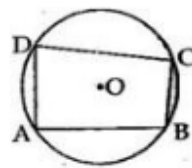




### Exercise 11C

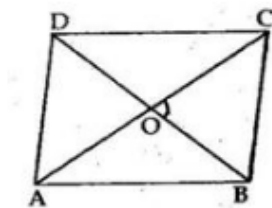
Question 19:

Let ABCD be a cyclic quadrilateral and let O be the centre of the circle passing through A, B, C, D.  
 Then each of AB, BC, CD and DA being a chord of the circle, its right bisector must pass through O.  
 $\therefore$  the right bisectors of AB, BC, CD and DA pass through O and are concurrent.



Question 20:

ABCD is a rhombus.  
 Let the diagonals AC and BD of the rhombus ABCD intersect at O.  
 But, we know, that the diagonals of a rhombus bisect each other at right angles.  
 So,  $\angle BOC = 90^\circ$   
 $\therefore \angle BOC$  lies in a circle.



Thus the circle drawn with BC as diameter will pass through O

Similarly, all the circles described with AB, AD and CD as diameters will pass through O.

\*\*\*\*\* END \*\*\*\*\*