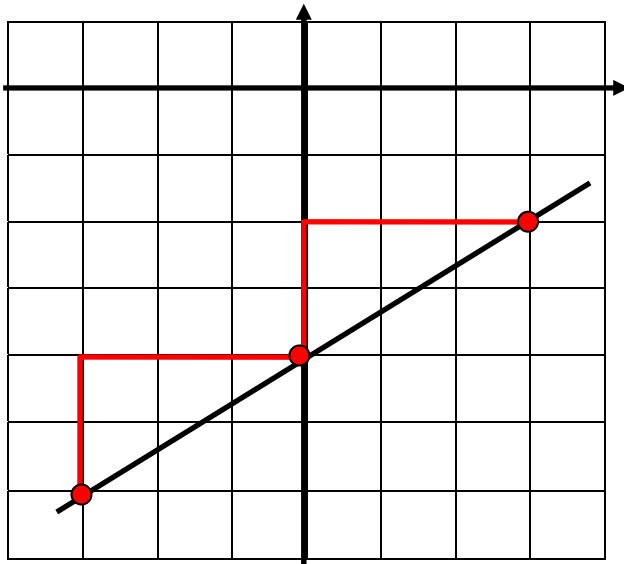


**Using Similar Triangles to Find Slope - Step-by-Step Lesson****Lesson 1 Find Slope Problem:**

1. a. Find the slope of the line using the similar triangles as a guide.
- b. Write the equation of the line.

**Explanation:**

a. Slope is a ratio between the change in  $y$  and the change in  $x$  ( $y/x$ ) (rise/run).

Both triangles rise 2 places ( $y$ ) and run 3 places ( $x$ ).

So the slope is  $2/3$ .

b. The equation for a straight line is:  $y = mx + b$

$m$  = slope,  $b$  =  $y$ -intercept

The slope we determined is  $(2/3)$ .

The  $Y$  intercept is where the line crosses the  $Y$  axis. Looking at the graph it crosses at  $-4$ . So the final equation will look like:

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

