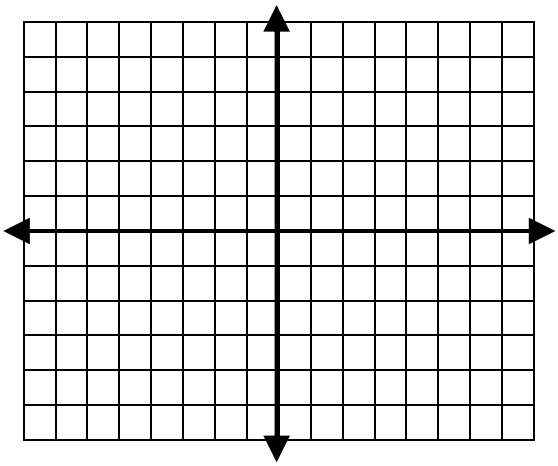
Essential Question: How can we graph a linear relationship using the Slope-Intercept Method?

Do Now: Graph $3y - 6x = -12$ by finding the x and y-intercepts.



Complete the table below:

Equation	Slope of the Line	Y-Intercept	Equation in $y = mx + b$
$3y - 6x = -12$			

Can you draw a conclusion based on the information in the table?

Graphing Lines using the Slope-Intercept Method

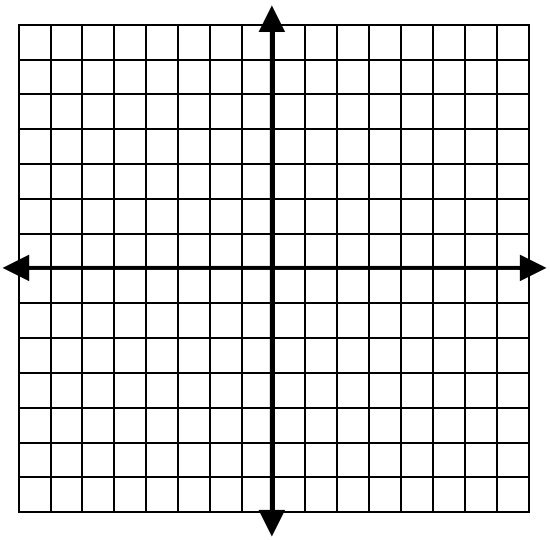
- **Rewrite the equation in slope-intercept form ($y = mx + b$).**
- **Identify the slope and y-intercept of the equation.**

$$y = mx + b$$

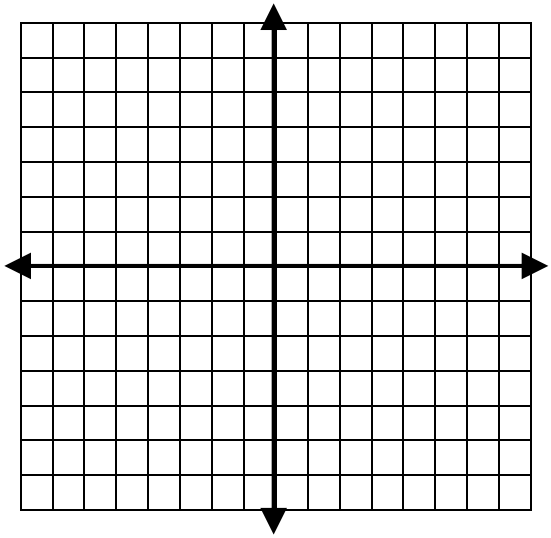
- **Plot the y-intercept (*the point where the line crosses the y-axis*).**
- **From the y-intercept, use the slope to plot a few more points.**
- **Connect the points and graph the line.**

Graph each linear function using the slope-intercept method.

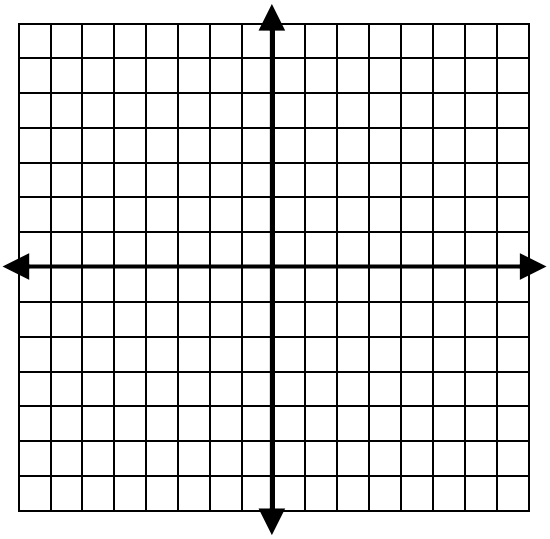
1. Graph $y = \frac{2}{3}x + 4$



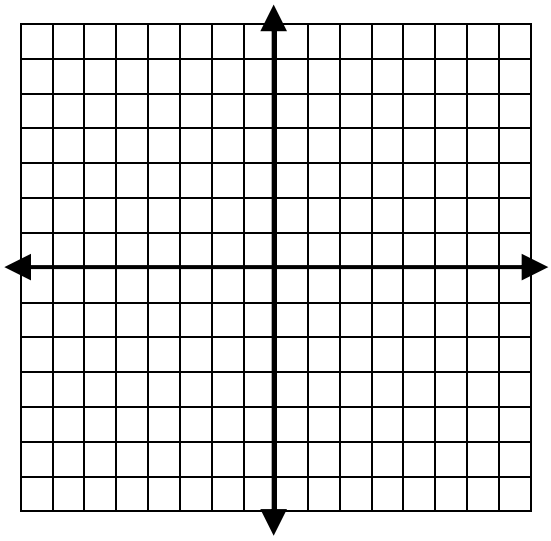
2. Graph $y = -\frac{1}{2}x - 1$



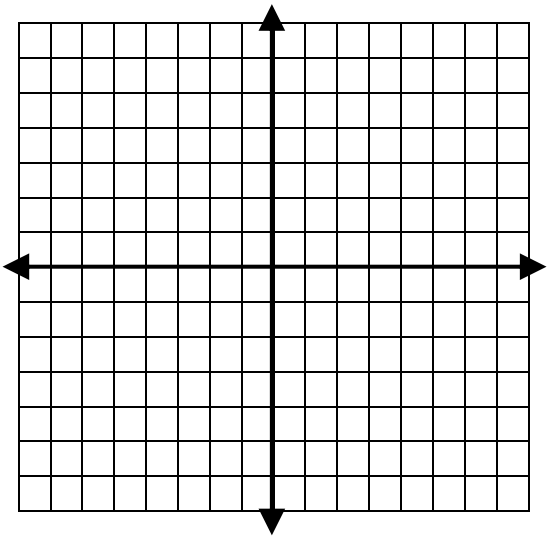
3. Graph $y = x$



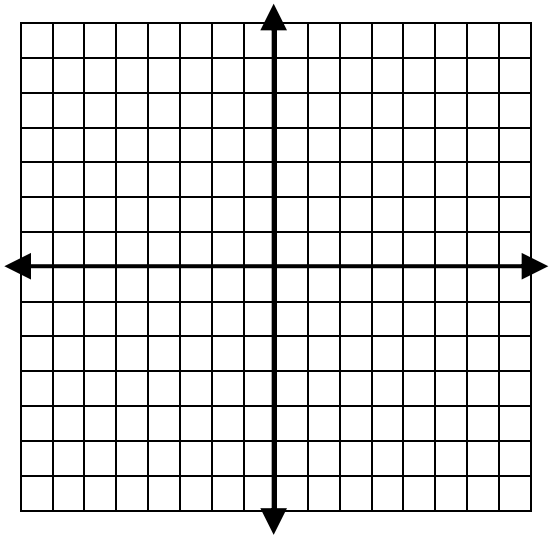
4. Graph $y = -2x + 1$



5. Graph $2y - 3x = 8$



6. Graph $x - y = -6$



The TAKE AWAY

In order to graph a linear relationship using the slope-intercept method, first put the equation in _____ form (*slope-intercept form*). Next, identify the _____ and _____. The first point plotted is the _____ (0,*b*). Use the _____ (rise/run) to create a second point, third point, etc….

Connect the points to create a line.