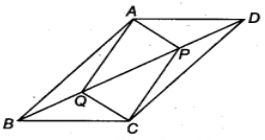
(ASSIGNMENT)

1. What is the base of a rhombus, if its area is 40 square units and the height is 8 units? Ans: 5 units
2. Find the perimeter of the quadrilateral with sides 5 cm, 7 cm, 9 cm and 11 cm. Ans: 32 cm
3. In a quadrilateral ABCD, the angles A, B, C and D are in ratio 1:2:3:4. Find the measure of each angle of the quadrilateral.
4. ABCD is a quadrilateral, whose angles are $\angle A = 5(a+2)°$, $\angle B = 2(2a+7)°$, $\angle C = 64°$, $\angle D = \angle C - 8°$. Determine the value of $\angle A$.
5. ABCD is a rhombus. Show that diagonal AC bisects $\angle A$as well as $\angle C$ and diagonal BD bisects $\angle B$ as well AS $\angle D$.
6. In parallelogram ABCD, two points P and Q are taken on diagonal BD such that DP = BQ (see figure).

Show that



(i) $\Delta APD \cong \Delta CQB$ (ii) $AP = CQ$
(iii) $\Delta AQB \cong \Delta CPD$ (iv) $AQ = CP$
(v) $APCQ$ is a parallelogram.