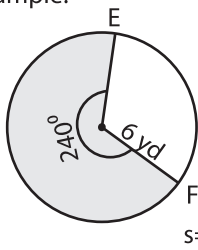


Arc Length and Area of a Sector

Example:

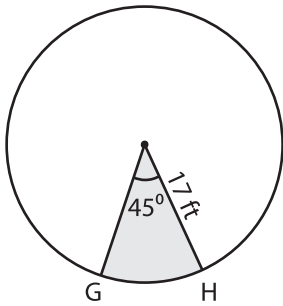


$$\begin{aligned} \text{Arc length of a sector (s)} &= \frac{\theta \times \pi \times r}{180^\circ} \\ &= \frac{240^\circ \times 3.14 \times 6}{180^\circ} \\ &= \mathbf{25.12 \text{ yd}} \end{aligned}$$

$$\begin{aligned} \text{Area} &= \frac{s \times r}{2} \\ &= \frac{25.12 \times 6}{2} \\ &= \mathbf{75.36 \text{ yd}^2} \end{aligned}$$

Find the length of the arc and area of the shaded region. Round the answer to two decimal places. (use $\pi = 3.14$)

1)



Length of the arc GH = _____

Area of a sector = _____

2)



PREVIEW

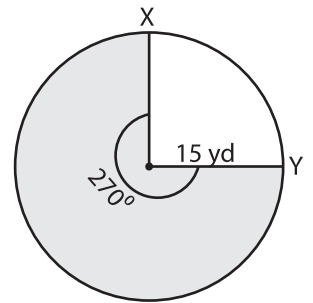
Gain complete access to the largest collection of worksheets in all subjects!

Members, please log in to download this worksheet.

Not a member? Please sign up to gain complete access.

www.mathworksheets4kids.com

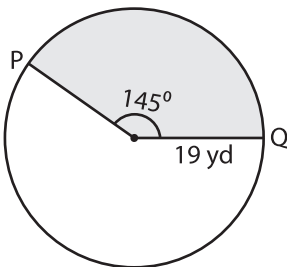
3)



Length of the arc XY = _____

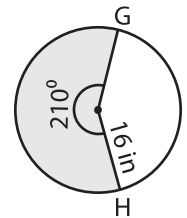
Area of a sector = _____

4)



Length of the arc PQ = _____

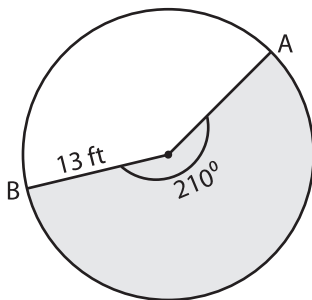
Area of a sector = _____



Length of the arc GH = _____

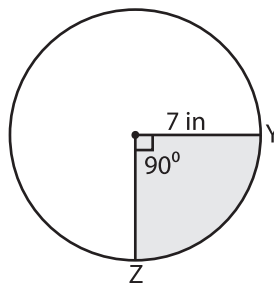
Area of a sector = _____

7)



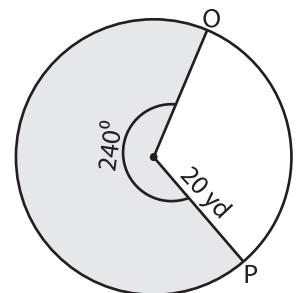
Length of the arc AB = _____

Area of a sector = _____



Length of the arc YZ = _____

Area of a sector = _____



Length of the arc OP = _____

Area of a sector = _____