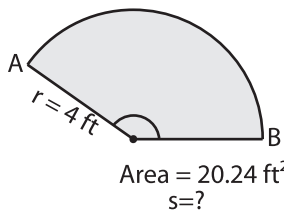


Finding Arc Length

Example:



$$\text{Area of a sector} = \frac{\theta \times \pi \times r^2}{360^\circ}$$

$$20.24 = \frac{\theta \times 3.14 \times 4 \times 4}{360^\circ}$$

$$\theta = 145^\circ$$

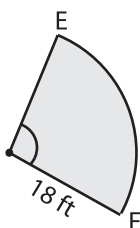
$$\text{Length of the arc AB} = \frac{\theta \times \pi \times r}{180^\circ}$$

$$= \frac{145^\circ \times 3.14 \times 4}{180^\circ}$$

$$= 10.12 \text{ ft}$$

Find the arc length for each sector. Round the answer to two decimal places. (use $\pi=3.14$)

1)



Area = 282.6 ft²

Length of the arc EF = _____

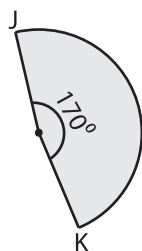
2)



Area = 15.26 in²

Length of the arc XY = _____

4)



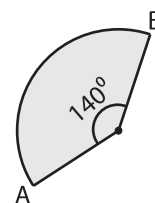
Area = 120.11 yd²

Length of the arc JK = _____

Members, please
log in to
download this
worksheet.

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

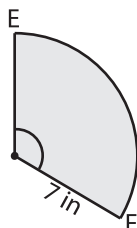
www.mathworksheets4kids.com



Area = 352.90 in²

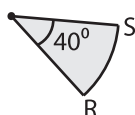
Length of the arc AB = _____

7)



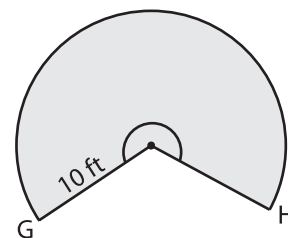
Area = 51.29 in²

Length of the arc EF = _____



Area = 139.56 yd²

Length of the arc RS = _____



Area = 204.97 ft²

Length of the arc GH = _____