

Solving Two-Step Equations - SHOW ALL YOUR STEPS

$$\begin{array}{r} 4y + 1 = 13 \\ -1 \quad -1 \\ \hline 4y = 12 \\ \frac{4}{4} \quad \frac{12}{4} \\ \hline y = 3 \end{array}$$

CHECK  
 $4(3) + 1 = 13$   
 $12 + 1 = 13$  ✓

$$\begin{array}{r} 6x + 2 = 26 \\ -2 \quad -2 \\ \hline 6x = 24 \\ \frac{6}{6} \quad \frac{24}{6} \\ \hline x = 4 \end{array}$$

CHECK  
 $6(4) + 2 = 26$   
 $24 + 2 = 26$  ✓

$$\begin{array}{r} -3 = 5k + 7 \\ +7 \quad +7 \\ \hline -10 = 5k \\ \frac{-10}{5} = \frac{5k}{5} \\ \hline -2 = k \end{array}$$

CHECK  
 $-3 = 5(-2) + 7$   
 $-3 = -10 + 7$  ✓

$$\begin{array}{r} \frac{2}{3}n + 4 = -26 \\ -4 \quad -4 \\ \hline \frac{2}{3}n = -30 \\ \frac{2}{3} \cdot \frac{3}{2}n = -30 \cdot \frac{3}{2} \\ \hline n = -45 \end{array}$$

CHECK  
 $\frac{2}{3}(-45) + 4 = -26$   
 $-30 + 4 = -26$  ✓

$$\begin{array}{r} 7 = -3c - 2 \\ +2 \quad +2 \\ \hline 9 = -3c \\ \frac{-9}{-3} = \frac{-3c}{-3} \\ \hline -3 = c \end{array}$$

CHECK  
 $7 = -3(-3) - 2$   
 $7 = 9 - 2$  ✓

$$\begin{array}{r} -8p + 3 = -29 \\ -3 \quad -3 \\ \hline -8p = -32 \\ \frac{-8p}{-8} = \frac{-32}{-8} \\ \hline p = 4 \end{array}$$

CHECK  
 $-8(4) + 3 = -29$   
 $-32 + 3 = -29$  ✓

$$\begin{array}{r} -5 = -5t - 5 \\ +5 \quad +5 \\ \hline 0 = -5t \\ \frac{0}{-5} = \frac{-5t}{-5} \\ \hline 0 = t \end{array}$$

CHECK  
 $-5 = -5(0) - 5$   
 $-5 = 0 - 5$   
 $-5 = -5$  ✓

$$\begin{array}{r} -9r + 12 = -24 \\ -12 \quad -12 \\ \hline -9r = -36 \\ \frac{-9r}{-9} = \frac{-36}{-9} \\ \hline r = 4 \end{array}$$

CHECK  
 $-9(4) + 12 = -24$   
 $-36 + 12 = -24$  ✓

$$\begin{array}{r} 11 + \frac{7}{9}n = 4 \\ -11 \quad -11 \\ \hline \frac{7}{9}n = -7 \\ \frac{7}{9} \cdot \frac{9}{7}n = -7 \cdot \frac{9}{7} \\ \hline n = -9 \end{array}$$

CHECK  
 $11 + \frac{7}{9}(-9) = 4$   
 $11 - 7 = 4$  ✓

$$\begin{array}{r} 35 = 7 + 4b \\ -7 \quad -7 \\ \hline 28 = 4b \\ \frac{28}{4} = \frac{4b}{4} \\ \hline 7 = b \end{array}$$

CHECK  
 $35 = 7 + 4(7)$   
 $35 = 7 + 28$  ✓

$$\begin{array}{r} -15 + \frac{4}{5}p = 9 \\ +15 \quad +15 \\ \hline \frac{4}{5}p = 24 \\ \frac{4}{5} \cdot \frac{5}{4}p = 24 \cdot \frac{5}{4} \\ \hline p = 6.5 \end{array}$$

CHECK  
 $-15 + \frac{4}{5}(30) = 9$   
 $-15 + 24 = 9$  ✓

$$\begin{array}{r} 49 = 16 + 3y \\ -16 \quad -16 \\ \hline 33 = 3y \\ \frac{33}{3} = \frac{3y}{3} \\ \hline 11 = y \end{array}$$

CHECK  
 $49 = 16 + 3(11)$   
 $49 = 16 + 33$  ✓

$$\begin{array}{r} 2 = 4t - 14 \\ +14 \quad +14 \\ \hline 16 = 4t \\ \frac{16}{4} = \frac{4t}{4} \\ \hline 4 = t \end{array}$$

CHECK  
 $2 = 4(4) - 14$   
 $2 = 16 - 14$  ✓

$$\begin{array}{r} -9x - 10 = 62 \\ +10 \quad +10 \\ \hline -9x = 72 \\ \frac{-9x}{-9} = \frac{72}{-9} \\ \hline x = -8 \end{array}$$

CHECK  
 $-9(-8) - 10 = 62$   
 $72 - 10 = 62$  ✓

$$\begin{array}{r} 30 = 12x - 18 \\ +18 \quad +18 \\ \hline 48 = 12x \\ \frac{48}{12} = \frac{12x}{12} \\ \hline 4 = x \end{array}$$

CHECK  
 $30 = 12(4) - 18$   
 $40 = 48 - 18$  ✓

$$\begin{array}{r} 7 + 4g = 7 \\ -7 \quad -7 \\ \hline 4g = 0 \\ \frac{4g}{4} = \frac{0}{4} \\ \hline g = 0 \end{array}$$

CHECK  
 $7 + 4(0) = 7$   
 $7 + 0 = 7$  ✓