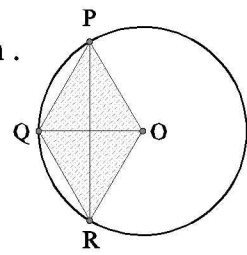
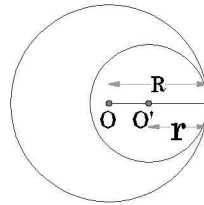


- 8) OPQR is a rhombus whose three vertices P, Q & R lies on a circle of radius 8 cm with center O. Find the area of the non-shaded region.

[ans.  $145.78 \text{ cm}^2$ ]

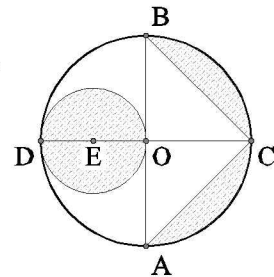


- 9) Two circles touch internally. The sum of their areas is  $116\pi \text{ cm}^2$  and the distance between their centers is 6 cm. Find the radii of the circles. [ans. 10 cm, 4 cm]

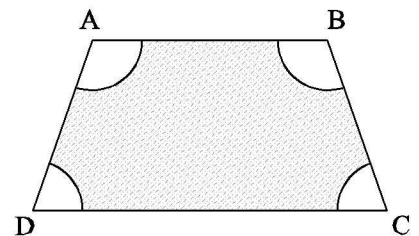


- 10) The minute hand of a big clock is 1.05 m long. Find the rate at which its tip is moving in cm / minute. [ans. 11 cm / min]

- 11) In the figure AB & CD are two diameters of a circle with center O,  $\perp$  to each other and OD is the diameter of the smaller circle. If  $OA = 7 \text{ cm}$ , find the area of the shaded region. [ans.  $66.5 \text{ cm}^2$ ]



- 12) In the figure ABCD is a trapezium with  $AB \parallel DC$ .  $AB = 18 \text{ cm}$ ,  $DC = 32 \text{ cm}$  and the distance between AB and DC is 14 cm. If arcs of equal radii 7 cm have been drawn with centres A, B, C and D, then find the area of the shaded region.




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Sheeja James