

Quadrilaterals

Chapter 5: Quadrilaterals · Topic 1

Key Concept

A parallelogram has opposite sides parallel and equal, opposite angles equal, and diagonals that bisect each other.

A rectangle is a parallelogram with all angles equal to 90° , while a rhombus is a parallelogram with all sides equal.

A square has properties of both rectangle and rhombus - all sides equal and all angles 90° .

A trapezium has only one pair of parallel sides, distinguishing it from parallelograms which have two pairs of parallel sides.

Quick Revision Notes

- Parallelogram: opposite sides parallel, equal.
- Opposite angles equal, diagonals bisect each other.
- Rectangle: parallelogram, all angles 90° .
- Rhombus: parallelogram, all sides equal.
- Square: both rectangle and rhombus properties.
- All sides equal, all angles 90° .
- Trapezium: only one pair of parallel sides.
- This differs from parallelograms (two pairs).

Practice Questions

- 1 Draw a parallelogram and label its properties.
- 2 Draw a rectangle, rhombus, and square.
- 3 Verify that a parallelogram's diagonals bisect.
- 4 Draw a trapezium and identify its parallel sides.
- 5 Compare a rectangle and a rhombus.
- 6 Explain quadrilateral properties in your own words.