

Area of Plane Figures

Chapter 6: Perimeter and Area · Topic 2

Key Concept

A helpful way to visualise area is by counting how many unit squares (like $1\text{cm} \times 1\text{cm}$ squares) fit inside a shape — this is literally what the area formula calculates for rectangles and squares. Area has countless practical applications, from calculating how much paint is needed to cover a wall, how much carpet is needed for a room, or comparing the size of two plots of land, making it an essential real-world mathematical skill.

Quick Revision Notes

- Area of rectangle = length $\times$ breadth; area of square = side².
- Area measures surface covered, in square units (cm^2 , m^2), unlike perimeter (linear units).
- Area can be visualised as counting unit squares fitting inside a shape.
- Practical uses: paint needed for a wall, carpet needed for a room, comparing land sizes.

Practice Questions

- 1 Find the area of a square with side 7 cm.
- 2 Calculate how much carpet (area) is needed for a room 5m by 4m.
- 3 Explain the difference between perimeter and area using a rectangle as an example.