REVIEW: Distributive Property

Name _____

Key Concept and Vocabulary

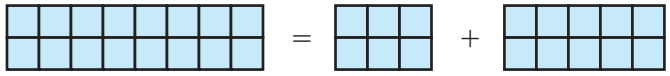
Distributive Property

$3(4 + 6) = 3 \cdot 4 + 3 \cdot 6$

$4(7 - 2) = 4 \cdot 7 - 4 \cdot 2$

Visual Model

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



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.

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Check your answers at BigIdeasMath.com.

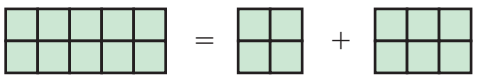
Use the Distributive Property to rewrite the expression.

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

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

13. $5 \cdot 7 + 5 \cdot 3$ _____ **14.** $2 \cdot 9 - 2 \cdot 6 =$ _____ **15.** $7 \cdot 4 + 7 \cdot 8 =$ _____

16.



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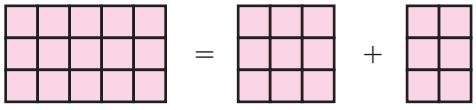
17.



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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.

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

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