



Co-Ordinate Geometry Ex 14.1 Q1

Answer :

According to the Rectangular Cartesian Co-ordinate system of representing a point (x, y) ,

If $x > 0, y > 0$ then the point lies in the 1st quadrant

If $x < 0, y > 0$ then the point lies in the 2nd quadrant

If $x < 0, y < 0$ then the point lies in the 3rd quadrant

If $x > 0, y < 0$ then the point lies in the 4th quadrant

But in case

If $x = 0, y \neq 0$ then the point lies on the y -axis

If $y = 0, x \neq 0$ then the point lies on the x -axis

(i) Here the point is given to be $P(5, 0)$. Comparing this with the standard form of

(x, y) we have

$$x = 5$$

$$y = 0$$

Here we see that $y = 0, x \neq 0$

Hence the given point lies on the **x -axis**

(ii) Here the point is given to be $Q(0, -2)$. Comparing this with the standard form of (x, y) we have

$$x = 0$$

$$y = -2$$

Here we see that $x = 0, y \neq 0$

Hence the given point lies on the **y -axis**

(iii) Here the point is given to be $R(-4, 0)$. Comparing this with the standard form of (x, y) we have

$$x = -4$$

$$y = 0$$

Here we see that $y = 0, x \neq 0$

Hence the given point lies on the **x -axis**

(iv) Here the point is given to be $S(0, 5)$. Comparing this with the standard form of (x, y) we have

$$x = 0$$

$$y = 5$$

Here we see that $x = 0, y \neq 0$

Hence the given point lies on the **y -axis**

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