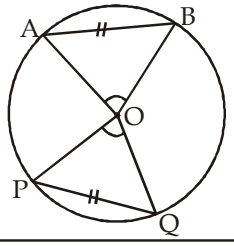
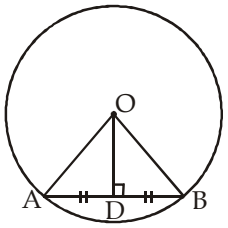
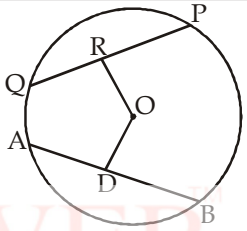
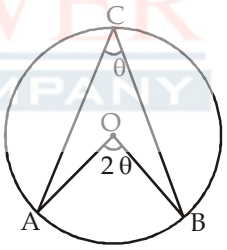
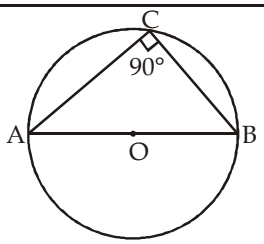
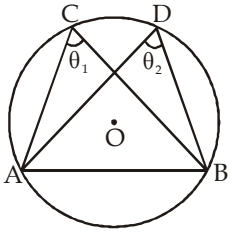
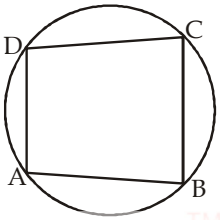
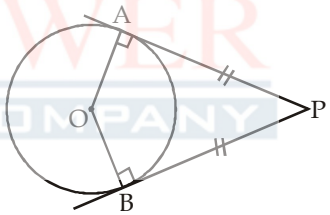
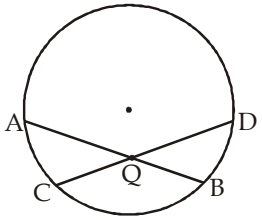
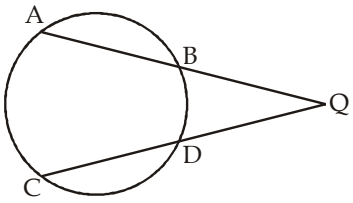
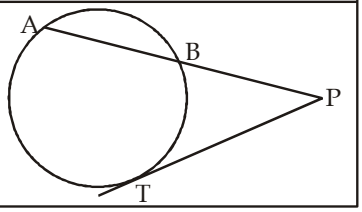
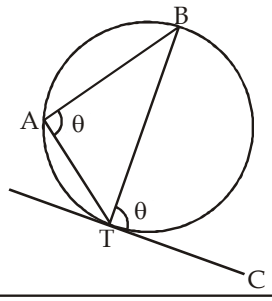
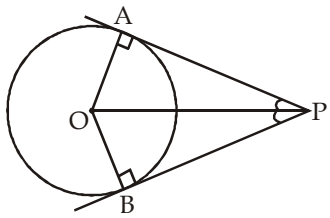
S. No.	Theorem	Diagram
1.	Equal Chords or Arc subtends equal angles at the centre $\overset{\frown}{PQ} = \overset{\frown}{AB}$ $\angle POQ = \angle AOB$	
2.	The perpendicular from the centre of a circle to a chord bisects the chord $OD \perp AB$ $AB = 2AD = 2BD$	
3.	Equal chords of circle are equidistant from the centre. $AB = PQ$ $OD = OR$	
4.	The angle subtended by an arc at the centre of a circle is twice the angle subtended by the arc at any point on remaining part of the circle $\angle AOB = 2m\angle ACB$	

S. No.	Theorem	Diagram
5.	Angle in a semicircle is a right angle	
6.	Angles in the same segment of a circle are equal $\angle ACB = \angle ADB$ $\theta_1 = \theta_2$	
7.	The sum pair of opposite angles of a cyclic quadrilateral is 180°. $\angle DAB + \angle BCD = 180°$ $\angle ABC + \angle CDA = 180°$	
8.	The length of two tangents drawn from an external point to a circle are equal i.e. AP = BP	
9.	If two chords AB and CD of a circle, intersect inside a circle or outside a circle when when produced to at a point Q, then AQ × BQ = CQ × DQ.	 
10.	When a chord AB is produced to meet a tangent PT at external point P then $PA \cdot PB = (PT)^2$	

S. No.	Theorem	Diagram
11.	**Alternate segment Theorem** → when a tangent is m drawn from point of contact of chord AB, then angle between chord and tangent will be equal to the Angle formed by the chord at the alternate segment. ∠BTC = ∠TAB	
12.	The Angle formed by two tangents meeting at on external point is bisected by a straight line. joining the centre of the circle to that external point ∠BPO = ∠APO ∠POB = POA	
13.	When two tangents meet externally at point P and touch circle at A and B then PO is perpendicular bisector of AB PO ⊥ AB and AM = BM