Cartesian plane topic test

12 questions | 19 marks | 30 minutes

Coordinate reading, plotting and movement on equal-unit grids.

Equivalent correct methods earn the corresponding marks.

1. Name the horizontal coordinate axis. [1 mark]

The y-axis is vertical.

Answer: The x-axis.

2. Give the coordinates of the origin. [1 mark]

The axes meet where both coordinates are zero.

Answer: (0,0)

3. Which quadrant contains $(-4,-2)$? [1 mark]

Both coordinates are negative.

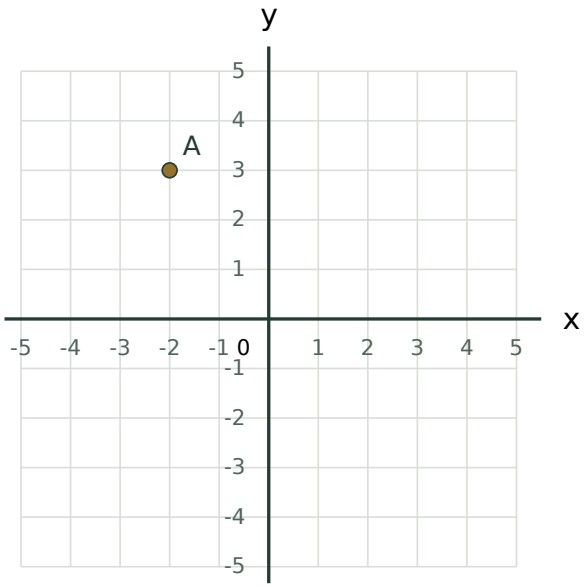
Answer: Quadrant III.

4. A point is (0,4). Name its axis and explain whether it is inside a quadrant. [2 marks]

x = 0 places it on the y-axis boundary.

Answer: It is on the y-axis and not inside a quadrant.

5. Read the coordinates of A. [1 mark]

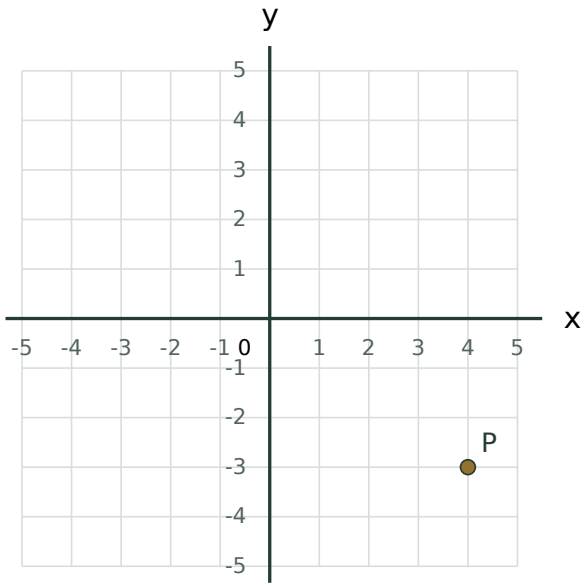


Each grid interval is 1 unit

A is 2 left and 3 up from the origin.

Answer: (−2,3)

6. Plot P = (4,−3) on the grid. [2 marks]



Each grid interval is 1 unit

Move horizontally first, then vertically.

Answer: P is 4 right and 3 down.

7. For the point (2,−1), a student writes (−1,2). Explain why these are different points. [2 marks]

The first value is x and the second is y.

Answer: The coordinates have been swapped. (2,−1) is right/down; (−1,2) is left/up.

8. Start at (−3,2). Move 4 right and 5 down. Find the final coordinates. [2 marks]

−3 + 4 = 1; 2 − 5 = −3.

Answer: (1,−3)

9. Reflect (−2,−4) in the x-axis. [1 mark]

Keep x and reverse y.

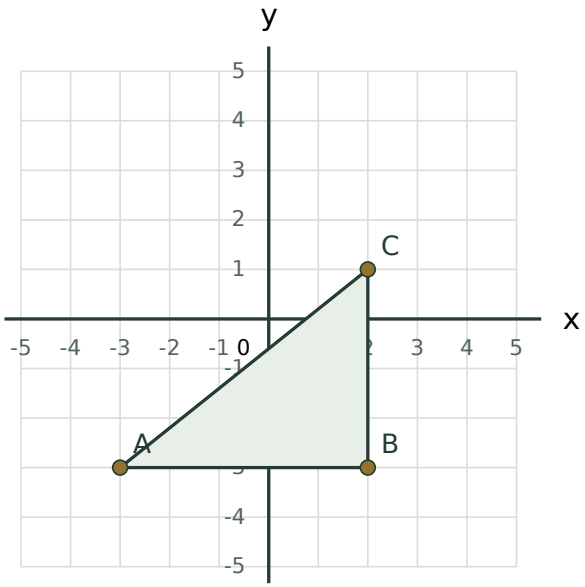
Answer: (−2,4)

10. Reflect (4,1) in the y-axis. [1 mark]

Reverse x and keep y.

Answer: (−4,1)

11. Plot A = (−3,−3), B = (2,−3), C = (2,1). Join A-B-C-A. [3 marks]



Each grid interval is 1 unit

Use each ordered pair without swapping it.

Join the vertices in order.

Answer: Correctly plotted triangle; AB is horizontal and BC is vertical.

12. A point moves from (−4,2) to (1,−2) using one horizontal slide and one vertical slide. Describe the two moves. [2 marks]

Horizontal change is from −4 to 1: +5.

Vertical change is from 2 to −2: −4.

Answer: 5 units right and 4 units down.