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CIRCLES CLASS 10

Basic Concepts

- 1. A **circle** is a collection of points in a plane at a **fixed distance** from a **fixed point**. The fixed point is called the centre of the circle. The fixed distance between the centre of the circle and the circumference, is called radius.
- 2. The perimeter of the circle is referred to as the circumference of the circle.
- 3. A **chord** of a circle is a line segment joining any two points on the circumference.
- 4. An arc of a circle is a part of the circumference.
- 5. A **diameter** of a circle is a chord which passes through the centre of the circle.
- 6. A line, which intersects the circle in two distinct points, is called a secant.
- 7. A line which has only one point common to the circle is called a **tangent** to the circle.
- 8. There is one and only one tangent at a point of the circle.
- 9. The tangent at any point of a circle is perpendicular to the radius through the point of contact.
- 10.No tangent can be drawn from a point inside the circle.
- 11. The lengths of tangents drawn from an external point to a circle are equal.
- 12. The perpendicular at the point of contact to the tangent to a circle passes through the centre of the circle.
- 13. Tangents drawn at the end points of a diameter of a circle are parallel.