

5/22/09: Graphing lines in slope-intercept form

NAME:

Warmup:

If three chickens can lay three eggs in three hours, how many eggs can six chickens lay in six hours?

Mini-Lesson:

First, let's review how to graph a line in slope-intercept form:

Ex: graph $y = \frac{2}{3}x + 1$

Slope:

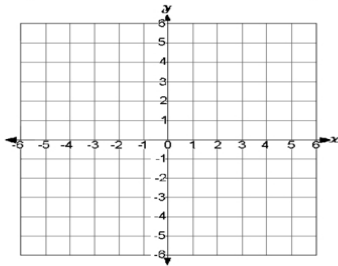
y-intercept:

← Step 1: Identify the slope and y-intercept

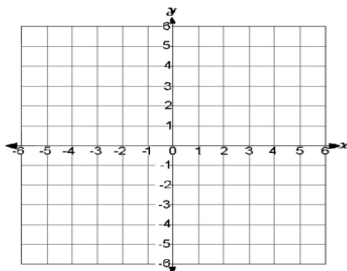
← Step 2: Put the first point at the y-Intercept

← Step 3: Use slope = $\frac{\text{rise}}{\text{run}}$
get the second point

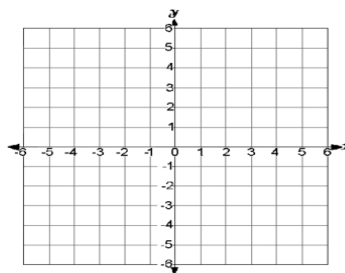
← Step 4: Repeat step 3 as necessary
and connect the dots



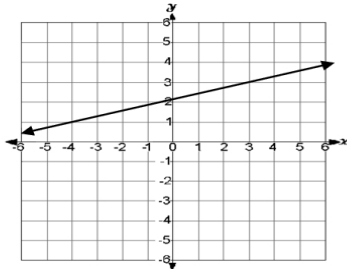
Practice: Graph $y = \frac{1}{2}x + 3$



graph $y = -\frac{3}{2}x + 4$



You can also write an equation based on a graph:



The general form is $y = mx + b$ where m is the slope and b is the y-intercept.

Based on the picture, we can identify that the y-intercept is 2.

We can count points to find that the slope is $\frac{1}{3}$

The equation of the line is: