**4-7B Lesson Master**

**SKILLS Objective C**

**Questions on SPUR Objectives**
See pages 245–249 for objectives.

In 1–11, solve for the stated variable.

1. \( x = \frac{1}{4}y + 2 \) for \( y \)
2. \( 6x + 8y = 24 \) for \( y \)
3. \( -25x + 5y = 50 \) for \( y \)
4. \( V = \frac{1}{3}bh \) for \( h \)
5. \( E = ku \) for \( u \)
6. \( 5x + 3y = 3x - y \) for \( y \)
7. \( \lambda = \frac{k}{p} \) for \( p \)
8. \( C = 2\pi x \) for \( x \)
9. \( R = \frac{q}{3} + \frac{q}{6} \) for \( q \)
10. \( \alpha = \frac{k}{\rho c} \) for \( c \)
11. \( A = Bc - 7D \) for \( D \)
12. \( A = P(1 + rt) \) for \( t \)
13. \( 7x + 2y = 10 \) for \( y \)
14. \( x = 2(y + 3) + 2(y - 4) \) for \( y \)
15. a. Given the equation \( y = 2x + 3 \), find one solution of the equation by finding the \( y \) value that corresponds to \( x = 1 \).

b. Solve the equation for \( x \).

c. Does the solution satisfy the equation in Part b?

16. a. Solve \( A = l \times w \) for \( w \).

b. Find \( w \) if \( A = 10 \) and \( l = 2 \).

17. Two students are asked to solve the equation \( y = 3x + 2 \) for \( x \).

Student A obtains \( x = \frac{y - 2}{3} \). Student B obtains \( x = \frac{y - 2}{3} \).

Which student is correct?

18. a. Solve the following equations for \( y \).

\[ y = 0.2 - \frac{x}{4}, \quad 5x + 20y = 4, \quad \text{and} \quad x = \frac{4 - 20y}{5} \]

b. Graph each equation on a calculator.

c. Which of these equations appear to be equivalent?