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**LESSON**  
**11-1 Solving Two-Step Equations**

To solve equations with more than one operation, or a two-step equation, follow the order of operations in reverse. First add or subtract then, multiply or divide.

**Solving Two-Step Equations Using Division**

Solve. Check your answer.

$$7x + 9 = 37$$

\_\_\_\_\_ What number do you subtract from both sides? \_\_\_\_\_

$$7x = \underline{\hspace{2cm}}$$

$$\frac{7x}{7} = \frac{28}{7}$$

What number do you divide by to isolate the variable? \_\_\_\_\_

$$x = \underline{\hspace{2cm}}$$

What does x equal? \_\_\_\_\_

Check:

$$7x + 9 = 37$$

$7(\underline{\hspace{1cm}}) + 9 \stackrel{?}{=} 37$  Substitute \_\_\_\_\_ for x into the equation.

$\underline{\hspace{1cm}} + 9 \stackrel{?}{=} 37$  Multiply.

$\underline{\hspace{1cm}} = 37$  Does the answer check? \_\_\_\_\_

**Solving Two-Step Equation Using Multiplication**

Solve. Check your answer.

$$9 + \frac{p}{8} = 16$$

\_\_\_\_\_ What number do you subtract from both sides? \_\_\_\_\_

$$\frac{p}{8} = \underline{\hspace{2cm}}$$

$(\underline{\hspace{1cm}}) \frac{p}{8} = (7) \underline{\hspace{2cm}}$  What number do you multiply by to isolate the variable? \_\_\_\_\_

$$p = \underline{\hspace{2cm}}$$

Check:

$$9 + \frac{p}{8} = 16$$

$9 + \frac{56}{8} \stackrel{?}{=} 16$  Substitute \_\_\_\_\_ for p into the equation.

$9 + \underline{\hspace{1cm}} \stackrel{?}{=} 16$  Divide.

$\underline{\hspace{1cm}} = 16$  Does the answer check? \_\_\_\_\_