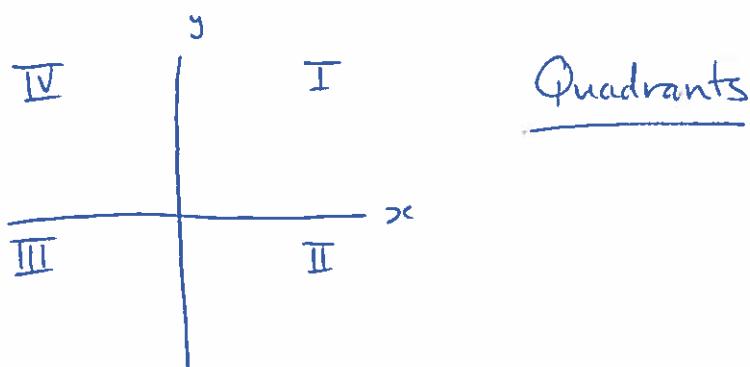


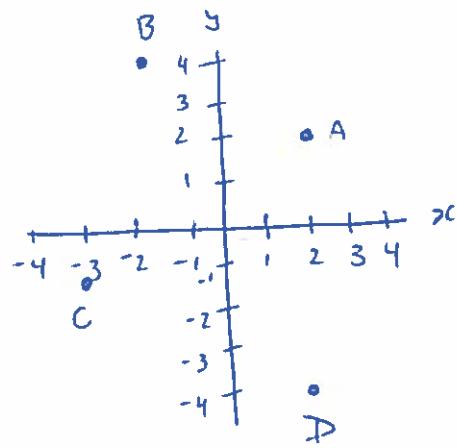
A Coordinate Geometry

Remember:



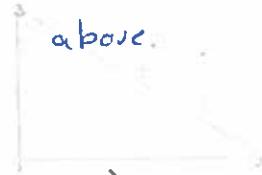
Examples:

1.



a) Identify the coordinates shown
(x, y)

$$A(2, 2) \quad B(-2, 4) \quad C(-3, -1) \quad D(2, -4)$$



b) Write the coordinates of any point found on the axis between:

i) the 1st and 2nd Quadrant.

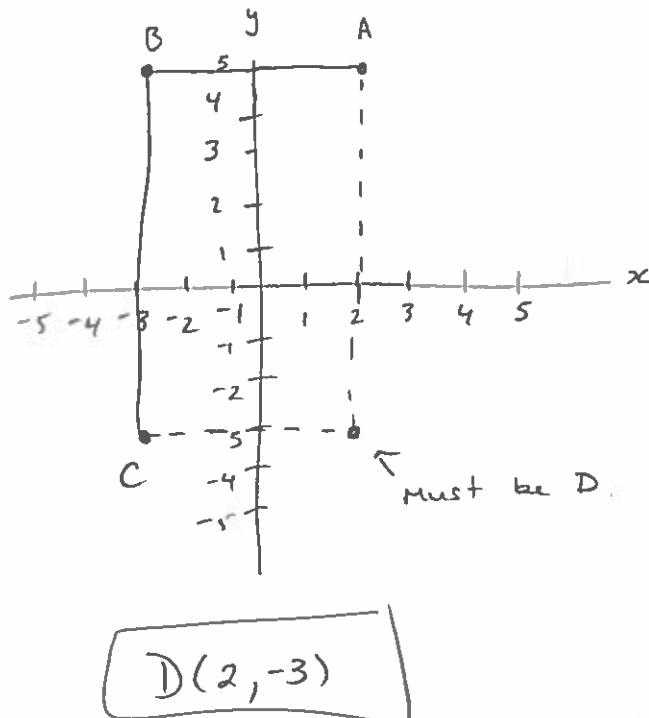
$$(1, 0), (2, 0), (3, 0) \dots$$

ii) ~~the~~ the 3rd & 4th Quadrant

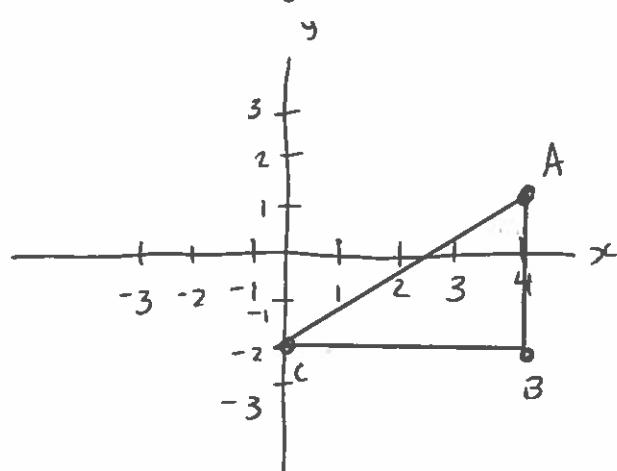
$$(-1, 0), (-2, 0), (-3, 0) \dots$$

2. The coordinates of the vertices of a ~~triangle~~
rectangle are $A(2, 5)$, $B(-3, 5)$, $C(-3, -3)$. Find the missing coordinate.

D.



3. The coordinates of a triangle are shown below.



a) Find the length of \overline{AB} , \overline{BC} and \overline{AC} .

$$\overline{AB} = 3 \text{ units} \quad (\text{count})$$

$$\overline{AC} : a^2 + b^2 = c^2$$

$$\overline{BC} = 4 \text{ units} \quad (\text{count})$$

$$(3)^2 + (4)^2 = c^2$$

$$9 + 16 = c^2$$

$$\sqrt{25} = \sqrt{c^2}$$

$$5 \text{ units} = c = \overline{AC}$$