

PRACTICE TEST: CLASS-X

AREA RELATED TO CIRCLE (X)

1. In a circle of radius 21 cm, an arc subtends an angle of 60° at the centre. Find (i) length of arc (ii) area of the sector formed by the arc (iii) area of the segment formed by the corresponding chord of the arc.
2. The diagram shows two arcs, A and B. Arc A is part of the circle with centre O and radius OP. Arc B is part of the circle with centre M and Radius PM where M is the mid point of PQ. Show that area enclosed by the two arcs is equal to
3. The inner and outer diameters of ring I of dart board are 32cm and 34 cm respectively and those of ring II are 19 cm and 21cm respectively. What is the total area of these two rings.
4. PQRS is the diameter of a circle of radius 6cm. The length PQ, QR and RS are equal. Semi circles are drawn PQ and QS as diameter as on figure. Find the perimeter and area of shaded region.
5. In figure AOBCA represents a quadrant of a circle of radius 3.5 cm with centre O. Calculate the area of the shaded region.
6. Athletic track 14 m wide consist of two straight sections 120m long joining semi circular ends where inner radius is 35 km. Calculate the area of path of track.