

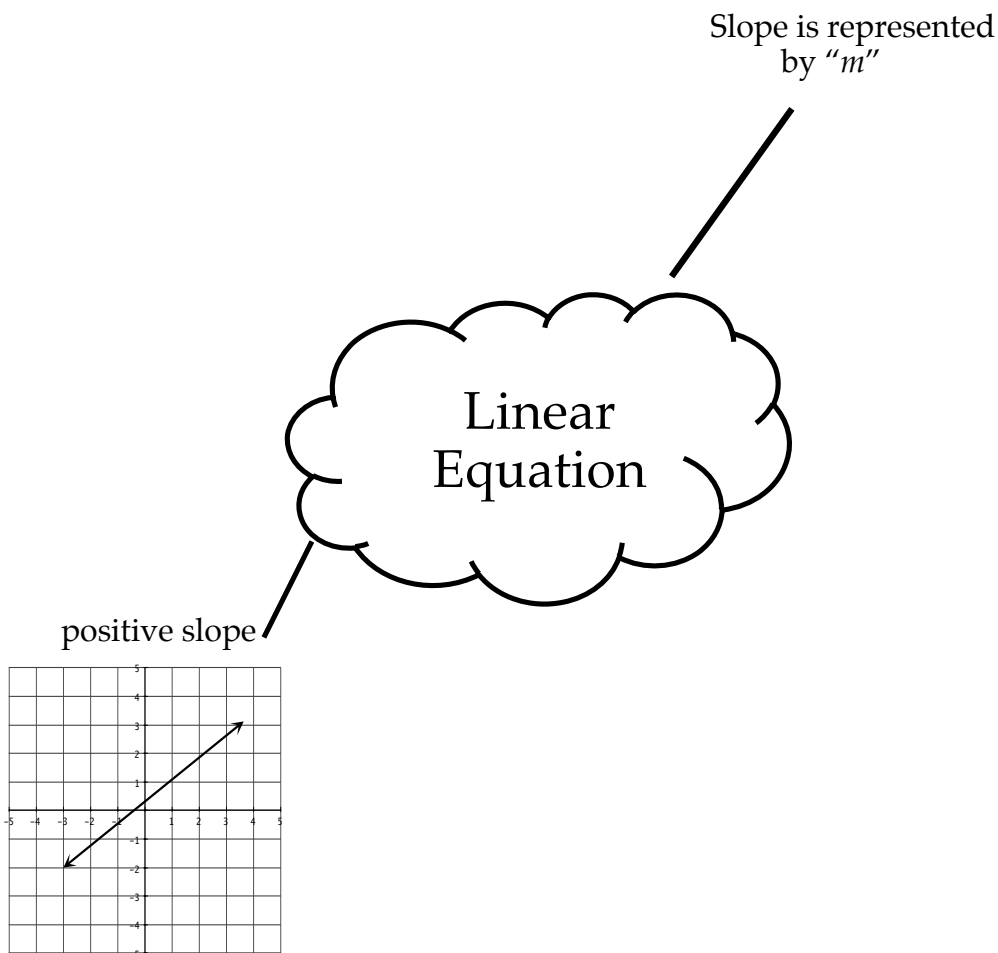
# Graphing Review



## Task 1 - Brainstorm

Complete the following brainstorm for 2-minutes alone.

Try to recall as many things you can about graphing lines. You can even draw pictures to show your understanding if you can't think of the words. An example is given.



## Task 2 – Graphing Review: Slope-intercept Form

Graph the following linear equations written in slope-intercept form ( $y = mx + b$ ). For each problem:

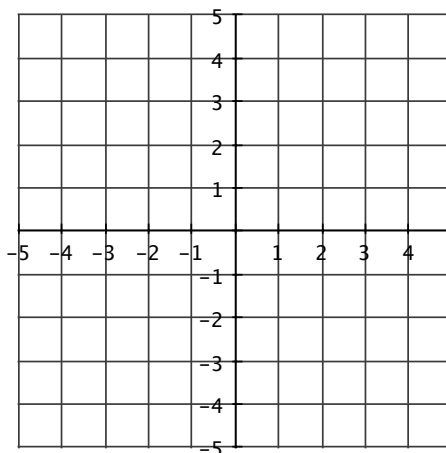
- 1) Circle the  $y$ -intercept using a colored pencil, in both the equation and on your graph. Write the value of the  $y$ -intercept on the line.
- 2) Circle the *slope* in the equation using a colored pencil and then use a slope-triangle to show the slope of the line on the graph. Write the value of the slope on the line.

The color I will use for slope is \_\_\_\_\_ and for the  $y$ -intercept is \_\_\_\_\_.

1)  $y = \frac{1}{2}x - 1$

slope = \_\_\_\_\_

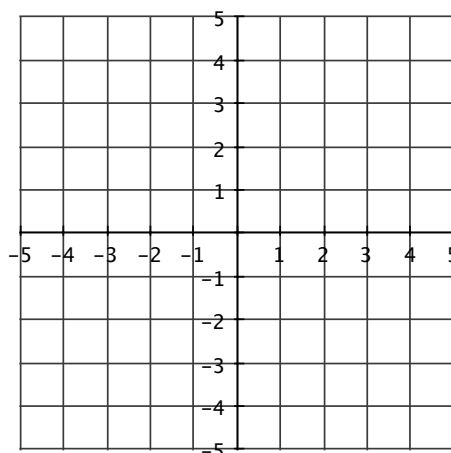
$y$ -intercept = \_\_\_\_\_



2)  $y = -2x + 4$

slope = \_\_\_\_\_

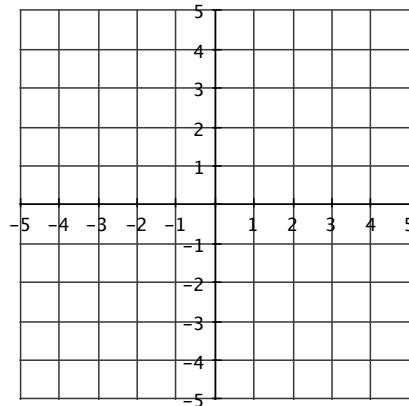
$y$ -intercept = \_\_\_\_\_



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

slope = \_\_\_\_\_

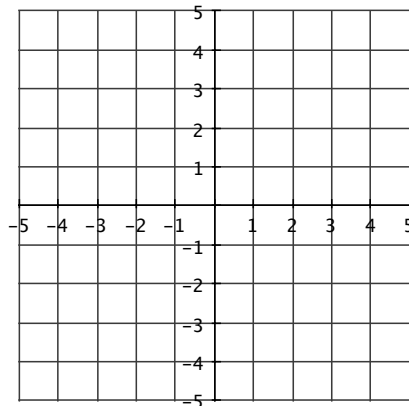
y-intercept = \_\_\_\_\_



4)  $y = x + 2$

slope = \_\_\_\_\_

y-intercept = \_\_\_\_\_



### Task 3 – Graphing Review: Standard Form

Graph each of the following equations, which are written in standard form ( $ax + by = c$ ). To graph the equations you may:

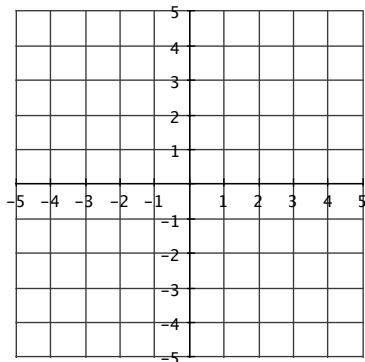
- use the  $x$ -and  $y$ -intercepts

OR

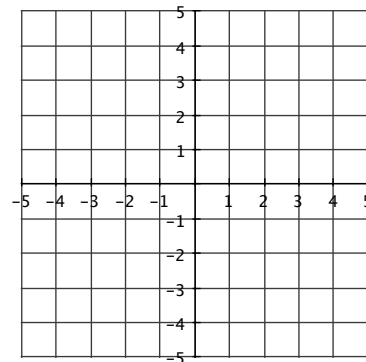
- convert the equation in to slope-intercept form

Use whichever method you are most comfortable with.

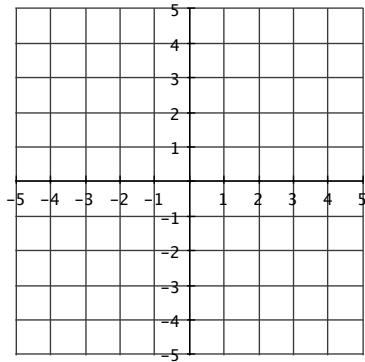
1)  $2x + 4y = 8$



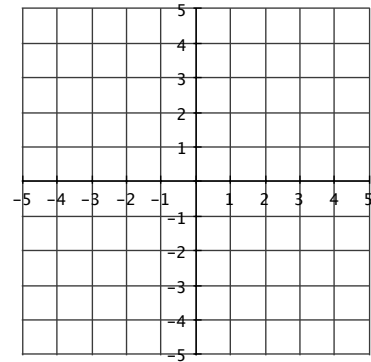
2)  $x - 2y = 2$



3)  $2x - 4y = -8$



4)  $3x + 2y = 8$



When graphing equations in standard form, the method I prefer to use is \_\_\_\_\_ (using *the intercepts* or *converting to slope-intercept form*) because \_\_\_\_\_.