

# 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 simplified expression for the sale cost.



$$x - 0.3x = 0.7x$$

••• The sale cost is  $0.7x$ .



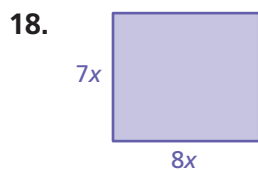
## PRACTICE MAKES PURR-FECT™

Check your answers at [BigIdeasMath.com](http://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. $5(x + 2) - 2(x + 2) =$ _____ |

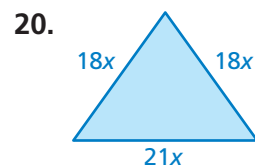
Write a simplified expression for the perimeter of the rectangle or triangle.



Perimeter = \_\_\_\_\_



Perimeter = \_\_\_\_\_



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. \_\_\_\_\_

