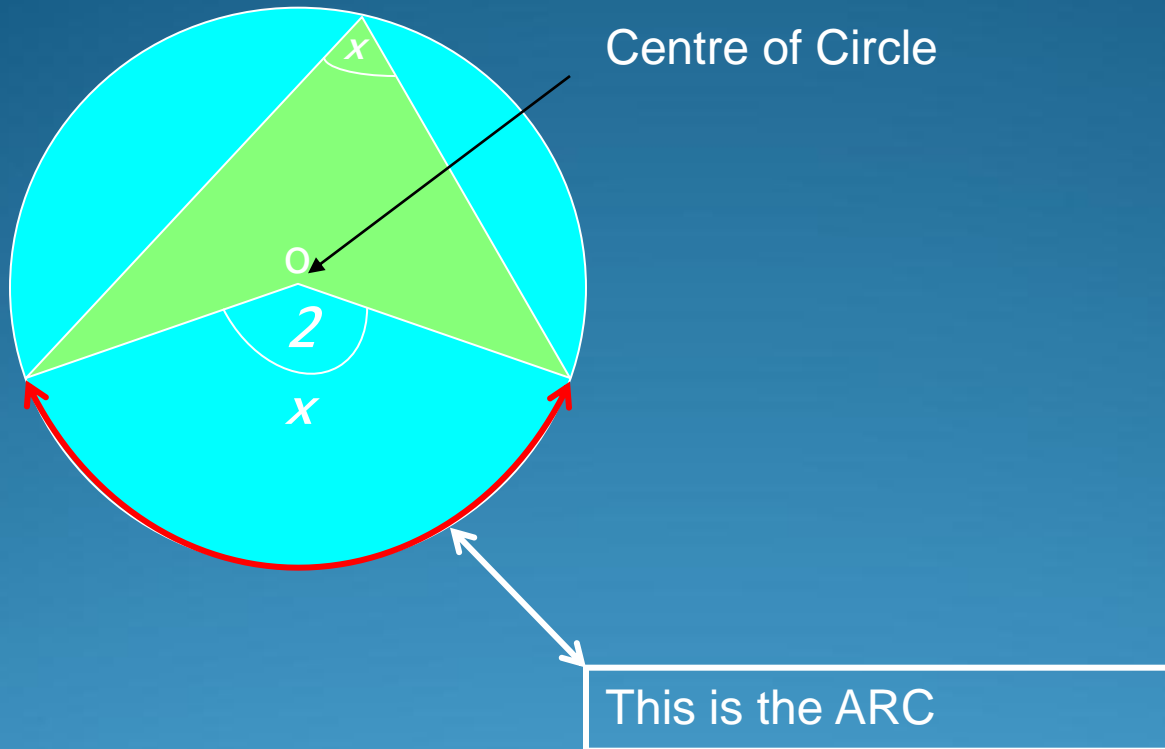
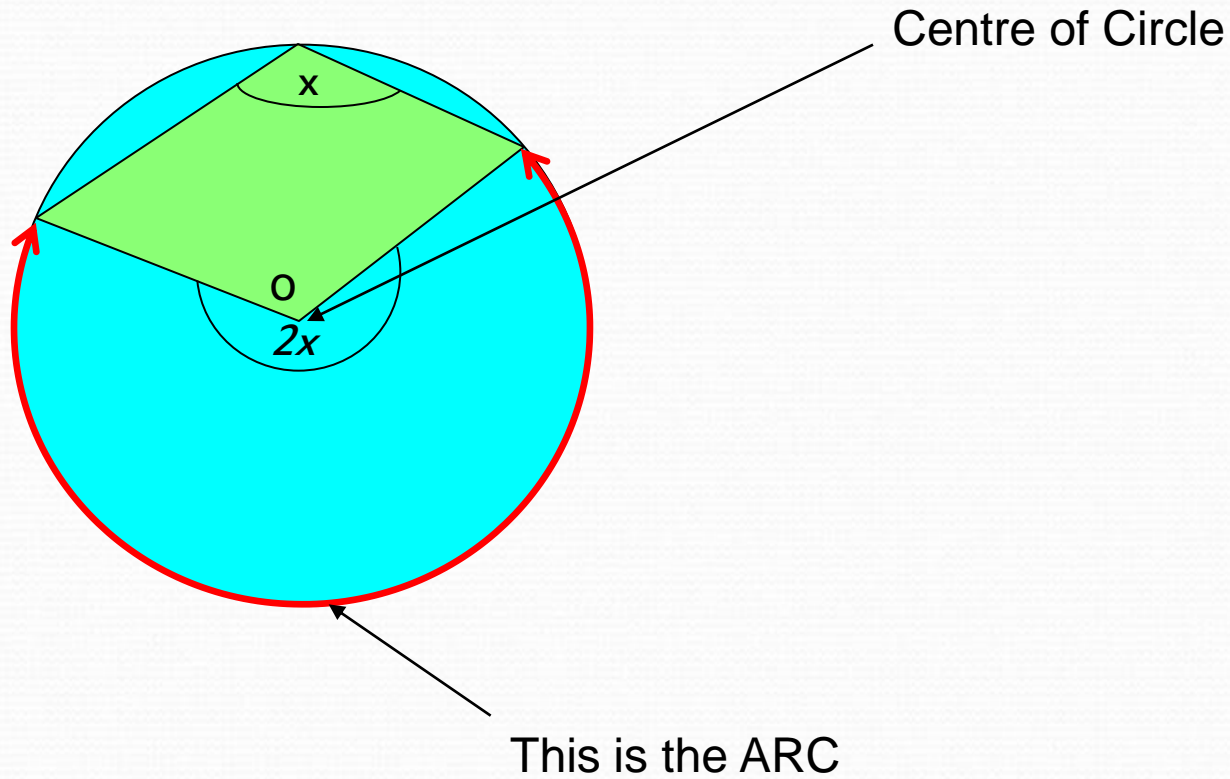


CIRCLE THEOREMS

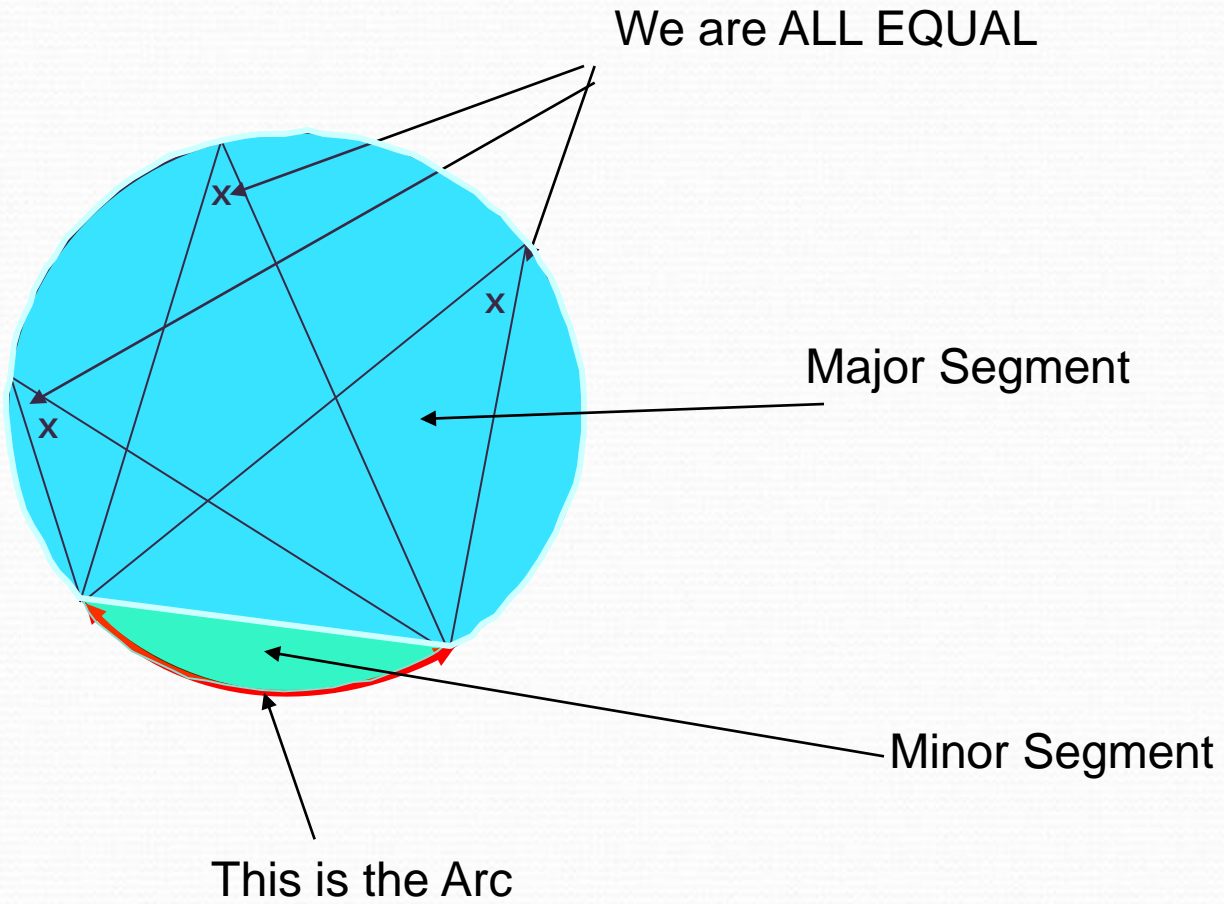


The Angle x subtended at the centre of a circle by an arc is twice the size of the angle on the circumference subtended by the same arc.

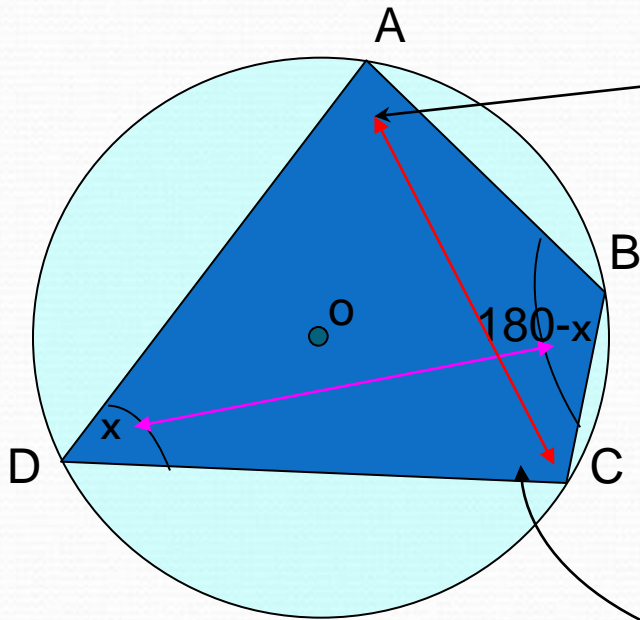
Case 2



Angle subtended at the Centre is twice the angle at the circumference



Angles Subtended in the same segment of a circle are equal

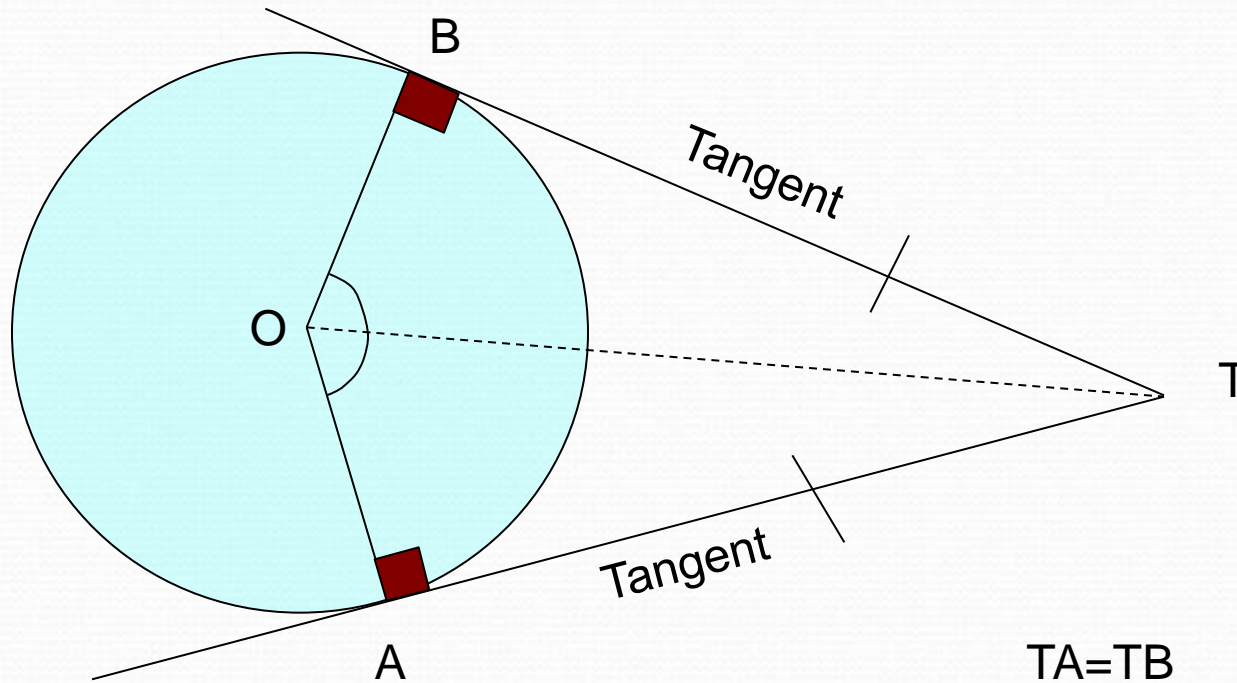


If this angle was 60° then angle BCD would be $180^\circ - 60^\circ = 120^\circ$

120°

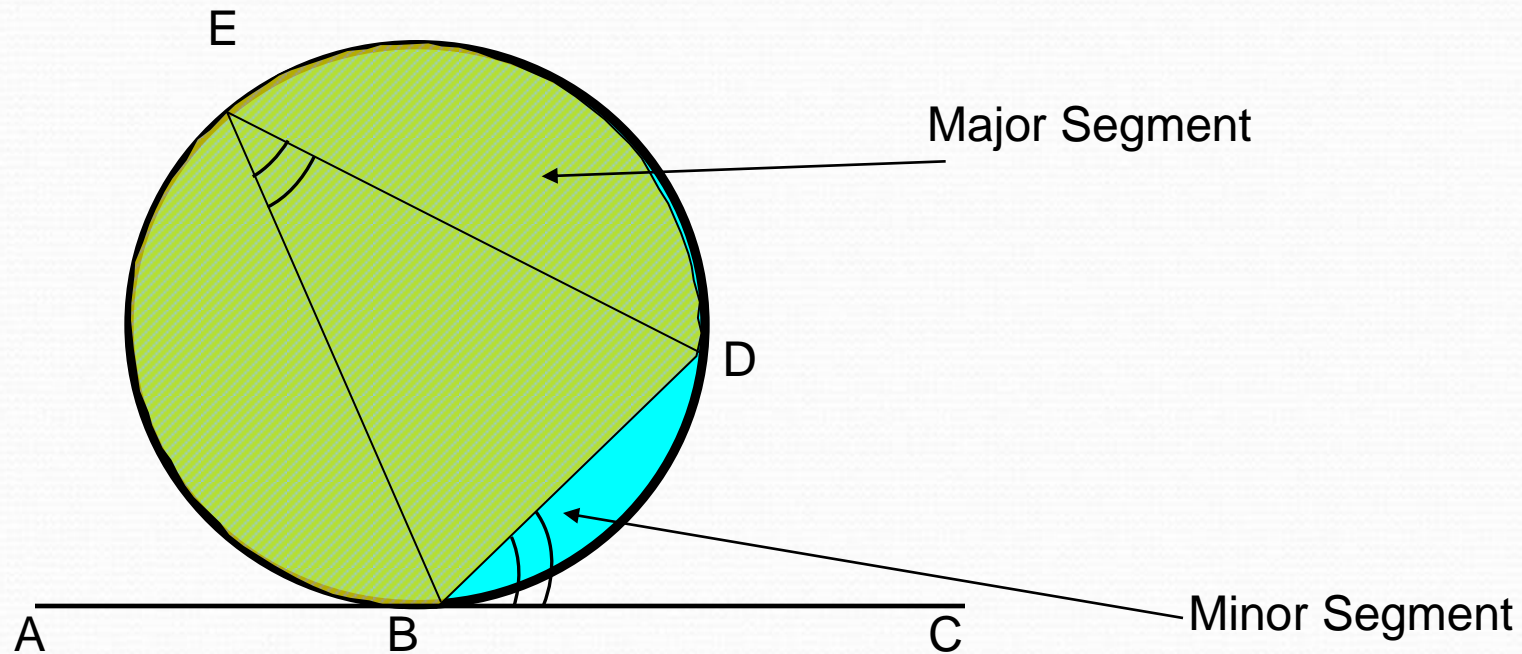
Cyclic Quadrilaterals

Points which lie on the circumference of the same circle are called cyclic (or concyclic) points. A **cyclic** quadrilateral is a quadrilateral with all its four corners (vertices) on the circumference of the same circle.



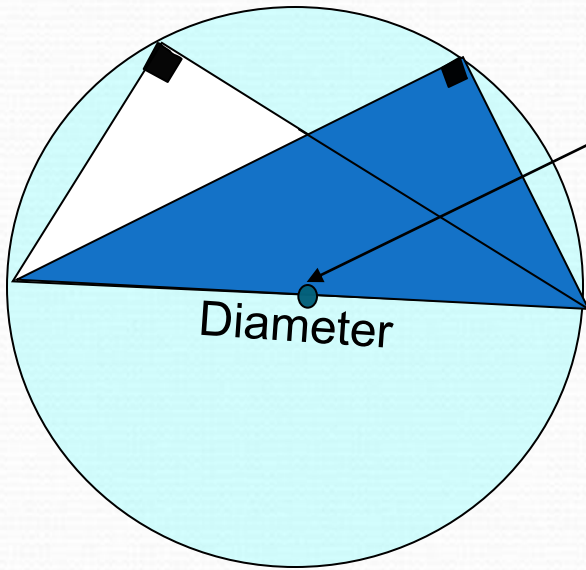
Tangents

NB : Triangles
OBT and OAT
are CONGRUENT!



The Shaded Segment BED is called the ***alternate segment*** to the angle CBD . The angle between a tangent to a circle and a chord drawn through the point of contact is equal to any angle subtended by the chord at the circumference in the alternate segment.

THE ANGLE IN A SEMI CIRCLE IS 90 DEGREES !



Centre of Circle

Diameter

THANK YOU