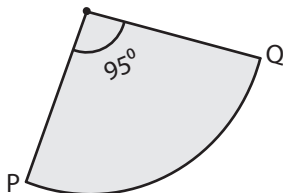


## Finding Area of the Sector from Arc Length

Find the area of each shaded region. Round your answer to two decimal places. (Use  $\pi = 3.14$ )

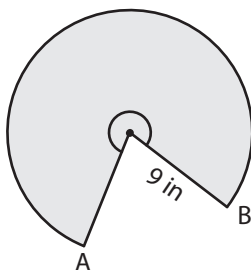
1)



Length of the arc PQ = 26.52 yd

Area = \_\_\_\_\_

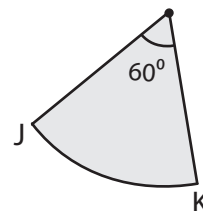
2)



Length of the arc AB = 44.75 in

Area = \_\_\_\_\_

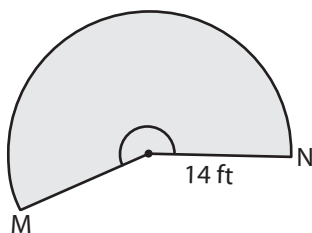
3)



Length of the arc JK = 4.19 ft

Area = \_\_\_\_\_

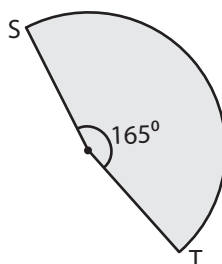
4)



Length of the arc MN = 50.07 ft

Area = \_\_\_\_\_

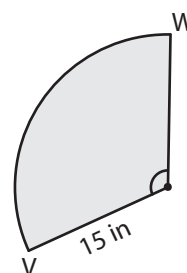
5)



Length of the arc ST = 20.15 yd

Area = \_\_\_\_\_

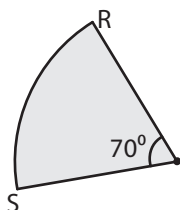
6)



Length of the arc VW = 30.09 in

Area = \_\_\_\_\_

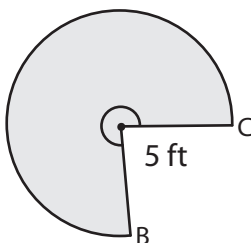
7)



Length of the arc RS = 9.77 in

Area = \_\_\_\_\_

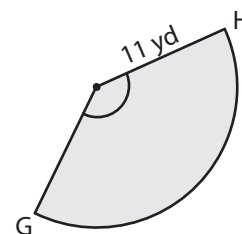
8)



Length of the arc BC = 23.99 ft

Area = \_\_\_\_\_

9)



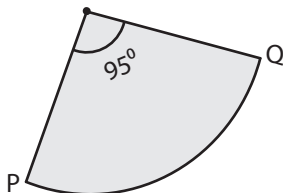
Length of the arc GH = 26.86 yd

Area = \_\_\_\_\_

# Finding Area of the Sector from Arc Length Answer Key

Find the area of each shaded region. Round your answer to two decimal places. (Use  $\pi = 3.14$ )

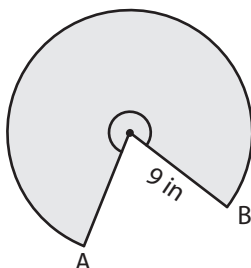
1)



Length of the arc PQ = 26.52 yd

Area = **212.2 yd<sup>2</sup>**

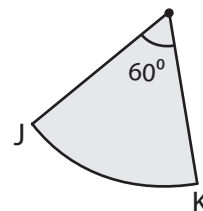
2)



Length of the arc AB = 44.75 in

Area = **201.38 in<sup>2</sup>**

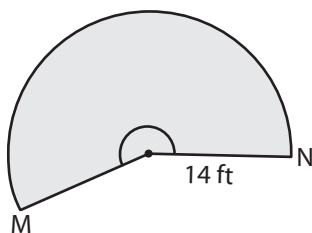
3)



Length of the arc JK = 4.19 ft

Area = **8.39 ft<sup>2</sup>**

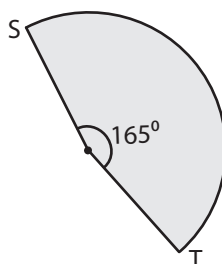
4)



Length of the arc MN = 50.07 ft

Area = **350.49 ft<sup>2</sup>**

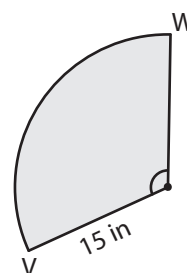
5)



Length of the arc ST = 20.15 yd

Area = **70.53 yd<sup>2</sup>**

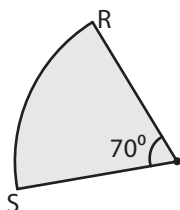
6)



Length of the arc VW = 30.09 in

Area = **225.68 in<sup>2</sup>**

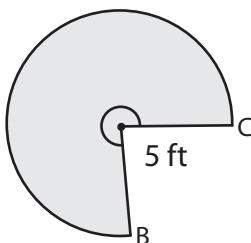
7)



Length of the arc RS = 9.77 in

Area = **39.08 in<sup>2</sup>**

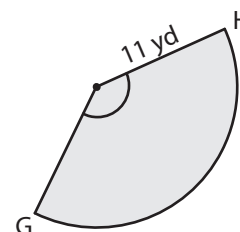
8)



Length of the arc BC = 23.99 ft

Area = **59.98 ft<sup>2</sup>**

9)



Length of the arc GH = 26.86 yd

Area = **147.73 yd<sup>2</sup>**