

CHAPTER-8

QUADRILATERALS

WORKSHEET-2

1. PQRS is a parallelogram, in which $PQ = 12$ cm and its perimeter is 40 cm. Find the length of each side of the parallelogram.
2. ABCD is a parallelogram and line segments AX bisects angle A and meets CD at X and , CY bisect the angle C and meets AB at Y. Show that $AX \parallel CY$.
3. No quadrilateral exists with its angles in the ratio 1: 2: 3:6. State TRUE or FALSE . Justify your answer
4. In a parallelogram, show that the angle bisectors of two adjacent angles intersect at right angles.
5. In a quadrilateral ABCD, AP and BP are bisectors of $\angle A$ and $\angle B$ respectively intersecting at P, $\angle D = 60^\circ$ and $\angle C = 130^\circ$, then find the angle between the bisectors.
6. ABCD is a rhombus in which altitude from D to side AB bisects AB. Find the angles of the rhombus.
7. The angle between two altitudes of a parallelogram through the vertex of an obtuse angle of the parallelogram is 60° . Find the angles of the parallelogram.
8. In parallelogram ABCD, $AB=10$ cm and $AD=6$ cm, the bisector of $\angle A$ meets DC in E. AE and BC produced meet at F. Find the length of CF.