

Mensuration (Perimeter and Area of Plane Figures)

Chapter 19: Mensuration (Perimeter and Area of Plane Figures) · Topic 1

Key Concept

The perimeter of a shape is the total length around its boundary, calculated by adding all side lengths.

The area of a rectangle is $\text{length} \times \text{width}$, while the area of a triangle is $(1/2) \times \text{base} \times \text{height}$.

The area of a square is $\text{side} \times \text{side}$, and the area of a circle is $\pi \times \text{radius}^2$, using the constant pi (approximately 3.14).

Mensuration skills are useful in real life for tasks like calculating flooring, fencing, or paint needed for a wall.

Quick Revision Notes

- Perimeter is the total boundary length.
- Rectangle area = $\text{length} \times \text{width}$.
- Triangle area = $(1/2) \times \text{base} \times \text{height}$.
- Square area = $\text{side} \times \text{side}$.
- Circle area = $\pi \times \text{radius}^2$.
- Pi is approximately 3.14.
- Mensuration helps calculate flooring and fencing.
- It's a practical, real-life maths skill.

Practice Questions

- 1 Calculate the perimeter of a rectangle with length 8cm and width 5cm.
- 2 Calculate the area of a triangle with base 6cm and height 4cm.
- 3 Calculate the area of a circle with radius 7cm.
- 4 Discuss a real-life use of area calculation.
- 5 Solve two mensuration problems.
- 6 Measure a room and calculate its area.