

BE-1A TUESDAY 2-6-07

If you HAVE EVEN BEEN mudding you have probably driven up $\oplus$ or down $\ominus$ some steep hills. Can you describe "how steep" to someone THAT WAS NOT THERE? How? Is your way EXACT? Try writing your description.

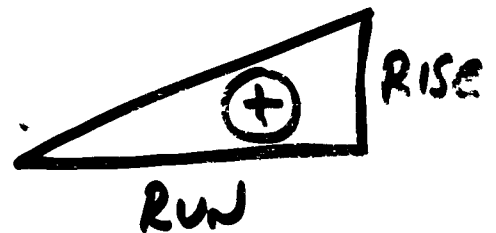
①

SLOPE A MEASURE OF THE
STEEPNESS OF A LINE.
SLOPE IS A NUMBER.

m THE VARIABLE USED FOR
SLOPE IN ALGEBRA. IT IS
NOT KNOWN FOR SURE WHY
m IS USED, IT MAY HAVE
COME FROM A FRENCH WORD
FOR STEPS 

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

WHERE



②

How to find the slope of a line.

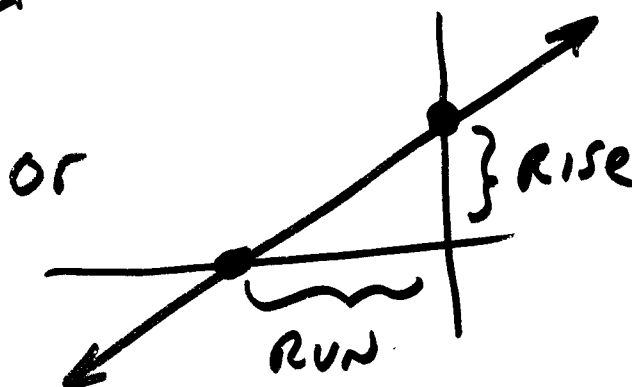
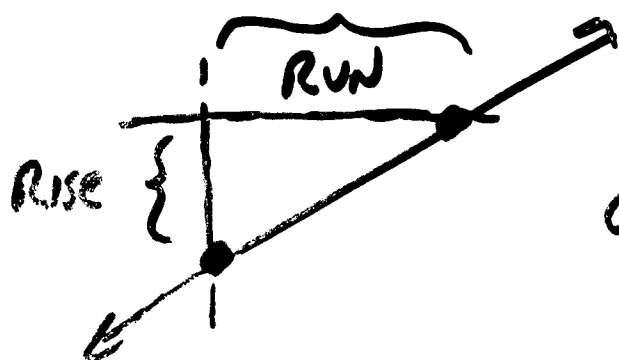
① TAKE ANY 2 points on the line

② Draw a horizontal OR vertical line through 1 point.

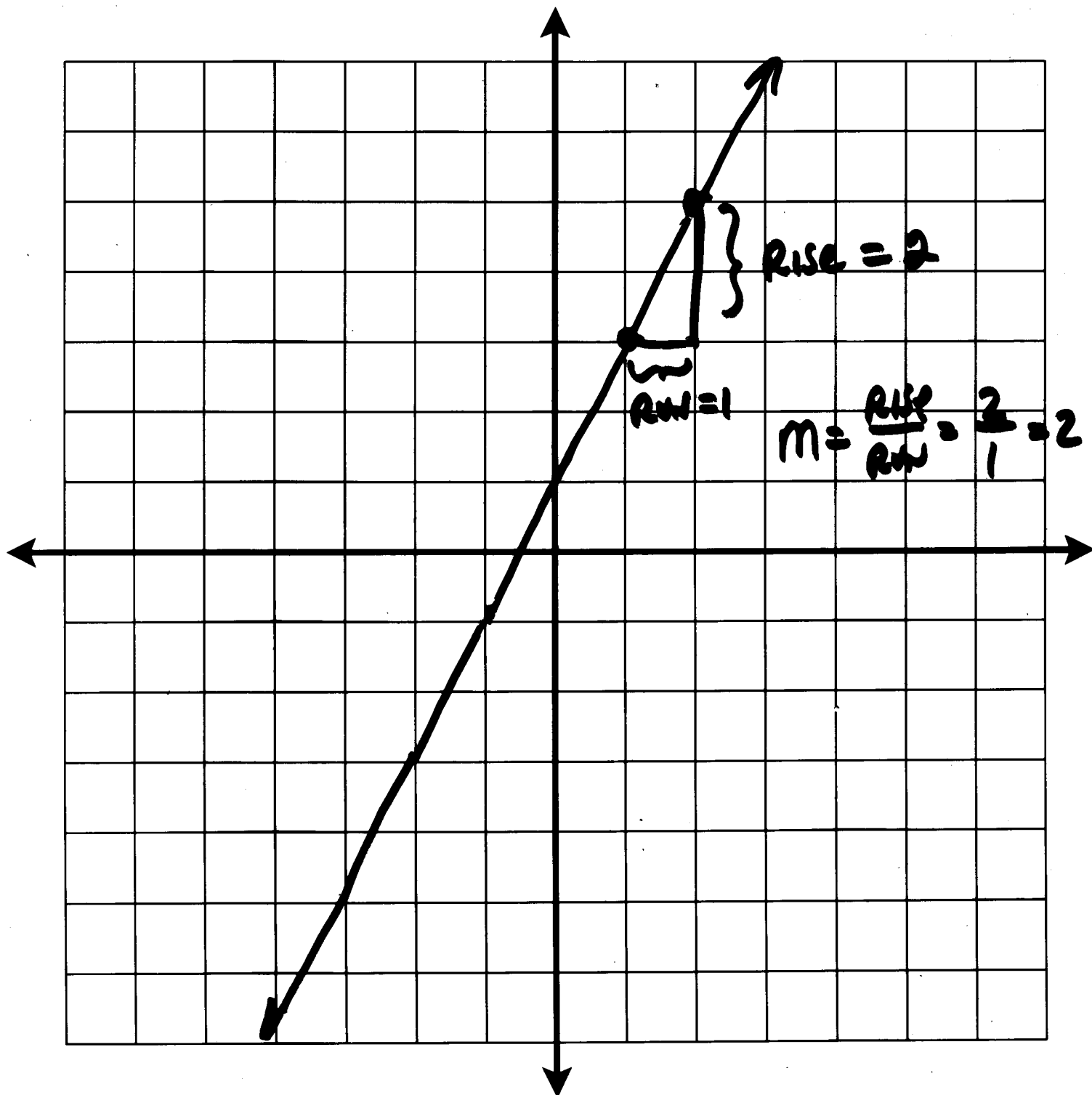
③ Whatever you picked above, draw the OTHER kind of line through the other point

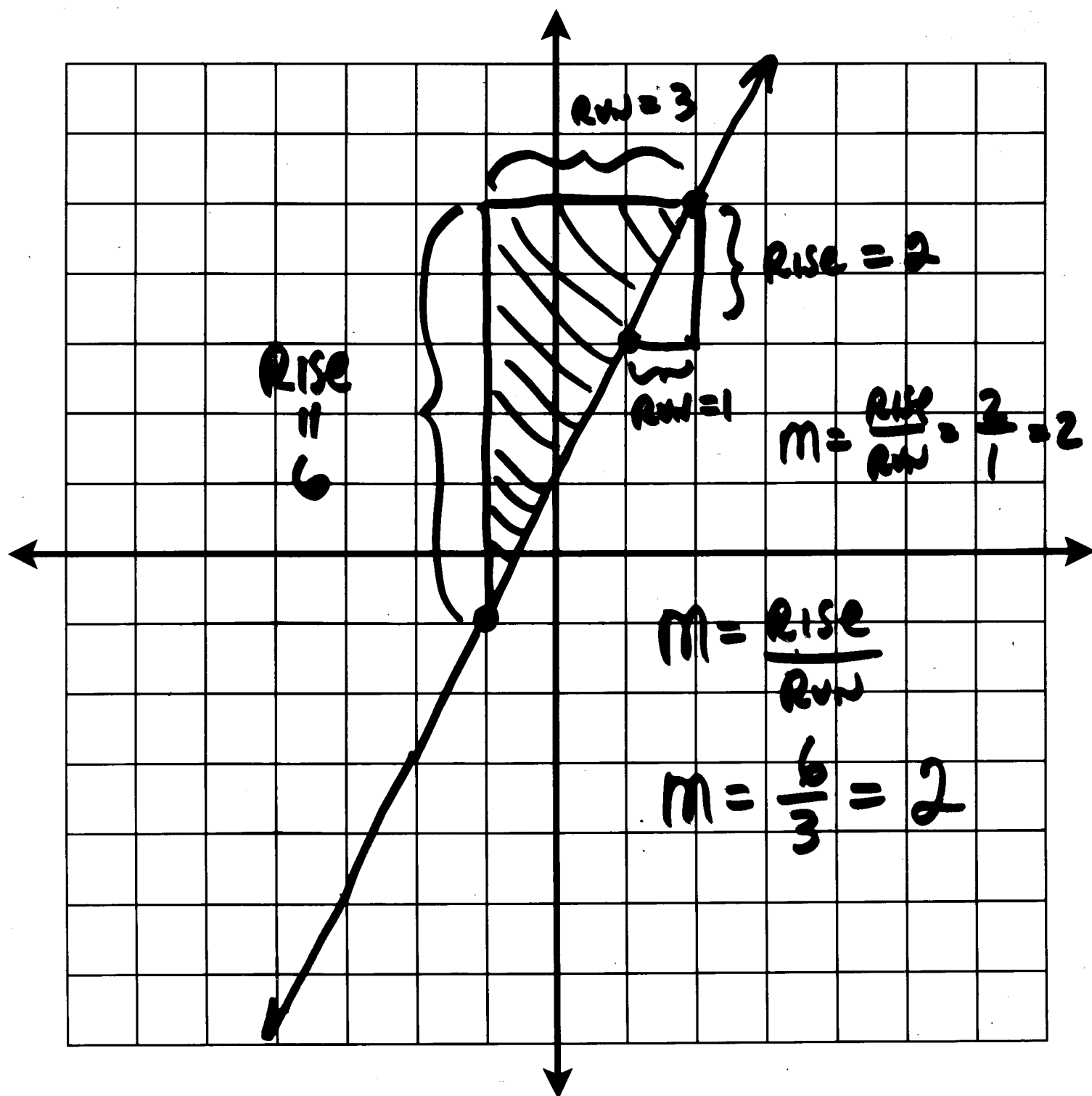
④ Measure the RISE AND RUN.

The slope is $\frac{\text{RISE}}{\text{RUN}}$

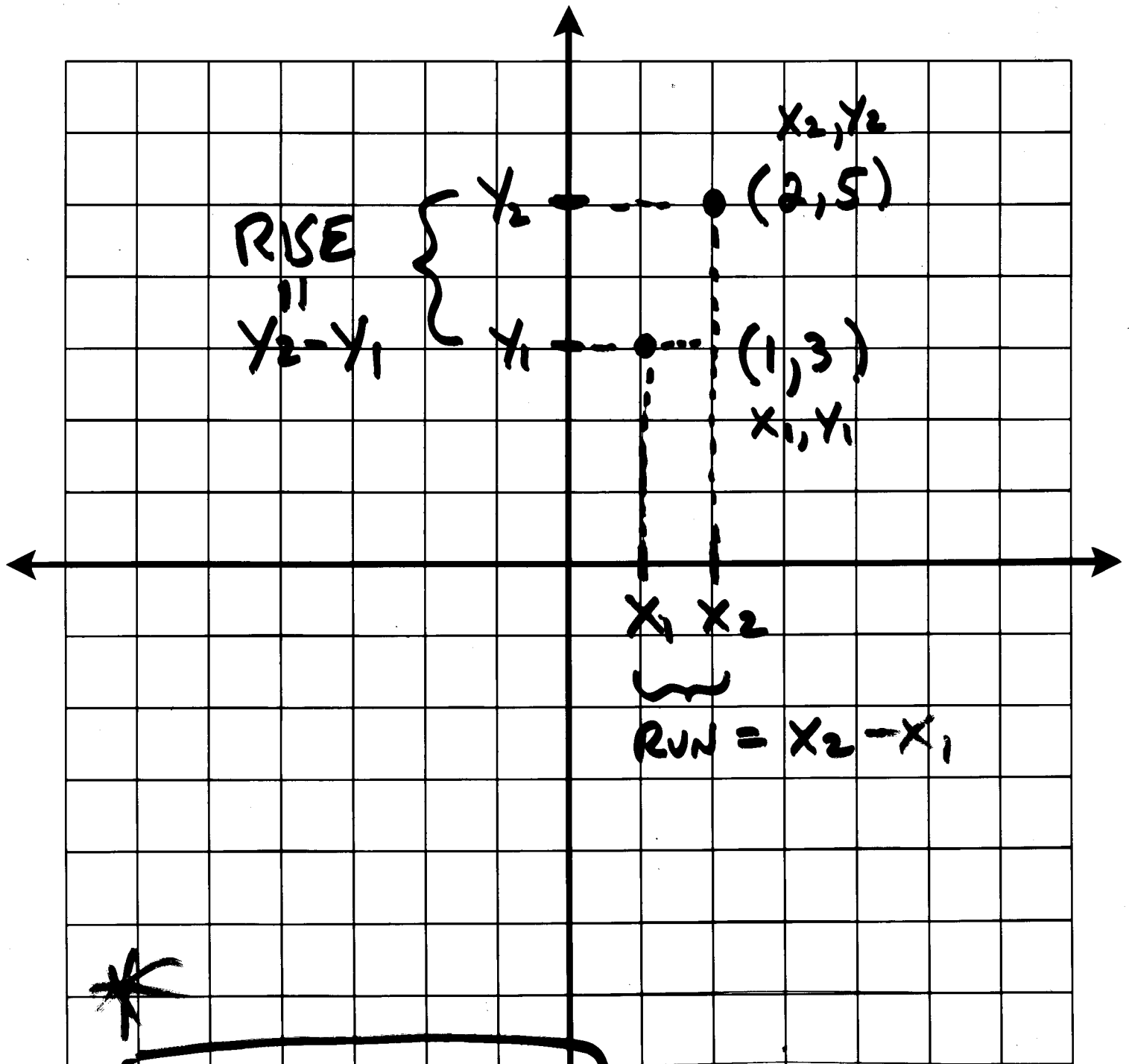


💡 LINES ON A graph ARE EASY!





5



$$m = \frac{\text{rise}}{\text{run}} = \frac{y_2 - y_1}{x_2 - x_1} = \frac{5 - 3}{2 - 1} = \frac{2}{1} = 2$$

6

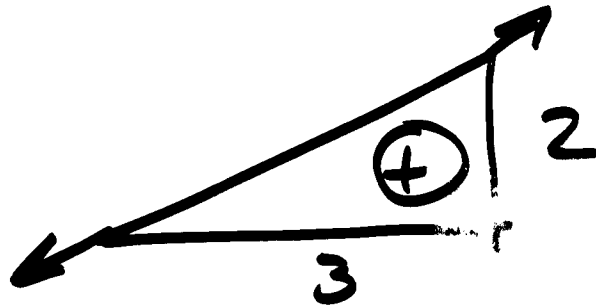
$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

Ex) Find m of the line
through $(1, 3), (4, 5)$

$$\begin{array}{cc} \text{↖} & \text{↗} \\ (1, 3), (4, 5) & \\ \text{↗} & \text{↖} \end{array}$$

$x_1, y_1 \quad x_2, y_2$

$$\frac{5-3}{4-1} = \boxed{\frac{2}{3} = m}$$



$$\text{EX) } (1, 1), (3, 4)$$

$$\text{EX) } (0, 0), (5, 4)$$

$$\text{EX) } (-2, 2), (-1, -2)$$

$$\text{EX) } (7, -4), (9, -1)$$

HW: • Read Ch. 5-1 Slope

• Pg 260 # 17, 20,
21 to 24
