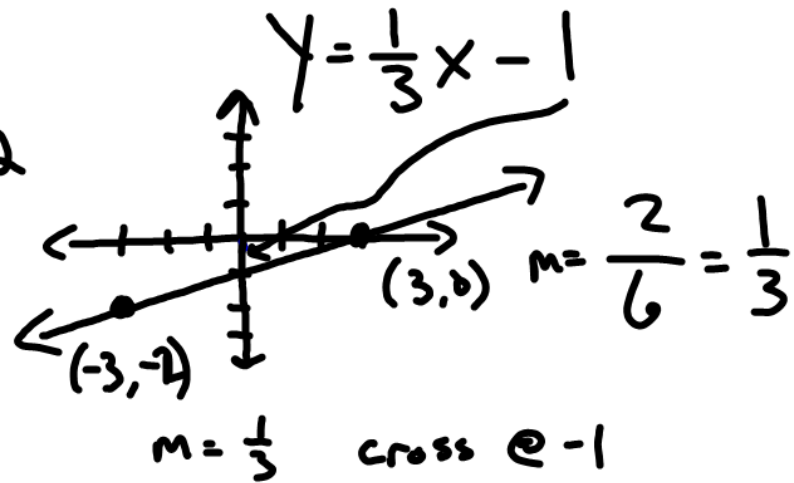
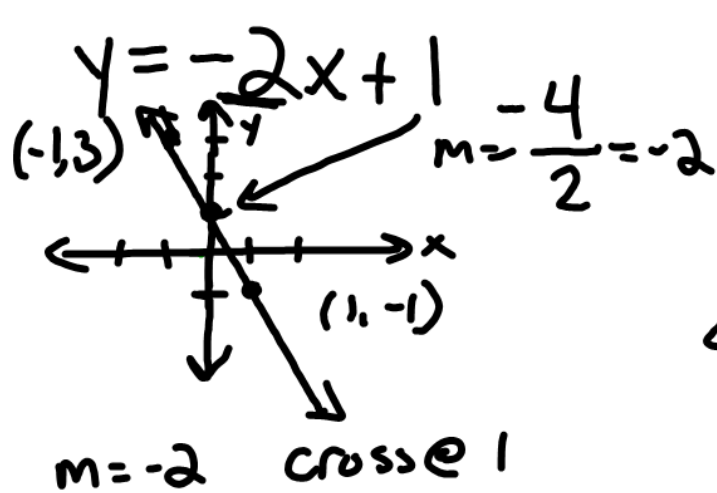


# 4.5 Graph with Slope-Intercept



$y = -2x + 1$   
 ↑ slope    ↑ y-intercept

$y = \frac{1}{3}x - 1$   
 ↑ slope    ↑ y-intercept

## Slope-Intercept Form

$$y = mx + b$$

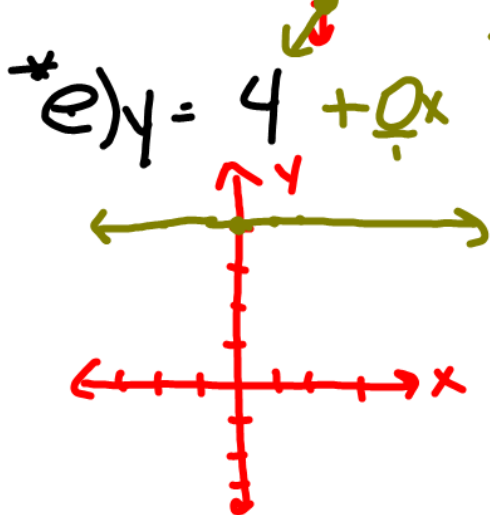
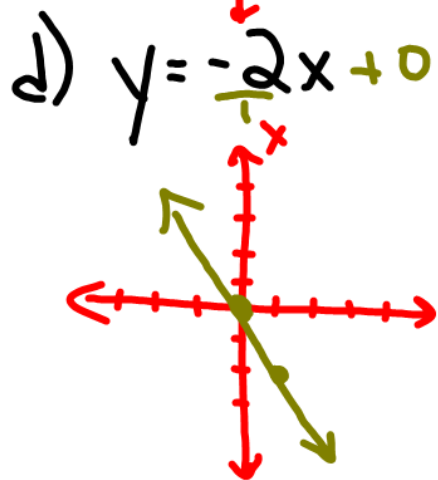
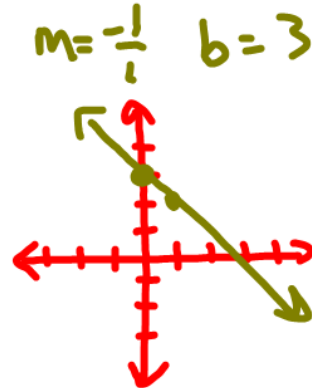
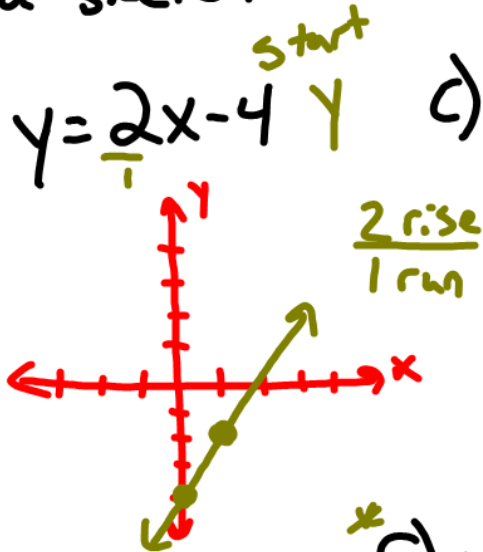
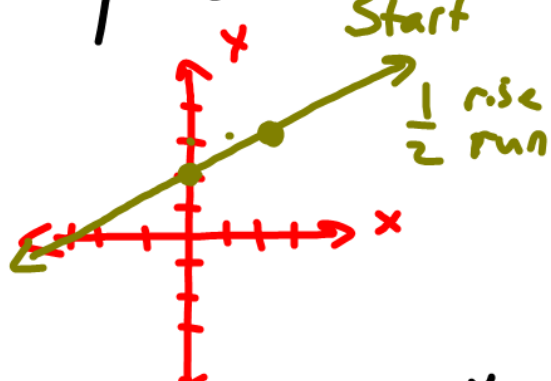
$m$  = Slope of line  
 $b$  = y-intercept (Where line crosses y-axis)

$x$  = x coordinate

$y$  = y coordinate

Example - Name Slope & y-intercept.  
Make a sketch.

a)  $y = \frac{1}{2}x + 2$     b)  $y = 2x - 4$     c)  $y = -x + 3$



f)  $3x + 2y = 6$

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

$$y = -\frac{3}{2}x + 3$$

