2-2 The Distributive Property (continued)

Example 3

Simplify.

a.
$$3(4m + 5)$$

b.
$$4(6 - x)$$

Solution

Use the distributive property.

a.
$$3(4m + 5) = 3(4m) + 3(5)$$

= $12m + 15$

b.
$$4(6-x) = 4(6) - 4(x) = 24 - 4x$$

Simplify.

25.
$$2(m + 5)$$

26.
$$7(x-4)$$

27.
$$3(3n + 6)$$

28.
$$5(7z - 2)$$

29.
$$9(6-c)$$

30.
$$1(4 + y)$$

31.
$$6(3 - 4x)$$

32.
$$4(5 + 7w)$$

33.
$$8(a - 6)$$

34.
$$3(n + 4)$$

35.
$$5(6m + 2)$$

36.
$$7(8p - 3)$$

37.
$$6(9 - w)$$

38.
$$2(8 - 7c)$$

39.
$$9(3 + 5n)$$

40. Eric Anderson bought 3 videotapes for \$4.50 each and 3 CDs for \$12.50 each. How much more did he spend on the CDs than on videotapes?

Spiral Review

- **41.** Evaluate mn when m = 6 and n = 8. (Lesson 1-1)
- **42.** Find the sum: 2.84 + 0.75 (*Toolbox Skill 11*)
- **43.** Simplify: 6(2y + 8) (Lesson 2-2)
- 44. Is 216 divisible by 3? by 9? (Toolbox Skill 16)
- **45.** Evaluate $3x^4$ when x = 3. (Lesson 1-9)