

## Topic: Parallelograms

Essential Question: What are the special properties of parallelograms?

Quadrilateral a closed figure formed by four segments intersecting at their endpoints

Parallelogram a quadrilateral in which opposite sides are parallel

Diagonals each diagonal separates the parallelogram into two congruent triangles

- 5 Properties of Parallelograms
1. Opposite sides are parallel
  2. Opposite sides are congruent
  3. Opposite angles are congruent
  4. Diagonals bisect each other
  5. Consecutive angles are supplementary

Coordinate Geometry to find the intersection of the diagonals, use the midpoint formula and the endpoints of either diagonal

Summary: Parallelograms are a type of quadrilateral identified by their two pairs of opposite, parallel sides.