

**LESSON  
MASTER**

**Questions on SPUR Objectives**  
See pages 210-213 for objectives.

**Skills Objective A**

In 1-4, simplify the expression.

1.  $(4x + -12) + 12$  \_\_\_\_\_ 2.  $-3.2 + -(-3.2)$  \_\_\_\_\_  
3.  $-(-8x)$  \_\_\_\_\_ 4.  $-15 + (3y + 15)$  \_\_\_\_\_

**Skills Objective B**

In 5-10, solve and check the equation.

5.  $y + 18 = -4$  6.  $-4a = 628$  7.  $48 = n + -10$   
8.  $y + \frac{3}{11} = -\frac{8}{11}$  9.  $\frac{7}{8} = \frac{3}{4}m$  10.  $624.5 + x = 453.9$

**Properties Objective E**

In 11-13, give a. another instance of the property illustrated and b. the name of the property.

11.  $-(-76) = 76$  a. \_\_\_\_\_ b. \_\_\_\_\_  
12.  $0 + \frac{2}{3} = \frac{2}{3}$  a. \_\_\_\_\_ b. \_\_\_\_\_  
13.  $\pi + (-\pi) = 0$  a. \_\_\_\_\_ b. \_\_\_\_\_

In 14 and 15, give the number that should be added to both sides to solve the equation quickly.

14.  $82 = y + 24$  \_\_\_\_\_ 15.  $-12 + x = 92$  \_\_\_\_\_

**Uses Objective G**

For 16 and 17, write an addition equation to describe the situation and solve the equation to answer the question.

16. During the summer of 1993 the Mississippi River flooded its banks. In St. Louis, the water was 17 feet above flood stage when it crested at 47 feet. What is considered flood stage at St. Louis?

\_\_\_\_\_ equation

\_\_\_\_\_ answer

17. The low temperature of the day occurred at 4 A.M.. By 10 A.M. it had risen  $12^\circ$  to  $-9^\circ$ . What was the 4 A.M. temperature?

\_\_\_\_\_ equation

\_\_\_\_\_ answer

**LESSON  
MASTER****Questions on SPUR Objectives****Skills** Objective A: Use properties of addition to simplify expressions.**In 1–8, simplify the expression.**

- |                                       |                             |
|---------------------------------------|-----------------------------|
| 1. $-(-94)$ _____                     | 2. $-8.66 + 8.66$ _____     |
| 3. $-\frac{6}{5} + \frac{6}{5}$ _____ | 4. $-4g + 0$ _____          |
| 5. $-(-704) + -704$ _____             | 6. $(e + -232) + 232$ _____ |
| 7. $(-44 + 99) + (-99 + 44)$ _____    | 8. $(9v + -16) + 16$ _____  |

**Skills** Objective B: Solve and check equations of the form  $x + a = b$ .

9. a. Check whether  $x = 6.1$  is the correct solution to the equation  $-14.2 + x = 8.1$ .

- b. Use another method to check whether  $x = 6.1$  is the correct solution.

**In 10–18, solve and check the equation.**

- |  |                          |                     |
|--|--------------------------|---------------------|
| 10. $u + -13 = 7$                      | 11. $2e = 852$           | 12. $66 = f + 88$   |
| 13. $-21 + r = -37$                    | 14. $45 = -\frac{5}{8}x$ | 15. $2.8 + w = 7.4$ |
| 16. $\frac{7}{12} + d = -\frac{5}{12}$ | 17. $-5.09 = -5.09 + h$  | 18. $-6.15 = -.03k$ |

► **LESSON MASTER 3-2 B** page 2

**Properties** Objective E: Identify and apply the Additive Identity Property, the Property of Opposites, the Opposite of Opposites Property, and the Addition Property of Equality.

In 19–21, a. give another instance of the property illustrated and b. name the property.

19.  $\frac{5}{9} + -\frac{5}{9} = 0$  a. \_\_\_\_\_ b. \_\_\_\_\_

20.  $0 + \pi = \pi$  a. \_\_\_\_\_ b. \_\_\_\_\_

21.  $-(-19) = 19$  a. \_\_\_\_\_ b. \_\_\_\_\_

In 22 and 23, give the number that should be added to both sides to solve the equation quickly.

22.  $x + -18 = 94$  \_\_\_\_\_ 23.  $5.11 = y + 4.9$  \_\_\_\_\_

24. a. If 37 is added to both sides of the equation  $m + 22 = -4$ , what is the result? \_\_\_\_\_

b. Does the equation you wrote for part a have the same solution as the equation  $m + 22 = -4$ ? \_\_\_\_\_

**Uses** Objective G: Apply models for addition to write and solve equations of the form  $x + a = b$ .

In 25 and 26, write and solve an equation to answer the question.

25. After receiving orders from the captain, a submarine rose 120 feet to 40 feet below sea level. At what level was the submarine before the captain gave the orders?

\_\_\_\_\_ equation

\_\_\_\_\_ answer

26. Mr. Craig received notice that his checking account was overdrawn by \$55. After making a deposit, his new balance was \$480. How much did he deposit?

\_\_\_\_\_ equation

\_\_\_\_\_ answer