## 4-7B Lesson Master

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

(**SKILLS**) Objective C

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. 
$$\lambda = \frac{h}{p}$$
 for  $p$ 

8. 
$$C = 2x\pi$$
 for  $x$ 

**9.** 
$$R = \frac{q}{5} + \frac{q}{6}$$
 for  $q$ 

**10.** 
$$\alpha = \frac{k}{\rho c}$$
 for  $c$ 

**11.** 
$$A = Bc - 7D$$
 for  $D$ 

**12.** 
$$A = P(1 + rt)$$
 for  $t$ 

13. 
$$7x + zy = 10$$
 for  $y$ 

**14.** 
$$x = 2(y + 3) + 2(y - 4)$$
 for  $y$ 

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- **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  $x = \frac{y}{3} \frac{2}{3}$ . Which student is correct?
- **18.** a. Solve the following equations for *y*.

$$y = 0.2 - \frac{x}{4}$$
,  $5x + 20y = 4$ , and  $x = \frac{4 - 20y}{5}$ .

b. Graph each equation on a calculator.

c. Which of these equations appear to be equivalent?