

Quadrilaterals

- 1) What are the different types of Quadrilaterals?
- 2) In a parallelogram ABCD, $\angle DAB = 40^\circ$ find the other angles of the parallelogram
- 3) Two adjacent sides of a parallelogram are 4.5 cm and 3 cm. Find its perimeter
- 4) In a parallelogram ABCD, the bisectors of the consecutive angles $\angle A$ and $\angle B$ intersect at P. Show that $\angle APB = 90^\circ$
- 5) State whether the statements are True or False.
 - (i) Every parallelogram is a trapezium ()
 - (ii) All parallelograms are quadrilaterals ()
 - (iii) All trapeziums are parallelograms ()
 - (iv) A square is a rhombus ()
 - (v) Every rhombus is a square ()
 - (vi) All parallelograms are rectangles ()
- 6) In a triangle ABC, AD is the median drawn on the side BC is produced to E such that $AD = ED$ prove that ABEC is a parallelogram.
- 7) Show that the diagonals of a rhombus divide it into four congruent triangles.
- 8) Show that the diagonals of a square are equal and right bisectors of each other.
- 9) Show that the diagonals of a rhombus divide it into four congruent triangles.
- 10) Show that the diagonals of a square are equal and right bisectors of each other. 24° Show that the diagonals of a rhombus divide it into four congruent triangles.