

Lesson 1 Reteach

Solve One-Step Addition and Subtraction Equations

Remember, equations must always remain balanced. If you subtract the same number from each side of an equation, the two sides remain equal. Also, if you add the same number to each side of an equation, the two sides remain equal.

Example 1

Solve $x + 5 = 11$. Check your solution.

$$\begin{array}{r} x + 5 = 11 \\ - 5 = -5 \\ \hline x = 6 \end{array}$$

Write the equation.
Subtract 5 from each side.
Simplify.

Check $x + 5 = 11$ Write the original equation.
 $6 + 5 \stackrel{?}{=} 11$ Replace x with 6.
 $11 = 11 \checkmark$ This sentence is true.

The solution is 6.

Example 2

Solve $15 = t - 12$. Check your solution.

$$\begin{array}{r} 15 = t - 12 \\ + 12 = + 12 \\ \hline 27 = t \end{array}$$

Write the equation.
Add 12 to each side.
Simplify.

Check $15 = t - 12$ Write the original equation.
 $15 \stackrel{?}{=} 27 - 12$ Replace t with 27.
 $15 = 15 \checkmark$ This sentence is true.

The solution is 27.

Exercises

Solve each equation. Check your solution.

1. $h + 3 = 14$

2. $m + 8 = 22$

3. $p + 5 = 15$

4. $17 = y + 8$

9. $b - 3 = 6$

10. $7 = c - 5$

11. $j - 12 = 18$

12. $v - 4 = 18$

Lesson 2 Reteach

Multiplication and Division Equations

Use the Division Property of Equality to solve multiplication equations and the Multiplication Property of Equality to solve division equations.

The **Division Property of Equality** states that if you divide each side of an equation by the same nonzero number, the two sides remain equal.

The **Multiplication Property of Equality** states that if you multiply each side of an equation by the same number, the two sides remain equal.

Example 1

Solve $30 = 6x$.

$$30 = 6x$$

Write the equation.

$$\frac{30}{6} = \frac{6x}{6}$$

Divide each side of the equation by 6.

$$5 = x$$

$$30 \div 6 = 5.$$

The solution is 5.

Example 2

Solve $\frac{x}{-5} = -2$.

$$\frac{x}{-5} = -2$$

Write the equation.

$$\frac{x}{-5}(-5) = -2(-5)$$

Multiply each side of the equation by -5 .

$$x = 10$$

$$-2(-5) = 10.$$

The solution is 10.

Exercises

Solve each equation. Check your solution.

1. $3x = 12$

4. $14 = 2b$

5. $\frac{x}{5} = 12$

8. $-7y = 42$

9. $\frac{m}{6} = -4$