

Properties of Quadrilaterals

Chapter 4: Quadrilaterals · Topic 1

Key Concept

A square combines the properties of both a rectangle and a rhombus — all four sides equal, all four angles 90° . Understanding the hierarchy of quadrilaterals (square is a special rectangle, which is a special parallelogram) helps in solving geometry problems, since properties proven for a general parallelogram automatically apply to all its more specific types, like rectangles and squares.

Quick Revision Notes

- Parallelogram: opposite sides equal and parallel, opposite angles equal.
- Rectangle: parallelogram properties + all angles 90° .
- Rhombus: all four sides equal, diagonals bisect each other at right angles.
- A square combines rectangle and rhombus properties (all sides equal, all angles 90°).

Practice Questions

- 1 List two properties of a rectangle.
- 2 Explain why a square can be considered a special type of both rectangle and rhombus.
- 3 Compare the properties of a rhombus and a rectangle.