Finding The Slope of a Line From 2 Points

The Slope Formula: $m = \frac{y_2 - y_1}{x_2 - x_1}$

Ex:) Pt. 1 $(-3, 1)$ & Pt. 2 $(1, -5)$

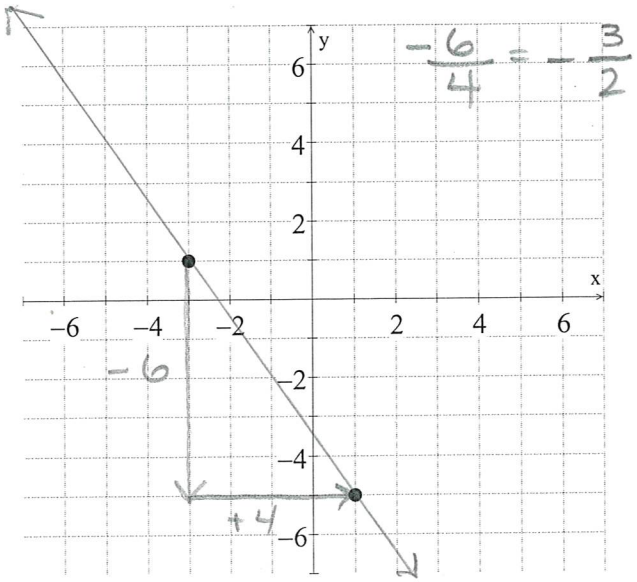
$x_1\ y_1 \qquad x_2\ y_2$

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

$$m = \frac{(-5) + (-1)}{(1) + (+3)}$$

$$m = \frac{-6}{4}$$

$$\boxed{m = -\frac{3}{2}}$$



↑ LIMITED

LARGER #S ?

$(1000, 200)$ & $(-500, -300)$

FRACTIONS / DECIMALS

$(4\frac{1}{8}, -2\frac{1}{2})$ & $(-3, -5\frac{1}{4})$

Ex:) $(4, -3)$ & $(-1, 2)$

$x_1\ y_1 \qquad x_2\ y_2$

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

$$m = \frac{(2) + (+3)}{(-1) - (4)}$$

$$m = \frac{5}{-5}$$

$$\boxed{m = -1}$$

Ex:) $(-4, 0)$ & $(6, 6)$
$x_1\ y_1 \quad x_2\ y_2$

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

$$m = \frac{(6) - (0)}{(6) + (+4)}$$

$$m = \frac{6}{10}$$

$$\boxed{m = \frac{3}{5}}$$

Ex:) $(-2, 5)$ & $(-5, -4)$
$x_1\ y_1 \quad x_2\ y_2$

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

$$m = \frac{(-4) + (-5)}{(-5) + (+2)}$$

$$m = \frac{-9}{-3}$$

$$\boxed{m = 3}$$

Ex:) $(3, 0)$ & $(0, 4)$
$x_1\ y_1 \quad x_2\ y_2$

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

$$m = \frac{(4) - (0)}{(0) - (3)}$$

$$\boxed{m = \frac{4}{-3}}$$