
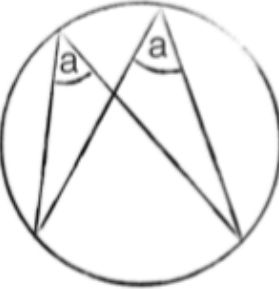
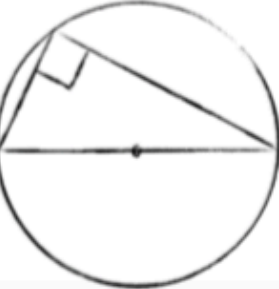
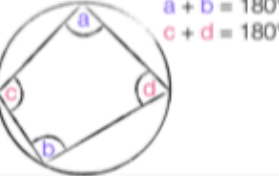
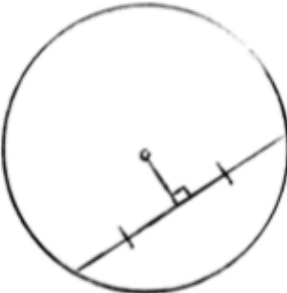




18 - Properties of Circles

1. Perpendicular bisector of any chord always passes through the centre of the circle
2. Where a tangent meets a radius the angle between them is always 90°
3. Tangents from same point are always equal in length to where they touch the circle
4. An angle in a semi circle is always 90° (When a triangle goes through the centre, where it hits the circumference = 90°)
5. The angle subtended at centre is twice angle at circumference
6. Angles in the same segment, subtended by the same arc/chord are equal
7. Opposite angles of a cyclic quadrilateral add to 180° /supplementary
8. Alternate Segment theorem \rightarrow the angle between a tangent and a chord is equal to the angle subtended by the chord in the alternate segment

<p>The angle at the centre is twice the angle at the circumference</p> 	<p>Angles in the same segment are equal</p> 	<p>The angle in a semicircle is 90 degrees</p> 	<p>Opposite angles in a cyclic quadrilateral add up to 180 degrees</p> 
<p>The perpendicular from the centre to the chord bisects the chord</p> 	<p>The angle between a tangent and a radius is 90 degrees</p> 	<p>Tangents from a point outside a circle are equal in length</p> 	<p>Alternate segment theorem</p> 