

Linear Equation : line graph

$$y = 3x + 2$$

$$\#1 - \begin{array}{r} -5x + 12 \\ + 2x + 23 \end{array} = \begin{array}{r} -23 + 5x \\ + 23 \end{array}$$

$$\begin{array}{r} 5x = 35 \\ \hline x = 7 \end{array}$$

#2 -

$$\begin{array}{r} \cancel{2n} - 3 = 6n + 25 \\ - \cancel{2n} \qquad - 2n \end{array}$$

$$\begin{array}{r} - 3 = 4n + \cancel{25} \\ - \cancel{25} \qquad - \cancel{25} \end{array}$$

$$\cancel{4n} = -28$$

$$\begin{array}{r} \cancel{4} \\ \hline n = -7 \end{array}$$

#3 -

$$12(r+3) = 2(r+5) - 3r$$

$$12r + 36 = \underline{2r} + 10 - \underline{3r}$$

$$12r + 36 = 10$$

~~+r~~  
~~+r~~

$$13r + 36 = 10$$

$$r = -\frac{26}{13} = -\frac{2}{1}$$

#4-

$$6 \left( \frac{1}{2}x + 4 = -\frac{2}{3}x + \frac{1}{2} \right)$$

$$\begin{array}{r} 3x + 24 = -4x + 3 \\ +4x \qquad \qquad +4x \end{array}$$

$$\begin{array}{r} 7x + 24 = 3 \\ -24 \qquad -24 \end{array}$$

$$\begin{array}{r} 7x = -21 \\ \div 7 \end{array}$$

$$x = -3$$

$$\begin{array}{r} \frac{3}{6}x + \frac{24}{6} = \frac{-4}{6}x + \frac{3}{6} \\ +\frac{4}{6}x \qquad \qquad +\frac{4}{6}x \end{array}$$

$$\begin{array}{r} \frac{7}{6}x + 4 = \frac{1}{2} \\ -4 \qquad -4 \end{array} > -3$$

$$\begin{array}{r} \frac{7}{6}x = -\frac{7}{2} \\ \div \frac{7}{6} \end{array}$$
$$x = -\frac{7}{2}$$

#5 -

$$X + 623,908 + 635,867 = 1,774,779$$

$$X = 515,004$$