

## Part One:

$$1.) v - 10 = -9$$
$$\begin{array}{r} +10 \\ \hline v = 1 \end{array}$$

$$2.) v - 10 = -3$$
$$\begin{array}{r} +10 \\ \hline v = 7 \end{array}$$

$$3.) x - 3 = 4$$
$$\begin{array}{r} +3 \\ \hline x = 7 \end{array}$$

$$4.) \frac{x}{5} = 2$$
$$\begin{array}{r} \cdot 5 \\ \hline x = 10 \end{array}$$

$$5.) 22 = -11k$$
$$\begin{array}{r} -11 \\ \hline k = -2 \end{array}$$

$$6.) -13m = -377$$
$$\begin{array}{r} -13 \\ \hline m = 29.2 \end{array}$$

$$7.) b - 7 = -1$$
$$\begin{array}{r} +7 \\ \hline b = 6 \end{array}$$

$$8.) -8 = p - 13$$
$$\begin{array}{r} +13 \\ \hline 5 = p \\ p = 5 \end{array}$$

## Part Two:

$$1.) 7m + 8 = 71$$
$$\begin{array}{r} -8 \\ \hline 7m = 63 \\ \frac{7m}{7} = \frac{63}{7} \\ m = 9 \end{array}$$

$$2.) \frac{y}{7} + 6 = 11$$
$$\begin{array}{r} -6 \\ \hline \frac{y}{7} = 5 \\ \cdot 7 \\ \hline y = 35 \end{array}$$

$$3.) 12x + 2 = 146$$
$$\begin{array}{r} -2 \\ \hline 12x = 144 \\ \frac{12x}{12} = \frac{144}{12} \\ x = 12 \end{array}$$

$$4.) \frac{m}{9} - 17 = 21$$
$$\begin{array}{r} +17 \\ \hline \frac{m}{9} = 38 \\ \cdot 9 \\ \hline m = 342 \end{array}$$

$$15.) 2y + 16 = 10$$
$$\begin{array}{r} -16 \\ \hline 2y = -6 \\ \frac{2y}{2} = \frac{-6}{2} \\ y = -3 \end{array}$$

$$5.) 2a - 1 = 19$$
$$\begin{array}{r} +1 \\ \hline 2a = 20 \\ \frac{2a}{2} = \frac{20}{2} \\ a = 10 \end{array}$$

$$11.) 3n - 8 = 4$$
$$\begin{array}{r} +8 \\ \hline 3n = 12 \\ \frac{3n}{3} = \frac{12}{3} \\ n = 4 \end{array}$$

$$12.) 2n - 3 = 9$$
$$\begin{array}{r} +3 \\ \hline 2n = 12 \\ \frac{2n}{2} = \frac{12}{2} \\ n = 6 \end{array}$$

$$13.) \frac{n}{5} - 4 = 11$$
$$\begin{array}{r} +4 \\ \hline \frac{n}{5} = 15 \\ \cdot 5 \\ \hline n = 75 \end{array}$$

$$14.) \frac{z}{2} + 1 = 9$$
$$\begin{array}{r} -1 \\ \hline \frac{z}{2} = 8 \\ \cdot 2 \\ \hline z = 16 \end{array}$$

Part 3

Combine like terms: "x values" and then solve.

$$1) -7x - 156 + 18x = 97$$

$$\begin{array}{r} 11x - 156 = 97 \\ +156 \quad +156 \\ \hline 11x = 253 \\ \hline 11 \quad 11 \end{array}$$

$$x = 23$$

$$2) -42 - 10x + 5x = 68$$

$$\begin{array}{r} -42 - 5x = 68 \\ +42 \quad +42 \\ \hline -5x = 110 \\ \hline -5 \quad -5 \end{array}$$

$$x = -22$$

$$3) -60 - 10x + 6x = 52$$

$$\begin{array}{r} -60 - 4x = 52 \\ +60 \quad +60 \\ \hline -4x = 112 \\ \hline -4 \quad -4 \end{array}$$

$$x = -28$$

$$4) -57 - 3x - x = 71$$

$$\begin{array}{r} -57 - 4x = 71 \\ +57 \quad +57 \\ \hline -4x = 128 \\ \hline -4 \quad -4 \end{array}$$

$$x = -32$$

$$5) -77 - 10x + 13x = 55$$

$$\begin{array}{r} -77 + 3x = 55 \\ +77 \quad +77 \\ \hline 3x = 132 \\ \hline 3 \quad 3 \end{array}$$

$$x = 44$$

$$6) -125 + 2x + 7x = 100$$

$$\begin{array}{r} -125 + 9x = 100 \\ +125 \quad +125 \\ \hline 9x = 225 \\ \hline 9 \quad 9 \end{array}$$

$$x = 25$$

$$7) -16x + 12x - 65 = 103$$

$$\begin{array}{r} -4x - 65 = 103 \\ +65 \quad +65 \\ \hline -4x = 168 \\ \hline -4 \quad -4 \end{array}$$

$$x = -42$$

$$8) -13 - 10x + 9x = 27$$

$$\begin{array}{r} -13 - x = 27 \\ +13 \quad +13 \\ \hline -x = 40 \\ \hline +1 \quad -1 \end{array}$$

$$x = -40$$