CIRCLES

EQUAL CHORDS AND THEIR DISTANCES FROM THE CENTRE

EXERCISE

Q.1 O is the centre of the circle and PO bisects the angle APD. Prove that AB = CD.



Q.2 In figure two equal chords AB and CD of a circle with centre O, intersect each other at E. Prove that AD = CB.



Q.3 In figure O is the centre of a circle and PO bisects \angle APD. Prove that AB = CD



Q.4 Bisector AD of \angle BAC of \triangle ABC passes through the centre O of the circumcircle of



 \triangle ABC as shown in figure. Prove that AB = AC.

CLASS 9

- **Q.5** Prove that the circle drawn on any one of the equal sides of an isosceles triangle as diameter bisects the base.
- **Q.6** In a circle of radius 5 cm, AB and AC are two chords such that AB = AC = 6 cm. Find the length of the chord BC.
- **ANS.** 9.6 cm
- **Q.7** Prove that the line joining the mid-points of two parallel chords of a circle passes through the centre.