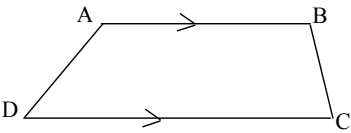
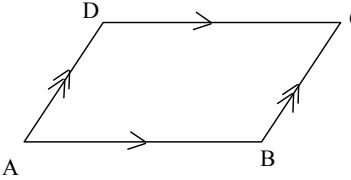
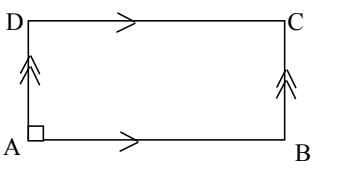
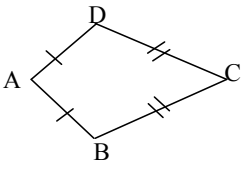
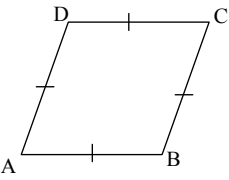
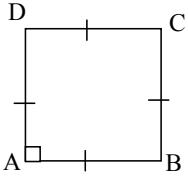


## Properties of Quadrilaterals

Quadrilateral and Its Definition	Properties of the Quadrilateral
 <p><b>Trapezoid:</b> A quadrilateral with at least one pair of parallel sides</p>	<p>Consecutive angles between parallel sides are supplementary.</p>
 <p><b>Parallelogram:</b> A quadrilateral in which each pair of opposite sides is parallel</p>	<ol style="list-style-type: none"> <li>A parallelogram has all the properties of a trapezoid.</li> <li>Opposite sides are congruent.</li> <li>Opposite angles are congruent.</li> <li>Diagonals bisect each other.</li> </ol>
 <p><b>Rectangle:</b> A parallelogram with a right angle.</p>	<ol style="list-style-type: none"> <li>A rectangle has all the properties of a parallelogram.</li> <li>All the angles of a rectangle are right angles.</li> <li>A quadrilateral in which all the angles are right angles is a rectangle.</li> <li>The diagonals of a rectangle are congruent and bisect each other.</li> </ol>
 <p><b>Kite:</b> A quadrilateral with two distinct pairs of congruent adjacent sides</p>	<ol style="list-style-type: none"> <li>Lines containing the diagonals are perpendicular to each other.</li> <li>A line containing one diagonal is a bisector of the other.</li> <li>One diagonal bisects nonconsecutive angles.</li> </ol>
 <p><b>Rhombus:</b> A parallelogram with all sides congruent.</p>	<ol style="list-style-type: none"> <li>A rhombus has all the properties of a parallelogram and a kite.</li> <li>A quadrilateral in which all the sides are congruent is a rhombus.</li> <li>The diagonals of a rhombus are perpendicular to and bisect each other.</li> <li>Each diagonal bisects opposite angles.</li> </ol>
 <p><b>Square:</b> A rectangle with all sides congruent</p>	<p>A square has all the properties of a parallelogram, a rectangle, and a rhombus.</p>