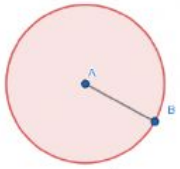
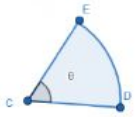
Area of sector:

We know:
Area $= 2\pi R^2$
AB = radius = R
degrees = 360 °

We know:
θ°

We need to find:
sector CED



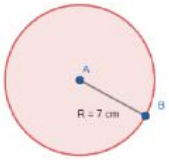


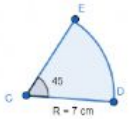
$$\frac{\pi R^2}{360^0} = \frac{sector\ CED}{\theta^0}$$

Plug in what you know , then cross multiply to solve.

---

ex





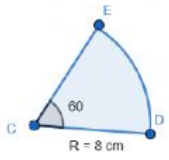
$$\frac{2\pi \cdot 7^2}{360^0} = \frac{sector\ CED}{45^0}$$

$$\frac{2\pi \cdot 7 \cdot 7 \cdot 45}{360^0} = sector\ CED$$

$$\frac{49}{8}\pi = \text{sector CED}$$

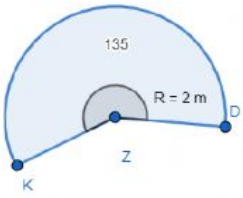
$$19.24\ cm^2 = \text{sector CED}$$

Fill in the text boxes, and find the length of arc



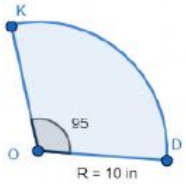
$$\frac{2\pi \cdot \quad ^2}{0} = \frac{sector}{0}$$

$$\text{———}\pi \quad ^2 = \text{sector}$$



$$\frac{2\pi \cdot \quad ^2}{0} = \frac{sector}{0}$$

$$\text{———}\pi \quad ^2 = \text{sector}$$



$$\frac{2\pi \cdot \quad ^2}{0} = \frac{sector}{0}$$

$$\text{———}\pi \quad ^2 = \text{sector}$$