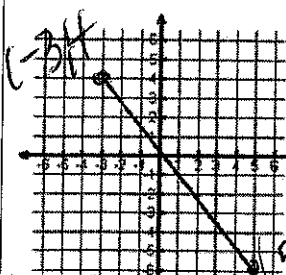


Distance Formula:

When given (x_1, y_1) and (x_2, y_2) $d = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$

Ex. 4: Find the "length" of the line segment.



x_1, y_1 x_2, y_2
 $(-3, 4)$ and $(5, -6)$

$$d = \sqrt{(-3 - 5)^2 + (4 - (-6))^2}$$

$$d = 12.8$$

Ex. 5: Find the distance between the 2 points. Round to nearest tenth.

$(-3, 6)$ and $(-10, -5)$
 x_1, y_1 x_2, y_2

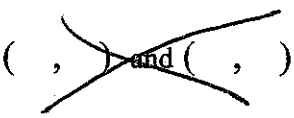
$$d = \sqrt{(-3 - (-10))^2 + (6 - (-5))^2}$$

$$= 13.0$$

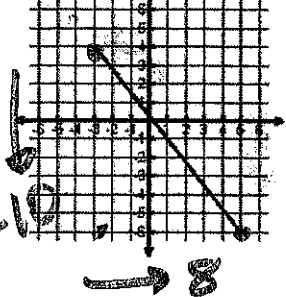
Slope Formula: m When given (x_1, y_1) and (x_2, y_2)

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

Ex. 6: Find the slope.



Count ↑



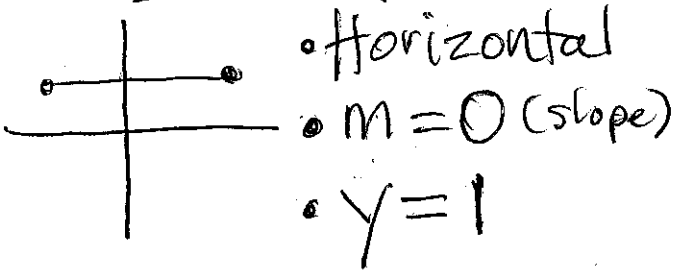
$$m = \frac{-10}{8} = -\frac{5}{4}$$

Ex. 7: Find the slope given two points.

x_1, y_1 x_2, y_2
 $(-5, 1)$ and $(4, -3)$

$$m = \frac{-3 - 1}{4 - (-5)} = -\frac{4}{9}$$

HOY



VUX

