

**Practice 10-4****Solving Quadratic Equations**

Solve each equation by finding square roots. If the equation has no real solution, write *no solution*. If the value is irrational, round to the nearest hundredth.

1.  $x^2 = 16$

4.  $x^2 + 16 = 0$

7.  $x^2 + 8 = -10$

10.  $x^2 = 80$

13.  $x^2 = 300$

16.  $x^2 + 8 = 72$

19.  $5x^2 + 20 = 30$

22.  $2x^2 - 7 = 74$

25.  $9x^2 = 1$

28.  $x^2 = 9$

31.  $4x^2 - 2 = 1$

34.  $2x^2 - 10 = -4$

37.  $7x^2 + 8 = 15$

40.  $x^2 - 400 = 0$

43.  $5x^2 + 25 = 90$

46.  $3x^2 - x^2 = 10$

49.  $-3 + 4x^2 = 2$

Solve each problem. If necessary, round to the nearest tenth.

53. The formula  $A = 6s^2$  will calculate the surface area of a cube. Suppose you have a cube that has a surface area of  $216 \text{ in.}^2$ . What is the length of each side?