

# WIN 1-4 → Equations From Graphs

$$y = mx + b$$

↓  
Stays  
"y"

↓  
Stays  
"x"

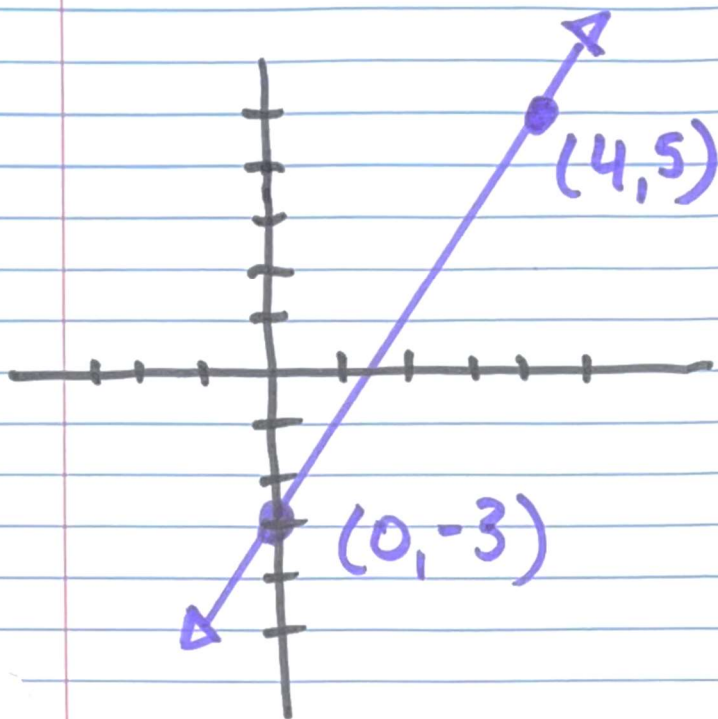
Slope (or)  $\frac{\text{Rise}}{\text{Run}}$

y-intercept

↓  
How steep the  
line is

↓  
What "y" is  
when "x" is 0

Find the  $y = mx + b$  equation!



y-intercept  
"b"  
is  
-3

Slope is  
positive

How steep is the line? What's the slope?

"m" =  $\frac{\text{Rise}}{\text{Run}}$

$\frac{\text{Rise } 8}{\text{Run } 4} = 2$

We have found  $b = -3$  and  $m = 2$

$$y = mx + b$$

$$y = 2x + (-3)$$

$$y = 2x - 3$$