January 6, 2012

~~Get out your homework...~~

due Monday

1/5 - Graphing from Standard Form

Standard Form:

$$Ax + By = C$$

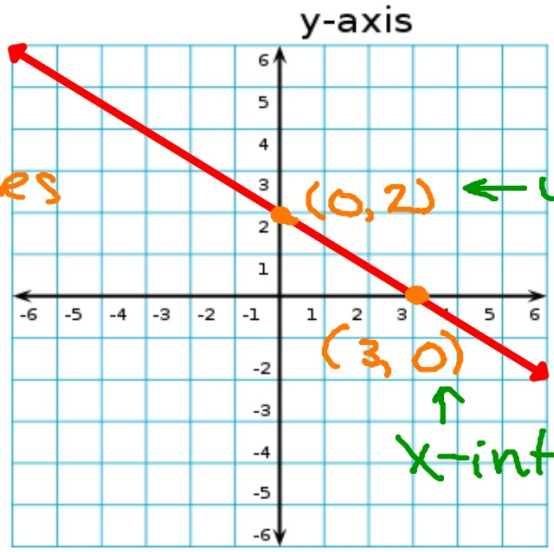
- A, B, C are integers no fractions
- x and y are in alphabetial order

Examples:

$2x + 3y = 6$ | $4x - y = 2$ | $x - 4y = -4$

What are the intercepts?

where the graph crosses the x-axis and y-axis



← y-intercept

x-intercept

Find the intercepts.

$2x+3y=6$

$x=0$: $2(0)+3y=6$

$\frac{3y}{3}=\frac{6}{3}$

$y=2$

$y=0$: $2x+3(0)=6$

$\frac{2x}{2}=\frac{6}{2}$

$x=3$

$4x-y=2$

$x=0$: $4(0)-y=2$

$-y=2$

$y=-2$

$y=0$: $4x-0=2$

$\frac{4x}{4}=\frac{2}{4}$

$x=\frac{1}{2}$

Graph by finding the intercepts.

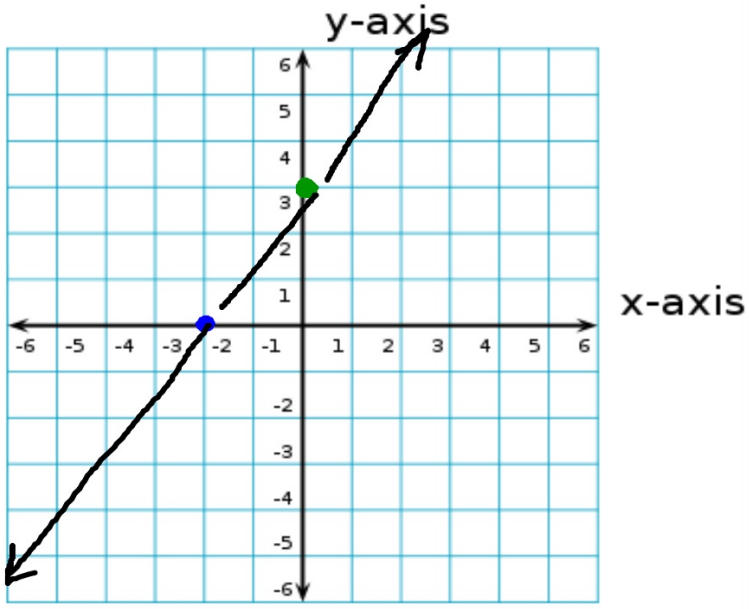
$$3x - 2y = -6$$

$x = 0$: $\frac{-2y}{-2} = \frac{-6}{-2}$

$y = 3$

$y = 0$: $\frac{3x}{3} = \frac{-6}{3}$

$x = -2$



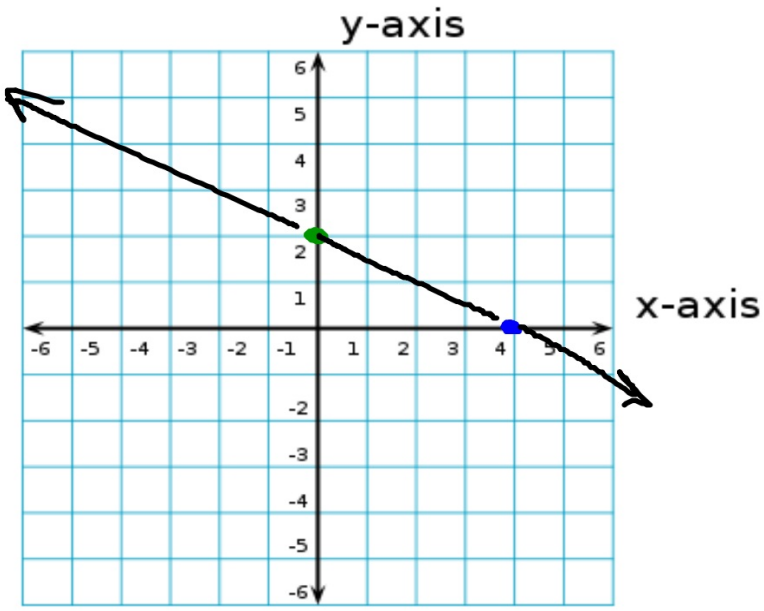
$$2x + 4y = 8$$

$$\frac{4y}{4} = \frac{8}{4}$$

$$y = 2$$

$$\frac{2x}{2} = \frac{8}{2}$$

$$x = 4$$



HOMEWORK

White worksheet LOS 7

Due: Monday