

**Practice B**

For use with pages 503–510

Evaluate the expression. Give the exact value if possible. Otherwise, approximate to the nearest hundredth.

1.  $-\sqrt{49}$

2.  $-\sqrt{81}$

3.  $\sqrt{0.25}$

4.  $-\sqrt{38}$

5.  $\pm\sqrt{0.16}$

6.  $\sqrt{12.25}$

7.  $\pm\sqrt{0.4}$

8.  $\sqrt{19.36}$

Evaluate  $\sqrt{b^2 - 4ac}$  for the given values.

9.  $a = 3, b = -6, c = 3$

10.  $a = 5, b = 8, c = 3$

11.  $a = -4, b = -9, c = -6$

12.  $a = 4.25, b = -10, c = 5$

13.  $a = -6, b = 5, c = -4$

14.  $a = -2, b = 9, c = 5$

Use a calculator to evaluate the expression. Round the results to the nearest hundredth.

15.  $\frac{8 \pm 3\sqrt{6}}{-1}$

16.  $\frac{9 \pm 2\sqrt{12}}{6}$

17.  $\frac{6 \pm 4\sqrt{5}}{7}$

18.  $\frac{6 \pm 3\sqrt{2}}{3}$

19.  $\frac{9 \pm 5\sqrt{8}}{-2}$

20.  $\frac{-3 \pm 0.2\sqrt{7}}{4}$

Solve the equation or write *no solution*. Write the solutions as integers if possible. Otherwise, write them as radical expressions.

21.  $x^2 = 49$

22.  $3y^2 = 192$

23.  $7a^2 = 0$

24.  $6 - 3x^2 = 27$

25.  $y^2 + 19 = 33$

26.  $8b^2 - 16 = 24$

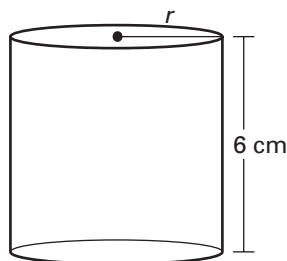
27.  $3x^2 + 9 = 84$

28.  $2x^2 - 7 = 1$

29.  $-4x^2 + 6 = -394$

30. **Geometry** Use the volume  $V$  to find the length of the radius. (Use  $\pi \approx 3.14$ .)

Cylinder:  $r = \sqrt{\frac{V}{\pi h}}$



Volume =  $230.79 \text{ cm}^3$

31. **Falling Object** An object is dropped from a height of 576 feet. How long does it take for the object to reach the ground? Assume there is no air resistance.