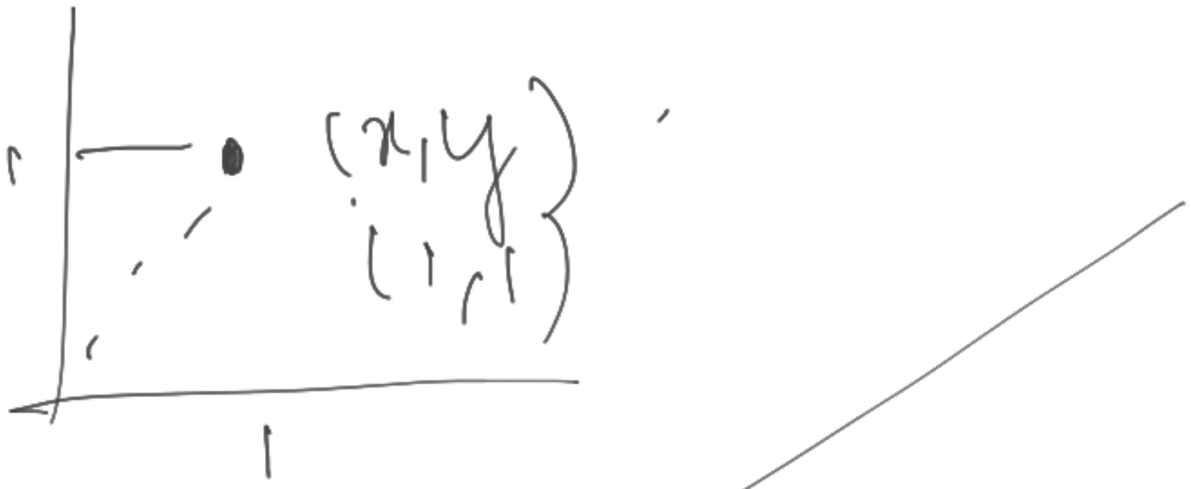

$$ax + by + c = 0$$

1 3 5

$ax + by + c = 0$

$1x + 1y - 2 = 0$

P1 (1, 1)

P2 (3, 5)

P1 lies on the line

$1x + 1y - 2 = 0$

$1(1) + 1(1) - 2$

$= 1 + 1 - 2$

$= 2 - 2 = 0$

P2 does not lies on the line

$1x + 1y - 2 = 0$

$1(3) + 1(5) - 2 =$

$= 3 + 5 - 2$

$= 8 - 2 = 6$

dist

$$= \frac{|ax_1 + by_1 + c|}{\sqrt{a^2 + b^2}}$$