

Name: _____ Date: _____ Period: _____

Solving Equations – Is It Correct?

Directions: Carlos solved the following equations but was having some trouble. In each of the following problems, Carlos made a mistake. See if you can help Carlos fix his mistakes. Examine the problem. When you find the mistake, circle it. Then, in the space provided, explain why it is a mistake, and then solve the equation correctly.

Carlos' Work	Explain: What mistake did he make?	Corrected Solution
1. $\frac{-6t}{6} = \frac{30}{6}$ $t = 5$		
2. $\frac{3}{4} \cdot \frac{3}{4}x = 12 \cdot \frac{3}{4}$ $x = 9$		
3. $\begin{array}{r} 8 - 5c = -37 \\ -8 \quad -8 \\ \hline 5c = -45 \\ \frac{5c}{5} = \frac{-45}{5} \\ c = -9 \end{array}$		
4. $\frac{x+1}{3} = 2-1$ $3 \cdot \frac{x}{3} = 1 \cdot 3$ $x = 3$		
5. $\begin{array}{r} 4x - 3 = 17 \\ +3 \quad +3 \\ \hline 4x = 20 \\ -4 \quad -4 \\ \hline x = 16 \end{array}$		

<p>6. $3(2x - 4) = 8$</p> $\begin{array}{r} 6x - 4 = 8 \\ +4 \quad +4 \\ \hline 6x = 12 \\ \frac{6x}{6} = \frac{12}{6} \\ x = 2 \end{array}$		
<p>7. $3x + 2x - 6 = 24$</p> $\begin{array}{r} -2x - 2x \\ \hline x - 6 = 24 \\ +6 \quad +6 \\ \hline x = 30 \end{array}$		
<p>8. $5x + 1 = -2x - 8$</p> $\begin{array}{r} 3x + 1 = -8 \\ -1 \quad -1 \\ \hline 3x = -9 \\ \frac{3x}{3} = \frac{-9}{3} \\ x = -3 \end{array}$		
<p>9. $-2(x - 2) = 14$</p> $\begin{array}{r} -2x - 4 = 14 \\ +4 \quad +4 \\ \hline -2x = 18 \\ \frac{-2x}{-2} = \frac{18}{-2} \\ x = -9 \end{array}$		
<p>10. $3(2x + 1) + 4 = 10$</p> $\begin{array}{r} 6x + 3 + 4 = 10 \\ 9x + 4 = 10 \\ -4 \quad -4 \\ \hline 9x = 6 \\ \frac{9x}{9} = \frac{6}{9} \\ x = \frac{6}{9} = \frac{2}{3} \end{array}$		

Reflect: Which of the mistakes above have you made? Why do you think you have made those mistakes? How will you avoid these common mistakes?