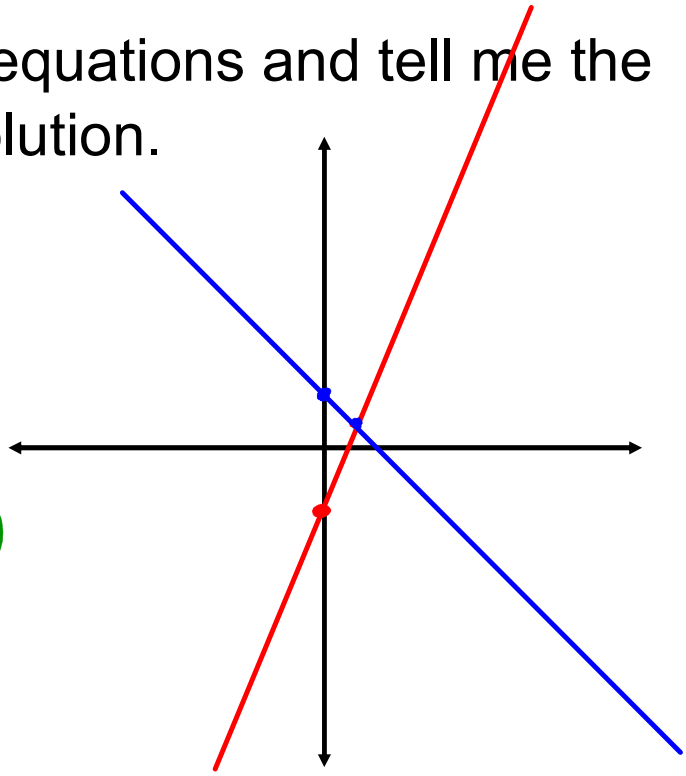
Bell Work 4/15/2015

Graph the system of equations and tell me the solution.

$$\begin{cases} y = 3x - 2 \\ y = -x + 2 \end{cases}$$

m = 3
b = -2

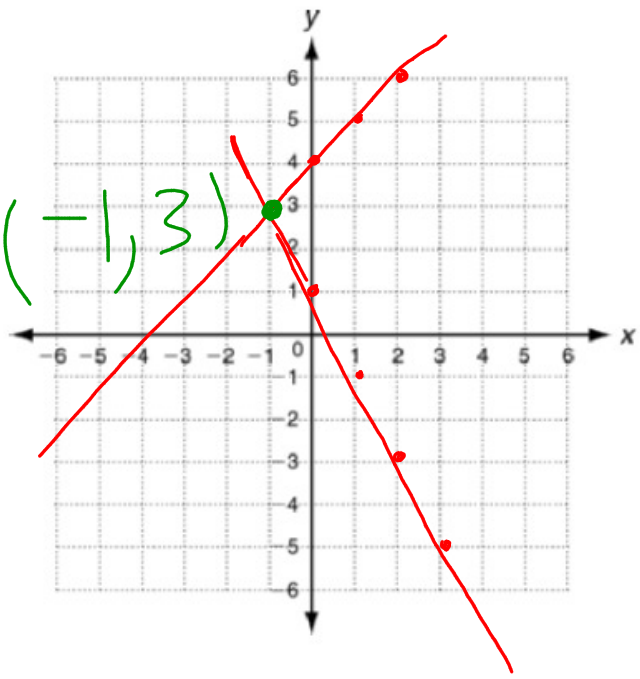
m = -1
b = 2



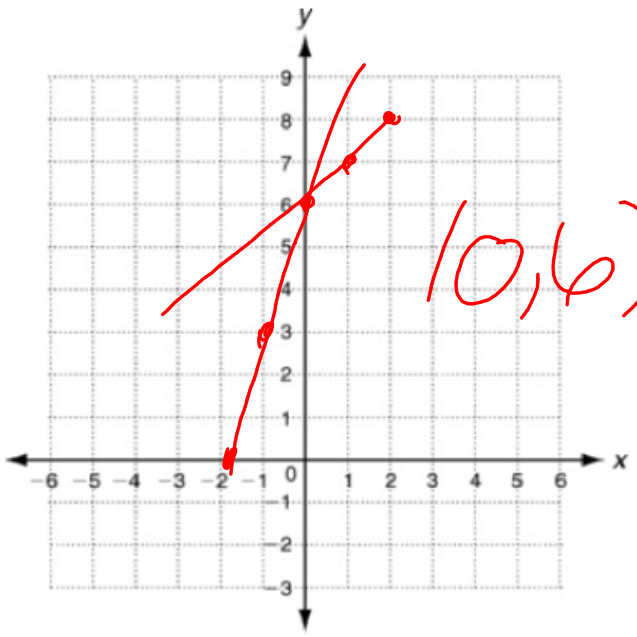
Solution: (1 , 1)

Please get out your assignment from yesterday.

3. $\begin{cases} y = x + 4 \\ y = -2x + 1 \end{cases}$ Solution : _____

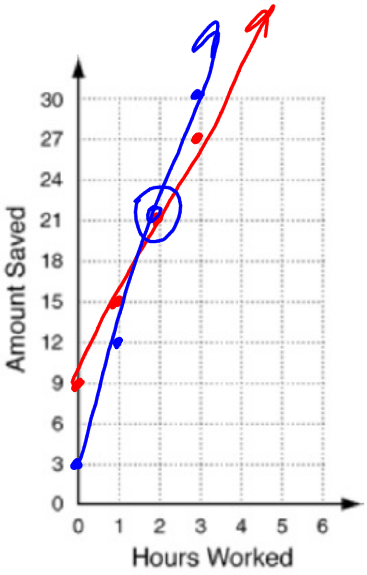


4. $\begin{cases} y = x + 6 \\ y = -3x + 6 \end{cases}$ Solution : _____



5. Maryann and Carlos are each saving for new scooters. So far, Maryann has $9 saved, and can earn $6 per hour babysitting. Carlos has $3 saved, and can earn $9 per hour working at his family's restaurant. After how many hours of work will Maryann and Carlos have saved the same amount? What will that amount be?

2 hours, $21



Maryann → $y = 6x + 9$

Carlo → $y = 9x + 3$

1. $(6, -2)$; $\begin{cases} 2x - y = 14 \\ x + 4y = -2 \end{cases}$

$2(6) - -2 \stackrel{?}{=} 14$
$12 + 2 \stackrel{?}{=} 14$
$14 = 14$
✓

$6 + 4(-2) \stackrel{?}{=} -2$
$6 - 8 \stackrel{?}{=} -2$
$-2 = -2$
✓

2. (4, 0); $\begin{cases} x-2y=4 \\ -x+y=-8 \end{cases}$

$(4)-2(0)=4$ ✓

$4-0=4$ ✓

$-4+0=-8$

$-4=-8$

NO

3. $(-6, -2)$; $\begin{cases} 2x - y = -10 \\ -x + y = 4 \end{cases}$

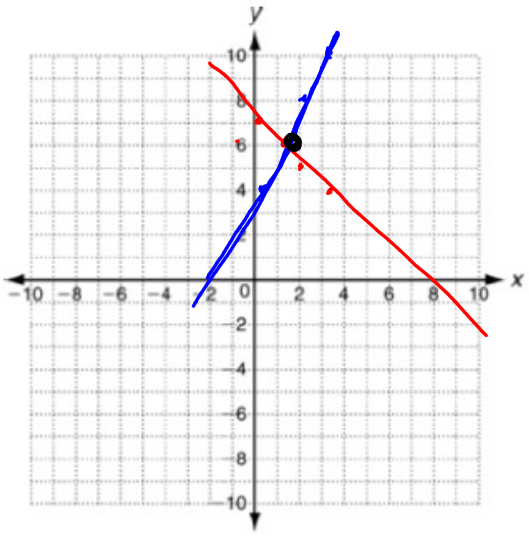
$2(-6) - -2 = -10$ $\quad -6 + -2 = 4$

$-12 - -2 = -10$ $\quad 4 = 4$

$10 = -10$

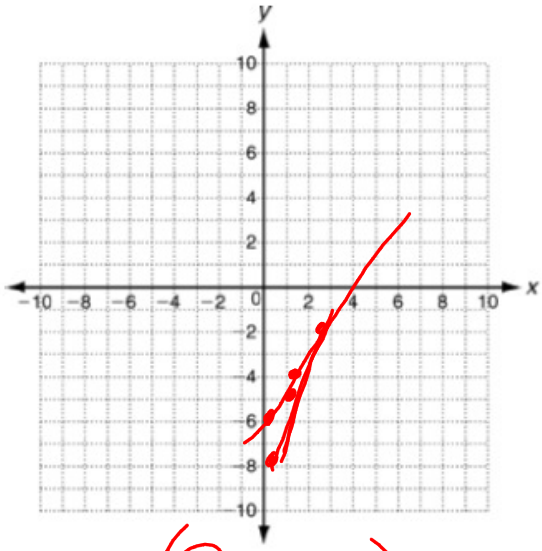
✓ ✓

4. $\begin{cases} y = 2x + 4 \\ y = -x + 7 \end{cases}$



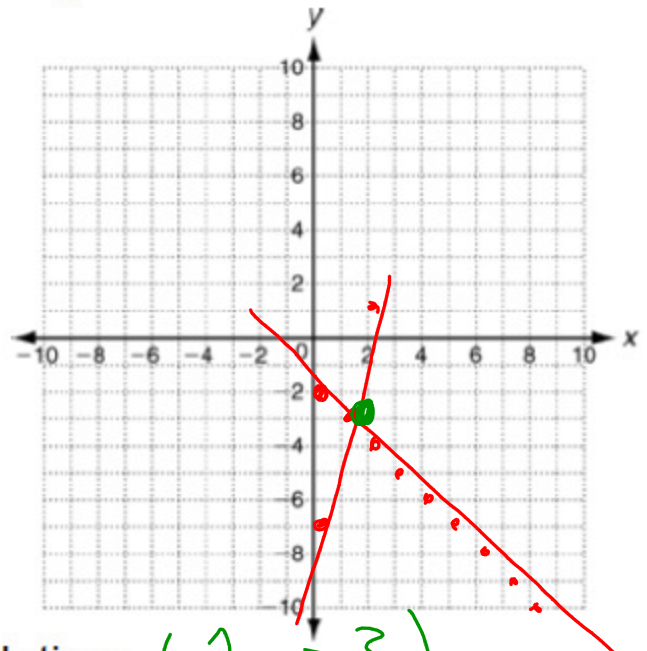
Solution: (1 , 6)

5. $\begin{cases} y = 2x - 6 \\ y = 3x - 8 \end{cases}$



Solution: (2, −2)

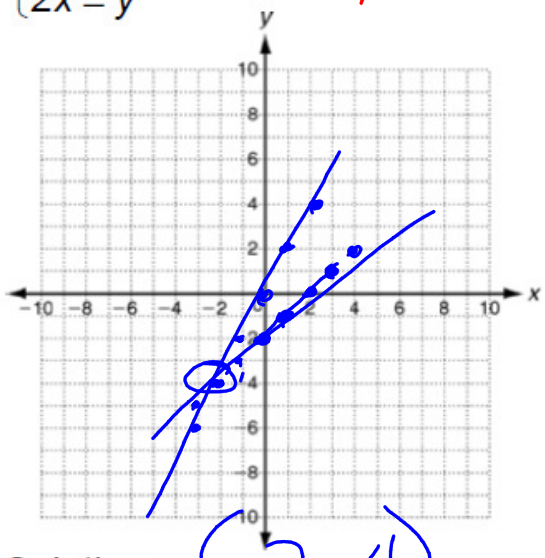
6. $\begin{cases} x+y=-2 \\ y=4x-7 \end{cases}$



$x + y = -2$
$-x \quad -4$
$y = -x - 2$

Solution: $(1, -3)$

7. $\begin{cases} x = y + 2 \\ 2x = y \end{cases}$ → $y = 2x + 0$



Solution: $(-2, -4)$

$x = y + 2$
$-2 \quad -2$

$x - 2 = y$

$y = x - 2$