February 21, 2012

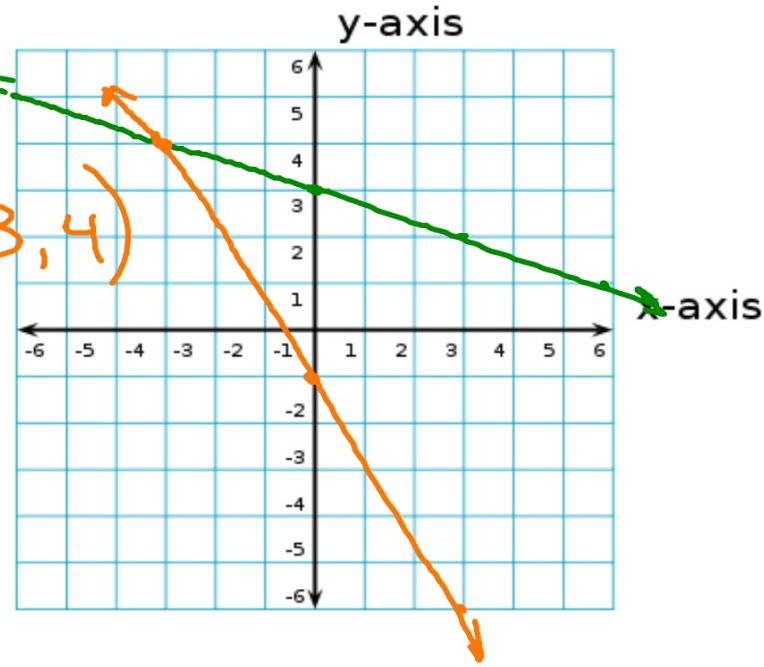
Alg1

Get out Pink Systems WS1

13) $y = -\frac{5}{3}x - 1$

$y = -\frac{1}{3}x + 3$

$(-3, 4)$



~~2/20~~ 2/21 - Solving Systems by Graphing - Any Equation

What are the 2 **quick** ways to graph lines?

Slope-Intercept

$y = mx + b$

1. start @ b
2. $\frac{\text{up}}{\text{over}}$

Standard Form (intercepts)

$Ax + By = C$

1. Cover x to see y-int.
2. Cover y to see x-int.

Solve each system by graphing.

$$-x = -6 - 3y$$

$$y = 3 + 2x$$

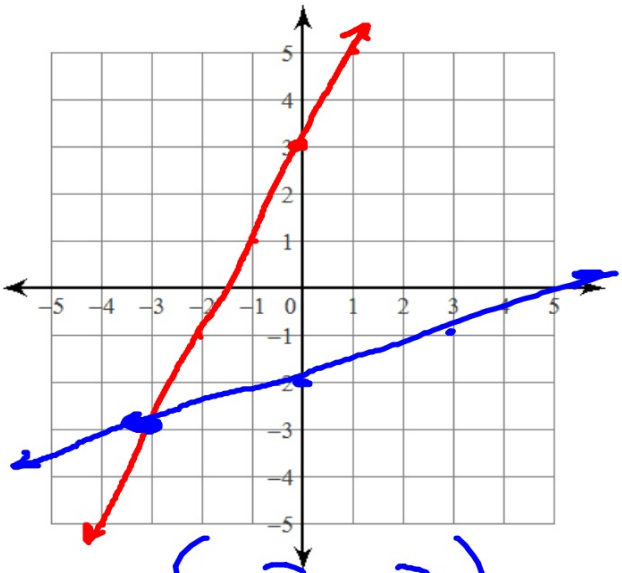
$$y = 2x + 3$$

$$-x = -6 - 3y$$

$$+6 \qquad +6$$

$$\frac{-1x + 6}{-3} = \frac{-3y}{-3}$$

$$\frac{1}{3}x - 2 = y$$



$(-3, -3)$

$$-2y - 3x = -6$$

$$-2 - 2y - x = 0$$

$$+2 \qquad\qquad +2$$

$$-3x - 2y = -6$$

cover x $\quad y = 3$

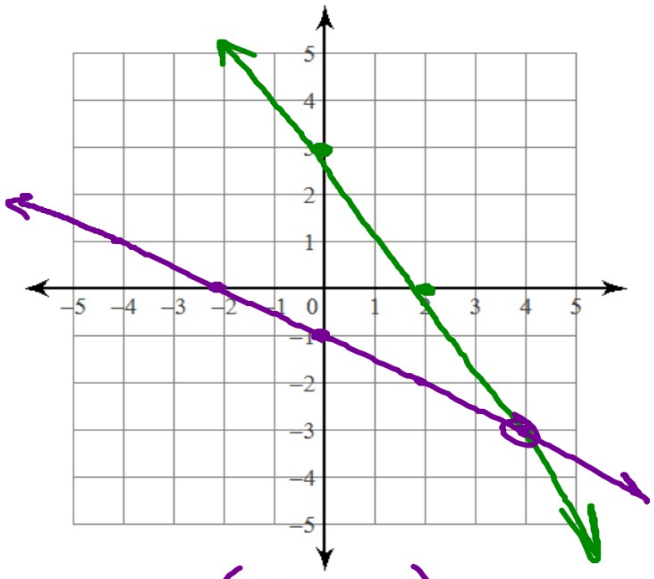
cover y $\quad x = 2$

$$-2y - x = 2$$

$$-x - 2y = 2$$

cover x $\quad y = -1$

cover y $\quad x = -2$



$(4, -3)$

$$0 = 3y + 15x + 6$$

$$-x - y = -2$$

$y = 2$

$x = 2$

$$-6 = 3y + 15x$$

$$15x + 3y = -6$$

$$y = -2$$

a mess! $\rightarrow$ $x = \frac{-6}{15} = -\frac{2}{5}$

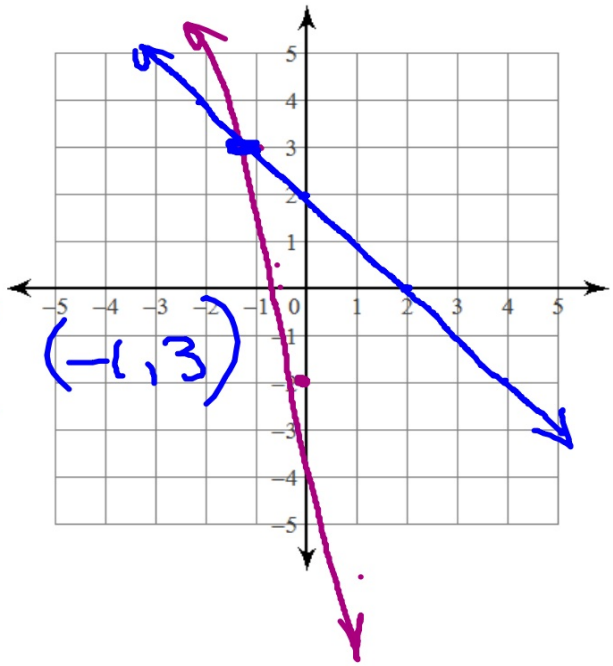
Try other way

$$0 = 3y + 15x + 6$$

$$-3y \quad -3y$$

$$\frac{-3y}{-3} = \frac{15x + 6}{-3}$$

$$y = -5x - 2$$



$$\frac{-6y}{-6} = \frac{14x}{-6} - \frac{24}{-6}$$

$$2 \cdot 0 = 2 \cdot -x \cdot \frac{3}{2} - \frac{3}{2} y$$

$$y = -\frac{7}{3}x + 4$$

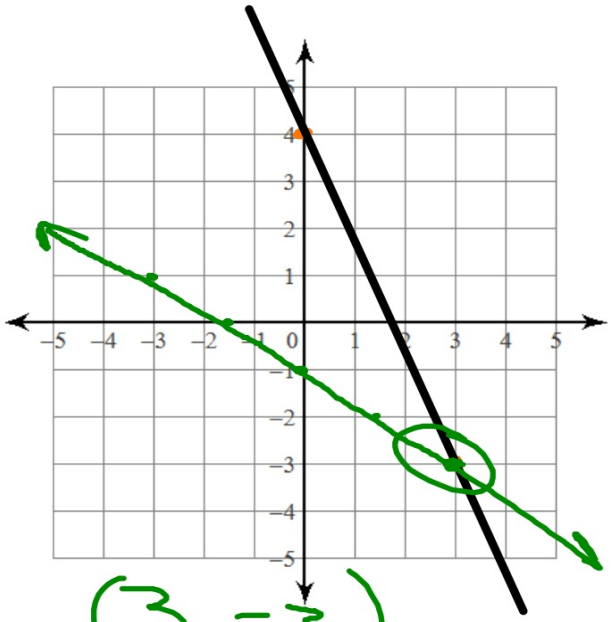
$$0 = -2x - 3 - 3y$$

$$+3 \qquad +3$$

$$3 = -2x - 3y$$

$$-1 = y$$

$$-\frac{3}{2} \quad x$$



$(3, -3)$

Homework

Yellow Systems WS2

Due Thursday