Name : _____ Score : _____

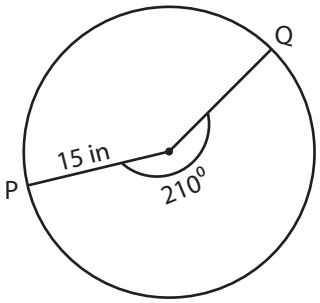
Sheet 1

Radius, Central Angle & Arc Length

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

Find the missing one. Round the radius and central angle to the nearest whole number.
Round the arc length to two decimal places. (use $\pi = 3.14$)

1)

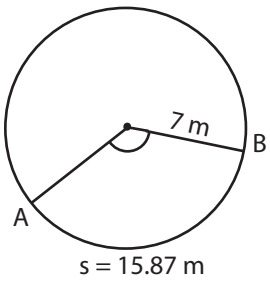


Radius = _____

Central angle = _____

Length of the arc PQ = _____

2)

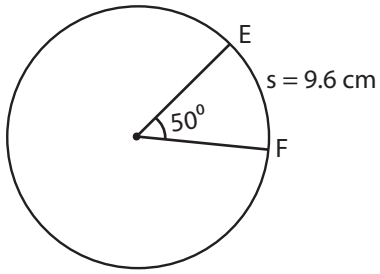


Radius = _____

Central angle = _____

Length of the arc AB = _____

3)

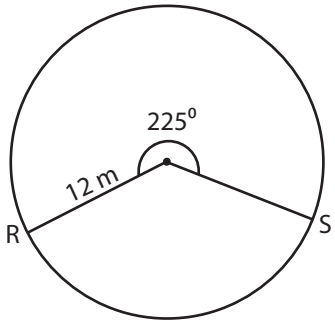


Radius = _____

Central angle = _____

Length of the arc EF = _____

4)

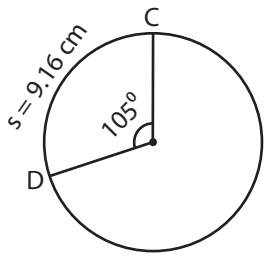


Radius = _____

Central angle = _____

Length of the arc RS = _____

5)

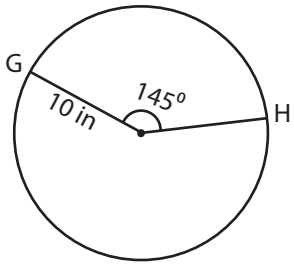


Radius = _____

Central angle = _____

Length of the arc CD = _____

6)

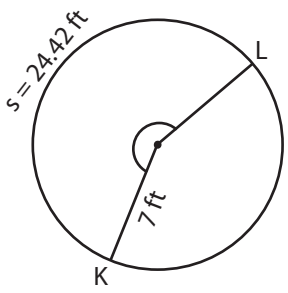


Radius = _____

Central angle = _____

Length of the arc GH = _____

7)

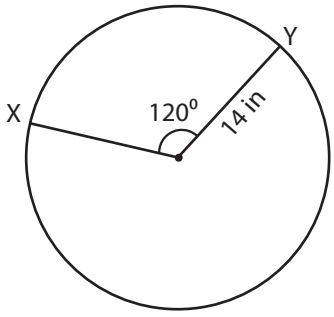


Radius = _____

Central angle = _____

Length of the arc KL = _____

8)

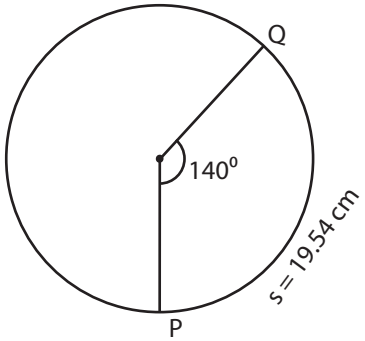


Radius = _____

Central angle = _____

Length of the arc XY = _____

9)



Radius = _____

Central angle = _____

Length of the arc PQ = _____

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

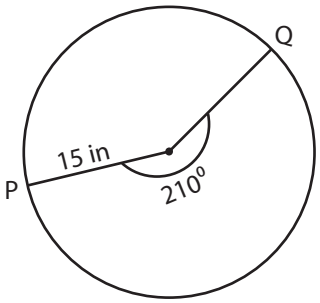
Sheet 1

Radius, Central Angle & Arc Length

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

Find the missing one. Round the radius and central angle to the nearest whole number.
Round the arc length to two decimal places. (use $\pi = 3.14$)

1)

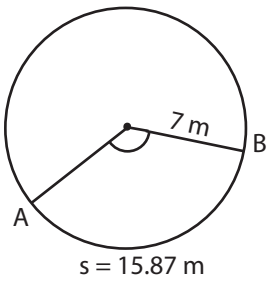


Radius = **15 in**

Central angle = **210°**

Length of the arc PQ = **54.95 in**

2)

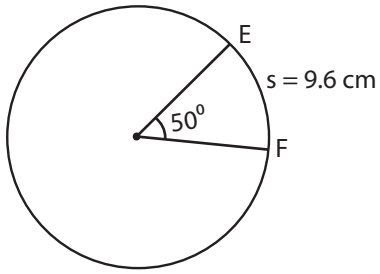


Radius = **7 m**

Central angle = **130°**

Length of the arc AB = **15.87 m**

3)

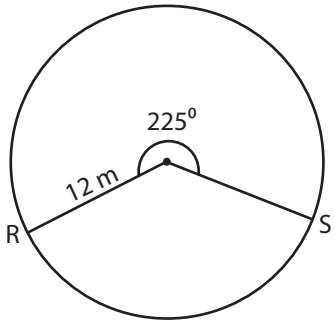


Radius = **11 cm**

Central angle = **50°**

Length of the arc EF = **9.6 cm**

4)

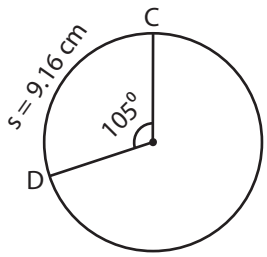


Radius = **12 m**

Central angle = **225°**

Length of the arc RS = **47.1 m**

5)

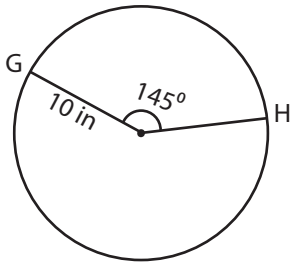


Radius = **5 cm**

Central angle = **105°**

Length of the arc CD = **9.16 cm**

6)

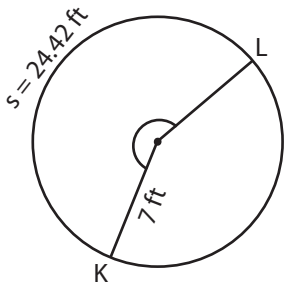


Radius = **10 in**

Central angle = **145°**

Length of the arc GH = **25.29 in**

7)

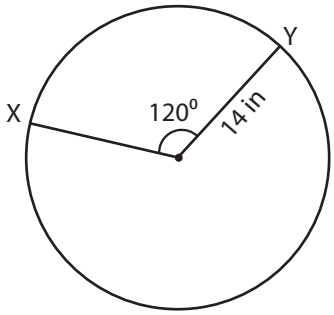


Radius = **7 ft**

Central angle = **200°**

Length of the arc KL = **24.42 ft**

8)

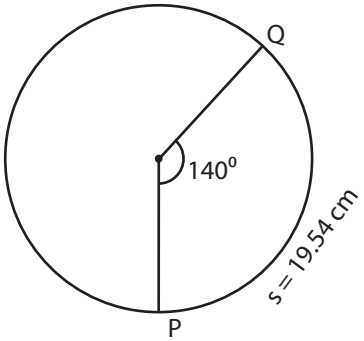


Radius = **14 in**

Central angle = **120°**

Length of the arc XY = **29.31 in**

9)



Radius = **8 cm**

Central angle = **140°**

Length of the arc PQ = **19.54 cm**

Name : _____ Score : _____

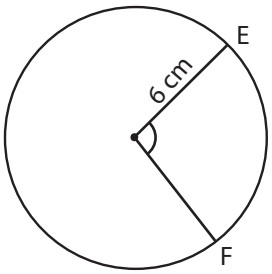
Sheet 2

Radius, Central Angle & Arc Length

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

Find the missing one. Round the radius and central angle to the nearest whole number.
Round the arc length to two decimal places. (use $\pi = 3.14$)

1)



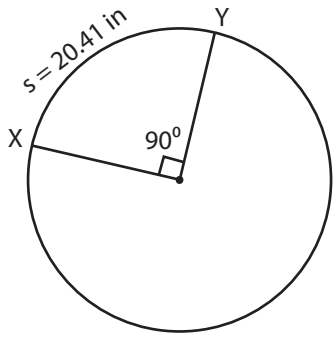
s = 10.47 cm

Radius = _____

Central angle = _____

Length of the arc EF = _____

2)

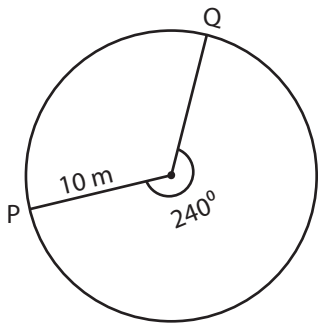


Radius = _____

Central angle = _____

Length of the arc XY = _____

3)

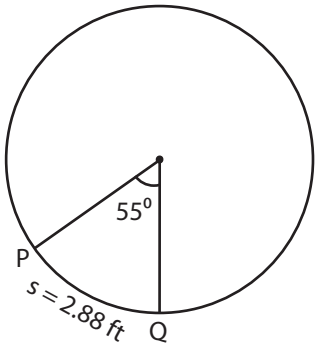


Radius = _____

Central angle = _____

Length of the arc PQ = _____

4)

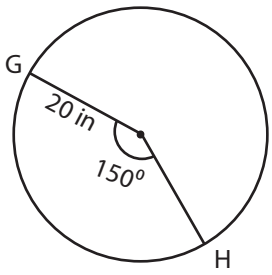


Radius = _____

Central angle = _____

Length of the arc PQ = _____

5)

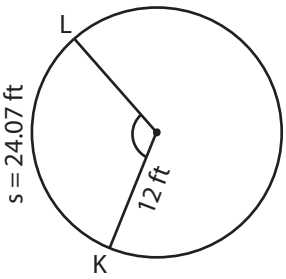


Radius = _____

Central angle = _____

Length of the arc GH = _____

6)

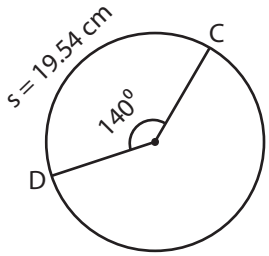


Radius = _____

Central angle = _____

Length of the arc KL = _____

7)

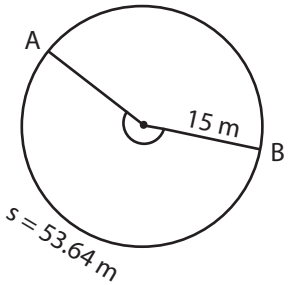


Radius = _____

Central angle = _____

Length of the arc CD = _____

8)

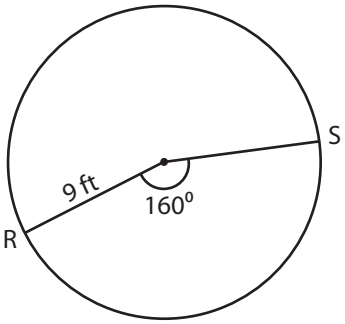


Radius = _____

Central angle = _____

Length of the arc AB = _____

9)



Radius = _____

Central angle = _____

Length of the arc RS = _____

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

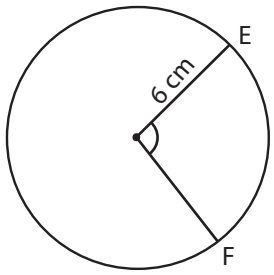
Sheet 2

Radius, Central Angle & Arc Length

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

Find the missing one. Round the radius and central angle to the nearest whole number.
Round the arc length to two decimal places. (use $\pi = 3.14$)

1)



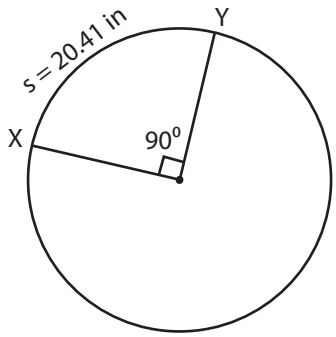
s = 10.47 cm

Radius = **6 cm**

Central angle = **100°**

Length of the arc EF = **10.47 cm**

2)

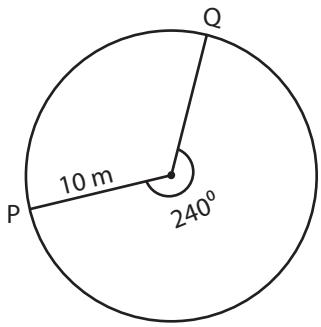


Radius = **13 in**

Central angle = **90°**

Length of the arc XY = **20.41 in**

3)

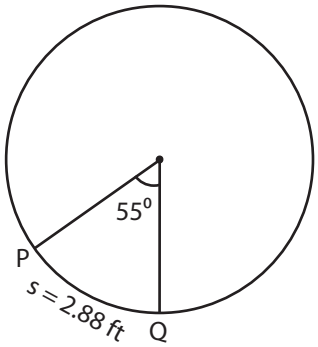


Radius = **10 m**

Central angle = **240°**

Length of the arc PQ = **41.87 m**

4)

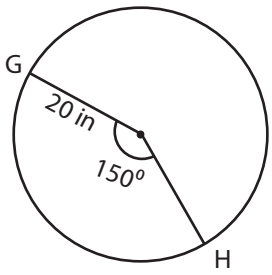


Radius = **3 ft**

Central angle = **55°**

Length of the arc PQ = **2.88 ft**

5)

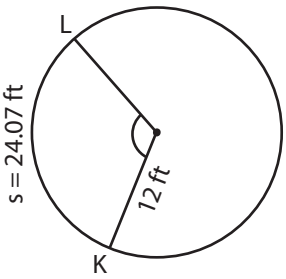


Radius = **20 in**

Central angle = **150°**

Length of the arc GH = **52.33 in**

6)

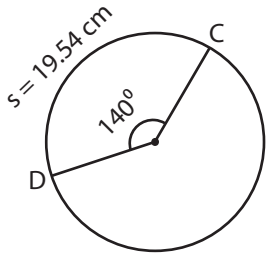


Radius = **12 ft**

Central angle = **115°**

Length of the arc KL = **24.07 ft**

7)

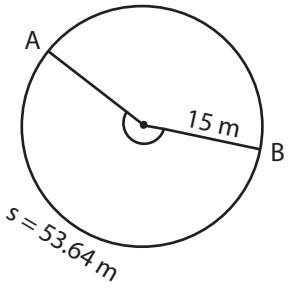


Radius = **8 cm**

Central angle = **140°**

Length of the arc CD = **19.54 cm**

8)

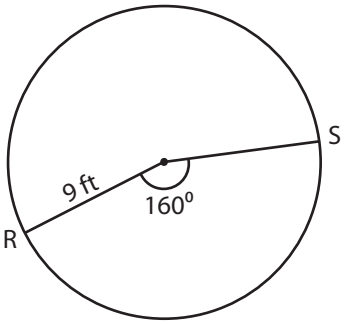


Radius = **15 m**

Central angle = **205°**

Length of the arc AB = **53.64 m**

9)



Radius = **9 ft**

Central angle = **160°**

Length of the arc RS = **25.12 ft**

Name : _____ Score : _____

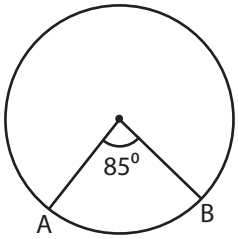
Sheet 3

Radius, Central Angle & Arc Length

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

Find the missing one. Round the radius and central angle to the nearest whole number.
Round the arc length to two decimal places. (use $\pi = 3.14$)

1)

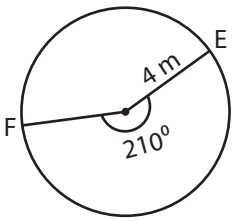


Radius = _____

Central angle = _____

Length of the arc AB = _____

2)

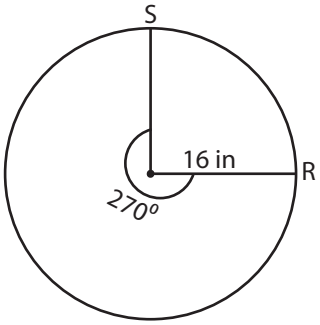


Radius = _____

Central angle = _____

Length of the arc EF = _____

3)

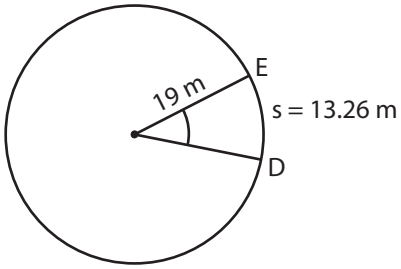


Radius = _____

Central angle = _____

Length of the arc RS = _____

4)

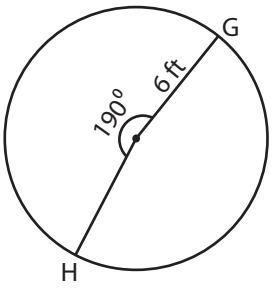


Radius = _____

Central angle = _____

Length of the arc DE = _____

5)

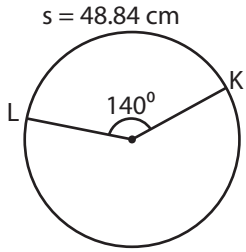


Radius = _____

Central angle = _____

Length of the arc GH = _____

6)

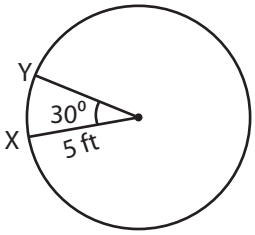


Radius = _____

Central angle = _____

Length of the arc KL = _____

7)

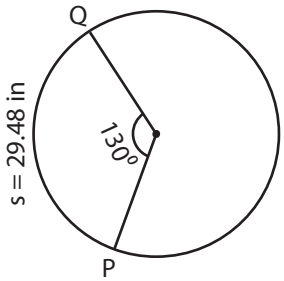


Radius = _____

Central angle = _____

Length of the arc XY = _____

8)

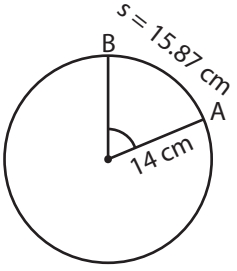


Radius = _____

Central angle = _____

Length of the arc PQ = _____

9)



Radius = _____

Central angle = _____

Length of the arc AB = _____

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

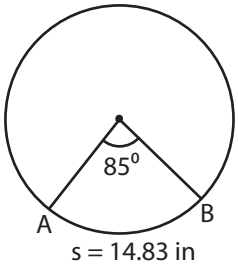
Sheet 3

Radius, Central Angle & Arc Length

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

Find the missing one. Round the radius and central angle to the nearest whole number.
Round the arc length to two decimal places. (use $\pi = 3.14$)

1)

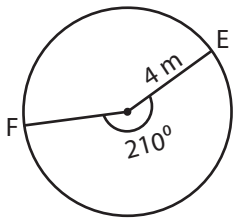


Radius = **10 in**

Central angle = **85°**

Length of the arc AB = **14.83 in**

2)

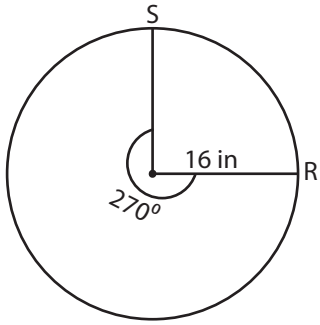


Radius = **4 m**

Central angle = **210°**

Length of the arc EF = **14.65 m**

3)

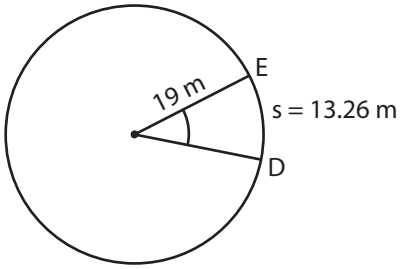


Radius = **16 in**

Central angle = **270°**

Length of the arc RS = **75.36 in**

4)

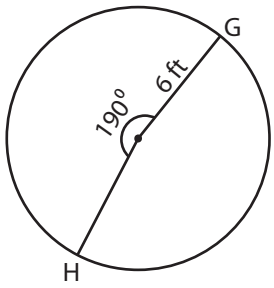


Radius = **19 m**

Central angle = **40°**

Length of the arc DE = **13.26 m**

5)

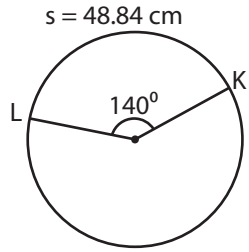


Radius = **6 ft**

Central angle = **190°**

Length of the arc GH = **19.89 ft**

6)

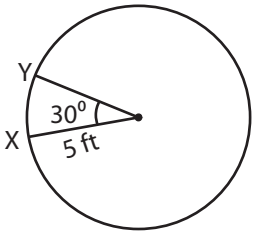


Radius = **20 cm**

Central angle = **140°**

Length of the arc KL = **48.84 cm**

7)

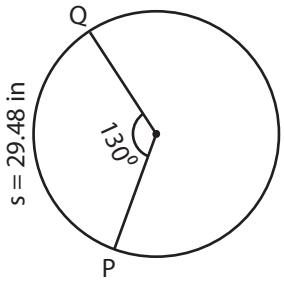


Radius = **5 ft**

Central angle = **30°**

Length of the arc XY = **2.62 ft**

8)

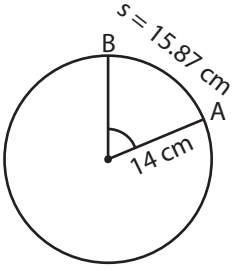


Radius = **13 in**

Central angle = **130°**

Length of the arc PQ = **29.48 in**

9)



Radius = **14 cm**

Central angle = **65°**

Length of the arc AB = **15.87 cm**