

③ $A(0,5)$ $C(3,6)$

$B(0,6)$

False

Pts $A(0,5)$, $B(0,6)$ lie on y axis and $C(3,6)$ lies in I quadrant

$\therefore A, B, C$ are not collinear

OR ar ΔABC .

$$= \frac{1}{2} \begin{vmatrix} 0 & 5 \\ 0 & 6 \\ 3 & 6 \\ 0 & 5 \end{vmatrix}$$

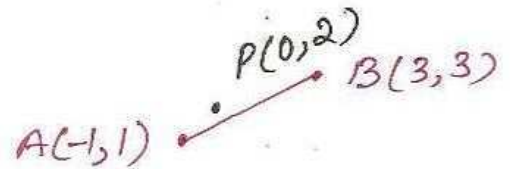
$$= \frac{1}{2} |0 - 0 + 0 - 18 + 15 - 0|$$

$$= \frac{1}{2} |-3|$$

$$= \frac{3}{2} \text{ Sq units}$$

$\therefore \text{ar}(\Delta ABC) \neq 0 \therefore$ not collinear

④



$$PA = \sqrt{(-1-0)^2 + (1-2)^2}$$

$$= \sqrt{1+1}$$

$$= \sqrt{2} \text{ units}$$

$$PB = \sqrt{(3-0)^2 + (3-2)^2}$$

$$= \sqrt{9+1}$$

$$= \sqrt{10} \text{ units}$$

$$\therefore PA \neq PB$$

\therefore False [any point on per. bis. of a line segment is equidistant from end points]