

$y = mx + b$ is a linear equation

example

$$y = 3x + 2$$

To get an idea of the graph, we take a few points on this line

x	$y = 3x + 2$	(x, y)
0	$y = 3(0) + 2 = 0 + 2 = 2$	(0, 2)
1	$y = 3(1) + 2 = 3 + 2 = 5$	(1, 5)
2	$y = 3(2) + 2 = 6 + 2 = 8$	(2, 8)
3	$y = 3(3) + 2 = 9 + 2 = 11$	(3, 11)
-1	$y = 3(-1) + 2 = -3 + 2 = -1$	(-1, -1)
-2	$y = 3(-2) + 2 = -6 + 2 = -4$	(-2, -4)
-3	$y = 3(-3) + 2 = -9 + 2 = -7$	(-3, -7)

(x,y)

$(0,2)$

$(1,5)$

$(2,8)$

$(3,11)$

$(-1,-1)$

$(-2,-4)$

$(-3,-7)$

**plot
these
points
and connect
them by
a ruler
to get
a graph**

