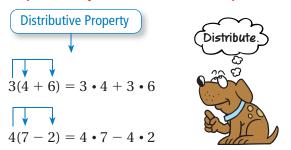
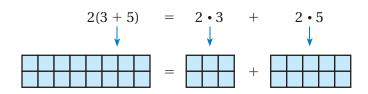
REVIEW: Distributive Property

Name

Key Concept and Vocabulary —



Visual Model



Skill Examples

1.
$$3(9+4)=3 \cdot 9 + 3 \cdot 4$$

2.
$$7(10-3) = 7 \cdot 10 - 7 \cdot 3$$

3.
$$6 \cdot 8 + 6 \cdot 7 = 6(8 + 7)$$

4.
$$12 \cdot 9 - 12 \cdot 2 = 12(9 - 2)$$

5.
$$5(2+5+3) = 5 \cdot 2 + 5 \cdot 5 + 5 \cdot 3$$

Application Example

6. You buy 3 hot dogs for \$1.25 each and 3 sodas for \$0.75 each. Find the total cost.

$$3(1.25) + 3(0.75) = 3(1.25 + 0.75)$$

= $3(2.00)$
= 6

The total cost is \$6.00.

PRACTICE MAKES PURR-FECT

Check your answers at BigIdeasMath.com. —

Use the Distributive Property to rewrite the expression.

7.
$$3(4+5) = 3 \cdot 4 + 3 \cdot 5$$

8.
$$5(8-3) = 5 \cdot 8 - 5 \cdot 3$$

7.
$$3(4+5) = 3 \cdot 4 + 3 \cdot 5$$
 8. $5(8-3) = 5 \cdot 8 - 5 \cdot 3$ **9.** $9(11+7) = 9 \cdot 11 + 9 \cdot 7$

10.
$$8(27-9) = 8 \cdot 27 - 8 \cdot 9$$
 11. $6(17-7) = 6 \cdot 17 - 6 \cdot 7$ **12.** $4(7+3+2) = 2$

$$4 \cdot 7 + 4 \cdot 3 + 4 \cdot 2$$

13.
$$5 \cdot 7 + 5 \cdot 3$$
 50. 14. $2 \cdot 9 - 2 \cdot 6 =$ **20. 15.** $7 \cdot 4 + 7 \cdot 8 =$ **70. 70. 70. 17**

14.
$$2 \cdot 9 - 2 \cdot 6 = 2(9 - 6)$$

15.
$$7 \cdot 4 + 7 \cdot 8 = 7(4 + 8)$$

 $3(3+2) = 3 \cdot 3 + 3 \cdot 2$

$$2(2+3) = 2 \cdot 2 + 2 \cdot 3$$

18. MENTAL MATH You buy 5 hot dogs for \$1.29 each and 5 sodas for \$0.71 each. Show how you can use mental math to find the total cost.

5(1.29) + 5(0.71) = 5(1.29 + 0.71) = 5(2.00) = \$10

19. EXTENSION Does the Distributive Property apply to a combination of addition and subtraction? Decide using the expression 3(7 + 5 - 4).

yes;
$$3(7 + 5 - 4) = 3(8) = 24$$
 and $3(7 + 5 - 4) = 3 \cdot 7 + 3 \cdot 5 - 3 \cdot 4 = 21 + 15 - 12 = 24$