

Today's Learning Goal(s):

By the end of the class, I will be able to:

Graph a line using all 3 methods:

(1: Table of Values)

(2: Slope, y -intercept)

(3: x -intercept, y -intercept)

Today's Plan:

-correct homework

-more practice graphs

-SMART activity

-partner practise

Show [cram.com](http://www.cram.com)
[schaefa](http://www.cram.com)

<http://www.cram.com/flashcards/integers-6776824>

Correct Seatwork: (on the bottom of page 1 of the handout)

BUY GRAPH PAPER!

1. Graph using Method 2 (Slope, y-intercept):

a)

$$2x + y = 3$$

$$y = -2x + 3$$

$$b = 3$$

$$m = -2$$

$$-1/2$$

$$\left(\begin{array}{l} 2 \\ -1 \end{array} \right)$$

b)

$$x - y + 1 = 0$$

$$y = x + 1$$

$$b = 1$$

$$m = 1$$

c)

$$-5x + 2y = -2$$

$$\frac{2y}{2} = \frac{5x}{2} - \frac{2}{2}$$

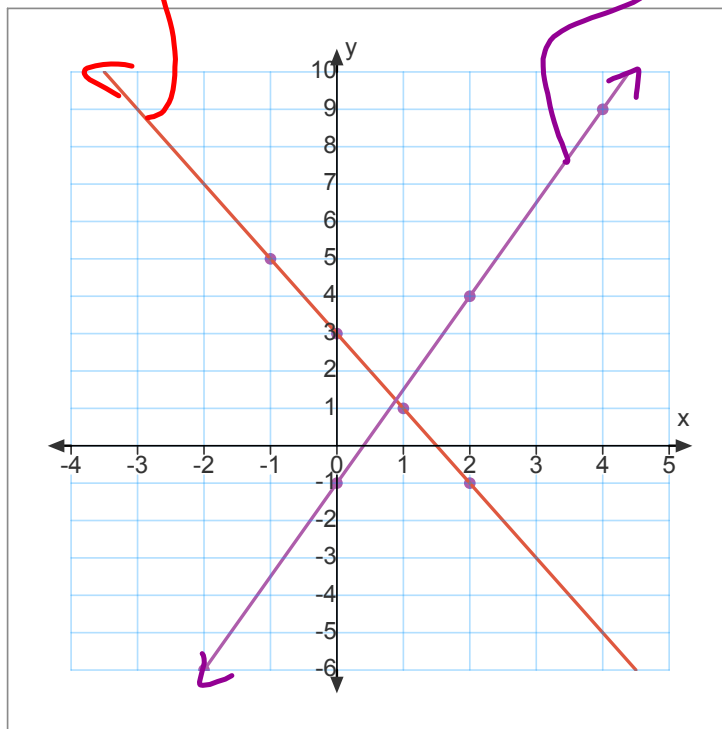
$$y = \frac{5}{2}x - 1$$

$$b = -1$$

$$m = \frac{5}{2}$$

rise
run

$$\left(\begin{array}{l} 5 \\ 2 \end{array} \right)$$



Correct Seatwork: (on the bottom of page 1 of the handout)

2. Graph using Method 3 (x-intercept, y-intercept):

a) $x + y = 3$

b) $5x - 3y = 15$

c) $4x - 8y + 16 = 0$

x-int,
let $y=0$

$x + 0 = 3$

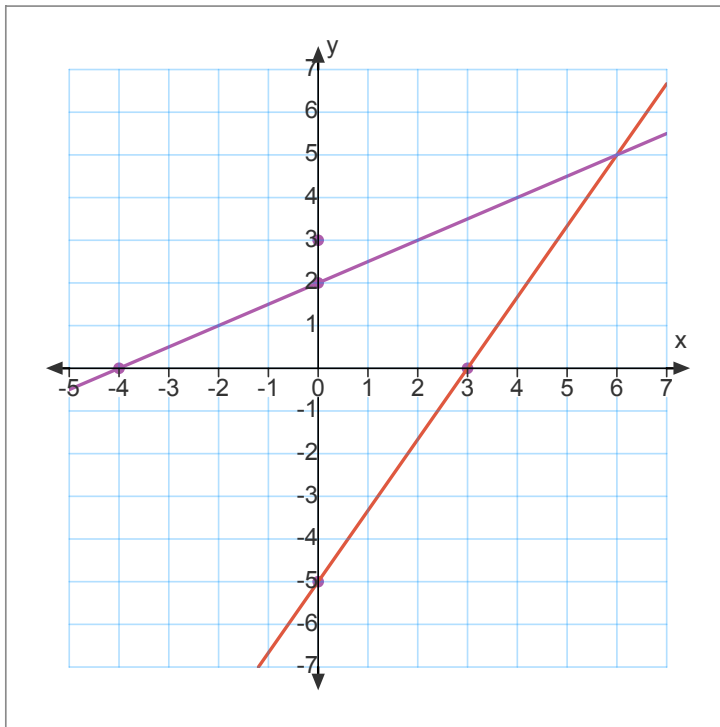
$x = 3$

y-intercept,

let $x=0$

$0 + y = 3$

$y = 3$

x-int, let $y=0$

$4x - 8(0) + 16 = 0$

$\frac{4x}{4} = \frac{-16}{4}$

$x = -4$

y-int, let $x=0$

$4(0) - 8y + 16 = 0$

$-8y = -16$

$y = 2$

$5x - 3y = 15$

x-int, let $y=0$

$5x - 3(0) = 15$

$\frac{5x}{5} = \frac{15}{5}$

$x = 3$

y-int, let $x=0$

$5(0) - 3y = 15$

$\frac{-3y}{-3} = \frac{15}{-3}$

$y = -5$

Correct Seatwork: (on the bottom of page 1 of the handout)

3. Graph using the most appropriate method:

a)

$$2x - 5y = 20$$

$$x\text{-int, } y=0$$

$$2x = 20$$

$$x = 10$$

$$y\text{-int, } x=0$$

$$-5y = 20$$

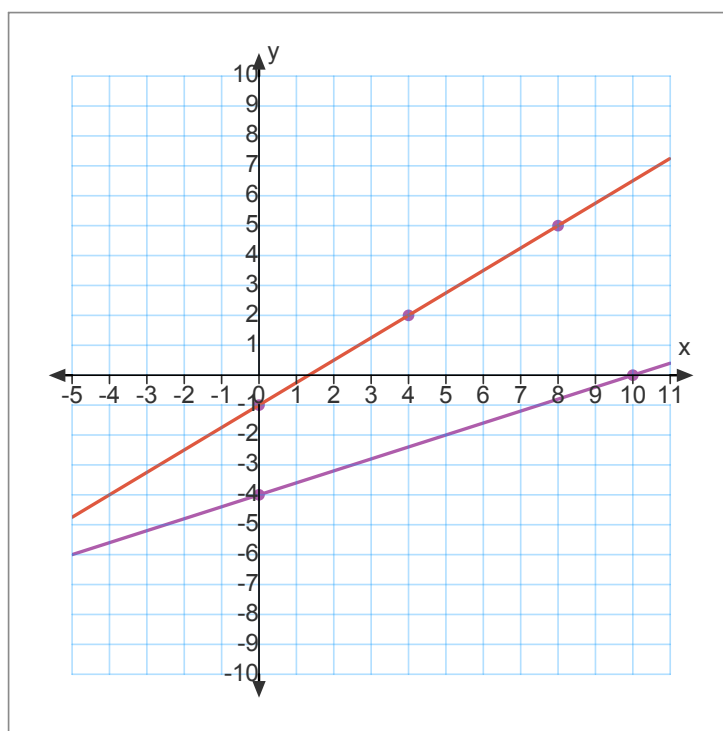
$$y = -4$$

b)

$$y = \frac{3}{4}x - 1$$

$$b = -1$$

$$m = \frac{3}{4}$$



More Graphing Practice:

1. Graph using the most appropriate method:

a)

$$y = \frac{-2}{3}x + 5$$

$b = 5$

$m = \frac{-2}{3}$

$y = \frac{-2}{3}x + 5$

b)

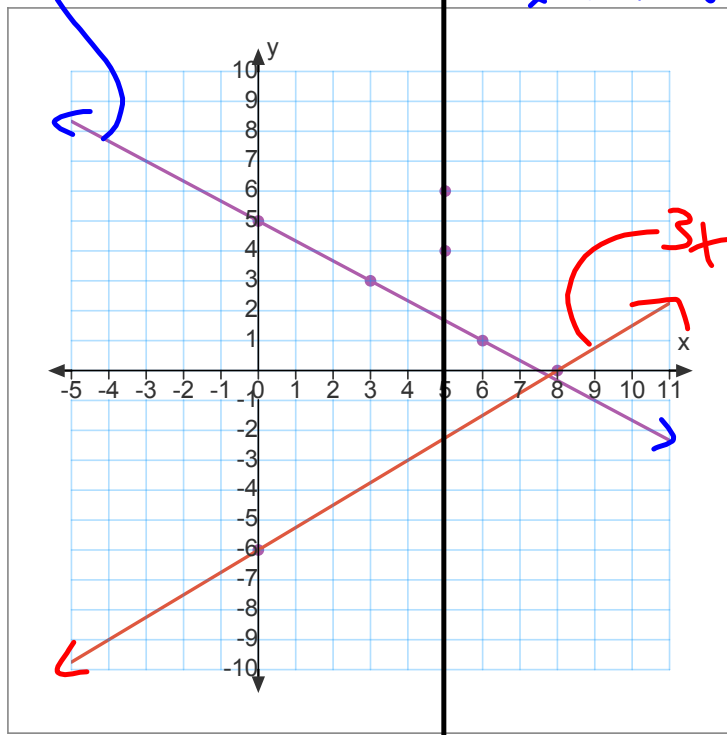
$$3x - 4y = 24$$

$x\text{-int, } y=0$
 $3x = 24$
 $x = 8$

$y\text{-int, let } x=0$
 $-4y = 24$
 $y = -6$

$(5, 6)$
 $(5, 4)$

$3x - 4y = 24$



$x = 5$

Seatwork:

1. Graph **without** using a table of values:

a) $y = \frac{3}{4}x + 1$

b) $y = 3x - 5$

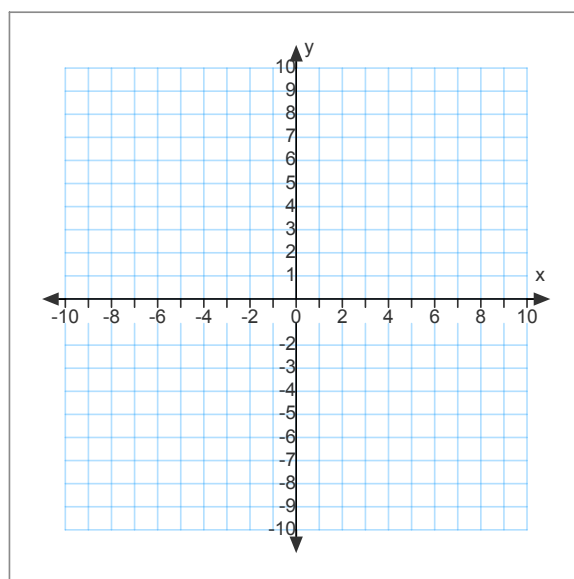
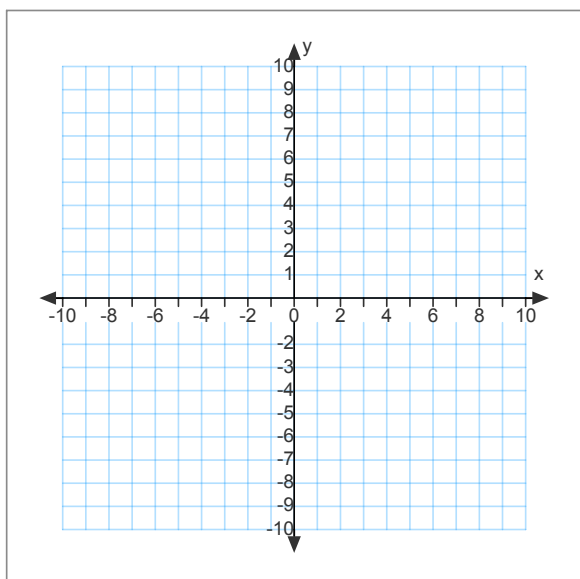
c) $y = -2x - 1$

d) $y = x + 3$

e) $y = 4x$

f) $y = -\frac{2}{5}x - 6$

g) partner challenge
 $y =$



(Recall: The rule for choosing the x values:)

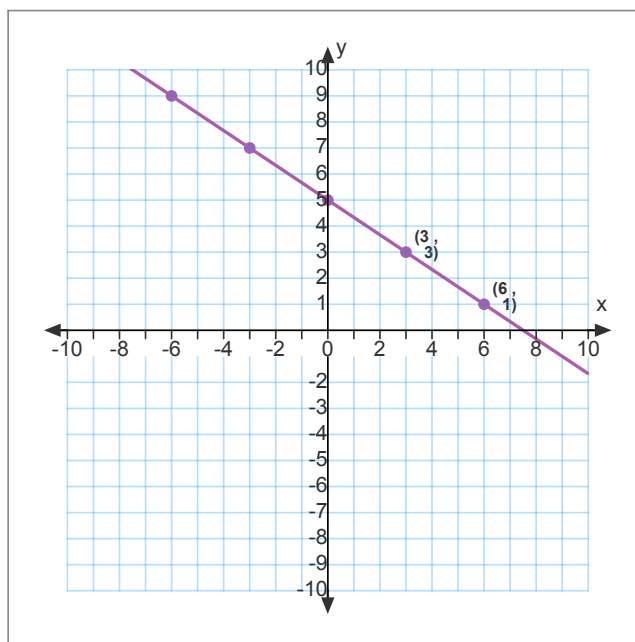
Use the "standard" values: -2, -1, 0, 1, 2, UNLESS the slope is a fraction. When a fraction exists, choosing x values which are multiples of the denominator results in "nice" integer values for y .

2. Create a table of values, then graph:

$$y = -\frac{2}{3}x + 5$$

x	y
-6	9
-3	7
0	5
3	3
6	1

$$\begin{aligned}
 y &= -\frac{2}{3}(\underline{6}) + 5 \\
 &= -4 + 5 \\
 &= 1
 \end{aligned}$$



Attachments

1.02 B Get Ready - The Linear Relation - SMART FILE.notebook

0.3 B Get Ready - The Linear Relation - SMART FILE (Day 2) (Fall 2014).notebook

0.3_B Get Ready - The Linear Relation - SMART FILE (Day 2) (Fall 2014).notebook