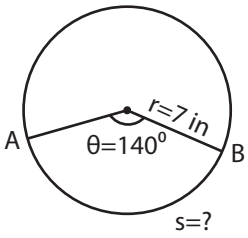
Name : _____ Score : _____

Sheet 1

Length of Arc

Example:



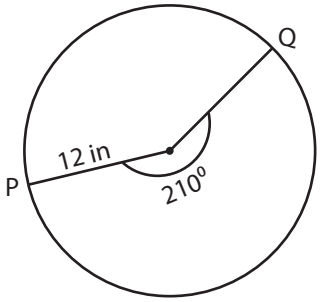
Arc length of a sector (s) = $\frac{\text{central angle}}{180^0} \times \pi \times \text{radius} = \frac{\theta \times \pi \times r}{180^0}$

$= \frac{140^0 \times 3.14 \times 7}{180^0}$

Length of the arc AB = **17.10 in**

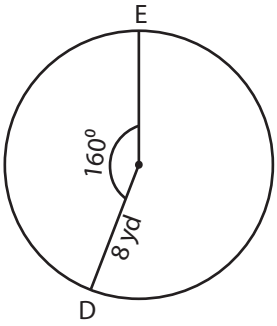
Find the arc length of each sector. Round the answer to two decimal places. (use π=3.14)

1)



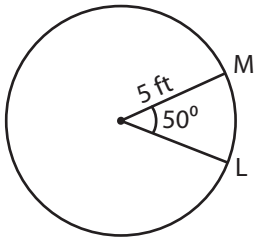
Length of the arc PQ = _____

2)



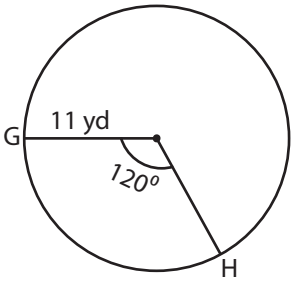
Length of the arc DE = _____

3)



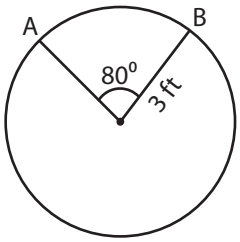
Length of the arc LM = _____

4)



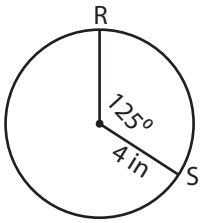
Length of the arc GH = _____

5)



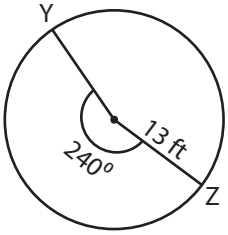
Length of the arc AB = _____

6)



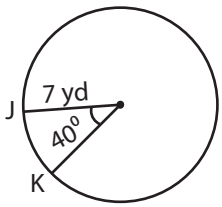
Length of the arc RS = _____

7)



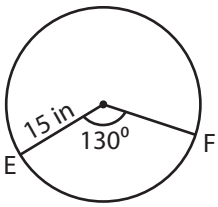
Length of the arc YZ = _____

8)



Length of the arc JK = _____

9)



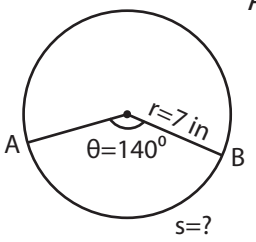
Length of the arc EF = _____

Name : _____ **Answer Key** Score : _____

Sheet 1

Length of Arc

Example:



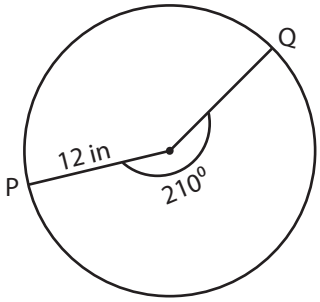
Arc length of a sector (s) = $\frac{\text{central angle}}{180^0} \times \pi \times \text{radius} = \frac{\theta \times \pi \times r}{180^0}$

$= \frac{140^0 \times 3.14 \times 7}{180^0}$

Length of the arc AB = **17.10 in**

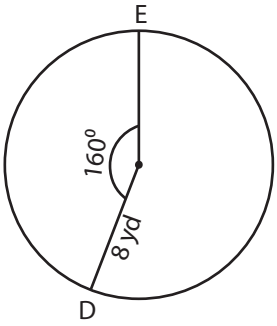
Find the arc length of each sector. Round the answer to two decimal places. (use π=3.14)

1)



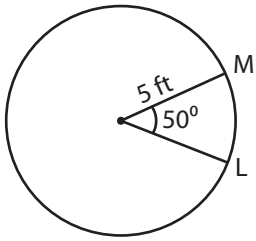
Length of the arc PQ = **43.96 in**

2)



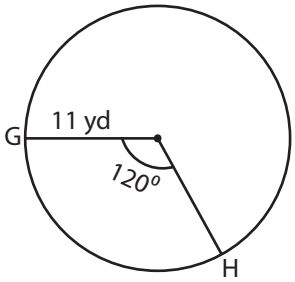
Length of the arc DE = **22.33 yd**

3)



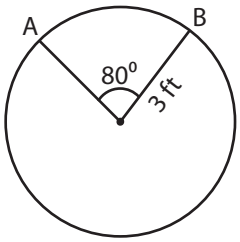
Length of the arc LM = **4.36 ft**

4)



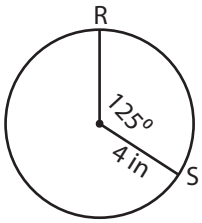
Length of the arc GH = **23.03 yd**

5)



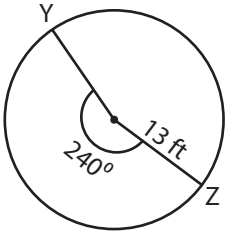
Length of the arc AB = **4.19 ft**

6)



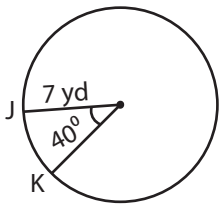
Length of the arc RS = **8.72 in**

7)



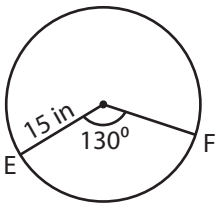
Length of the arc YZ = **54.43 ft**

8)



Length of the arc JK = **4.88 yd**

9)



Length of the arc EF = **34.02 in**