

REVIEW: Simplifying Algebraic Expressions

Name _____

Key Concept and Vocabulary

Combine variable terms.

$2x + 4 + 3x - 1 = 5x + 3$

Combine numerical terms.

Simplifying expressions

Visual Model

Algebra Tiles

Skill Examples

- $2x + 5x = 7x$
- $1 + n + 4 = n + 5$
- $(2x + 3) - (x + 2) = x + 1$
- $2(y - 1) + 3(y + 2) = 5y + 4$

Application Example

- The original cost of a shirt is x dollars. The shirt is on sale for 30% off. Write a simplified expression for the sale price.



$$x - 0.3x = 0.7x$$

••• The sale price is $0.7x$.



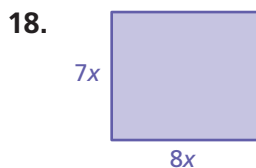
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Check your answers at BigIdeasMath.com.

Simplify the expression. (Remove parentheses and combine like terms.)

- $4x + 6x =$ _____
- $9x + 3 - 6x - 2 =$ _____
- $7m - 2m + 5m =$ _____
- $3x + 6 - x =$ _____
- $(x + 6) - (x + 6) =$ _____
- $(5x + 4) - 2(x + 1) =$ _____
- $3n + 5 - 2n =$ _____
- $3(x + 2) =$ _____
- $2 - (x + 1) =$ _____
- $5 - (1 - n) =$ _____
- $(4x - 2) + 3(x + 1) =$ _____
- $5(x + 2) - 2(x + 2) =$ _____

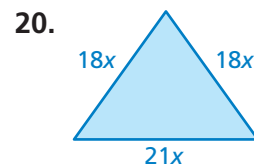
Write a simplified expression for the perimeter of the rectangle or triangle.



Perimeter = _____



Perimeter = _____



Perimeter = _____

- The original cost of a cell phone is x dollars. The phone is on sale for 35% off. Write a simplified expression for the sale cost. _____

