

Circle

Chapter 3: Circle · Topic 1

Key Concept

The radius is the distance from the centre to any point on the circle, while the diameter is twice the radius, passing through the centre.

A chord is a line segment connecting two points on a circle, with the diameter being the longest possible chord.

An arc is a part of the circle's circumference, and the angle subtended by an arc at the centre relates to its length.

Tangent lines touch a circle at exactly one point, and are always perpendicular to the radius at that point of contact.

Quick Revision Notes

- Radius: centre to circle point distance.
- Diameter: twice radius, through centre.
- Chord: line segment connecting two circle points.
- Diameter is the longest possible chord.
- Arc: part of circle's circumference.
- Angle subtended relates to arc length.
- Tangent: touches circle at one point.
- It's perpendicular to radius at that point.

Practice Questions

- 1 Draw a circle and label radius, diameter, chord.
- 2 Draw an arc and discuss its properties.
- 3 Draw a tangent line to a circle.
- 4 Verify the tangent-radius perpendicularity.
- 5 Discuss the relationship between radius and diameter.
- 6 Explain circle terminology in your own words.