

Plotting Points on a Grid

Chapter 13: Connecting the Dots · Topic 1

Key Concept

For example, the point (3,2) is located 3 units to the right and 2 units up from the origin, while (-2,4) is 2 units left and 4 units up. This coordinate system, called the Cartesian plane (named after mathematician René Descartes), is fundamental not just to mathematics but to fields like computer graphics, mapping, and navigation, where precise location on a two-dimensional surface must be communicated clearly and unambiguously.

Quick Revision Notes

- A point is located using an ordered pair (x,y): x is horizontal distance, y is vertical distance from origin.
- The origin (0,0) is where both axes meet.
- Example: (3,2) is 3 units right, 2 units up from the origin.
- This coordinate (Cartesian) system is used in mathematics, computer graphics, and navigation.

Practice Questions

- 1 Plot the points (2,3) and (4,1) on a grid.
- 2 Identify the coordinates of a point 5 units left and 3 units down from the origin.
- 3 Explain the meaning of the ordered pair (x,y) in locating a point on a grid.