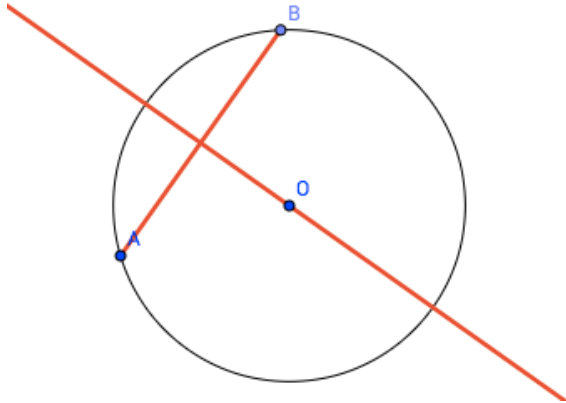


Circle Properties and Circle Theorems

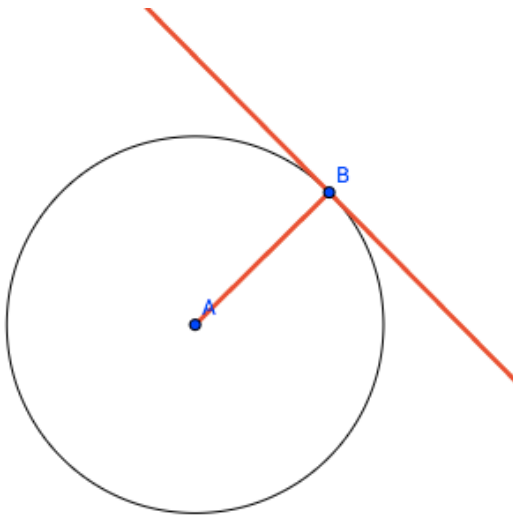


1. Perpendicular Bisector of Chord

The perpendicular bisector of any chord of a circle passes through the centre of the circle.

In proofs quote:

Perpendicular bisector of chord passes through centre.

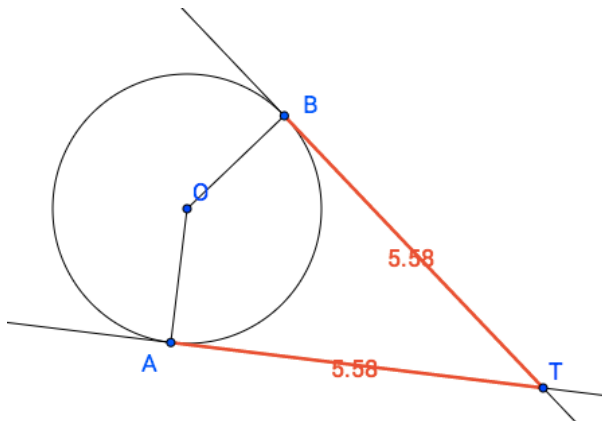


2. Angle Between Tangent and Radius

Where a tangent meets a radius the angle between them is always 90° .

In proofs quote:

Angle between tangent and radius is 90° .



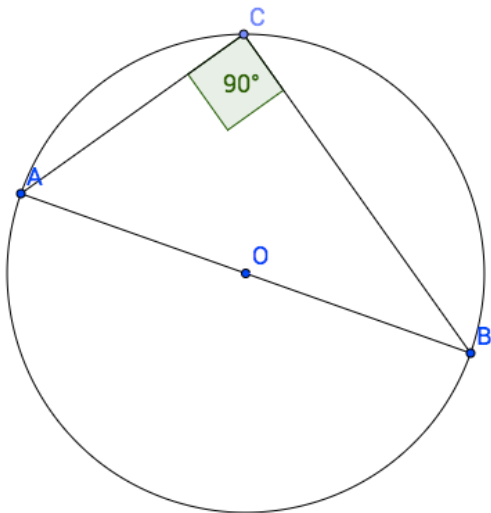
3. Tangents to Circle From Same Point

The two tangents to a circle from a given point are always equal in length to where they touch the circle.

In proofs quote:

Tangents from same point are equal in length.

Circle Properties and Circle Theorems

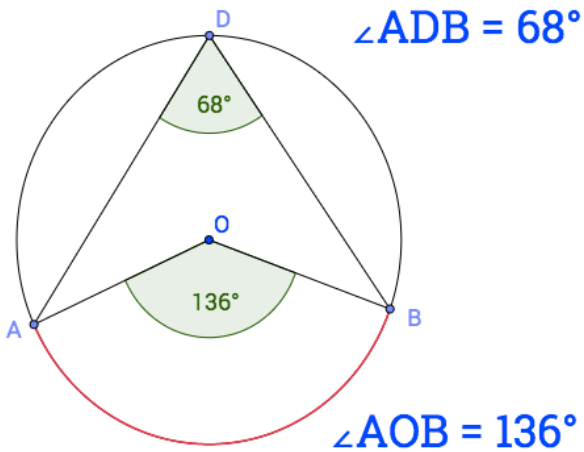


4. Angle in a Semi-Circle

An angle in a semi-circle is always 90° .

In proofs quote:

Angle in semi-circle is 90° .

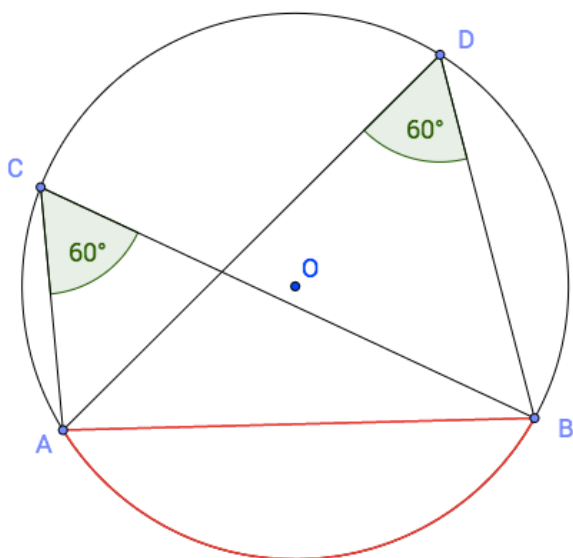


5. Angles at Centre and Circumference

The angle an arc or chord subtends at the centre is twice the angle it subtends at the circumference.

In proofs quote:

Angle at centre is twice angle at circumference.



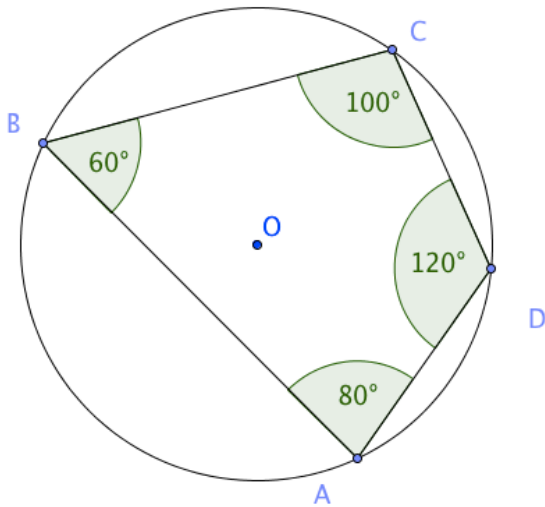
6. Angles in Same Segment

Angles in the same segment subtended by the same arc or chord are equal.

In proofs quote:

Angles in same segment are equal.

Circle Properties and Circle Theorems

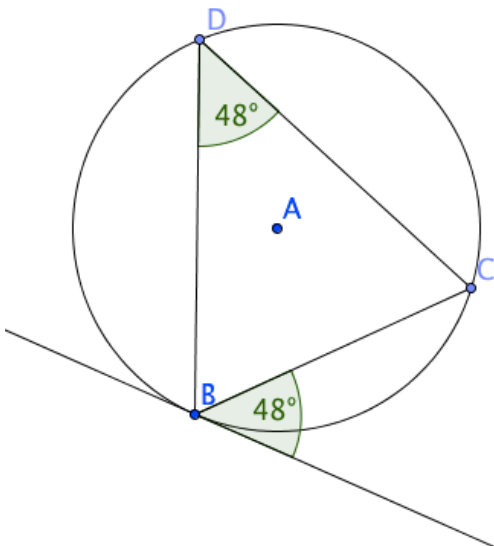


7. Opposite Angles of Cyclic Quadrilateral

Opposite angle of a cyclic quadrilateral are supplementary (add up to 180°).

In proofs quote:

Opposite angles of cyclic quad add up to 180° .



8. Alternate Segment Theorem

The angle between a tangent and a chord is equal to the angle subtended by the chord in the alternate segment.

In proofs quote:

Alternate segment theorem.