

**Equation**

Slope-Intercept Form:

$y = mx \pm b$

Slope

y intercept is always at  $x=0$

Start here to graph an eqn

**RISE**  
**RUN**

$y = 3x - 1$

**Table of Values**

Always x axis (Horizontal axis)

x	y
-1	-4
0	-1
1	2
2	5

y intercept  $x=0$   
 $y=-1$

Pattern: 1 to +x (Right)

Pattern: 3 to +y (up)

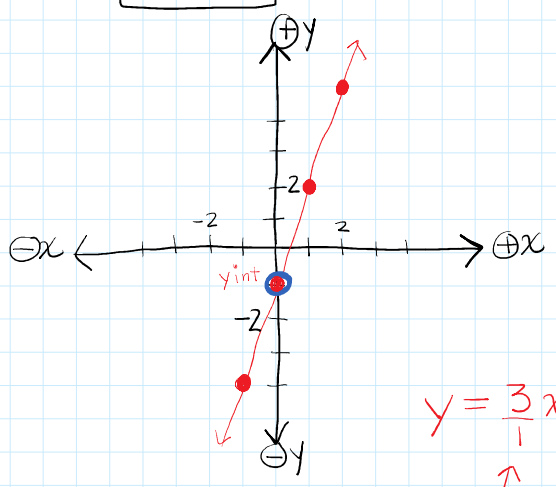
Run: +1

Rise: +3

Slope:  $\frac{\text{Rise}}{\text{Run}} = \frac{3}{1} = 3$

correct better

**Graph**



$y = 3x - 1$

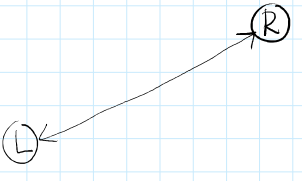
Start here

yint = -1  
 $x=0$

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

Increasing Line  
left to Right

**Positive Slope**



decreasing Line  
left to Right

**Negative Slope**

