

Name - \_\_\_\_\_

Start time - \_ : \_ End time - \_ : \_ \_

## Solve the following.

- Prove that if chords of congruent circles subtend equal angles at their centres, then the chords are equal.
- Two circles of radii 5 cm and 3 cm intersect at two points and the distance between their centres is 4 cm. Find the length of the common chord.
- If two equal chords of a circle intersect within the circle, prove that the segments of one chord are equal to corresponding segments of the other chord.
- 4. If a line intersects two concentric circles (circles with the same centre) with centre O at P, Q, R and S, prove that PQ = RS
- 5. Three girls Zoe, Ivy and Ana are playing a game by standing on a circle of radius 5m drawn in a park. Zoe throws a ball to Ivy, Ivy to Ana, Ana to Zoe. If the distance between Zoe and Ivy and between Ivy and Ana is 6m each, what is the distance between Zoe and Ana?