Lesson 8 Homework Practice

Simplify Expressions

Simplify each expression.

1.
$$(7 + x) + 7x$$

2.
$$5 \cdot (4 \cdot x)$$

3.
$$15y + (x + 9y)$$

4.
$$(6x + 21) + 14$$

5.
$$3x + 2 + 11x$$

6.
$$(x + 13y) + 8y$$

7.
$$(12y + 2x) + 4y$$

8. 8 •
$$(x • 4)$$

10.
$$3x + (7x + 10)$$

11.
$$5x + (2 + x)$$

14.
$$14x + 9y + 6x$$

15.
$$5x + (24 + 14x)$$

For Exercises 16 through 20, write and simplify an expression that represents each verbal expression.

- **16.** The sum of three and a number is added to twenty-four.
- 17. The product of six and a number is multiplied by nine.
- **18.** The sum of 10 times a number and fifteen is added to eleven times the same number.
- **19.** Two sets of the sum of a number and eight are added to five times the same number.
- 20. Three sets of a sum of a number and four are added to the sum of seven times the same number and thirteen.
- 21. Five friends went to a baseball game. Three of the friends each bought a ticket for x dollars and a soda for \$6.00. The other two friends each bought only tickets. Write and simplify an expression that represents the amount of money spent.