

Graphing  $y = mx + b$   
                  ↑            ↑  
                  slope - intercept

~~Place~~<sup>is</sup> the equation in  
slope-intercept form.

Graph the y-intercept.

Using rise over run,  
find the 2<sup>nd</sup> point.

Draw a line  
connecting the points.

Graphing  $y = mx + b$   
↑            ↑  
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Is  $y$  isolated?  
Yes → Keep going  
No → Use another method.

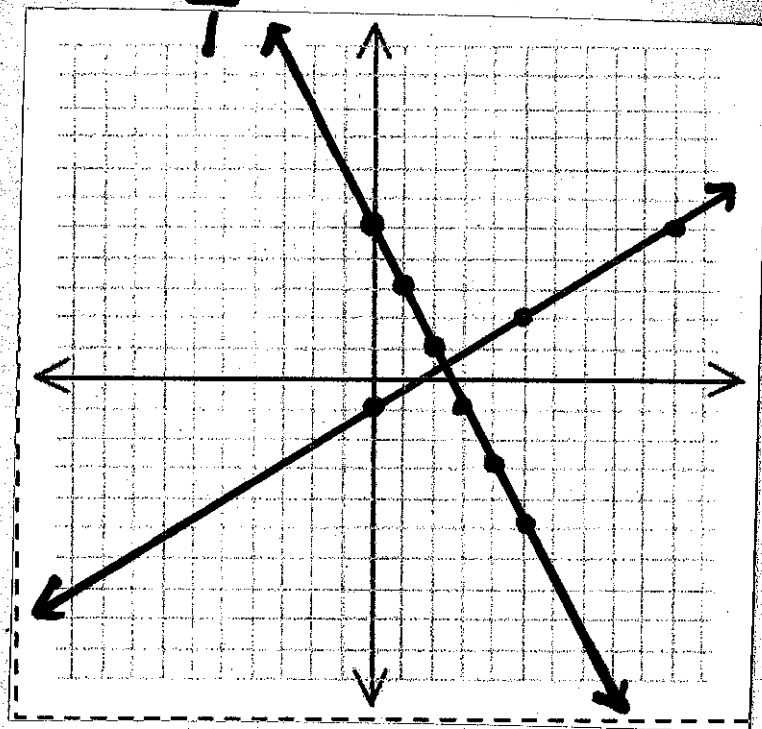
the constant is graphed on the  $y$ -axis

go up if slope is +, go down if slope is -, always go right!

Use a ruler!  
edge to edge!

$$y = -2x + 5$$

↑            ↑  
-2            5



$$y = \frac{3}{5}x - 1$$

# Graphing Slope-Intercept (y isolated) $y = mx + b$

## GRAPHING EQUATIONS WITH SLOPE-INTERCEPT

Read each of the equations below. Graph the linear function using slope-intercept using a different color for each line. In the space below, explain how you created each graph. Be specific.

1.  $y = 3x - 6$

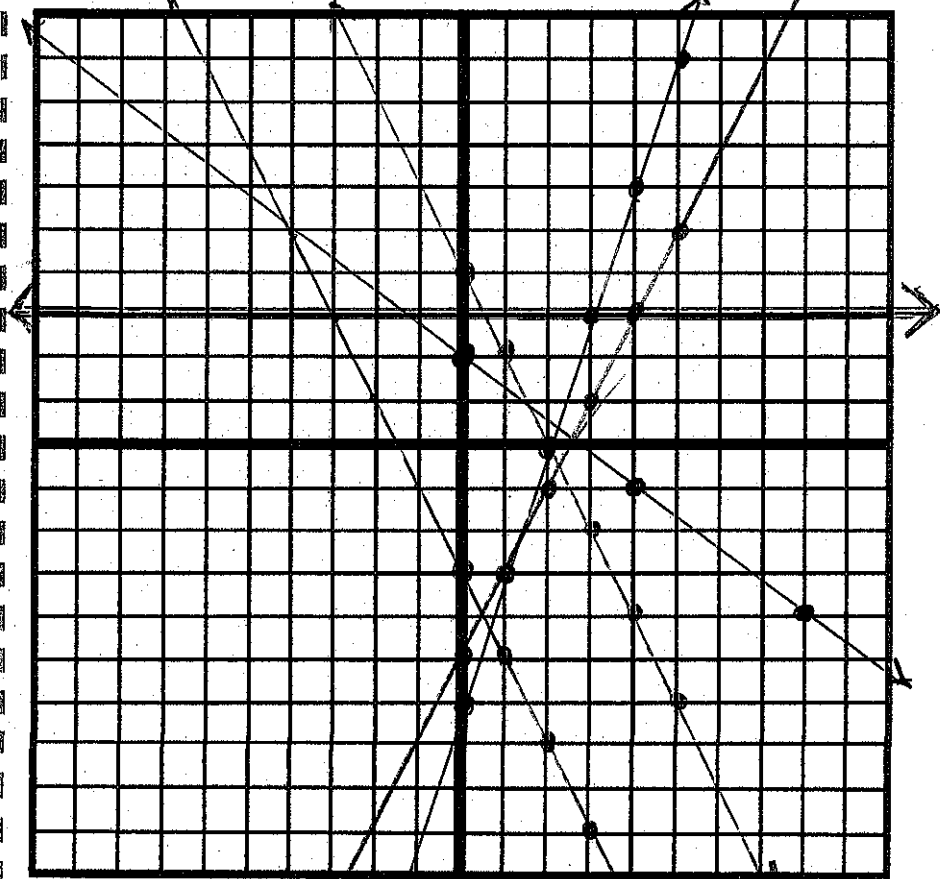
4.  $y = 3$

2.  $y = -2x - 3$

5.  $y - 3 = 1 - 2x$   
 $y = 4 - 2x$

3.  $y = -3/4x + 2$

6.  $y = 2x - 5$



1. start at  $-6$   
go up 3, right 1

2. start at  $-3$   
go down 2, right 1

4. start at 3.  
go up 0, right 1

5. simplify. start at 4  
go down 2, right 1