Chapter-Areas Related to Circles

Q1.

A chord of a circle of radius 10 cm subtends a right angle at the centre. Find the area of the corresponding minor segment and hence find the area of the major segment

Q2.

Area of a sector of a circle of radius 14 cm is 154 cm^2. Find the length of the corresponding arc of the sector

Q3.

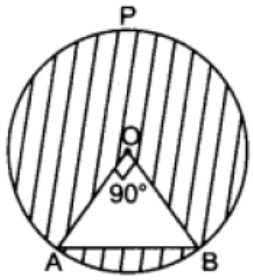
Two circular beads of different sizes are joined together such that the distance between their centres is 14 cm. The sum of their areas is 130π cm^2. Find the radius of each bead.

Q4.

A chord of a circle of radius 14 cm subtends an angle of 120° at the centre. Find the area of the corresponding minor segment of the circle.

Q5.

Find the area of the major segment APB in figure of a circle of radius 35 cm and ∠AOB = 90°.



Q6.

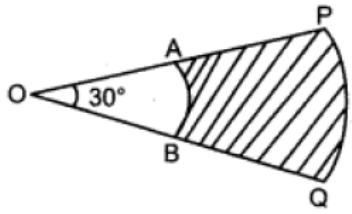
Find the area of a quadrant of a circle, where the circumference of circle is 44cm

Q7.

The length of the minute hand of a clock is 14 cm. Find the area swept by the minute hand in 10 minutes

Q8.

In figure, PQ and AB are respectively the arcs of two concentric circles of radii 7 cm and 3.5 cm and centre O. If ∠POQ = 30°, then find the area of the shaded region.



Q9.

.A park is of the shape of a circle of diameter 7 m. It is surrounded by a path of width of 0.7 m. Find the expenditure of cementing the path. If its cost is Rs.110 per sq. m.

Q10

A wire when bent in the form of an equilateral triangle encloses an area of $121\sqrt{3}$ cm^2. If the wire is bent in the form of a circle, find the area enclosed by the circle. Use $\pi = \frac{22}{7}$.