

CHAPTER 8 QUADRILATERAL

NOTES

Properties of Parallelogram

Theorem: A diagonal of a parallelogram divides it into	wo congruent triangles.
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Theorem: Opposite sides of a parallelogram are equal.

Theorem: A quadrilateral is a parallelogram if its opposite sides are equal.

Theorem: Opposite angles of a parallelogram are equal.

- **Theorem:** A quadrilateral is a parallelogram if its opposite angles are equal.
- **Theorem:** A quadrilateral is a parallelogram if it has a pair of parallel and equal sides.
- **Theorem:** The diagonals of a parallelogram bisect each other.
- **Theorem:** A quadrilateral is a parallelogram if its diagonals bisect each other.

Mid – Point Theorem:

The line segment joining the mid-points of two sides of a triangle is parallel to the third side and is half of it in length.

Converse of Mid-Point Theorem

The line drawn through the mid- point of one side of a triangle parallel to another side bisects the third side.

Government of Manipur