

Practice A

Solve the equation for y.

1.
$$\frac{2}{5}x + y = 7$$

2.
$$24 = 4x + 6y$$

3.
$$5x - \frac{1}{2}y = 3$$

4.
$$6\pi = x + 2y$$

- **5.** The formula d = 2r can be used to find the distance d traveled after 2 hours when driving at rate r.
 - **a.** Solve the formula for r.
 - **b.** Find the rate r when the distance traveled is 130 miles.

Solve the equation for the bold variable.

$$6. P = R + C$$

7.
$$p = \frac{X}{N}$$

8.
$$V = \frac{1}{3}\pi r^2 h$$

9.
$$A = \frac{1}{2}bh$$

- 10. The formula for the circumference of a circle with diameter d is $C = \pi d$.
 - **a.** Solve the formula for d.
 - **b.** The circumference of a circle is 8 inches. What is the diameter of the circle?
 - **c.** The circumference of a circle is 6π inches. What is the radius of the circle?
- 11. The formula for the area of a rhombus with diagonals of lengths c and d is $A = \frac{1}{2}cd$.
 - **a.** Solve the formula for c.
 - **b.** The area of a rhombus is 35 square feet. The length of one of the diagonals is 10 feet. What is the length of the other diagonal?
 - c. In a square (which is a rhombus), the lengths of the diagonals are the same. If a square has an area of 32 square feet, then what is the length of each diagonal?