\_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

# Homework 2-5

Solve each equation for y. Then find the value of y for each value of x.

**1.** y + 5x = 6; x = -1, 0, 1**2.** 8x - 4y = -12; x = -3, -1, 1**3.** -3y = 2x - 9; x = -3, 0, 3**4.** 5x = -y + 6; x = 1, 2, 3**5.** 6y = -3x + 12; x = -4, -2, 0**6.** -5y + 10x = 5; x = -2, 0, 2

## Solve each equation for *p*.

**7.** 
$$xp + yp = z$$
 **8.**  $n = \frac{p-k}{j}$ 

**9.** 
$$a = b + cp$$
 **10.**  $\frac{p+3}{m} = -1$ 

### Solve each problem. Round to the nearest tenth, if necessary. Use 3.14 for $\pi$ .

**11.** What is the width of a rectangle with length 25 in. and area 375 in.<sup>2</sup>?

**12.** What is the radius of a circle with circumference 5 cm?

**13.** A triangle has base 15 ft and area 60 ft<sup>2</sup>. What is the height?

# 2-5 Homework (continued)

# Solve each problem. Round to the nearest tenth, if necessary.

- 14. In baseball, a player's batting average is calculated by using the formula Average =  $\frac{\text{Hits}}{\text{AtBats}}$ . Find the number of times a player has batted if he has 24 hits and a batting average of approximately 0.320.
- 15. Dan drove 512 miles in 8 hours. What was his average speed for the trip?

### Solve each equation for the given variable.

**16.** 
$$-2z - xy = x + 7$$
 for x

17.
$$\frac{a}{b}$$
 - 8 =  $\frac{c}{d}$  for a

**18.** 
$$6qr + 7rs - 2st = -9$$
 for  $r$  **19.**  $p = (\frac{m+n}{-5})$  for  $n$ 

- **20.** A large box shaped like a rectangular prism needs to be painted.
  - **a.** Write a formula for the area *A* to paint in terms of length *l*, width *w*, and height *h*.
  - **b.** Rewrite the formula to find *l* in terms of *A*, *h*, and *w*.
  - **c.** If h is 36 in., w is 28 in. and A is 6112 in.<sup>2</sup>, what is the length of the prism?