

7-2 Graphing Equations

Determine whether $(\overset{x}{2}, \underset{y}{4})$ is a solution of $y = 3x - 2$.

$$4 = 3(2) - 2 \quad (2, 4) \text{ is a sol.}$$

$$4 = 6 - 2 \quad 4 = 4 \checkmark$$

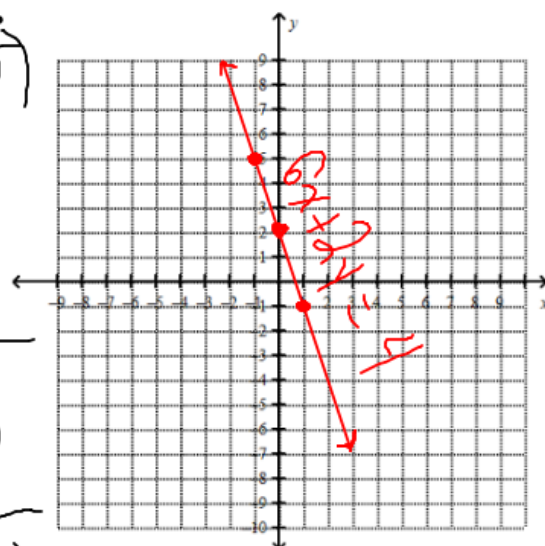
Determine whether $(\overset{x}{3}, \underset{y}{-2})$ is a solution of $5y = 4x - 22$

$$\begin{aligned} 5(-2) &= 4(3) - 22 & (3, -2) \text{ is a sol.} \\ -10 &= 12 - 22 \\ -10 &= -10 \end{aligned}$$

Graph the equation. Use a Chart.

$$6x + 2y = 4$$

x	$6x + 2y = 4$	(x, y)
-1	$6(-1) + 2y = 4$ $-6 + 2y = 4$ $+6 \quad +6$ $\frac{2y}{2} = \frac{10}{2}$ $y = 5$	$(-1, 5)$
0	$6(0) + 2y = 4$ $2y = 4$ $\frac{2y}{2} = \frac{4}{2}$ $y = 2$	$(0, 2)$
1	$6(1) + 2y = 4$ $6 + 2y = 4$ $-6 \quad -6$ $2y = -2$ $\frac{2y}{2} = \frac{-2}{2}$ $y = -1$	$(1, -1)$

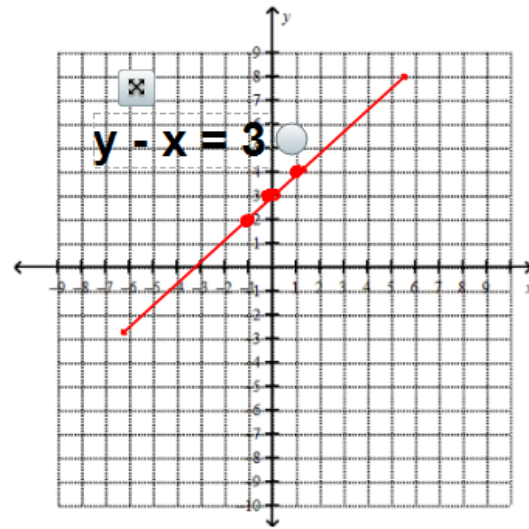


Graph.

$$y - x = 3$$

x	y - x = 3	(x, y)
-1	$y - (-1) = 3$ $y + 1 = 3$ $\begin{array}{r} -1 \quad -1 \\ \hline y = 2 \end{array}$	$(-1, 2)$
0	$y - 0 = 3$ $y = 3$	$(0, 3)$
1	$y - 1 = 3$ $\begin{array}{r} +1 \quad +1 \\ \hline y = 4 \end{array}$	$(1, 4)$

Graph.



$$y = x$$

x	y = x	(x, y)
-1	$y = -1$	$(-1, -1)$
0	$y = 0$	$(0, 0)$
1	$y = 1$	$(1, 1)$

