

# Graphing $y = mx + b$

10/7

Slope-intercept Form:  $y = mx + b$

Slope

y-intercept  
(Where Graph begins)

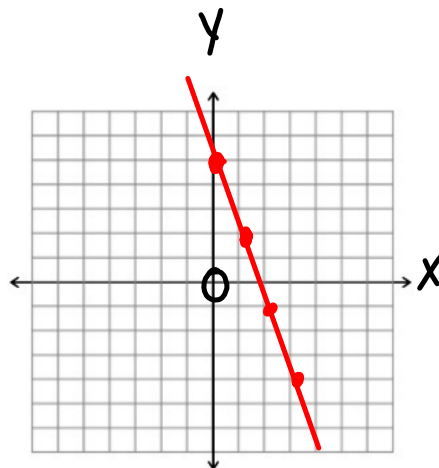
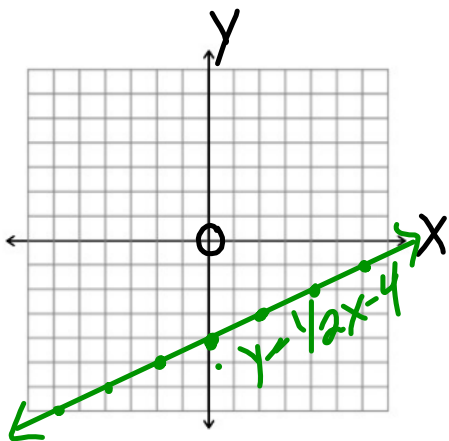
Write an equation that has:

a) Slope:  $\frac{1}{2}$   $m$   
y-int:  $-4$   $b$

b) Slope:  $-3$   
y-int:  $5$

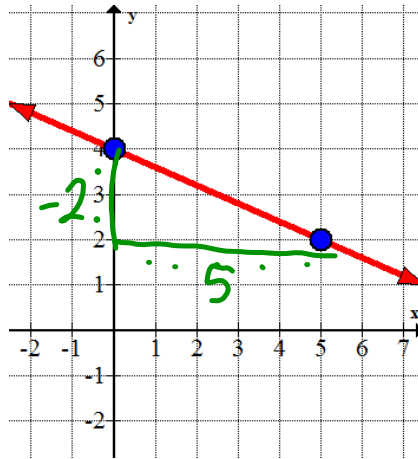
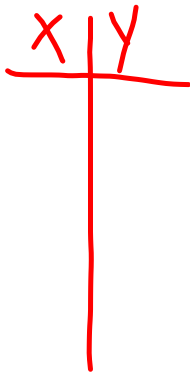
$y = mx + b$   
 $y = \frac{1}{2}x - 4$   $\frac{1}{2} \uparrow$   
 $2 \rightarrow$

$y = -3x + 5$   $\frac{-3 \downarrow}{1 \rightarrow}$



$\frac{\text{Rise}}{\text{Run}}$

Write the equation.



$$m = -2/5$$
$$y\text{-int: } 4$$

$$y = -2/5x + 4$$

# Graphing w/ Calc.

## Steps

1. Enter Equation into  $Y=$

$$y = -\frac{2}{5}x + 4$$

↖  $x$  is next to Green Alpha

2. Push Graph button

3. Push 2<sup>nd</sup> → Graph

↳ The table of ordered pairs pops up

4. Copy down table - Only need 5 points  
AND only "pretty" points

X	Y
-5	6
0	4
5	2
10	0

5. Plot the points from my table

