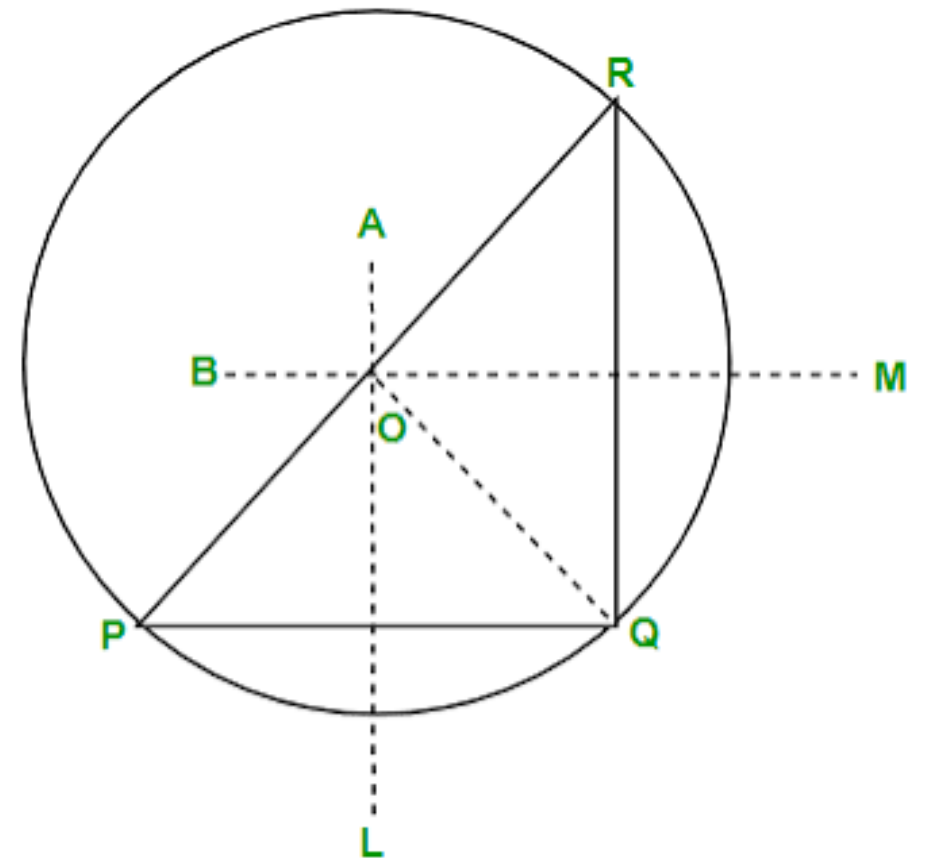


1. Unique Circle Through Three Points

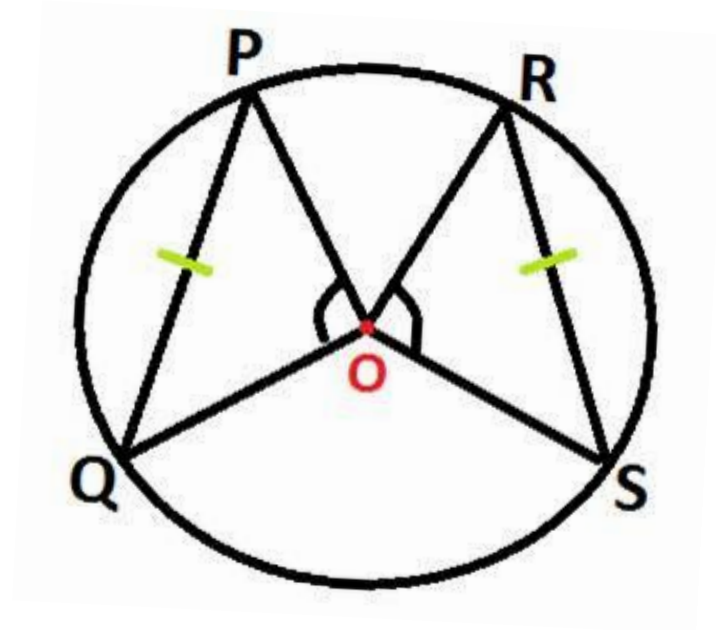
There is always a unique circle passing through 3 non-collinear points.



2.1 Equal Chords & Central Angles

Equal chords of a circle subtend equal angles at the centre of the circle.

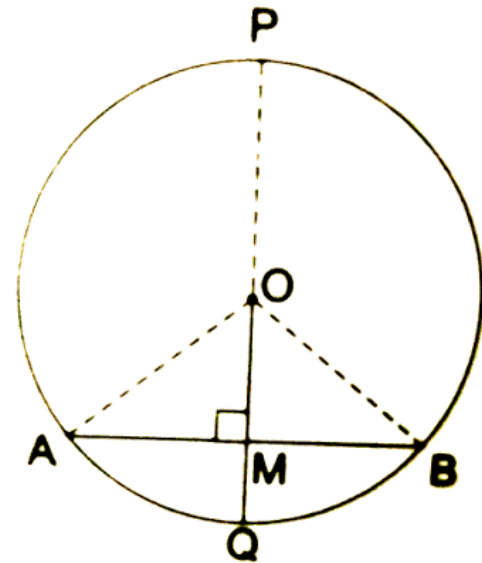
Chords that subtend equal angles at the centre are equal.



3.1 Centre & Midpoint of a Chord

The line joining the centre of the circle and the midpoint of a chord is perpendicular to the chord.

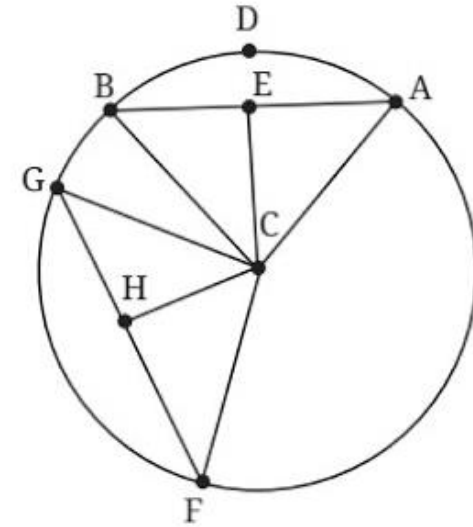
The perpendicular from the centre of the circle to the chord bisects the chord.



4.1 Equal Chords & Equal Distances

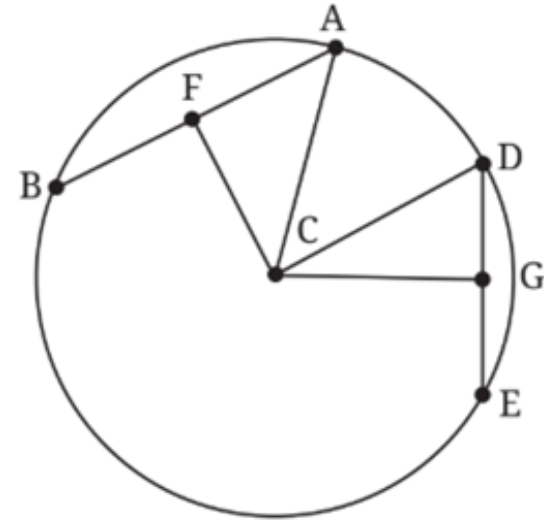
Chords of the circle that are equidistant from the centre have equal length.

Chords of a circle having the same length are all at the same distance from the centre.



5. Comparing Two Chords

If $AB > DE$, then the distance from C to AB is less than the distance from C to DE .



Quick Revision

Equal chords $\leftrightarrow$ equal central angles

Perpendicular from centre $\rightarrow$ bisects chord

Equal chords $\leftrightarrow$ equal distances from centre

Longer chord $\rightarrow$ closer to centre