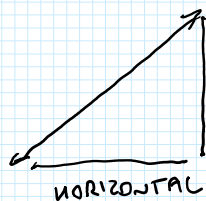SLOPE — RATE OF CHANGE
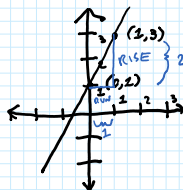
$$\text{SLOPE} = \frac{\text{VERTICAL CHANGE}}{\text{HORIZONTAL CHANGE}}$$

$$= \frac{\text{RISE}}{\text{RUN}}$$

$$= \frac{y}{x}$$

VERTICAL

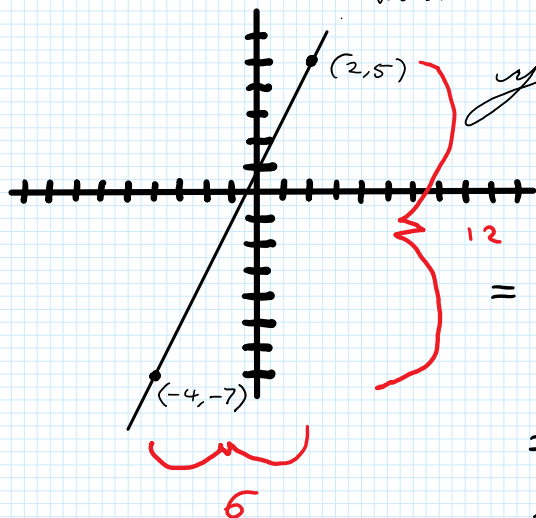HORIZONTAL

HOW FAST VERTICAL
RATIO CHANGES
IN COMPARISON TO
HORIZONTAL RATIO

(2,3)
RISE } 2
(0,2)
RUN
1   2   3

$$\text{SLOPE} = \frac{\text{CHANGE IN } y}{\text{CHANGE IN } x}$$

$$= \frac{2}{1}$$

$$= 2$$

ANY TWO POINTS
IN THE CARTESIAN
PLANE I.E. (x_1, y_1)
AND (x_2, y_2)
THEN SLOPE IS
DEFINED AS

$$\text{SLOPE} = \frac{y_1 - y_2}{x_1 - x_2}$$

$$= \frac{(3-1)}{(1-0)}$$

$$= \frac{2}{1}$$

$$= 2$$

(2,5)

$$y = 2x + 1$$

12

(-4,-7)

6

$$= \frac{5 - -7}{2 - -4}$$

$$= \frac{12}{6}$$

$$= 2$$

C.W.G
2800In1

Lecture 9
JJC AI (ALGEBRA I)
11:53

West: Graph
$$y = (-1, 7)$$

$y = (-1, 1)$

$y = (2, -8)$ AND

FIND SCOPE