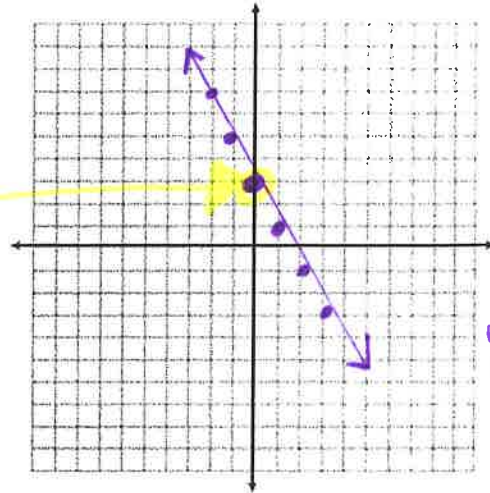


Slope-Intercept Form

Can you graph a line given this information?

1. $m = -2$ $-\frac{2}{1}$ down 2, right 1

2. $(0, 3)$ is a point on the line **y-intercept**



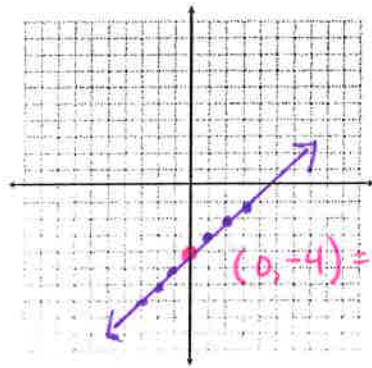
$$y = mx + b$$

↑ slope
 ↓ y-intercept

Identifying the slope and y-intercept in an equation.

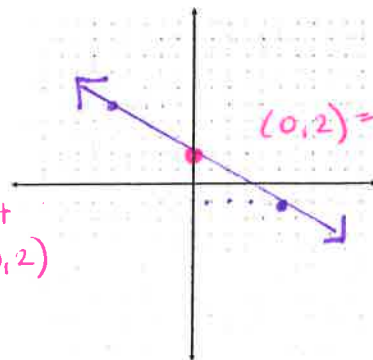
Find the slope and y-intercept and use that information to graph the line.

1) $y = |x - 4|$ y-intercept $(0, -4)$
 ↑ Slope = 1



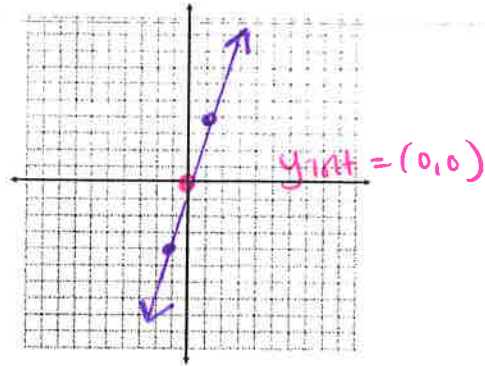
Slope = 1
up 1, right 1

2) $3x + 5y = 10$
 $5y = -3x + 10$
 $y = -\frac{3}{5}x + 2$
 ↑ Slope y-int $(0, 2)$



Slope = $-\frac{3}{5}$
down 3, right 5

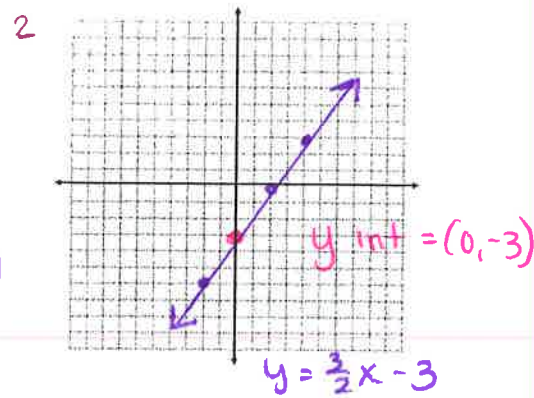
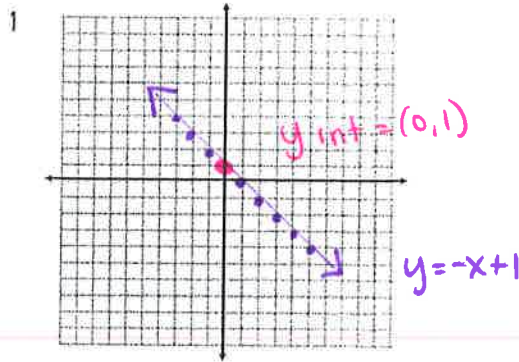
3) $y = 4x$ $(+0)$ y intercept
 ↑
 slope



Slope = 4
 up 4, right 1

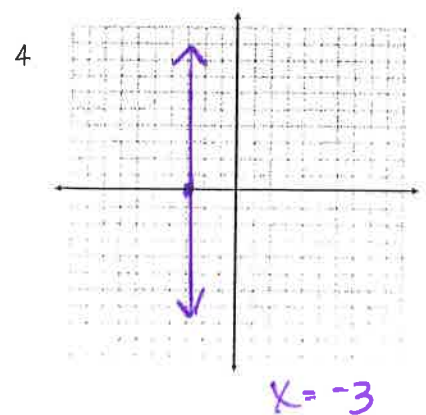
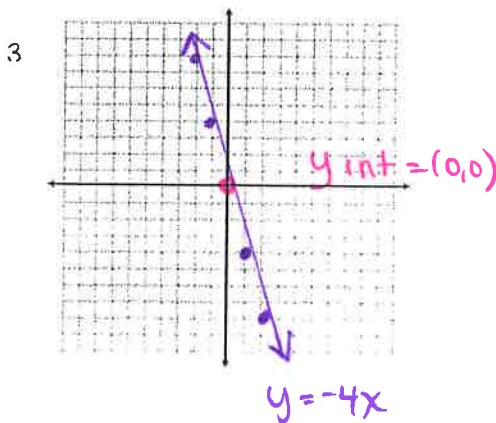
Student Practice

1) $y = -x + 1$ $(+1)$ y int = 1
 ↑
 slope = -1



2) $3x - 2y = 6$
 $-2y = -3x + 6$
 $y = \frac{3}{2}x - 3$ (-3) y intercept = -3

3) $y = 4x$ $(+0)$ y int = 0
 ↑
 slope = 4



4) $x = -3$
 Slope = undefined
 NO y intercept