

Plotting Points in the Plane

Chapter 3: Coordinate Geometry · Topic 2

Key Concept

Special points have notable positions: any point $(0,y)$ lies exactly on the y-axis (since it has zero horizontal movement), and any point $(x,0)$ lies exactly on the x-axis (since it has zero vertical movement). Practising plotting a variety of points, including negative coordinates and points on the axes themselves, builds fluency with the coordinate system essential for graphing linear equations and other functions in later mathematics.

Quick Revision Notes

- Plot (x,y) by moving x units horizontally and y units vertically from the origin.
- Points $(0,y)$ lie exactly on the y-axis; points $(x,0)$ lie exactly on the x-axis.
- Negative coordinates indicate a movement left (for x) or down (for y).
- Fluency with plotting points is essential for graphing equations later.

Practice Questions

- 1 Plot the points $(3,2)$ and $(-2,-1)$ on a graph.
- 2 Identify which axis the point $(0,-4)$ lies on.
- 3 Plot three points that lie in Quadrant III.