



# Practice

## 10.2 Solving Equations by Using Square Roots

Find each square root. Round answers to the nearest hundredth.

1.  $\sqrt{1}$  \_\_\_\_\_
2.  $\sqrt{81}$  \_\_\_\_\_
3.  $\sqrt{16}$  \_\_\_\_\_
4.  $\sqrt{225}$  \_\_\_\_\_
5.  $\sqrt{30}$  \_\_\_\_\_
6.  $\sqrt{18}$  \_\_\_\_\_
7.  $\sqrt{110}$  \_\_\_\_\_
8.  $\sqrt{55}$  \_\_\_\_\_

Solve each equation for  $x$ . Round answers to the nearest hundredth.

9.  $x^2 = 16$  \_\_\_\_\_
10.  $x^2 = 900$  \_\_\_\_\_
11.  $x^2 = 75$  \_\_\_\_\_
12.  $x^2 = \frac{1}{4}$  \_\_\_\_\_
13.  $x^2 = \frac{4}{49}$  \_\_\_\_\_
14.  $x^2 = \frac{9}{25}$  \_\_\_\_\_
15.  $(x - 2)^2 = 16$  \_\_\_\_\_
16.  $(x + 2)^2 = 16$  \_\_\_\_\_
17.  $x^2 - 4 = 0$  \_\_\_\_\_
18.  $4 = (x + 3)^2$  \_\_\_\_\_
19.  $-(x + 3)^2 + 4 = 0$  \_\_\_\_\_
20.  $(x - 2)^2 - 36 = 0$  \_\_\_\_\_
21.  $(x - 3)^2 = 18$  \_\_\_\_\_
22.  $x^2 + 1 = 17$  \_\_\_\_\_
23.  $x^2 + 2 = 5$  \_\_\_\_\_
24.  $(x + 5)^2 = 7$  \_\_\_\_\_

Find the vertex, axis of symmetry, and zeros of each function.  
Sketch the graph.

25.  $f(x) = (x - 1)^2 - 1$  \_\_\_\_\_
26.  $g(x) = (x + 2)^2 - 4$  \_\_\_\_\_

