Worked answers | Cartesian plane

The four coordinate quadrants

6 questions | 8 marks

Equivalent correct methods earn the corresponding marks.

1. Name the quadrant containing $(2, 3)$. [1 mark]

Both coordinates are positive: right and up.

Answer: Quadrant I

2. Name the quadrant containing $(-4, 1)$. [1 mark]

Negative x and positive y mean left and up.

Answer: Quadrant II

3. Name the quadrant containing $(-2, -3)$. [1 mark]

Both coordinates are negative: left and down.

Answer: Quadrant III

4. Name the quadrant containing $(3, -4)$. [1 mark]

Positive x and negative y mean right and down.

Answer: Quadrant IV

5. Describe the location of $(0, -2)$. State whether it lies in a quadrant. [2 marks]

$x = 0$ places the point on the y-axis.

Answer: On the y-axis, 2 units below the origin; no quadrant.

6. Leo says $(-5, 0)$ is in Quadrant III because it is to the left. Explain the error. [2 marks]

The y-coordinate is zero, so the point is on a boundary.

Quadrant III requires both x and y to be negative.

Answer: It is on the x-axis, not in Quadrant III.