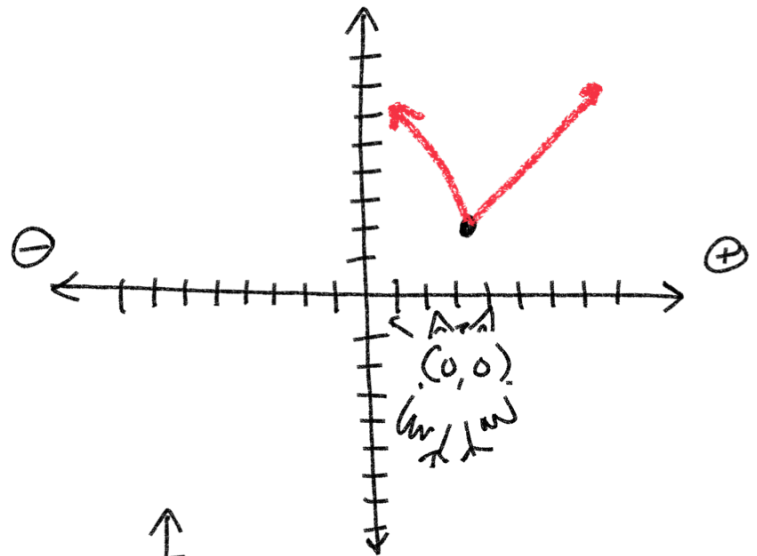


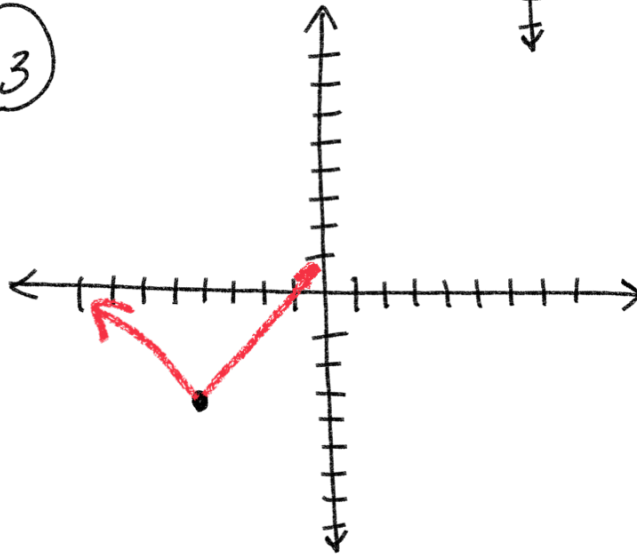
$$y = |x - 3| + 2$$

Annotations:  
 - 3: opposite, right 3  
 - +2: up 2



$$y = |x + 4| - 3$$

Annotations:  
 - +4: left 4  
 - -3: down 3

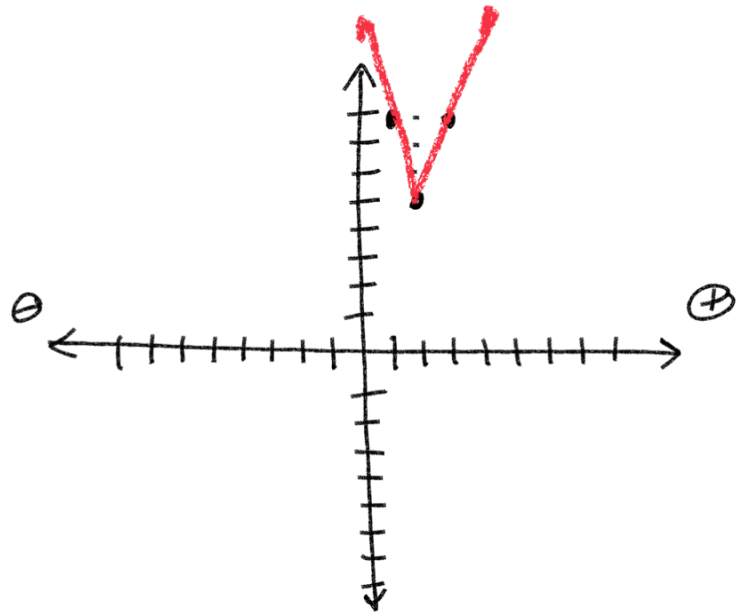


$$y = |3x - 6| + 5$$

Annotations:  
 - 3: factor out  
 - -6/3: factor out

$$y = |3(x - 2)| + 5$$

Annotations:  
 - 3: slope  
 - -2: opposite, right 2  
 - +5: shift up 5

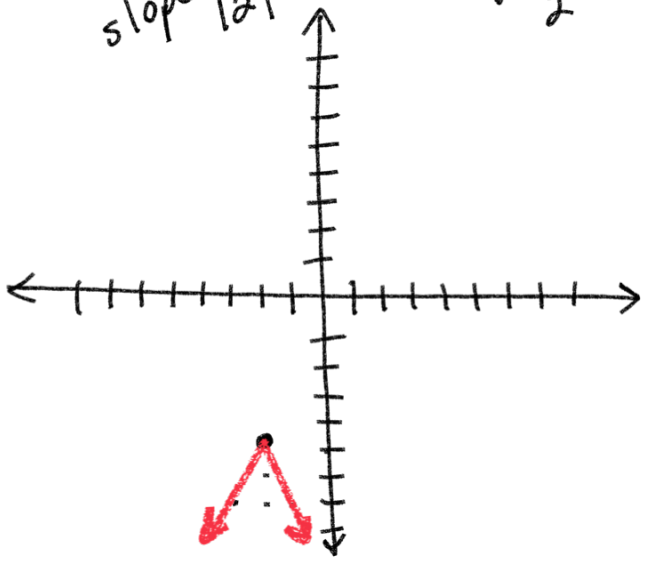


$$y = (-) \left( \frac{2}{2} \right) x + \frac{4}{2} \mid -5$$

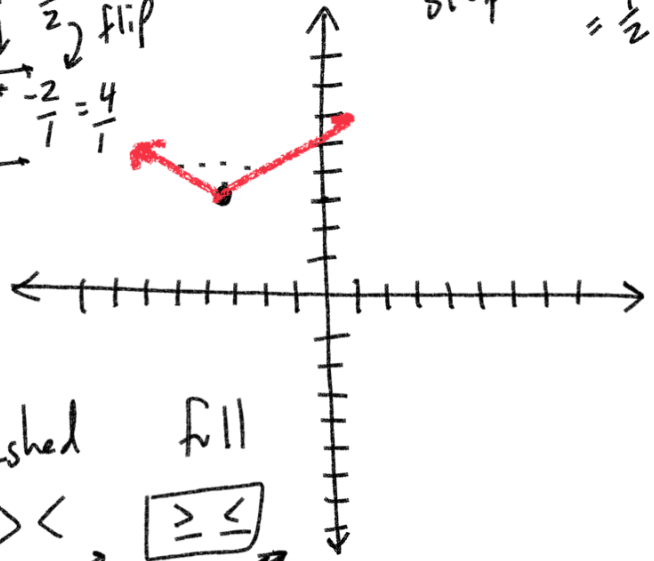
$$y = (+) \left( -\frac{1}{2} \right) x - \frac{2}{2} \mid +3$$

flip ↙  
 slope  $|a|$   
 left 2  
 down 5

slope =  $|-1/2|$   
 =  $1/2$



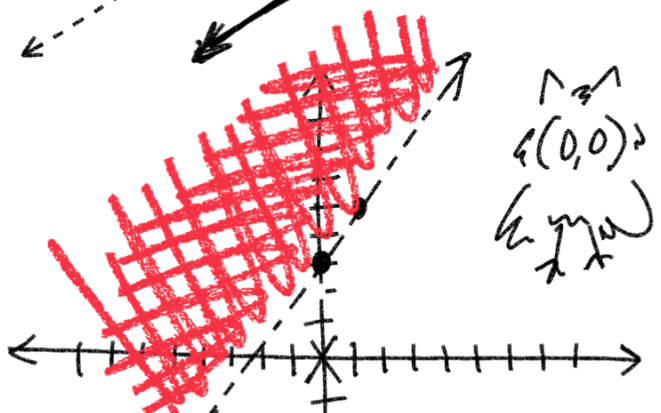
$-2 \div -1/2 = 4$   
 flip  
 $-2 \cdot -1 = 2$



2-7 Graph Inequalities

dashed  $> <$   
 full  $\boxed{\geq \leq}$

$y > 2x + 3$   
 $y = 2x + 3$  ← y-intercept  
 slope  
 $y = mx + b$   
 slope-intercept



$y > 2x + 3$   
 $0 > 2(0) + 3$   
 $0 > 3$  NO! false

$$3x - 4y > 12$$

$$y = mx + b$$

rise / run    up/down  
right/left

Intercept

$$3x = 12$$

$x = 4$

$$-4y = 12$$

$y = -3$

Slope-Intercept

$$3x - 4y > 12$$

$$-4y > -3x + 12$$

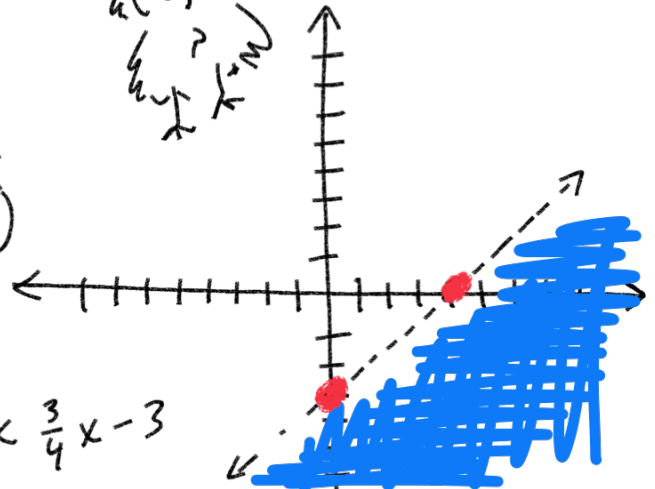
$$y < \frac{3}{4}x - 3$$

$$y < \frac{3}{4}x - 3$$

$$0 < \frac{3}{4}(0) - 3$$

$0 < -3$  false

$(0,0)$   
rise / run



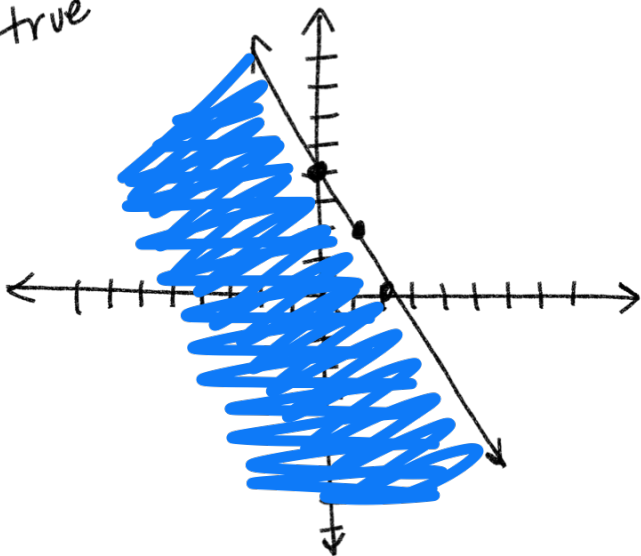
$$y \leq -2x + 4$$

$$0 \leq -2(0) + 4$$

$$0 \leq 4$$

true

$(0,0)$   
rise / run



$$3x + 6y > 18$$

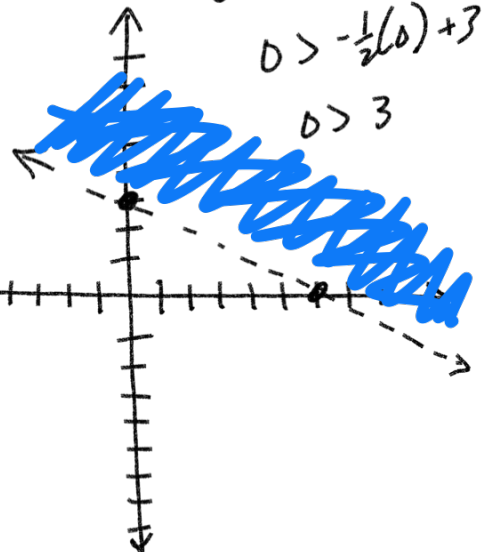
$$6y > -3x + 18$$

$$y > -\frac{1}{2}x + 3$$

$$0 > -\frac{1}{2}(0) + 3$$

$$0 > 3$$

$(0,0)$   
rise / run



when/if  
ready  
email about  
actual test.

Quiz 9  
due som

Quiz 10  
due over  
Break

HW

2-7 evens  
Supplemental HW  
Online HW II (soon)

Quiz 11 (soon)  
due by Dec 2<sup>nd</sup>  
~~Pre-Test~~