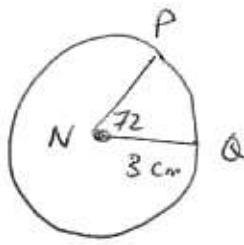


27



arc length PQ = ?

$$\frac{m}{360} = \frac{\text{arc length}}{\text{circumference}}$$

$$\frac{72}{360} = \frac{\text{arc length PQ}}{2\pi(3\text{ cm})}$$

$$\text{arc length PQ} \cdot 360 = 72 \cdot 2\pi(3\text{ cm})$$

$$\text{arc length PQ} = \frac{72 \cdot 2\pi(3\text{ cm})}{360} =$$

Area of sector PNQ = ?

$$\frac{m}{360} = \frac{A(\text{sector})}{A(\text{circle})}$$

$$\frac{72}{360} = \frac{A(\text{sector})}{\pi(3\text{ cm})^2}$$

$$360 \cdot A_{\text{sector}} = 72 \cdot \pi(9) \text{ cm}^2$$

$$A_{\text{sector}} = \frac{72 \cdot \pi \cdot 9 \text{ cm}^2}{360}$$

$$A_{\text{sector}} =$$