2.4 Multiply Real Numbers

pp. 88–90

EXAMPLE

Find the product.

a. $-4(12) = -48$ — Different signs; product is negative.

b. $\frac{1}{2}(-6)(-3) = -3(-3)$ — Multiply $\frac{1}{2}$ and -6.

$= 9$ — Same signs; product is positive.

EXERCISES

EXAMPLES 1, 3, and 4 on pp. 88–90 for Exs. 29–35

Find the product.

29. $15(-4)$ **30.** $-7.5(-8)$ **31.** $-\frac{2}{5}(-5)(-9)$

Find the product. *Justify* your steps.

32. $-4(-y)(-7)$ **33.** $-\frac{1}{3}x \cdot (-18)$ **34.** $2.5(-4z)(-2)$

35. SWIMMING POOLS The water level of a swimming pool is 3.3 feet and changes at an average rate of -0.14 feet per day due to water evaporation. What will the water level of the pool be after 4 days?

2.5 Apply the Distributive Property

pp. 96–98

EXAMPLE

Use the distributive property to write an equivalent expression.

a. $5(x + 3) = 5(x) + 5(3)$ — Distribute 5.

$= 5x + 15$ — Simplify.

b. $(7 - y)(-2y) = 7(-2y) - y(-2y)$ — Distribute $-2y$.

$= -14y + 2y^2$ — Simplify.

EXERCISES

EXAMPLES 1, 2, 4, and 5 on pp. 96–98 for Exs. 36–42

Use the distributive property to write an equivalent expression.

36. $8(5 - x)$ **37.** $-3(y + 9)$ **38.** $(z - 4)(-z)$

Simplify the expression.

39. $3(x - 2) + 14$ **40.** $9.1 - 4(m + 3.2)$ **41.** $5n + \frac{1}{2}(8n - 7)$

42. PARTY COSTS You are buying 10 pizzas for a party. Cheese pizzas cost \$11 each, and single topping pizzas cost \$13 each. Write an equation that gives the total cost C (in dollars) as a function of the number p of cheese pizzas that you buy. Then find the total cost if you buy 4 cheese pizzas.