

# Lesson 3 Reteach

## Write Two-Step Equations

Some verbal sentences translate into two step equations.

### Example 1

Translate each sentence into an equation.

#### Sentence

Four more than three times a number is 19.

Five is seven less than twice a number.

Seven more than the quotient of a number and 3 is 10.

#### Equation

$$3n + 4 = 19$$

$$5 = 2n - 7$$

$$7 + \frac{n}{3} = 10$$

After a sentence has been translated into a two step equation, you can solve the equation.

### Example 2

Translate the sentence into an equation. Then find the number. **Thirteen more than five times a number is 28.**

**Words** Thirteen more than five times a number is 28.

**Variable** Let  $n$  = the number.

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| <b>Equation</b> | $5n + 13 = 28$ $\underline{-13 = -13}$ $5n = 15$ $\frac{5n}{5} = \frac{15}{5}$ $n = 3$ | <p>Write the equation.</p> <p>Subtraction Property of Equality</p> <p>Simplify.</p> <p>Division Property of Equality</p> |
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Therefore, the number is 3.

### Exercises

Define a variable. Then translate each sentence into an equation.

Then find each number.

1. Five more than twice a number is 7.
  
  
  
  
  
  
  
  
  
  
2. Fourteen more than three times a number is 2.

3. Seven less than twice a number is 5.

4. Two more than four times a number is  $-10$ .

5. Eight less than three times a number is  $-14$ .

6. Three more than the quotient of a number and 2 is 7.