Lesson 6 Homework Practice

The Distributive Property

Find each product mentally. Show the steps you used.

1. 8×34 　　　　　　　**2.** 5×47 　　　　　　　**3.** $12 \times 4\frac{3}{4}$

4. $8 \times 3\frac{3}{4}$ 　　　　　　　**5.** 6×4.4 　　　　　　　**6.** 7×2.9

Use the Distributive Property to rewrite each algebraic expression.

7. $6(n + 4)$ 　　　　　　　**8.** $15(2 + r)$ 　　　　　　　**9.** $8(s + 5)$

10. $3(b + 8)$ 　　　　　　　**11.** $5(6 + b)$ 　　　　　　　**12.** $9(3 + v)$

13. $7(r - 7)$ 　　　　　　　**14.** $12(4 - v)$ 　　　　　　　**15.** $11(3 - s)$

16. MOVIES Use the table that shows the prices of tickets and various food items at the movie theater.

Item	Price
Ticket	$8.50
Popcorn	$5.25
Soda	$4.00
Candy	$3.75
Nachos	$6.50

　a. Four friends each bought a ticket and a bag of popcorn. How much total money did they spend?

　b. How much money will the movie theater make if a birthday party of 12 kids each buys a box of candy and a soda but does not go see a movie?

　c. How much more money will a person spend who buys three orders of nachos than a person who buys three bags of popcorn?

Lesson 7 Homework Practice

Equivalent 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. $8 \cdot (x \cdot 4)$

9. $3(5x)$

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

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

12. $4 \cdot x \cdot 10$

13. $(x \cdot 12) \cdot 3$

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

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

ALGEBRA For Exercises 16 through 21, translate each verbal expression into an algebraic expression. Then, simplify the 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.