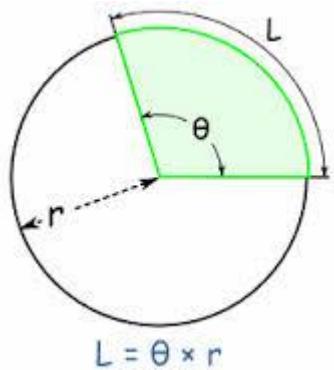


Answer on Question #18861 – Math – Geometry

The arc length of a sector is calculated by the following formulae:

$$L = r\theta \quad (\text{when } \theta \text{ is in radians})$$

$$L = r\theta \frac{\pi}{180} \quad (\text{when } \theta \text{ is in degrees}).$$



Apply the second formula and obtain

$$r = \frac{180L}{\pi\theta} = \frac{180 \times 10.3}{\pi \times 45.9} \approx \frac{180 \times 10.3}{3.1416 \times 45.9} \approx 12.86 \text{ (cm)}$$

Answer: 12.86 cm.