

## **Properties of Quadrilaterals**

Parallelogram	<ul> <li>The opposite sides are parallel and equal.</li> <li>The opposite angles are equal.</li> <li>The consecutive or adjacent angles are supplementary.</li> <li>If any one of the angles is a right angle, then all the other angles will be at right angle.</li> <li>The two diagonals bisect each other.</li> </ul>
Rectangle	<ul> <li>The opposite sides are parallel and equal to each other.</li> <li>The diagonals bisect each other.</li> <li>Both the diagonals have the same length.</li> </ul>
Square	<ul> <li>All four interior angles are equal to 90°.</li> <li>All four sides of the square are congruent or equal to each other.</li> <li>The opposite sides of the square are parallel to each other.</li> <li>The diagonals of the square bisect each other at 90°.</li> <li>The two diagonals of the square are equal to each other.</li> </ul>





Туре	Properties
Rhombus	<ul> <li>All sides of the rhombus are equal.</li> <li>The opposite sides of a rhombus are parallel.</li> <li>Opposite angles of a rhombus are equal.</li> <li>In a rhombus, diagonals bisect each other at right angles.</li> <li>Diagonals bisect the angles of a rhombus.</li> </ul>
Trapezium	<ul> <li>In trapezium, exactly one pair of opposite sides are parallel.</li> <li>The diagonals intersect each other.</li> <li>The non-parallel sides in the trapezium are unequal except in isosceles trapezium.</li> <li>The line that joins the mid-points of the non-parallel sides is always parallel to the bases or parallel sides which is equal to half of the sum of parallel sides.</li> </ul>
Kite	<ul> <li>Two pairs of adjacent sides are equal.</li> <li>One pair of opposite angles are equal.</li> <li>The diagonals of a kite are perpendicular to each other.</li> <li>The longer diagonal of the kite bisects the shorter diagonal.</li> <li>The area of a kite is equal to half of the product of the length of its diagonals.</li> </ul>