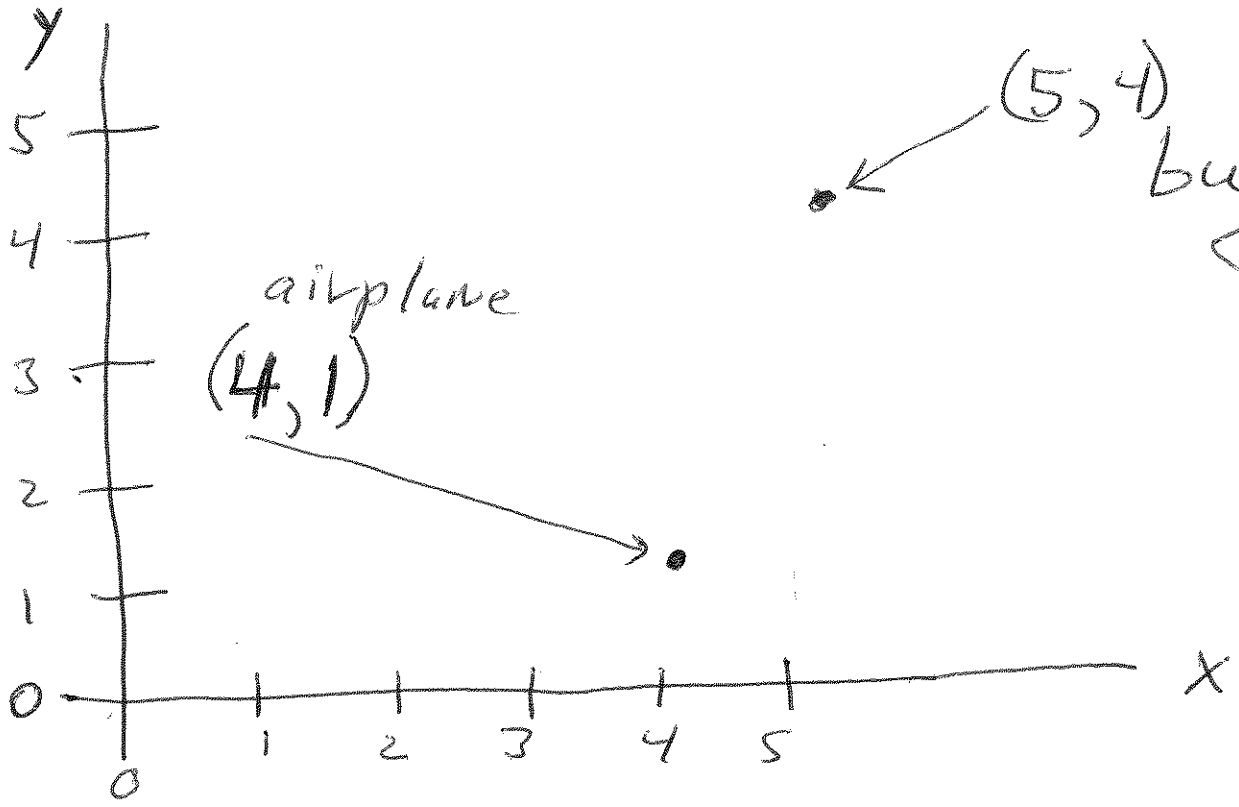


(4) What is the slope of line that goes through (4,1) and (5,4)?

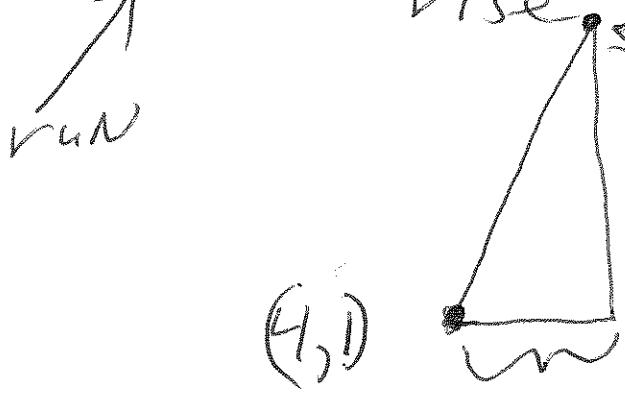
(5, 4)
(4, 1)

$\frac{4-1}{5-4} = \frac{3}{1} = \frac{\text{rise}}{\text{run}}$

$= 3$

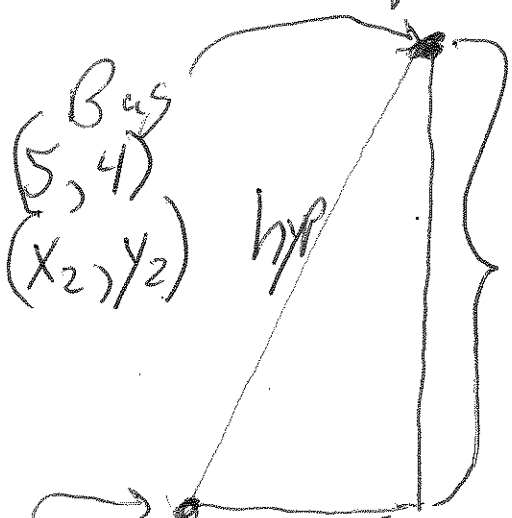
SLOPE = 3

1 run, 3 rise



$\frac{3}{1}$ is the SLOPE.

(5) What is the distance from airplane to the bug?



$3 = 4 - 1 = y_2 - y_1$

y distance (vertical leg)

$1 = 5 - 4 = x_2 - x_1$

x distance (horizontal leg)

$$1^2 + 3^2 = hyp^2$$

$$1 + 9 = hyp^2 = 10$$

$$hyp = \sqrt{10}$$

$$hyp = 3.162$$

distance from airplane to the bug