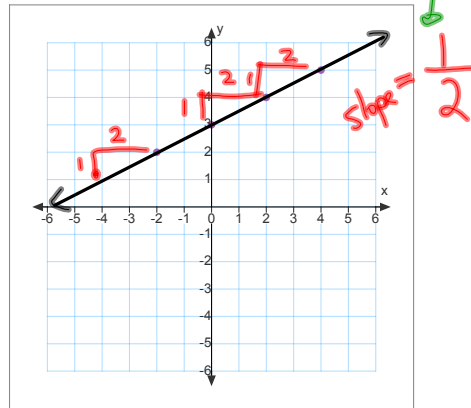


### 6.3 Graphing Lines (Linear Functions)

Ex Graph  $y = \frac{1}{2}x + 3$  *y-intercept*

method 1 : Table of values

x	y
-2	2
0	3
2	4
4	5



Ex:  $y = -\frac{3}{4}x + 5$

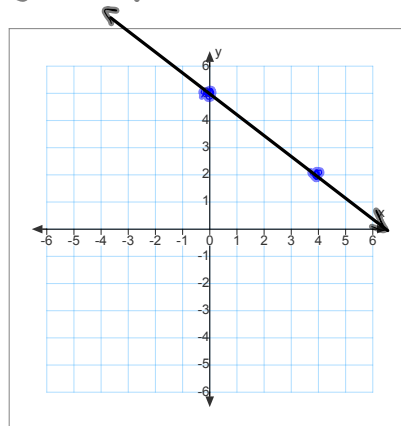
$y = mx + b$   
*m* slope *b* y-intercept

method 2 : using y-intercept and slope

y-intercept is 5

slope is  $-\frac{3}{4}$

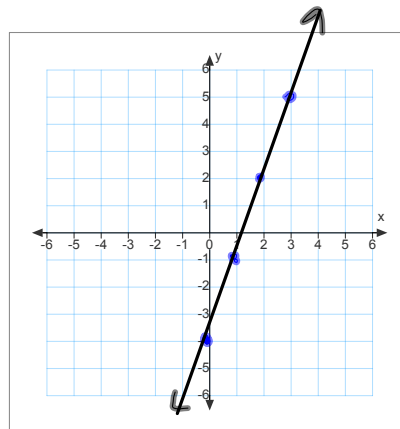
$\frac{\text{rise}}{\text{run}} = -\frac{3}{4}$



Ex: Graph  $y = 3x - 4$

$m = \frac{3}{1}$

y-int = -4



Equation	slope	y-int
$y = \frac{2}{3}x + 5$	$\frac{2}{3}$	5
$y = -2x - 3$	$-\frac{2}{1}$	-3
$y = -\frac{3}{4}x + 2$	$-\frac{3}{4}$	2
$y = \frac{1}{2}x + 7$	$\frac{1}{2}$	7
$y = 7 + \frac{1}{2}x$		

with slope  $\frac{2}{3}$  and y-int of -5

- A)  $y = -\frac{2}{3}x - 5$
- B)  $y = -\frac{2}{3}x + 5$
- C)  $y = \frac{2}{3}x - 5$**
- D)  $y = \frac{2}{3}x + 5$