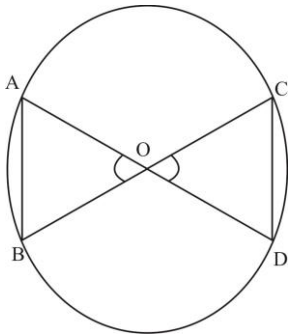


National Institute of Open Schooling (NIOS)
Secondary Course
Lesson –15: Circles
Worksheet – 15

1. Draw a Circle of any size and indicate its radius, diameter, arc, sector and centre.
2. Differentiate between Concentric circles and congruent circles with examples.
3. O be the centre of the circle and OP is perpendicular to AB. If $AB = 6$ cm and $OP = 4$ cm, then find OA.
4. A rectangular pentagon is inscribed in a circle. Find the angle which each side of the pentagon subtends at centre.
5. Diameter of a circle is 30 cm. If the length of a chord of the circle is 20 cm, find the distance of the chord from the centre.
6. Two chords AB and CD of lengths 8 cm and 12 cm. respectively of a circle are parallel to each other and are on opposite sides of its centre. If the distance between the chords AB and CD is 5 cm, find the radius of the circle.
7. Prove that equal chords of a circle subtend equal angles at the centre



8. Prove that two arcs of a circle are congruent if and only their corresponding chords are equal.
9. Prove that equal chords of a circle are equidistant from the centre of the circle
10. If the length of a chord of a circle is 8cm and the distance of the chord from the centre is 3cm, find the radius of the circle.