

HW

10/23

$$1) \cdot 10 [0.2x + 5.7 = 9.3]$$

$$2x + 57 = 93$$

$$\underline{-57 \quad -57}$$

$$2x = 36$$

$$\underline{2 \quad 2}$$

$$x = 18$$

$$2) \cdot 10x [0.5m - 4.9 = 2.6]$$

$$5m - 49 = 26$$

$$\underline{+49 \quad +49}$$

$$5m = 75$$

$$\underline{5 \quad 5}$$

$$m = 15$$

$$3) \cdot 100 [0.5 - 0.07x = 0.15]$$

$$50 - 7x = 15$$

$$\underline{-50 \quad -50}$$

$$-7x = -35$$

$$\underline{-7 \quad -7}$$

$$x = 5$$

$$4) \cdot 10 [5.7x + 1.2 = 6.3x + 5.4]$$

$$57x + 12 = 63x + 54$$

$$\underline{-57x \quad -57x}$$

$$12 = 6x + 54$$

$$\underline{-54 \quad -54}$$

$$-42 = 6x$$

$$\underline{6 \quad 6}$$

$$x = -7$$

$$5.) \quad \overset{100x}{\left[ 1.3W + 0.67 = 1.32W + 2.31 \right]}$$

$$130W + 67 = 132W + 231$$

$$\begin{array}{r} -132W \qquad \qquad -132W \\ \hline \end{array}$$

$$-2W + 67 = 231$$

$$\begin{array}{r} -67 \quad -67 \\ \hline \end{array}$$

$$-2W = 164$$

$$\begin{array}{r} -2 \quad -2 \\ \hline \end{array}$$

$$W = -82$$

$$6.) \quad \overset{10}{\left[ 1.2x + 5 = 0.6x - 2.4 + 0.6x \right]}$$

$$12x + 5 = 6x - 24 + 6x$$

$$12x + 5 = 12x - 24$$

$$\begin{array}{r} -12x \quad \quad -12x \\ \hline \end{array}$$

$$5 \neq -24$$

no solution

Example 2: Solve for x: 1 place value  $\rightarrow \times 10$

$$10 [ 2.5x + 3.6 = 1.1 ]$$

$$25x + 36 = 11$$

$$\frac{25x = -25}{25} = \frac{-25}{25}$$

$$x = -1$$

Example 3: Solve for p: 2 place values  $\rightarrow \times 100$

$$100 [ 0.02p + 0.7 = 0.8 ]$$

$$2p + 70 = 80$$

$$\frac{2p = 10}{2}$$

$$p = 5$$

Example 4: Solve for k: 1 place value  $\rightarrow \times 10$

$$10 [ 0.6k + 3 = 2k + 0.2 ]$$

$$6k + 30 = 20k + 2$$

$$\frac{-14k + 30 = 2}{-30} = \frac{2}{-30}$$

$$\frac{-14k = -28}{-14} = \frac{-28}{-14}$$

$$k = 2$$

# HOMEWORK:

Show your work on page 60 & 61 for #s 1 - 6.

Directions: Solve the equations by clearing the decimals.

- 1)  $0.2x + 5.7 = 9.3$
- 2)  $0.5m - 4.9 = 2.6$
- 3)  $0.5 - 0.07x = 0.15$
- 4)  $5.7x + 1.2 = 6.3x + 5.4$
- 5)  $1.3w + 0.67 = 1.32w + 2.31$
- 6)  $1.2x + 5 = 0.6x - 2.4 + 0.6x$

7) Find the sum of the expression  $(5x - 9)$  and  $(x + 2)$ .

$$\begin{array}{r} 5x - 9 \\ + 1x + 2 \\ \hline 6x - 7 \end{array}$$

8) What is  $(6x + 3)$  subtracted from  $(-9x + 3)$ ?

$$\begin{array}{r} (-9x + 3) - (6x + 3) \\ -9x + 3 \\ - 6x - 3 \\ \hline -15x \end{array}$$

9) Given the expression:  $18x^2 + 9x - 6y - 3$

a) How many terms are in the expression? 4

b) What is the coefficient of y in the expression? -6

c) What is the constant in the expression? -3

10) The length of a side of a square is  $3\frac{2}{3}$  inches. Find the perimeter of the square.

$$\begin{array}{l} \square \\ \text{side } 3\frac{2}{3} \\ P = 4s \\ = 4(3\frac{2}{3}) \\ = 4(4\frac{1}{3}) \\ = \frac{44}{3} = 14\frac{2}{3} \end{array}$$