

2-4

## Solving Equations

with variable on both sides

1. Simplify the expressions on each side.
2. Use the Addition/Subtraction Properties to get the variables on one side and the numbers on the other side. Simplify.
3. Use the Multiplication/Division Properties to solve.

Example 1 - Variable on each side

$$8 + 5x = 7x - 2$$

Example 2: Grouping Symbols

$$\frac{1}{3}(18 + 12y) = 6(2y - 7)$$

Example 3: Special Solutions  
 $8(5n - 2) = 10(32 + 4n)$

## Example 4: Special Solutions

$$4(m + 20) = \frac{1}{5}(20m + 400)$$

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Write an equation to find the value of  $h$  so that the figures have the same area:

Reminder:

Formula for area of a triangle: Area =

