

**\* GOAL: USE INVERSE OPERATIONS TO ISOLATE THE VARIABLE!**

Meaning: get rid of all of the numbers "around" or on the side with the variable

Remember use order of operations backwards (1 Add/Subtract then (2 Multiply/Divide

Ex. 1. Solve each equation. Graph your solution.

A)  $13.6 + 2.1x = -5.3$

$$\begin{array}{r} 13.6 + 2.1x = -5.3 \\ -13.6 \quad -13.6 \quad \quad \quad 2.1x = -18.9 \\ \hline 2.1x = -18.9 \\ \hline 2.1 \quad 2.1 \end{array}$$

$x = -9$



B)  $\frac{3}{5}x - \frac{3}{8} = \frac{3}{8}$

$$\begin{array}{r} \frac{3}{5}x - \frac{3}{8} = \frac{3}{8} \\ +\frac{3}{8} \quad +\frac{3}{8} \\ \hline \frac{3}{5}x = \frac{6}{8} \\ \hline \frac{3}{5}x = \frac{3}{4} \end{array}$$

$x = \frac{5}{8}$

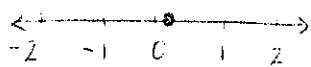


C)  $2x + \frac{3}{4} = \frac{7}{8}$

$$\begin{array}{r} 2x + \frac{3}{4} = \frac{7}{8} \\ -\frac{3}{4} \quad -\frac{3}{4} \\ \hline 2x = \frac{1}{8} \end{array}$$

$\frac{1}{2} \cdot \frac{2x}{1} = \frac{1}{8} \cdot \frac{1}{2}$  OR  $\frac{2x}{2} = \frac{1}{8}$

$x = \frac{1}{16}$



D)  $\frac{3x}{14} - \frac{1}{2} = \frac{4}{7}$

$$\begin{array}{r} \frac{3x}{14} - \frac{1}{2} = \frac{4}{7} \\ +\frac{1}{2} \quad +\frac{1}{2} \\ \hline \frac{3x}{14} = \frac{11}{7} \end{array}$$

$\frac{14}{3} \cdot \frac{3x}{14} = \frac{15}{7} \cdot \frac{14}{3}$

$x = 5$

