

Lesson 4.4 ~ The Distributive Property

Name _____ Period _____ Date _____

Use the Distributive Property to rewrite each expression without parentheses.

1. $6(x + 3)$

2. $5(y - 4)$

3. $-7(m - 1)$

4. $9(3x + 2)$

5. $-3(7 + 3p)$

6. $\frac{1}{2}(8x - 10)$

Solve each equation for the variable. Check your solution.

7. $2(x + 7) = 20$

8. $6(x - 3) = -24$

9. $9 = 3(x - 11)$

10. $5(2x - 4) = 60$

11. $\frac{1}{4}(8x + 20) = 11$

12. $10 = -5(x - 1)$

13. $2(2x - 1) = -22$

14. $-3 = -2(x + 1)$

15. $5(x + 1.1) = 18.5$

16. Jacob has kept a food journal of the last 14 days. He has eaten 200 calories less than his normal intake by not eating ice cream every night. He calculated that he has eaten 30,800 calories over the last 14 days.

a. The equation $14(x - 200) = 30800$ represents this situation. What does x represent in the equation?

b. Solve the equation and determine what Jacob's normal calorie intake was before he stopped eating ice cream.