

Writing and Graphing Linear Equations
Honors Algebra 2

$$\text{Slope} = \frac{\Delta y}{\Delta x} = \frac{y_2 - y_1}{x_2 - x_1}$$

y-intercept = b
slope = m

Equation	Name	Benefits
$y = mx + b$	slope-intercept	see slope & y-intercept
$y - y_1 = m(x - x_1)$	point-slope	see slope *easiest one to start w/ to write equation
$Ax + By = C$ <small>A, B, & C integers A positive</small>	standard	find x & y-intercept quickly

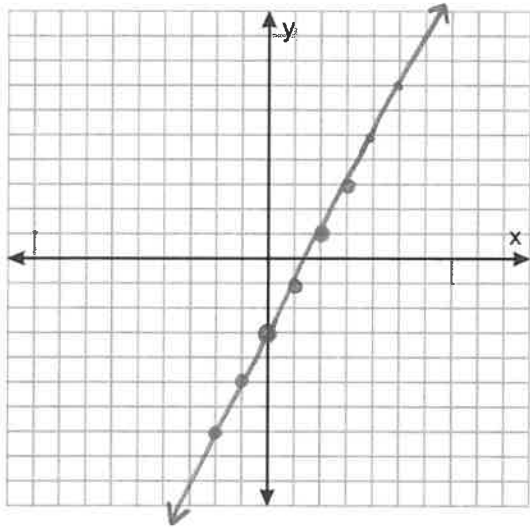
ex) Graph $y = 2x - 3$

y-intercept = -3

x-intercept (#, 0)

y-intercept (0, #)

slope = 2



or can make table:

x	y
-2	-7
-1	-5
0	-3
1	-1
2	1