Related Questions with Solutions

Questions

Quetion: 01

Find the radius of the circle in which a central

angle of 60° intercepts an arc of length 37.4 cm $\left(use\ \pi = \dfrac{22}{7} \right)$.

A. 37.5 cm
B. 32.8 cm
C. 35.7 cm
D. 34.5 cm

Solutions

Solution: 01

Here $I = 37.4$ cm and $\theta = 60° = \dfrac{60\pi}{180}$ radian $= \dfrac{\pi}{3}$

Hence, by $r = \dfrac{l}{\theta}$, we have

$$r = \frac{37.4 \times 3}{\pi} = \frac{37.4 \times 3 \times 7}{22} = 35.7 \text{ cm}$$

Correct Options

Answer:01
Correct Options: C