Slope of a Line Rules

Slope (m):   The slant of a line as you look at it from left to right.

$$slope\ (m) = \frac{rise}{run} = \frac{y_2 - y_1}{x_2 - x_1}$$
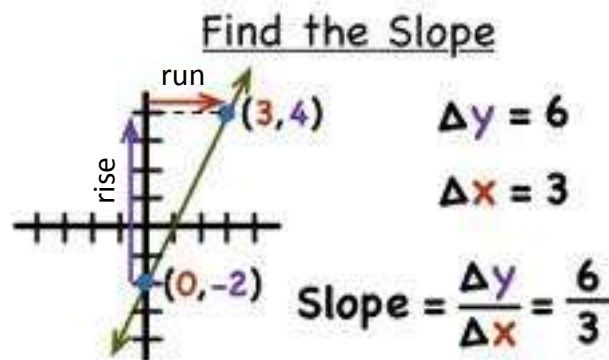
Finding the slope from two points using a graph.

Step 1:   Graph points.

Step 2:   Find the rise or the change in "y".

Step 3:   Find the run or the change in "x".

Step 4:   Write the slope as a ratio of rise to run.

Find the Slope

$\Delta y = 6$

$\Delta x = 3$

$Slope = \frac{\Delta y}{\Delta x} = \frac{6}{3}$

Finding the slope using the formula.

Step 1:   Label the coordinate points (x_1, y_1) and (x_2, y_2).

Step 2:   Find the change in y or Δy or $y_2 - y_1$.

Step 3:   Find the change in x or Δx or $x_2 - x_1$.

Step 4:   Write the slope as a ratio of Δy to Δx.

(3 , 4) and (0, -2)

(x_1, y_1) and (x_2, y_2)

Step 1:   Then $x_1 = 3$, $x_2 = 0$, $y_1 = 4$, and $y_2 = -2$

Step 2:   Find $y_2 - y_1$ or $-2 - 4 = -6$.

Step 3:   Find $x_2 - x_1$ or $0 - 3 = -3$.

Step 4:   Write the slope as a ratio or m = -6/-3 or 2.