

Lesson 1 - 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 1Solve $x + 5 = 11$. 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.

Please show both the steps and how you checked your answer to receive full credit

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 2Solve $15 = t - 12$. 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 1 Skills Practice

Solve One-Step Addition and Subtraction Equations

Solve each equation. Check your solution.

1. $x + 2 = 8$

2. $y + 7 = 9$

3. $a + 5 = 12$

7. $b - 4 = 9$

8. $8 = c - 4$

9. $11 = t - 7$

13. $72 = 24 + w$

14. $86 + y = 99$

15. $6 + y = -8$

19. $98 = t - 18$

20. $12 = g - 56$

21. $x - 18 = -2$