## 1-1A Lesson Master

Questions on SPUR Objectives See pages 60–63 for objectives.\*

## **VOCABULARY**

In 1–4, match the name of the algebraic definition or property with its representation using variables where *a*, *b*, *c* are real numbers.

- 1. Algebraic Definition of Subtraction
- 2. Algebraic Definition of Division
- 3. Associative Property of Multiplication
- 4. Associative Property of Addition

A 
$$(ab)c = a(bc)$$

B 
$$a - b = a + -b$$

$$C (a + b) + c = a + (b + c)$$

$$\mathbf{D} \quad a \div b = a \cdot \frac{1}{b} \text{ if } b \neq 0$$

## **SKILLS** Objective A

In 5 and 6, state the first operation performed and evaluate each expression.

5. 
$$\sqrt{(3+6)}$$

6. 
$$(14 \cdot 4 + 7)^2$$

In 7 and 8, evaluate the algebraic expression for the given value of the variable.

7. 
$$5a^4$$
 for  $a = -6$ 

**8.** 
$$\left(\frac{x+y}{x-y}\right)^2$$
 for  $x = 9$  and  $y = 5$ 

## **PROPERTIES** ) Objectives F, G

In 9 and 10, rewrite the expression using addition instead of subtraction.

9. 
$$3-7$$

**10.** 
$$(7-5) \cdot 4$$

In 11 and 12, rewrite the expression using multiplication instead of division.

12. 
$$(8+5) \div 8$$

13. If x + 58 = y + 15 and y + 15 = w, what conclusion can be made based on the Transitive Property of Equality?

\*See the Student Edition for SPUR objectives.