

# Solving Two-Step Linear Equations WS#1

Solve each equation. Show your work. For your final answer, your variable should be on the left side.

$$1) 38 = -10 - 3r$$

$$\begin{array}{r} +10 \quad +10 \\ 48 = -3r \\ \hline -3 \quad -3 \end{array}$$

$$-16 = r$$

$$\boxed{r = -16}$$

$$2) -4 - 4x = -32$$

$$\begin{array}{r} +4 \quad +4 \\ -4x = -28 \\ \hline -4 \quad -4 \end{array}$$

$$\boxed{x = 7}$$

$$3) 4 = -3n + 4$$

$$\begin{array}{r} -4 \quad -4 \\ 0 = -3n \\ \hline -3 \quad -3 \end{array}$$

$$0 = n$$

$$\boxed{n = 0}$$

$$4) -54 = 9 - 9x$$

$$\begin{array}{r} -9 \quad -9 \\ -63 = -9x \\ \hline -9 \quad -9 \end{array}$$

$$7 = x$$

$$\boxed{x = 7}$$

$$5) -6x + 1 = -35$$

$$\begin{array}{r} -1 \quad -1 \\ -6x = -36 \\ \hline -6 \quad -6 \end{array}$$

$$\boxed{x = 6}$$

$$6) -15 = 3 + 6x$$

$$\begin{array}{r} -3 \quad -3 \\ -18 = 6x \\ \hline 6 \quad 6 \end{array}$$

$$-3 = x$$

$$\boxed{x = -3}$$

$$7) 9 + 2p = -1$$

$$\begin{array}{r} -9 \quad -9 \\ 2p = -10 \\ \hline 2 \quad 2 \end{array}$$

$$\boxed{p = -5}$$

$$8) -84 = -4 - 8n$$

$$\begin{array}{r} +4 \quad +4 \\ -80 = -8n \\ \hline -8 \quad -8 \end{array}$$

$$10 = n$$

$$\boxed{n = 10}$$

# Solving 2-step Linear Equations ws # 1, cont.

9)  $10 - x = -17$

$$\frac{-1x}{-1} = \frac{-17}{-1}$$

$$\boxed{x = 17}$$

10)  $70 = 4x + 10$

$$\frac{60}{4} = \frac{4x}{4}$$

$$15 = x$$

$$\boxed{x = 15}$$

11)  $5v - 2 = 83$

$$\frac{5v}{5} = \frac{85}{5}$$

$$\boxed{v = 17}$$

12)  $1 - 8x = 121$

$$\frac{-8x}{-8} = \frac{120}{-8}$$

$$\boxed{x = -15}$$

13)  $-14 = 4x - 6$

$$\frac{-8}{4} = \frac{4x}{4}$$

$$-2 = x$$

$$\boxed{x = -2}$$

14)  $-2a - 3 = -15$

$$\frac{-2a}{-2} = \frac{-12}{-2}$$

$$\boxed{a = 6}$$

15)  $5a - 7 = 38$

$$\frac{5a}{5} = \frac{45}{5}$$

$$\boxed{a = 9}$$

16)  $9x - 10 = 125$

$$\frac{9x}{9} = \frac{135}{9}$$

$$\boxed{x = 15}$$