

Name \_\_\_\_\_

**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  $x = 1$ .

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- b. Solve the equation for  $x$ .

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

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16. a. Solve  $A = l \times w$  for  $w$ .

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- b. Find  $w$  if  $A = 10$  and  $l = 2$ .

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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?

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18. a. Solve the following equations for  $y$ .  
 $y = 0.2 - \frac{x}{4}$ ,  $5x + 20y = 4$ , and  $x = \frac{4 - 20y}{5}$ .

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- b. Graph each equation on a calculator.
- c. Which of these equations appear to be equivalent?

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