 | 80.7(1.2) | 81.3(1.8) | 80.0(1.2) | 82.9(1.1) | 69.8(4.6) | 74.6(8.1) |
| | 1986 | 82.5(0.9) | 82.7(1.3) | 82.2(1.1) | 86.9(0.8) | 65.0(2.1) | 66.9(5.5) |
| | 1982 | 72.6(1.4) | 73.9(2.0) | 71.3(1.6) | 76.2(1.6) | 57.0(4.2) | 57.4(4.1) |

(***) STANDARD ERROR ESTIMATE IS GREATER THAN 9.9

| ITEM DESCRIPTION | YEAR | NATION | MALE | FEMALE | WHITE | BLACK | HISPANIC |
|-----------------------------|------|-----------|-----------|-----------|-----------|-----------|-----------|
| Use deductive reasoning | 1996 | 82.2(1.2) | 83.5(1.3) | 81.0(2.0) | 84.5(1.6) | 72.9(1.8) | 75.9(3.3) |
| | 1994 | 78.7(1.3) | 78.8(1.6) | 78.8(1.8) | 81.3(1.2) | 72.0(3.9) | 69.8(6.5) |
| | 1992 | 78.5(0.9) | 77.8(1.4) | 79.3(1.0) | 81.2(0.9) | 68.3(2.8) | 67.4(4.8) |
| | 1990 | 80.2(1.4) | 79.2(1.7) | 81.3(1.8) | 83.6(1.3) | 70.6(4.1) | 66.0(6.9) |
| | 1986 | 78.7(0.9) | 77.8(1.3) | 79.5(1.4) | 81.4(1.1) | 69.8(4.1) | 65.2(3.5) |
| | 1982 | 81.7(1.0) | 80.4(1.8) | 82.9(1.2) | 83.1(1.1) | 74.6(3.2) | 75.6(4.0) |
| | 1978 | 84.1(0.9) | 82.7(1.6) | 85.4(1.2) | 86.3(0.9) | 70.8(2.9) | 75.2(5.6) |
| Determine age relationship | 1996 | 89.5(0.9) | 91.9(1.2) | 87.3(1.4) | 92.4(1.2) | 79.8(2.5) | 77.4(2.4) |
| | 1994 | 87.8(1.1) | 88.7(1.2) | 86.8(1.6) | 90.1(1.0) | 79.8(2.6) | 82.3(5.2) |
| | 1992 | 89.0(0.7) | 90.2(1.0) | 87.8(1.2) | 91.1(0.7) | 79.3(2.9) | 84.0(2.6) |
| | 1990 | 86.8(1.0) | 86.9(1.4) | 86.8(1.0) | 89.3(1.0) | 79.2(2.6) | 72.1(5.4) |
| | 1986 | 86.3(1.1) | 87.6(1.2) | 85.1(1.5) | 89.4(1.0) | 71.8(3.3) | 82.3(4.2) |
| | 1982 | 79.7(1.3) | 80.8(1.5) | 78.7(1.6) | 82.4(1.2) | 63.6(3.0) | 73.9(4.3) |
| | 1978 | 82.3(1.2) | 81.4(1.6) | 83.1(1.2) | 85.8(1.1) | 60.1(3.7) | 72.3(4.2) |
| Identify valid conclusion | 1996 | 85.0(1.1) | 84.0(1.3) | 86.0(1.4) | 86.4(1.2) | 81.0(3.8) | 78.4(3.2) |
| | 1994 | 84.3(1.1) | 82.3(1.6) | 86.7(1.2) | 86.6(1.2) | 79.2(2.9) | 76.8(3.3) |
| | 1992 | 84.7(1.1) | 81.6(1.7) | 87.9(1.2) | 86.1(1.3) | 81.4(2.6) | 75.0(3.6) |
| | 1990 | 81.8(1.0) | 79.1(1.6) | 84.5(1.3) | 83.9(1.0) | 78.2(2.9) | 70.3(4.5) |
| | 1986 | 78.3(1.4) | 75.8(2.0) | 80.7(1.6) | 80.9(1.3) | 70.4(4.4) | 67.0(5.7) |
| | 1982 | 69.3(1.2) | 66.5(1.6) | 71.9(1.4) | 71.0(1.3) | 63.9(4.5) | 57.5(3.9) |
| | 1978 | 72.0(1.4) | 70.3(1.7) | 73.5(1.9) | 72.6(1.4) | 69.8(4.2) | 62.5(5.4) |
| Identify valid conclusion | 1996 | 38.4(1.1) | 42.8(1.5) | 34.2(1.2) | 40.4(1.6) | 26.6(3.1) | 32.3(4.2) |
| | 1994 | 36.0(1.4) | 39.6(1.9) | 32.2(1.5) | 38.3(1.5) | 27.6(2.8) | 29.3(4.2) |
| | 1992 | 37.2(1.3) | 40.6(2.1) | 33.7(1.2) | 39.9(1.3) | 28.2(3.4) | 27.9(4.1) |
| | 1990 | 38.7(1.4) | 40.8(1.9) | 36.6(1.7) | 41.1(1.6) | 26.5(2.3) | 36.7(3.4) |
| | 1986 | 41.9(1.3) | 44.8(2.1) | 39.3(2.1) | 44.1(1.5) | 31.6(2.9) | 36.8(3.8) |
| | 1982 | 56.6(1.2) | 61.3(1.8) | 52.0(1.8) | 59.4(1.1) | 41.7(3.9) | 49.6(3.8) |
| | 1978 | 58.9(1.2) | 63.4(1.6) | 54.6(1.9) | 60.9(1.3) | 48.4(3.9) | 53.9(5.0) |
| Identify false statement | 1996 | 57.2(1.7) | 58.5(2.0) | 56.1(2.1) | 61.7(2.3) | 46.4(4.3) | 37.6(4.1) |
| | 1994 | 53.2(1.5) | 55.5(2.0) | 51.2(1.9) | 57.0(1.3) | 43.1(3.7) | 36.8(5.8) |
| | 1992 | 51.6(1.2) | 54.2(1.9) | 48.9(1.6) | 55.1(1.3) | 38.5(4.6) | 39.6(3.8) |
| | 1990 | 51.2(1.5) | 51.5(2.1) | 50.9(1.8) | 55.2(1.5) | 39.1(5.4) | 32.9(5.5) |
| | 1986 | 51.0(1.7) | 53.1(2.2) | 49.0(1.9) | 55.1(1.8) | 35.7(4.1) | 37.0(5.1) |
| | 1982 | 50.4(1.3) | 51.2(1.5) | 49.7(2.0) | 54.8(1.4) | 29.5(3.1) | 33.2(3.8) |
| | 1978 | 52.3(1.7) | 53.9(2.1) | 50.7(2.4) | 56.9(1.6) | 29.8(3.2) | 25.4(5.5) |
| Compute using data in table | 1996 | 34.1(1.2) | 35.9(1.4) | 32.5(1.8) | 37.9(1.6) | 20.2(3.6) | 20.9(2.9) |
| | 1994 | 30.0(1.3) | 30.9(1.7) | 29.1(1.5) | 34.8(1.6) | 14.5(2.7) | 18.6(4.0) |
| | 1992 | 33.8(1.3) | 33.6(2.2) | 34.1(1.0) | 37.1(1.5) | 18.4(3.1) | 24.2(2.4) |
| | 1990 | 32.2(1.7) | 34.8(2.5) | 29.5(1.8) | 36.6(1.7) | 16.7(2.9) | 14.1(5.8) |
| | 1986 | 34.6(1.4) | 34.6(2.3) | 34.5(1.7) | 39.7(1.6) | 17.2(2.7) | 15.6(4.9) |
| | 1982 | 43.5(1.6) | 45.5(1.8) | 41.6(2.2) | 48.2(1.7) | 21.6(4.6) | 23.8(3.9) |
| | 1978 | 50.9(1.4) | 49.3(2.0) | 52.6(1.8) | 55.7(1.6) | 28.5(4.1) | 19.8(5.3) |

(***) STANDARD ERROR ESTIMATE IS GREATER THAN 9.9

| ITEM DESCRIPTION | YEAR | NATION | MALE | FEMALE | WHITE | BLACK | HISPANIC |
|--------------------------|------|-----------|-----------|-----------|-----------|-----------|-----------|
| Interpret data in table | 1996 | 72.0(0.9) | 75.4(1.6) | 68.9(1.2) | 78.3(1.2) | 44.2(3.5) | 60.5(2.7) |
| | 1994 | 68.5(1.5) | 72.5(2.3) | 64.9(2.0) | 75.7(1.5) | 45.0(3.6) | 54.9(5.3) |
| | 1992 | 70.7(1.7) | 74.5(2.0) | 66.7(1.8) | 75.7(1.6) | 46.0(4.1) | 65.3(5.7) |
| | 1990 | 70.2(1.5) | 71.9(2.0) | 68.5(1.5) | 75.3(1.4) | 49.3(4.7) | 56.0(***) |
| | 1986 | 65.4(1.5) | 69.0(2.2) | 62.2(1.9) | 71.7(1.9) | 38.4(2.7) | 53.9(3.8) |
| | 1982 | 66.4(1.4) | 70.2(1.6) | 62.6(2.0) | 72.5(1.2) | 33.6(3.7) | 46.5(4.5) |
| | 1978 | 66.0(1.3) | 69.5(1.6) | 62.9(2.0) | 71.4(1.2) | 34.2(4.1) | 45.4(6.5) |
| Read line graph | 1996 | 90.1(1.0) | 92.9(0.9) | 87.4(1.4) | 92.6(1.1) | 81.6(3.4) | 81.5(3.8) |
| | 1994 | 88.0(0.9) | 90.1(0.8) | 86.3(1.6) | 90.6(1.2) | 81.5(2.0) | 81.0(3.3) |
| | 1992 | 90.4(0.7) | 90.9(1.0) | 89.9(0.9) | 91.4(0.7) | 87.3(2.1) | 84.6(3.0) |
| | 1990 | 89.3(0.8) | 90.4(1.1) | 88.1(1.1) | 90.8(0.8) | 83.7(2.7) | 86.6(3.2) |
| | 1986 | 86.8(1.0) | 88.3(1.5) | 85.5(1.1) | 91.0(0.9) | 69.9(3.4) | 75.4(3.8) |
| | 1982 | 86.7(1.0) | 89.1(1.3) | 84.5(1.2) | 90.2(0.9) | 71.1(2.4) | 70.8(4.4) |
| | 1978 | 80.4(1.2) | 82.7(1.4) | 78.1(1.7) | 83.2(1.5) | 62.9(3.1) | 67.8(7.0) |
| Interpret line graph | 1996 | 80.8(1.0) | 82.9(1.2) | 78.9(1.4) | 84.2(1.1) | 67.9(3.5) | 71.8(4.7) |
| | 1994 | 79.9(1.2) | 82.3(1.4) | 77.7(1.7) | 83.3(1.4) | 62.9(4.0) | 80.2(4.6) |
| | 1992 | 78.6(1.6) | 79.1(2.1) | 78.1(1.8) | 81.2(1.3) | 64.6(4.3) | 76.5(4.5) |
| | 1990 | 79.2(1.0) | 79.9(1.7) | 78.6(1.2) | 83.3(1.0) | 65.1(3.3) | 66.7(9.2) |
| | 1986 | 76.3(1.3) | 77.1(2.0) | 75.6(1.7) | 80.3(1.4) | 61.1(3.5) | 64.7(5.1) |
| | 1982 | 77.3(1.5) | 78.6(1.9) | 76.0(1.7) | 80.9(1.3) | 62.5(3.4) | 56.3(5.4) |
| | 1978 | 69.9(1.1) | 74.3(1.3) | 65.4(1.9) | 72.1(1.2) | 52.4(2.2) | 69.4(4.1) |
| Solve multi-step problem | 1996 | 20.6(0.9) | 27.6(1.6) | 14.0(1.1) | 24.3(1.1) | 6.1(1.8) | 11.3(3.1) |
| | 1994 | 24.0(1.1) | 31.8(1.8) | 16.3(0.9) | 28.8(1.3) | 4.2(1.7) | 17.9(5.2) |
| | 1992 | 26.7(1.1) | 32.1(1.6) | 20.9(1.2) | 31.0(1.1) | 10.5(2.4) | 11.2(4.2) |
| | 1990 | 26.3(1.4) | 31.5(2.0) | 21.0(1.5) | 30.6(1.4) | 10.1(3.2) | 8.5(4.2) |
| | 1986 | 26.9(1.5) | 32.3(2.1) | 21.9(1.6) | 31.3(1.7) | 8.8(2.6) | 13.3(3.1) |
| | 1982 | 27.1(1.5) | 30.9(2.0) | 23.4(2.2) | 31.4(1.5) | 6.4(1.9) | 13.0(4.2) |
| | 1978 | 29.6(1.2) | 36.7(1.9) | 22.9(1.3) | 33.4(1.3) | 7.2(2.1) | 16.3(4.9) |
| Solve multi-step problem | 1996 | 27.1(1.6) | 33.3(1.9) | 20.7(1.6) | 34.5(1.5) | 7.1(1.8) | 12.6(4.2) |
| | 1994 | 32.9(1.7) | 39.0(2.2) | 27.2(2.0) | 39.9(1.9) | 8.7(1.6) | 15.0(3.2) |
| | 1992 | 32.8(1.2) | 41.2(1.8) | 24.3(1.3) | 39.0(1.5) | 10.1(3.2) | 19.8(5.2) |
| | 1990 | 31.7(1.5) | 37.1(1.8) | 26.9(1.9) | 38.8(1.4) | 7.6(1.3) | 14.7(2.5) |
| | 1986 | 33.1(1.7) | 40.7(2.1) | 25.2(2.2) | 37.5(1.6) | 12.8(2.4) | 17.4(3.3) |
| | 1982 | 25.8(1.1) | 30.4(2.0) | 21.5(1.6) | 29.3(1.3) | 8.6(1.8) | 12.2(1.8) |
| | 1978 | 30.2(1.5) | 39.2(2.3) | 21.6(1.4) | 34.2(1.8) | 7.5(1.6) | 11.7(4.3) |
| Solve money problem | 1996 | 72.7(1.1) | 71.9(1.9) | 73.6(1.4) | 79.0(1.2) | 56.4(4.2) | 62.1(2.6) |
| | 1994 | 75.1(1.4) | 75.5(2.0) | 74.7(2.0) | 79.8(1.4) | 59.9(3.7) | 61.3(5.1) |
| | 1992 | 70.7(1.4) | 71.0(2.1) | 70.4(1.7) | 75.3(1.6) | 50.3(3.0) | 68.4(4.3) |
| | 1990 | 68.3(1.5) | 66.7(2.2) | 69.8(1.8) | 74.4(1.2) | 48.2(5.0) | 51.6(6.9) |
| | 1986 | 67.7(1.6) | 67.7(2.5) | 67.7(1.5) | 73.0(1.4) | 42.2(4.1) | 58.9(5.1) |
| | 1982 | 67.0(1.0) | 65.0(1.6) | 68.8(1.4) | 71.0(1.1) | 48.4(2.7) | 48.9(6.1) |
| | 1978 | 68.5(1.5) | 69.4(2.1) | 67.6(1.8) | 71.8(1.4) | 44.1(3.9) | 57.1(5.4) |

(***) STANDARD ERROR ESTIMATE IS GREATER THAN 9.9

| ITEM DESCRIPTION | YEAR | NATION | MALE | FEMALE | WHITE | BLACK | HISPANIC |
|-----------------------------|------|-----------|-----------|-----------|-----------|-----------|-----------|
| Identify algebraic identity | 1996 | 69.4(1.2) | 70.8(1.8) | 68.1(1.7) | 73.7(1.4) | 61.8(3.5) | 48.6(3.2) |
| | 1994 | 66.1(1.4) | 63.7(2.0) | 68.6(1.6) | 69.9(1.5) | 53.4(4.7) | 53.3(5.6) |
| | 1992 | 67.1(1.1) | 65.3(1.5) | 69.0(1.4) | 71.0(1.4) | 52.0(4.3) | 50.7(3.9) |
| | 1990 | 64.8(1.9) | 64.1(2.5) | 65.4(1.8) | 68.6(1.8) | 50.7(5.3) | 48.8(***) |
| | 1986 | 63.8(1.5) | 63.7(1.7) | 63.9(2.4) | 68.5(1.3) | 44.1(4.1) | 42.9(5.1) |
| | 1982 | 64.2(1.9) | 63.2(2.4) | 65.1(2.1) | 69.8(1.6) | 42.4(3.5) | 26.9(4.9) |
| | 1978 | 69.0(1.8) | 69.6(1.9) | 68.5(2.3) | 73.5(1.8) | 43.4(2.4) | 46.3(5.7) |
| Relate meter to yard | 1996 | 69.3(1.6) | 73.6(1.9) | 64.8(2.0) | 76.8(1.7) | 49.0(3.3) | 60.0(3.6) |
| | 1994 | 73.9(1.8) | 80.3(1.7) | 67.8(2.5) | 80.9(1.6) | 51.3(4.5) | 57.4(5.0) |
| | 1992 | 70.6(1.6) | 76.7(1.9) | 64.6(2.1) | 76.9(1.4) | 43.5(2.4) | 71.5(4.8) |
| | 1990 | 67.2(1.7) | 75.2(1.7) | 60.1(2.3) | 74.3(1.5) | 42.3(4.4) | 53.6(3.9) |
| | 1986 | 69.3(1.4) | 77.4(1.5) | 61.1(2.0) | 73.3(1.4) | 45.5(3.6) | 70.9(7.9) |
| | 1982 | 71.6(1.4) | 79.1(1.9) | 64.3(1.6) | 76.2(1.4) | 47.4(3.1) | 57.2(4.2) |
| | 1978 | 71.4(1.6) | 78.7(1.8) | 64.8(2.3) | 75.8(1.3) | 43.9(2.9) | 58.3(7.3) |
| Estimate height of door | 1996 | 83.5(1.2) | 90.1(1.5) | 77.2(1.8) | 87.0(1.3) | 67.3(4.0) | 75.6(3.8) |
| | 1994 | 81.0(1.0) | 87.9(1.6) | 74.1(1.6) | 85.7(1.0) | 62.2(2.9) | 77.6(6.0) |
| | 1992 | 86.3(0.8) | 90.9(0.9) | 81.5(1.1) | 89.2(0.8) | 71.5(3.3) | 83.4(2.8) |
| | 1990 | 84.3(1.1) | 89.2(1.5) | 79.2(1.4) | 88.0(1.1) | 75.0(2.8) | 66.7(7.5) |
| | 1986 | 82.3(1.4) | 89.8(1.2) | 75.4(2.0) | 85.0(1.6) | 71.9(3.6) | 71.7(3.9) |
| | 1982 | 82.5(1.0) | 89.6(1.3) | 75.9(1.6) | 85.9(0.9) | 62.8(2.9) | 78.7(3.3) |
| | 1978 | 86.4(1.0) | 92.0(1.1) | 81.5(1.4) | 89.4(1.0) | 69.3(2.9) | 78.1(6.0) |
| Solve multi-step problem | 1996 | 28.0(1.8) | 26.3(1.8) | 29.6(2.5) | 33.2(2.3) | 13.5(2.6) | 18.4(2.8) |
| | 1994 | 27.9(1.6) | 28.4(2.3) | 27.4(1.7) | 32.1(1.8) | 14.0(2.4) | 19.0(4.2) |
| | 1992 | 31.9(1.2) | 34.6(1.9) | 29.2(1.5) | 36.4(1.4) | 15.4(4.0) | 22.1(3.5) |
| | 1990 | 30.9(1.5) | 33.6(1.8) | 28.5(1.8) | 36.8(1.5) | 13.7(2.6) | 15.2(2.8) |
| | 1986 | 26.4(1.8) | 27.3(2.2) | 25.5(2.3) | 28.7(2.2) | 13.1(2.8) | 17.7(3.6) |
| | 1982 | 25.1(1.5) | 26.6(1.5) | 23.7(2.1) | 28.2(1.6) | 9.9(2.2) | 13.5(3.9) |
| | 1978 | 29.0(1.5) | 30.1(1.7) | 28.0(1.7) | 32.4(1.6) | 7.2(1.9) | 21.1(4.5) |
| Estimate circumference | 1996 | 24.0(1.7) | 26.1(2.1) | 22.0(1.9) | 26.7(2.1) | 13.0(2.4) | 14.3(2.9) |
| | 1994 | 22.3(1.7) | 25.2(2.3) | 19.5(2.0) | 25.6(2.2) | 10.1(2.0) | 12.8(2.3) |
| | 1992 | 23.5(1.3) | 26.5(1.9) | 20.4(1.7) | 26.3(1.4) | 10.3(2.3) | 14.5(2.7) |
| | 1990 | 23.7(1.6) | 27.8(1.7) | 19.5(1.8) | 26.1(1.8) | 13.7(3.4) | 14.5(4.7) |
| | 1986 | 19.9(1.1) | 23.0(1.5) | 17.0(1.8) | 22.9(1.4) | 6.7(1.5) | 14.0(4.1) |
| | 1982 | 16.9(1.3) | 20.4(2.1) | 13.4(1.5) | 19.3(1.5) | 5.6(1.5) | 5.6(3.6) |
| | 1978 | 22.5(1.4) | 27.1(2.2) | 17.9(1.5) | 24.7(1.5) | 10.5(2.7) | 12.0(4.1) |
| Find area given perimeter | 1996 | 49.4(2.3) | 49.7(2.6) | 49.2(3.0) | 53.1(2.7) | 30.3(3.0) | 37.4(3.5) |
| | 1994 | 45.6(2.0) | 47.1(2.6) | 44.1(2.1) | 49.7(2.4) | 23.4(2.6) | 47.2(8.2) |
| | 1992 | 44.6(1.4) | 46.8(1.5) | 42.3(1.9) | 47.8(1.5) | 33.1(3.2) | 30.2(3.6) |
| | 1990 | 43.1(2.2) | 44.5(2.8) | 41.7(2.4) | 46.5(2.3) | 29.3(6.0) | 27.1(5.2) |
| | 1986 | 38.7(1.7) | 39.4(2.2) | 38.0(2.1) | 42.0(1.8) | 21.2(4.5) | 23.8(3.4) |
| | 1982 | 34.0(2.1) | 36.1(2.7) | 32.0(2.3) | 37.2(2.4) | 17.7(2.4) | 19.6(3.2) |
| | 1978 | 32.3(1.7) | 37.8(2.6) | 27.3(2.0) | 34.3(1.8) | 19.6(3.1) | 22.4(5.0) |

(***) STANDARD ERROR ESTIMATE IS GREATER THAN 9.9

| ITEM DESCRIPTION | YEAR | NATION | MALE | FEMALE | WHITE | BLACK | HISPANIC |
|----------------------------|------|-----------|-----------|-----------|-----------|-----------|-----------|
| Find area of rectangle | 1996 | 73.5(1.6) | 75.2(1.7) | 72.0(2.0) | 77.7(1.7) | 59.4(3.7) | 53.9(4.5) |
| | 1994 | 69.8(1.6) | 71.7(2.1) | 68.2(2.0) | 72.9(1.9) | 52.8(3.8) | 66.9(4.4) |
| | 1992 | 68.9(1.6) | 70.1(2.6) | 67.7(1.5) | 72.5(1.6) | 47.9(4.0) | 68.3(4.1) |
| | 1990 | 66.4(1.7) | 68.9(2.2) | 63.9(1.8) | 69.1(1.7) | 55.7(3.7) | 54.2(***) |
| | 1986 | 62.7(1.7) | 63.4(2.1) | 62.0(2.0) | 65.7(2.0) | 49.8(4.8) | 50.6(4.0) |
| | 1982 | 73.9(1.5) | 75.3(2.1) | 72.7(1.6) | 76.3(1.7) | 60.5(4.4) | 68.3(4.0) |
| | 1978 | 73.4(1.8) | 73.8(2.6) | 73.0(1.7) | 78.3(1.7) | 43.5(3.5) | 65.4(6.4) |
| Apply vertical angles | 1996 | 93.2(0.7) | 93.5(0.9) | 92.9(1.2) | 94.1(0.7) | 87.3(2.3) | 91.1(3.0) |
| | 1994 | 93.0(0.8) | 92.9(1.0) | 93.3(1.0) | 95.2(0.6) | 83.5(3.9) | 93.8(2.7) |
| | 1992 | 91.1(0.8) | 92.3(0.8) | 89.8(1.0) | 92.9(0.7) | 84.7(3.1) | 84.8(3.6) |
| | 1990 | 89.6(0.9) | 89.6(1.3) | 89.6(1.1) | 92.0(0.7) | 79.7(3.5) | 82.6(4.7) |
| | 1986 | 88.0(1.2) | 89.1(1.6) | 87.0(1.4) | 90.4(1.1) | 78.0(3.1) | 76.6(5.9) |
| | 1982 | 85.1(1.1) | 86.1(1.3) | 84.3(1.9) | 87.7(1.3) | 74.9(2.1) | 68.5(4.5) |
| | 1978 | 81.5(1.2) | 80.9(1.5) | 82.0(1.5) | 85.3(1.1) | 59.9(4.8) | 60.0(4.8) |
| Apply supplementary angles | 1996 | 62.0(2.1) | 63.0(2.6) | 61.0(2.1) | 66.7(2.6) | 41.7(3.1) | 48.9(4.3) |
| | 1994 | 57.8(1.3) | 61.4(2.2) | 54.3(1.7) | 63.3(1.1) | 36.6(4.0) | 47.7(6.6) |
| | 1992 | 55.9(1.5) | 57.3(1.9) | 54.4(1.6) | 61.3(1.4) | 30.9(3.5) | 41.2(3.7) |
| | 1990 | 55.2(1.9) | 58.6(2.6) | 51.7(1.9) | 60.0(2.1) | 37.2(5.9) | 34.9(3.6) |
| | 1986 | 48.0(1.9) | 50.8(2.2) | 45.4(2.2) | 53.9(2.0) | 24.4(3.0) | 25.7(4.4) |
| | 1982 | 40.0(2.6) | 42.6(2.8) | 37.6(2.8) | 45.5(2.7) | 13.3(2.3) | 13.2(3.6) |
| | 1978 | 39.7(1.6) | 42.7(2.1) | 36.6(2.4) | 43.7(1.6) | 15.5(4.2) | 15.1(3.7) |
| Identify sign of divisor | 1996 | 64.0(1.9) | 64.2(2.1) | 63.7(2.1) | 68.0(2.0) | 51.4(3.3) | 59.5(3.3) |
| | 1994 | 65.1(1.5) | 63.7(2.1) | 66.3(2.0) | 70.5(1.3) | 49.4(4.0) | 46.3(7.3) |
| | 1992 | 64.5(1.5) | 65.7(2.0) | 63.3(2.0) | 67.7(1.6) | 49.2(5.4) | 58.0(5.2) |
| | 1990 | 60.3(1.5) | 60.5(1.7) | 60.1(1.9) | 64.8(1.4) | 45.0(5.5) | 51.6(4.2) |
| | 1986 | 58.6(2.2) | 61.6(3.1) | 55.6(2.0) | 62.2(2.4) | 38.6(4.3) | 50.6(7.2) |
| | 1982 | 59.4(1.9) | 61.2(2.6) | 57.8(2.2) | 61.5(2.0) | 44.7(4.4) | 58.6(5.9) |
| | 1978 | 56.5(1.5) | 57.9(2.3) | 55.3(1.6) | 58.7(1.5) | 45.9(3.6) | 43.0(7.2) |
| Add whole numbers | 1996 | 98.1(0.4) | 97.7(0.6) | 98.4(0.4) | 98.4(0.4) | 97.7(0.9) | 95.6(1.8) |
| | 1994 | 97.6(0.4) | 97.9(0.5) | 97.3(0.6) | 98.0(0.4) | 96.1(1.4) | 98.2(1.1) |
| | 1992 | 98.6(0.3) | 98.3(0.5) | 99.0(0.3) | 99.0(0.3) | 96.9(1.2) | 98.7(0.9) |
| | 1990 | 97.9(0.3) | 97.5(0.4) | 98.2(0.4) | 98.3(0.3) | 96.7(1.4) | 96.9(1.5) |
| | 1986 | 98.6(0.5) | 98.7(0.5) | 98.4(0.6) | 99.3(0.2) | 95.1(3.6) | 96.3(1.8) |
| | 1982 | 98.1(0.4) | 97.8(0.5) | 98.3(0.4) | 97.9(0.4) | 99.2(0.6) | 98.3(1.3) |
| Add whole numbers | 1996 | 97.7(0.3) | 97.8(0.5) | 97.6(0.5) | 98.6(0.3) | 96.5(1.2) | 93.3(2.0) |
| | 1994 | 97.6(0.4) | 97.8(0.5) | 97.4(0.6) | 98.1(0.4) | 97.6(1.1) | 93.1(1.8) |
| | 1992 | 97.9(0.4) | 97.2(0.8) | 98.7(0.4) | 98.3(0.4) | 96.2(1.4) | 98.8(0.9) |
| | 1990 | 98.4(0.3) | 97.7(0.6) | 99.1(0.3) | 98.6(0.3) | 97.9(1.4) | 99.4(0.6) |
| | 1986 | 98.4(0.4) | 98.1(0.5) | 98.6(0.6) | 98.7(0.3) | 96.3(2.2) | 98.7(1.4) |
| | 1982 | 97.7(0.4) | 96.6(0.7) | 98.8(0.4) | 97.8(0.5) | 97.6(0.9) | 97.1(1.4) |

(***) STANDARD ERROR ESTIMATE IS GREATER THAN 9.9

| ITEM DESCRIPTION | YEAR | NATION | MALE | FEMALE | WHITE | BLACK | HISPANIC |
|----------------------------|------|-----------|-----------|-----------|-----------|-----------|-----------|
| Add whole numbers | 1996 | 93.6(0.6) | 92.2(0.9) | 95.1(0.7) | 94.8(0.7) | 91.0(1.5) | 91.3(2.6) |
| | 1994 | 94.7(0.5) | 94.2(0.8) | 95.2(0.6) | 95.8(0.5) | 91.9(1.5) | 89.5(3.1) |
| | 1992 | 94.3(0.5) | 93.8(0.9) | 94.8(0.8) | 95.6(0.6) | 91.2(1.7) | 88.9(3.0) |
| | 1990 | 95.4(0.5) | 94.2(0.9) | 96.5(0.5) | 96.2(0.5) | 95.4(1.1) | 90.5(2.4) |
| | 1986 | 94.7(0.8) | 93.6(1.3) | 95.9(0.8) | 96.0(0.7) | 91.6(3.0) | 89.0(3.7) |
| | 1982 | 92.6(0.7) | 90.1(1.3) | 95.0(0.7) | 93.7(0.6) | 88.2(2.4) | 87.3(3.1) |
| Multiply fractions | 1996 | 67.7(2.0) | 64.8(2.0) | 70.6(2.6) | 69.5(2.2) | 63.2(3.7) | 56.8(4.3) |
| | 1994 | 71.9(1.5) | 71.4(2.0) | 72.5(1.7) | 74.5(1.7) | 63.2(3.9) | 64.2(4.1) |
| | 1992 | 74.6(1.2) | 71.2(2.0) | 78.1(1.5) | 76.6(1.3) | 65.2(3.5) | 64.2(4.0) |
| | 1990 | 76.7(1.5) | 73.9(1.8) | 79.6(1.6) | 77.7(1.7) | 73.5(2.5) | 65.3(9.6) |
| | 1986 | 75.1(1.2) | 72.9(1.5) | 77.2(1.7) | 78.0(1.3) | 66.1(3.0) | 57.6(5.7) |
| | 1982 | 71.6(1.4) | 71.3(1.6) | 71.8(1.9) | 74.8(1.3) | 58.2(1.9) | 46.8(5.2) |
| | 1978 | 75.0(1.3) | 71.8(1.8) | 78.1(1.7) | 78.1(1.2) | 58.9(4.0) | 53.7(5.2) |
| Multiply fractions | 1996 | 56.4(2.1) | 54.4(2.2) | 58.2(2.5) | 59.7(2.4) | 45.4(3.7) | 43.5(4.1) |
| | 1994 | 62.1(1.4) | 62.8(1.8) | 61.9(1.8) | 65.2(1.8) | 50.5(4.4) | 54.3(5.0) |
| | 1992 | 68.1(1.2) | 66.0(1.8) | 70.4(1.4) | 70.9(1.4) | 56.3(5.0) | 55.5(4.5) |
| | 1990 | 72.6(1.6) | 70.7(1.8) | 74.5(2.0) | 73.5(1.8) | 69.3(2.5) | 60.9(9.8) |
| | 1986 | 67.4(1.6) | 63.6(1.9) | 70.8(2.0) | 69.5(1.7) | 57.0(4.3) | 57.6(5.0) |
| | 1982 | 59.7(1.8) | 60.2(2.0) | 59.3(2.4) | 63.9(1.7) | 40.2(2.8) | 33.3(5.1) |
| | 1978 | 66.9(1.7) | 66.3(2.1) | 67.4(2.0) | 70.9(1.5) | 40.8(4.0) | 53.5(5.7) |
| Multiply fractions | 1996 | 65.3(1.5) | 63.5(1.8) | 67.1(2.2) | 67.9(1.7) | 56.1(3.2) | 57.2(3.7) |
| | 1994 | 71.2(1.4) | 71.1(2.1) | 71.6(1.5) | 74.4(1.7) | 59.5(3.8) | 64.2(2.7) |
| | 1992 | 74.4(1.1) | 72.0(1.6) | 76.9(1.7) | 77.0(1.2) | 62.4(3.8) | 63.1(3.4) |
| | 1990 | 78.2(1.3) | 76.4(1.4) | 80.0(1.6) | 79.1(1.3) | 76.8(2.2) | 63.4(9.3) |
| | 1986 | 75.4(1.3) | 73.4(1.9) | 77.2(1.6) | 76.7(1.6) | 69.9(2.9) | 68.5(6.9) |
| | 1982 | 69.4(1.7) | 68.1(1.9) | 70.7(2.0) | 72.5(1.7) | 53.4(2.7) | 50.5(4.4) |
| | 1978 | 75.8(1.4) | 73.8(2.0) | 77.7(1.8) | 78.4(1.2) | 60.2(4.5) | 60.8(7.1) |
| Find percent given numbers | 1996 | 75.8(1.5) | 82.5(1.3) | 69.5(2.3) | 81.3(1.8) | 54.6(3.9) | 58.2(5.2) |
| | 1994 | 73.7(1.5) | 79.2(1.5) | 68.4(2.1) | 79.0(1.6) | 55.9(2.3) | 61.4(6.8) |
| | 1992 | 76.0(1.4) | 83.6(1.4) | 68.0(1.9) | 80.2(1.1) | 63.2(3.5) | 56.5(4.9) |
| | 1990 | 72.9(1.6) | 79.3(1.8) | 66.3(1.9) | 77.0(1.8) | 58.7(5.3) | 54.6(5.9) |
| | 1986 | 72.5(1.6) | 79.9(1.6) | 65.6(2.2) | 77.7(1.7) | 52.9(3.5) | 53.2(4.6) |
| | 1982 | 74.3(1.5) | 80.7(2.0) | 68.4(2.1) | 78.6(1.2) | 45.6(3.1) | 71.8(4.3) |
| Find percent of number | 1996 | 69.3(1.2) | 76.0(1.7) | 62.9(2.0) | 74.3(1.7) | 52.3(3.6) | 51.7(2.7) |
| | 1994 | 66.9(1.3) | 70.8(2.2) | 63.0(1.9) | 72.9(1.1) | 48.4(3.9) | 51.1(4.9) |
| | 1992 | 69.9(1.1) | 75.5(1.6) | 64.1(1.6) | 74.8(1.1) | 48.7(3.6) | 58.2(4.2) |
| | 1990 | 68.9(1.2) | 71.5(1.8) | 66.3(1.6) | 71.9(1.4) | 57.3(4.5) | 55.9(8.3) |
| | 1986 | 63.9(1.3) | 68.4(2.0) | 59.8(1.4) | 67.6(1.4) | 43.6(3.5) | 60.2(4.7) |
| | 1982 | 54.1(1.9) | 57.4(2.9) | 51.1(2.2) | 56.7(2.1) | 36.4(2.7) | 50.4(4.9) |

(***) STANDARD ERROR ESTIMATE IS GREATER THAN 9.9

| ITEM DESCRIPTION | YEAR | NATION | MALE | FEMALE | WHITE | BLACK | HISPANIC |
|-------------------------------|------|-----------|-----------|-----------|-----------|-----------|-----------|
| Find percent greater than 100 | 1996 | 65.3(1.5) | 71.9(1.5) | 59.2(2.0) | 70.6(1.6) | 42.3(3.9) | 51.0(5.3) |
| | 1994 | 60.7(2.1) | 68.8(2.4) | 52.9(2.4) | 67.2(1.8) | 36.8(4.9) | 51.8(8.4) |
| | 1992 | 63.7(0.9) | 70.4(1.5) | 56.7(1.6) | 68.6(1.2) | 41.6(3.9) | 52.8(4.7) |
| | 1990 | 63.3(1.8) | 67.1(2.4) | 59.5(1.9) | 67.8(2.1) | 46.2(4.6) | 45.3(5.8) |
| | 1986 | 56.3(1.4) | 62.2(1.9) | 50.8(1.7) | 61.0(1.4) | 34.0(3.2) | 39.8(6.1) |
| | 1982 | 46.4(2.6) | 50.6(2.9) | 42.5(2.7) | 50.3(3.0) | 22.5(2.9) | 40.6(3.3) |
| Find number given percent | 1996 | 39.2(1.5) | 45.0(2.1) | 33.7(1.4) | 41.9(1.6) | 28.3(3.8) | 29.1(3.2) |
| | 1994 | 39.2(1.4) | 44.9(1.9) | 33.4(2.0) | 44.7(1.7) | 22.0(2.8) | 26.1(3.0) |
| | 1992 | 39.7(1.5) | 43.4(2.0) | 35.8(1.8) | 41.7(1.7) | 33.1(3.7) | 29.1(4.3) |
| | 1990 | 37.6(1.3) | 40.6(2.0) | 34.6(1.7) | 40.6(1.6) | 21.1(2.1) | 33.2(3.5) |
| | 1986 | 32.0(1.2) | 38.4(1.9) | 26.0(1.2) | 34.4(1.5) | 19.7(2.6) | 30.0(5.0) |
| | 1982 | 36.4(2.1) | 40.8(2.8) | 32.4(2.1) | 38.3(2.5) | 24.5(2.4) | 34.9(4.7) |
| Find percent given numbers | 1996 | 68.7(1.1) | 76.0(1.6) | 61.1(1.5) | 75.1(1.5) | 52.8(3.8) | 54.4(4.6) |
| | 1994 | 69.0(1.6) | 77.6(1.7) | 60.9(1.9) | 75.5(1.6) | 46.1(3.5) | 51.5(5.1) |
| | 1992 | 66.4(1.4) | 74.5(1.4) | 58.2(2.0) | 72.3(1.5) | 46.3(3.7) | 52.9(4.0) |
| | 1990 | 62.9(1.5) | 70.9(1.6) | 55.8(1.8) | 69.2(1.3) | 43.6(3.6) | 44.8(3.2) |
| | 1986 | 63.4(1.7) | 71.0(2.1) | 55.6(1.9) | 69.9(1.5) | 35.7(4.1) | 47.1(5.7) |
| | 1982 | 60.3(1.4) | 69.1(2.1) | 52.2(2.1) | 65.1(1.6) | 32.5(2.6) | 48.7(3.4) |
| Find percent of number | 1996 | 64.6(1.6) | 68.6(1.6) | 60.5(2.3) | 70.6(1.7) | 48.5(3.9) | 52.0(4.0) |
| | 1994 | 65.9(1.6) | 65.8(2.4) | 65.8(1.8) | 70.1(1.6) | 51.4(3.9) | 52.5(5.1) |
| | 1992 | 66.8(1.5) | 70.5(1.9) | 63.1(1.8) | 71.0(1.4) | 49.0(4.2) | 66.0(7.1) |
| | 1990 | 63.1(1.7) | 66.6(2.2) | 59.9(2.1) | 68.5(1.5) | 45.9(4.7) | 49.1(4.8) |
| | 1986 | 63.7(1.9) | 68.5(2.6) | 58.7(2.1) | 67.8(1.9) | 43.5(4.3) | 57.2(6.7) |
| | 1982 | 55.5(1.8) | 56.0(2.2) | 55.1(2.5) | 58.4(1.8) | 40.1(3.7) | 45.7(7.1) |
| Find percent greater than 100 | 1996 | 58.2(1.4) | 65.6(1.7) | 50.6(1.6) | 66.5(1.6) | 33.8(2.6) | 45.5(3.6) |
| | 1994 | 61.9(2.1) | 65.7(2.4) | 58.4(2.5) | 68.5(2.2) | 42.9(4.4) | 36.3(5.2) |
| | 1992 | 60.0(1.5) | 67.0(1.9) | 52.9(2.2) | 65.9(1.3) | 36.8(4.5) | 51.2(5.6) |
| | 1990 | 58.8(1.7) | 65.6(1.8) | 52.7(2.3) | 65.5(1.5) | 36.4(4.8) | 42.9(6.7) |
| | 1986 | 56.9(2.2) | 62.7(3.0) | 51.0(2.2) | 61.8(2.1) | 33.7(5.5) | 44.5(8.5) |
| | 1982 | 49.8(1.8) | 54.8(2.8) | 45.2(2.5) | 53.4(1.9) | 33.2(3.9) | 33.1(4.4) |
| Find percent given numbers | 1996 | 52.2(1.2) | 56.7(2.0) | 47.6(2.0) | 58.3(1.5) | 36.4(2.5) | 38.1(2.6) |
| | 1994 | 50.8(1.9) | 54.5(2.7) | 47.3(2.6) | 55.0(2.2) | 37.9(3.8) | 32.9(3.7) |
| | 1992 | 50.4(1.7) | 54.4(2.0) | 46.4(2.2) | 53.8(1.7) | 34.8(3.6) | 44.9(4.6) |
| | 1990 | 45.4(1.4) | 50.2(2.0) | 41.2(2.1) | 50.2(1.4) | 30.2(4.3) | 27.6(4.8) |
| | 1986 | 42.9(1.9) | 48.5(3.1) | 37.1(2.0) | 46.2(2.0) | 28.2(3.7) | 30.6(4.9) |
| | 1982 | 34.7(0.9) | 40.5(1.4) | 29.4(1.6) | 36.4(1.1) | 23.3(2.1) | 29.6(2.4) |

(***) STANDARD ERROR ESTIMATE IS GREATER THAN 9.9

| ITEM DESCRIPTION | YEAR | NATION | MALE | FEMALE | WHITE | BLACK | HISPANIC |
|---------------------------|------|-----------|-----------|-----------|-----------|-----------|-----------|
| Find number given percent | 1996 | 53.2(1.5) | 55.3(1.7) | 51.0(1.9) | 60.7(1.8) | 33.9(3.1) | 37.8(3.5) |
| | 1994 | 55.6(1.9) | 57.2(2.5) | 54.0(2.5) | 61.6(2.0) | 36.7(3.9) | 35.7(5.1) |
| | 1992 | 52.5(1.6) | 56.5(2.0) | 48.4(1.9) | 57.2(2.0) | 32.6(3.2) | 45.9(4.9) |
| | 1990 | 49.4(1.6) | 53.0(1.9) | 46.2(2.1) | 54.5(1.4) | 31.6(6.1) | 39.8(4.6) |
| | 1986 | 44.1(1.8) | 47.0(2.8) | 41.1(1.7) | 48.8(1.8) | 21.7(2.6) | 33.2(6.6) |
| | 1982 | 29.5(1.7) | 32.6(2.2) | 26.6(2.2) | 32.3(2.0) | 16.4(1.9) | 15.0(3.5) |
| Subtract decimals | 1996 | 67.9(1.6) | 68.6(1.8) | 67.4(2.4) | 70.2(1.9) | 58.4(4.2) | 59.5(4.0) |
| | 1994 | 69.0(1.5) | 68.6(2.5) | 69.9(1.7) | 72.1(1.6) | 52.7(4.2) | 66.5(5.2) |
| | 1992 | 74.3(1.2) | 71.6(1.7) | 77.0(1.5) | 77.6(0.9) | 61.2(3.7) | 62.2(5.7) |
| | 1990 | 74.0(1.5) | 71.8(1.9) | 76.3(1.7) | 75.6(1.6) | 66.3(2.5) | 66.0(9.5) |
| | 1986 | 72.2(1.1) | 69.0(1.6) | 75.2(1.6) | 74.7(1.4) | 61.3(3.7) | 64.8(4.3) |
| | 1982 | 73.8(1.3) | 74.3(1.7) | 73.3(1.7) | 77.6(1.2) | 52.9(4.2) | 58.4(4.2) |
| | 1978 | 71.0(1.8) | 69.2(1.9) | 72.7(2.0) | 74.9(1.6) | 46.8(3.7) | 55.5(6.2) |
| Subtract decimals | 1996 | 83.5(1.1) | 85.2(1.4) | 81.7(1.4) | 85.6(1.2) | 77.7(3.0) | 84.0(2.4) |
| | 1994 | 85.6(1.1) | 86.6(1.2) | 84.7(1.5) | 86.9(1.2) | 80.5(2.2) | 84.9(3.9) |
| | 1992 | 86.4(0.7) | 87.5(1.2) | 85.3(1.3) | 88.0(1.0) | 81.0(3.0) | 87.0(3.0) |
| | 1990 | 86.9(0.8) | 87.8(1.2) | 86.1(1.2) | 88.0(0.9) | 80.7(2.2) | 88.2(2.8) |
| | 1986 | 85.9(1.0) | 85.1(1.5) | 86.6(1.5) | 88.1(1.2) | 76.1(3.1) | 79.4(3.8) |
| | 1982 | 84.7(1.1) | 84.6(1.5) | 84.8(1.3) | 86.6(1.3) | 76.0(3.0) | 75.6(3.1) |
| | 1978 | 86.3(1.0) | 86.5(1.4) | 86.1(1.6) | 87.4(1.1) | 77.4(2.5) | 89.6(6.9) |
| Divide decimals | 1996 | 72.8(1.3) | 70.0(1.9) | 75.7(1.3) | 77.9(1.7) | 60.2(3.7) | 60.7(3.3) |
| | 1994 | 75.7(1.2) | 73.2(1.6) | 77.9(1.4) | 79.1(1.4) | 67.4(3.8) | 59.1(5.5) |
| | 1992 | 78.9(1.2) | 77.0(1.7) | 80.9(1.6) | 83.5(1.0) | 59.0(4.5) | 76.9(3.3) |
| | 1990 | 78.6(1.5) | 75.9(1.9) | 81.0(1.6) | 83.8(1.0) | 61.1(4.8) | 66.6(4.6) |
| | 1986 | 77.6(1.2) | 76.0(1.8) | 79.2(1.6) | 84.5(1.0) | 48.4(5.2) | 55.5(5.5) |
| | 1982 | 65.1(2.1) | 62.4(2.9) | 67.7(1.9) | 70.2(2.5) | 41.8(3.8) | 41.6(2.5) |
| | 1978 | 77.9(1.5) | 77.2(1.7) | 78.7(2.1) | 81.8(1.4) | 50.8(4.1) | 71.1(6.0) |
| Add decimals | 1996 | 87.1(0.9) | 85.6(1.3) | 88.6(1.1) | 90.7(0.7) | 76.9(3.0) | 80.9(2.8) |
| | 1994 | 88.4(0.9) | 86.2(1.5) | 90.5(1.1) | 91.8(0.7) | 74.9(3.2) | 83.1(3.5) |
| | 1992 | 89.5(1.0) | 87.5(1.3) | 91.5(1.2) | 93.1(0.9) | 76.5(2.8) | 81.4(7.1) |
| | 1990 | 89.8(1.0) | 87.3(1.5) | 92.1(1.0) | 93.2(0.7) | 79.2(3.0) | 81.5(3.8) |
| | 1986 | 88.4(1.3) | 85.2(2.2) | 91.7(0.9) | 92.2(1.1) | 69.0(4.4) | 84.6(2.7) |
| | 1982 | 86.0(1.0) | 82.5(1.5) | 89.2(1.1) | 89.0(1.3) | 72.1(3.8) | 71.9(4.4) |
| | 1978 | 88.8(1.1) | 87.6(1.5) | 90.1(1.3) | 91.9(0.8) | 68.0(4.1) | 82.6(4.6) |
| Divide decimals | 1996 | 80.2(1.0) | 79.0(1.6) | 81.4(1.3) | 84.1(1.1) | 67.3(3.3) | 73.2(3.5) |
| | 1994 | 81.0(1.4) | 79.1(1.7) | 82.8(1.7) | 83.7(1.4) | 69.7(3.7) | 74.0(3.9) |
| | 1992 | 78.7(1.4) | 77.0(1.9) | 80.4(1.7) | 83.2(1.6) | 60.4(3.9) | 74.8(4.9) |
| | 1990 | 77.7(1.3) | 74.6(1.6) | 80.4(1.6) | 82.2(1.1) | 62.7(3.3) | 67.4(3.7) |
| | 1986 | 74.9(2.1) | 71.3(3.2) | 78.6(1.5) | 80.4(2.2) | 47.1(4.9) | 67.9(2.8) |
| | 1982 | 70.7(1.4) | 63.6(1.6) | 77.2(1.9) | 74.7(1.6) | 53.9(5.6) | 49.3(4.5) |
| | 1978 | 80.1(1.3) | 77.7(1.9) | 82.5(1.6) | 83.5(1.3) | 56.6(3.7) | 76.0(5.0) |

(***) STANDARD ERROR ESTIMATE IS GREATER THAN 9.9

| ITEM DESCRIPTION | YEAR | NATION | MALE | FEMALE | WHITE | BLACK | HISPANIC |
|-------------------------------|------|-----------|-----------|-----------|-----------|-----------|-----------|
| Subtract decimals | 1996 | 72.1(2.0) | 70.9(2.1) | 73.4(2.5) | 76.5(2.6) | 57.6(3.6) | 66.3(3.2) |
| | 1994 | 75.0(1.7) | 72.9(1.9) | 76.9(2.1) | 78.9(1.6) | 61.6(4.3) | 62.3(5.7) |
| | 1992 | 74.2(1.6) | 73.7(2.3) | 74.7(1.4) | 78.9(1.6) | 56.0(6.0) | 69.6(3.7) |
| | 1990 | 76.5(1.3) | 73.8(1.8) | 78.9(1.5) | 80.1(1.4) | 68.2(3.9) | 63.1(4.1) |
| | 1986 | 74.7(1.9) | 71.9(2.6) | 77.5(1.9) | 78.9(2.0) | 55.4(5.6) | 69.1(4.0) |
| | 1982 | 57.5(2.4) | 48.6(2.7) | 65.7(2.3) | 62.1(2.9) | 38.5(3.1) | 30.3(4.4) |
| | 1978 | 70.9(1.6) | 67.4(2.1) | 74.2(2.0) | 75.9(1.6) | 41.1(3.9) | 53.8(9.0) |
| Divide decimals | 1996 | 64.9(2.5) | 65.2(3.0) | 64.6(2.5) | 67.1(2.9) | 55.5(4.2) | 66.3(3.9) |
| | 1994 | 67.7(1.8) | 66.4(2.2) | 68.8(2.0) | 71.0(1.9) | 53.1(3.9) | 62.8(4.6) |
| | 1992 | 65.7(2.0) | 62.7(2.3) | 68.7(2.1) | 70.4(2.2) | 48.7(5.6) | 60.2(4.1) |
| | 1990 | 66.3(1.6) | 63.6(1.8) | 68.8(1.8) | 71.1(1.6) | 54.3(5.1) | 51.3(4.7) |
| | 1986 | 64.7(2.3) | 61.2(3.2) | 68.4(2.3) | 69.3(2.4) | 42.6(4.8) | 59.3(5.5) |
| | 1982 | 44.9(1.5) | 36.7(2.0) | 52.5(2.0) | 48.4(1.8) | 28.4(3.7) | 27.4(5.1) |
| | 1978 | 61.4(1.7) | 57.4(2.4) | 65.3(2.1) | 65.8(1.6) | 35.8(3.7) | 51.9(4.6) |
| Estimate total cost | 1996 | 34.9(1.3) | 40.9(2.4) | 29.2(1.8) | 36.4(1.6) | 28.0(4.9) | 29.0(2.0) |
| | 1994 | 32.8(1.6) | 37.8(2.1) | 27.8(1.6) | 34.8(2.0) | 20.8(3.1) | 35.4(4.3) |
| | 1992 | 33.9(1.3) | 41.1(2.0) | 26.3(1.3) | 37.0(1.5) | 20.9(3.8) | 28.9(2.8) |
| | 1990 | 37.4(1.3) | 42.1(1.6) | 32.6(1.9) | 40.9(1.5) | 22.5(2.2) | 30.6(4.6) |
| | 1986 | 35.5(1.5) | 41.6(2.0) | 29.9(1.7) | 36.7(1.6) | 28.0(3.5) | 34.8(5.1) |
| | 1982 | 29.6(1.5) | 34.1(2.1) | 25.5(1.6) | 30.9(1.7) | 21.1(3.1) | 26.3(3.6) |
| Multiply equation by constant | 1996 | 18.7(1.2) | 22.5(1.7) | 15.2(1.6) | 20.1(1.4) | 11.4(2.6) | 11.5(2.1) |
| | 1994 | 17.2(1.1) | 20.5(2.0) | 14.0(1.2) | 18.9(1.4) | 8.6(1.8) | 12.5(1.8) |
| | 1992 | 18.4(1.1) | 21.7(1.5) | 15.0(1.2) | 19.7(1.1) | 10.7(2.1) | 11.7(3.7) |
| | 1990 | 18.4(1.2) | 22.1(1.8) | 14.7(1.6) | 18.7(1.2) | 15.8(3.3) | 9.7(3.0) |
| | 1986 | 17.3(1.2) | 19.3(1.6) | 15.5(1.4) | 18.3(1.4) | 11.3(2.4) | 14.7(3.5) |
| | 1982 | 21.8(1.7) | 23.9(2.2) | 19.9(1.7) | 22.6(2.1) | 15.8(2.8) | 21.7(3.3) |
| | 1978 | 20.1(1.1) | 25.0(1.7) | 15.2(1.3) | 22.4(1.2) | 6.5(1.8) | 7.3(2.1) |
| Solve equation (square root) | 1996 | 56.3(2.0) | 56.0(2.0) | 56.7(2.6) | 63.9(2.1) | 37.0(3.1) | 40.7(3.0) |
| | 1994 | 58.0(1.8) | 60.7(2.1) | 55.3(2.4) | 64.5(1.7) | 36.3(4.3) | 36.0(4.9) |
| | 1992 | 58.4(1.7) | 59.6(2.1) | 57.1(2.0) | 64.6(1.8) | 33.7(4.9) | 46.8(6.3) |
| | 1990 | 53.3(1.8) | 53.7(2.3) | 52.9(2.1) | 60.4(1.6) | 31.5(4.7) | 31.6(4.3) |
| | 1986 | 51.2(1.8) | 53.2(2.5) | 49.1(2.3) | 57.1(1.8) | 24.0(4.3) | 33.3(4.6) |
| | 1982 | 45.7(2.6) | 45.7(4.0) | 45.8(2.1) | 49.7(3.3) | 27.1(3.4) | 26.9(6.1) |
| | 1978 | 36.8(2.0) | 37.2(2.5) | 36.3(2.2) | 39.3(2.2) | 16.6(3.4) | 34.8(5.1) |
| Identify expected value | 1996 | 65.3(1.2) | 73.9(1.7) | 57.1(2.0) | 71.5(1.5) | 35.4(2.6) | 55.9(4.9) |
| | 1994 | 63.6(1.6) | 69.8(2.2) | 57.4(1.7) | 69.6(1.5) | 42.9(2.6) | 54.3(6.0) |
| | 1992 | 63.7(1.4) | 70.7(1.8) | 56.4(1.8) | 67.7(1.4) | 47.4(3.6) | 55.2(4.5) |
| | 1990 | 62.6(1.7) | 69.3(2.2) | 56.0(1.8) | 67.7(1.5) | 44.2(3.8) | 51.1(9.0) |
| | 1986 | 61.2(1.6) | 68.5(2.1) | 54.4(1.9) | 65.6(1.7) | 45.9(3.9) | 50.8(5.4) |
| | 1982 | 78.8(1.5) | 83.1(1.3) | 74.7(2.5) | 83.2(1.5) | 59.2(3.8) | 61.5(3.6) |
| | 1978 | 73.6(1.5) | 77.3(2.2) | 69.9(1.8) | 76.6(1.6) | 56.5(3.4) | 66.2(5.8) |

(***) STANDARD ERROR ESTIMATE IS GREATER THAN 9.9

| ITEM DESCRIPTION | YEAR | NATION | MALE | FEMALE | WHITE | BLACK | HISPANIC |
|--------------------------------|------|-----------|-----------|-----------|-----------|-----------|-----------|
| Compute using data in table | 1996 | 80.7(1.3) | 83.9(1.0) | 77.8(1.9) | 84.2(1.7) | 71.0(3.0) | 66.3(3.2) |
| | 1994 | 81.2(1.1) | 83.2(1.6) | 79.7(1.7) | 84.5(1.0) | 68.2(3.8) | 76.2(5.1) |
| | 1992 | 81.6(0.8) | 83.4(1.1) | 79.7(1.0) | 84.5(0.8) | 73.2(2.5) | 69.9(4.2) |
| | 1990 | 78.8(1.2) | 79.9(1.5) | 77.6(1.6) | 80.0(1.4) | 73.3(3.5) | 70.4(6.3) |
| | 1986 | 75.1(1.3) | 77.3(1.5) | 73.1(1.4) | 78.6(1.3) | 59.4(3.1) | 68.0(5.7) |
| | 1982 | 80.0(1.4) | 80.0(1.8) | 80.1(1.7) | 84.2(1.1) | 58.4(3.5) | 65.8(3.6) |
| | 1978 | 77.8(1.2) | 78.2(1.5) | 77.3(1.5) | 81.2(1.1) | 58.8(3.2) | 66.7(6.4) |
| Interpret data in table | 1996 | 90.6(0.9) | 92.6(1.1) | 88.7(1.2) | 94.0(0.8) | 81.3(1.9) | 75.9(4.0) |
| | 1994 | 88.5(0.9) | 91.5(1.1) | 85.7(1.3) | 92.4(0.8) | 77.9(3.3) | 77.1(5.2) |
| | 1992 | 88.0(0.8) | 88.4(1.0) | 87.6(1.4) | 91.9(0.6) | 73.3(3.0) | 75.6(4.3) |
| | 1990 | 88.6(1.0) | 88.7(1.2) | 88.5(1.3) | 91.6(1.0) | 80.5(3.4) | 70.4(6.9) |
| | 1986 | 87.9(1.1) | 90.0(1.4) | 85.9(1.3) | 91.1(1.2) | 76.0(2.8) | 76.9(2.7) |
| | 1982 | 87.8(1.0) | 89.6(1.1) | 86.2(1.6) | 91.4(0.8) | 70.4(3.5) | 74.6(4.3) |
| | 1978 | 87.4(1.3) | 88.7(1.2) | 86.0(1.8) | 91.7(0.9) | 62.8(3.8) | 70.7(4.9) |
| Understand decimal place value | 1996 | 81.5(1.1) | 84.7(1.3) | 78.6(1.6) | 86.1(1.4) | 66.5(3.8) | 65.8(3.4) |
| | 1994 | 76.9(1.4) | 78.1(1.9) | 76.0(1.7) | 83.1(1.2) | 53.7(3.4) | 64.7(5.9) |
| | 1992 | 79.4(1.4) | 81.1(1.6) | 77.6(1.9) | 83.3(1.2) | 62.8(4.8) | 67.0(5.0) |
| | 1990 | 76.6(1.4) | 78.0(2.1) | 75.3(1.5) | 81.4(1.7) | 58.0(4.3) | 61.6(5.0) |
| | 1986 | 70.5(1.3) | 73.1(2.1) | 68.2(1.5) | 76.6(1.2) | 41.8(4.9) | 55.5(3.7) |
| | 1982 | 73.3(1.7) | 75.2(1.6) | 71.6(2.0) | 79.6(1.3) | 41.0(3.6) | 53.7(3.6) |
| | 1978 | 73.2(1.8) | 73.0(3.0) | 73.3(2.0) | 78.7(1.9) | 41.1(3.6) | 57.6(4.3) |
| Understand decimal place value | 1996 | 78.8(1.2) | 80.3(1.6) | 77.4(1.6) | 83.5(1.3) | 67.2(3.5) | 57.1(3.1) |
| | 1994 | 75.7(1.2) | 77.2(1.7) | 74.4(1.9) | 82.3(1.1) | 54.3(3.4) | 59.5(5.1) |
| | 1992 | 76.4(1.7) | 78.0(1.7) | 74.8(2.1) | 81.1(1.4) | 57.9(4.7) | 62.8(5.8) |
| | 1990 | 74.1(1.5) | 77.2(2.0) | 70.9(1.8) | 77.4(1.5) | 61.8(5.6) | 57.2(8.2) |
| | 1986 | 69.4(1.7) | 71.7(2.1) | 67.4(2.1) | 74.7(1.5) | 48.1(4.9) | 51.0(5.4) |
| | 1982 | 71.6(1.7) | 73.7(1.7) | 69.7(2.5) | 75.9(1.7) | 46.7(4.5) | 62.6(3.3) |
| | 1978 | 72.3(2.0) | 72.1(2.8) | 72.5(2.1) | 76.3(2.2) | 52.5(4.1) | 52.6(7.5) |
| Divide integers | 1996 | 82.3(1.2) | 79.0(1.7) | 85.3(1.7) | 84.7(1.5) | 72.9(2.4) | 73.1(5.2) |
| | 1994 | 83.0(1.1) | 80.8(1.7) | 85.7(1.1) | 84.8(1.3) | 77.8(3.3) | 76.3(3.2) |
| | 1992 | 82.1(1.1) | 79.6(1.6) | 84.7(1.3) | 83.6(1.3) | 76.9(2.9) | 73.0(3.3) |
| | 1990 | 80.8(1.4) | 78.2(1.7) | 83.4(1.5) | 82.2(1.5) | 75.7(3.9) | 69.9(6.2) |
| | 1986 | 76.3(1.7) | 75.0(2.4) | 77.4(1.7) | 78.2(1.8) | 67.5(3.4) | 66.3(6.1) |
| | 1982 | 68.6(2.1) | 70.0(2.4) | 67.3(2.6) | 71.2(2.5) | 55.6(2.8) | 55.7(3.7) |
| | 1978 | 67.1(1.8) | 64.5(2.6) | 69.8(1.6) | 69.3(2.2) | 50.5(4.4) | 64.5(2.9) |
| Divide integers | 1996 | 69.3(2.1) | 69.6(2.3) | 69.0(2.8) | 72.2(2.8) | 60.2(3.0) | 57.3(5.9) |
| | 1994 | 70.3(1.5) | 68.0(2.1) | 73.1(1.6) | 72.6(1.9) | 60.5(3.1) | 63.9(5.8) |
| | 1992 | 69.9(1.5) | 67.6(1.7) | 72.3(1.9) | 72.6(1.4) | 59.3(4.6) | 57.3(5.8) |
| | 1990 | 67.4(1.6) | 66.4(2.1) | 68.5(1.8) | 69.7(1.7) | 59.1(5.8) | 52.5(8.1) |
| | 1986 | 61.6(1.7) | 63.6(2.3) | 59.8(2.1) | 65.6(1.7) | 43.8(3.6) | 45.0(4.4) |
| | 1982 | 60.2(2.2) | 62.0(2.5) | 58.6(2.5) | 63.2(2.7) | 42.8(3.6) | 49.7(3.3) |
| | 1978 | 56.2(2.2) | 55.1(2.8) | 57.4(2.0) | 59.5(2.5) | 36.7(4.0) | 46.8(4.8) |

(***) STANDARD ERROR ESTIMATE IS GREATER THAN 9.9

| ITEM DESCRIPTION | YEAR | NATION | MALE | FEMALE | WHITE | BLACK | HISPANIC |
|--------------------------------|------|-----------|-----------|-----------|-----------|-----------|-----------|
| Understand opposite of integer | 1996 | 76.5(1.6) | 74.9(2.0) | 78.0(1.8) | 79.5(1.9) | 64.6(3.6) | 64.1(4.5) |
| | 1994 | 73.4(1.0) | 74.0(1.7) | 72.7(1.5) | 76.5(1.4) | 59.6(2.7) | 68.8(3.9) |
| | 1992 | 73.9(1.0) | 71.4(1.6) | 76.5(1.4) | 76.6(1.2) | 61.2(4.5) | 63.5(2.6) |
| | 1990 | 72.0(1.8) | 70.8(2.4) | 73.3(1.9) | 74.0(2.2) | 63.5(4.9) | 64.5(4.0) |
| | 1986 | 68.0(1.6) | 69.4(1.9) | 66.7(2.1) | 71.6(1.5) | 52.1(4.4) | 54.6(4.8) |
| | 1982 | 67.5(2.0) | 69.1(2.5) | 66.0(2.1) | 72.0(1.3) | 46.1(4.1) | 46.2(***) |
| | 1978 | 72.0(1.6) | 72.5(1.8) | 71.5(1.9) | 75.7(1.8) | 50.9(2.8) | 53.8(5.3) |
| Understand opposite of integer | 1996 | 78.6(1.6) | 76.7(1.9) | 80.4(1.8) | 81.8(1.6) | 64.6(4.4) | 68.0(5.0) |
| | 1994 | 78.0(1.3) | 77.2(2.0) | 79.4(1.4) | 80.9(1.4) | 67.2(4.0) | 72.3(3.5) |
| | 1992 | 76.0(1.1) | 75.0(1.4) | 77.0(1.6) | 78.5(1.2) | 63.5(3.6) | 67.8(3.6) |
| | 1990 | 73.5(1.5) | 72.2(2.1) | 74.8(1.7) | 76.6(1.7) | 62.8(4.4) | 60.5(4.4) |
| | 1986 | 71.2(1.5) | 69.6(2.0) | 72.7(1.8) | 74.3(1.6) | 56.7(4.4) | 57.1(4.6) |
| | 1982 | 70.5(1.9) | 69.4(2.2) | 71.6(2.2) | 75.1(1.6) | 48.1(3.4) | 53.0(6.7) |
| | 1978 | 71.7(1.7) | 70.7(1.6) | 72.5(2.2) | 75.8(1.7) | 48.0(2.7) | 51.4(6.3) |
| Convert decimal to fraction | 1996 | 37.2(1.4) | 39.0(1.9) | 35.5(1.8) | 40.9(1.8) | 28.6(4.4) | 18.9(3.5) |
| | 1994 | 45.7(1.7) | 44.8(2.0) | 46.8(2.2) | 48.6(1.9) | 38.7(4.3) | 31.8(4.6) |
| | 1992 | 46.5(1.6) | 44.3(2.1) | 48.8(1.8) | 49.7(1.7) | 32.2(4.7) | 34.6(3.3) |
| | 1990 | 52.9(1.6) | 52.3(2.1) | 53.5(2.0) | 57.1(1.4) | 37.8(4.9) | 35.0(5.5) |
| | 1986 | 50.2(2.1) | 50.5(2.7) | 49.9(2.5) | 53.7(2.4) | 37.2(2.5) | 34.5(5.1) |
| | 1982 | 59.8(2.3) | 58.0(2.2) | 61.4(3.0) | 65.8(2.3) | 33.7(3.2) | 30.7(3.7) |
| | 1978 | 61.7(1.9) | 61.4(2.3) | 62.1(2.3) | 65.3(2.2) | 42.9(2.8) | 43.0(6.9) |
| Convert decimal to fraction | 1996 | 37.6(1.9) | 42.5(2.4) | 33.0(2.0) | 42.4(2.4) | 19.5(3.0) | 21.4(3.1) |
| | 1994 | 28.6(1.9) | 32.9(2.7) | 24.5(1.9) | 33.3(2.2) | 13.7(2.4) | 19.3(3.3) |
| | 1992 | 26.6(1.6) | 30.4(2.1) | 22.7(1.6) | 29.8(1.7) | 12.5(3.4) | 18.7(3.3) |
| | 1990 | 24.2(2.1) | 30.4(2.7) | 17.9(2.1) | 26.8(2.3) | 11.6(5.0) | 9.8(2.8) |
| | 1986 | 19.0(1.9) | 24.1(2.6) | 14.2(1.9) | 21.0(2.2) | 11.5(2.5) | 9.1(2.8) |
| | 1982 | 20.4(1.5) | 24.8(2.3) | 16.3(1.2) | 23.1(1.8) | 7.1(1.3) | 8.9(1.8) |
| | 1978 | 24.7(1.5) | 30.5(2.1) | 19.3(1.7) | 27.3(1.6) | 8.7(2.1) | 14.5(3.8) |

(***) STANDARD ERROR ESTIMATE IS GREATER THAN 9.9