REVIEW: Simplifying Expressions

Name _____

Key Concept and Vocabulary

Combine variable terms.

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

Combine numerical terms.

Simplifying Expressions

Visual Model

Algebra Tiles
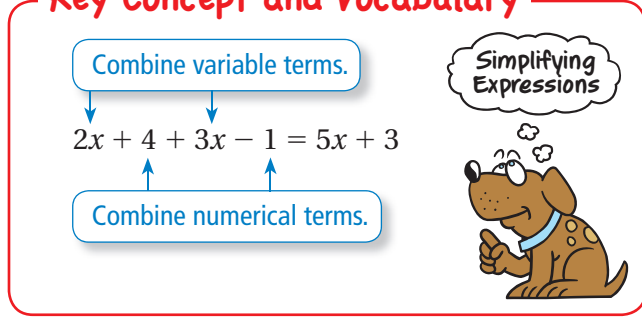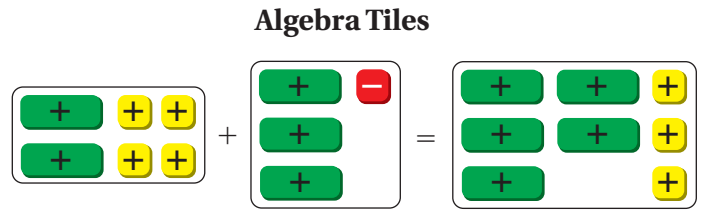
Skill Examples

1. $2x + 5x = 7x$

2. $1 + n + 4 = n + 5$

3. $(2x + 3) - (x + 2) = x + 1$

4. $2(y - 1) + 3(y + 2) = 5y + 4$

Application Example

5. The original cost of a shirt is x dollars. The shirt is on sale for 30% off. Write a simplifed expression for the sale cost.

30% Off

$x - 0.3x = 0.7x$

⋰ The sale cost is $0.7x$.

PRACTICE MAKES *PURR*-FECT™
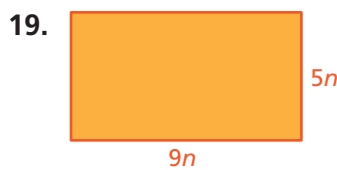
Check your answers at BigIdeasMath.com.

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

6. $4x + 6x =$ _____

7. $3n + 5 - 2n =$ _____

8. $9x + 3 - 6x - 2 =$ _____

9. $3(x + 2) =$ _____

10. $7m - 2m + 5m =$ _____

11. $2 - (x + 1) =$ _____

12. $(3x + 6) - x =$ _____

13. $5 - (1 - n) =$ _____

14. $(x + 6) - (x + 6) =$ _____

15. $(4x - 2) + 3(x + 1) =$ _____

16. $(5x + 4) - 2(x + 1) =$ _____

17. $5(x + 2) - 2(x + 2) =$ _____

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

18.

$7x$

$8x$

Perimeter = _____

19.

$5n$

$9n$

Perimeter = _____

20.

$18x$ $18x$

$21x$
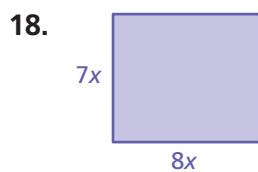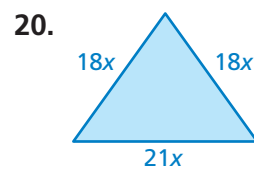
Perimeter = _____

21. 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. _____

35% Off