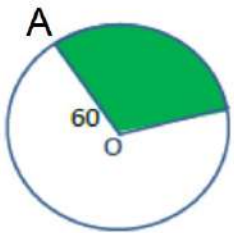


Find the length of arc AB in the figure below if the radius is 60 inches and the central angle measures  $130^\circ$ .

$$S = \frac{n}{360} \cdot 2\pi r$$

$$\frac{130}{360} \cdot 2\pi(60) = \frac{13}{36} \cdot 120\pi = \frac{1560\pi}{36} = \frac{130}{3}\pi \text{ in}$$



Find the area of the shaded sector of circle O.

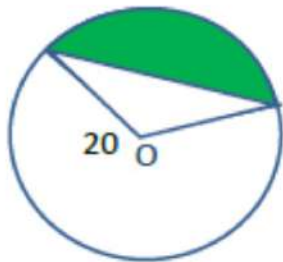
The radius is 60 inches and the central angle is  $130^\circ$ .

$$A = \frac{n}{360} \cdot \pi r^2$$

$$= \frac{130}{360} \cdot \pi(60)^2$$

$$\frac{13}{36} \cdot 3600\pi$$

$$1300\pi \text{ in}^2$$



Find the area of a segment of a circle if the central angle of the segment is  $130^\circ$  and the radius is 20

Area of segment = Area of Sector - Area of  $\Delta$ .

$$\frac{n}{360} \cdot \pi r^2 - \frac{1}{2} r^2 \sin(n)$$

300.58

$$\frac{130}{360} \cdot \pi (20)^2 - \frac{1}{2} (20)^2 \sin(130)$$