Circles

Handout -1

1. A **circle** is a closed figure in a plane and it is the collection of all the points in the plane which are at a constant distance from a fixed point in the plane. The fixed point is the <u>centre</u> of the circle and the constant distance is the <u>radius</u> of the circle.
2. <u>Circumference of a circle</u> is the length of the complete circular curve constituting the circle.
3. <u>Chord</u> of a circle is a line segment joining any two points on the circle.
4. Any two points A and B of a circle divide the circle into two parts. The smaller part is called the <u>minor arc</u> and the larger part is called the <u>major arc</u> of the circle. If the two parts are equal, AB is a diameter of the circle and each part is called a <u>semi circle</u>.
5. A chord of a circle divides the circular region into two parts. The smaller part is known as the <u>minor</u> <u>segment</u> and the larger part is known as the <u>major segment</u> .
   If the chord is a diameter, then the two segments are equal and each part is called a semi circular region.
6. The region between an arc and two radii joining the centre to the end points of the arc is called a sector.
   Two radii of a circle divide the circular region into two parts. The smaller part is known as the <u>minor sector</u> and the larger part is known as the <u>major sector</u>.
7. Equal chords of a circle subtend equal angles at the centre.
8. If the angles subtended by the chords of a circle at the centre are equal, then the chords are equal.

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