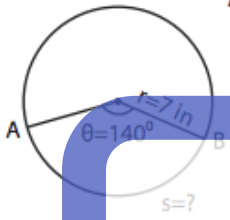
Name: Date:

Arc Length of a Sector

Example:

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

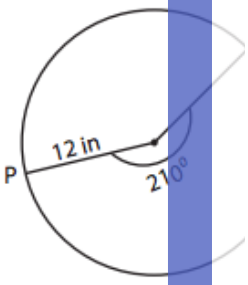


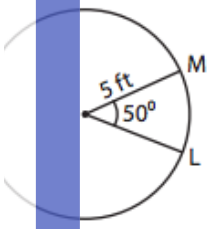
$= \frac{140^0 \times 3.14 \times 7}{180^0}$

Length of the arc AB = 17.10 in

Find the arc length of eac

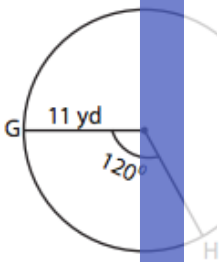
1)

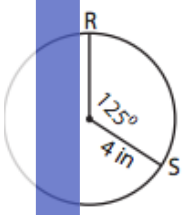




Length of the arc PQ = _____ e arc LM = _____

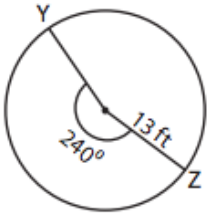
4)

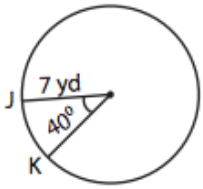


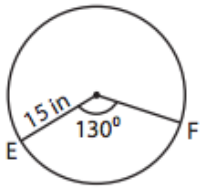


Length of the arc GH = _____ of the arc RS = _____

7) 8) 9)



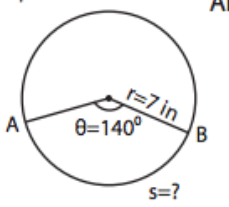




Length of the arc YZ = _____ Length of the arc JK = _____ Length of the arc EF = _____

Answers

Example:



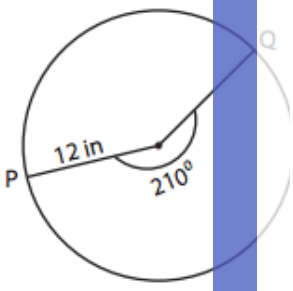
Arc length of a sector (s) = $\frac{\text{central angle}}{180^0} \times \pi \times \text{radius} = \frac{\theta \times \pi \times r}{180^0}$

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

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

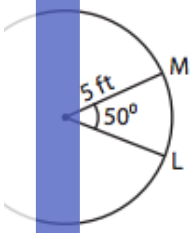
Find the arc length of each sector. Round the answer to two decimal places. (use π=3.14)

1)



2)

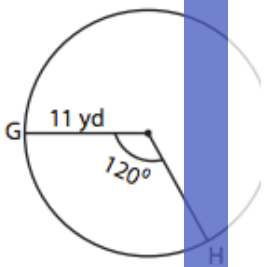
3)

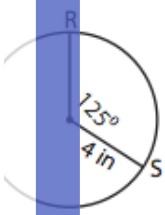


Length of the arc PQ = 43.9

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

4)

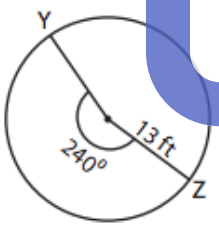




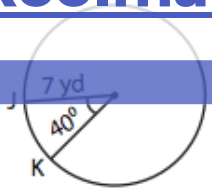
Length of the arc GH = 23.(

arc RS = **8.72 in**

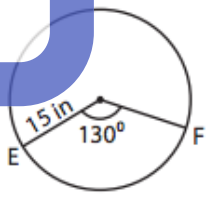
7)



8)



9)



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

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

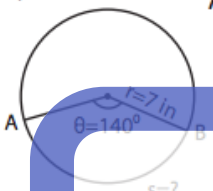
Length of the arc EF = **34.02 in**

Name: Date:

Arc Length of a Sector

Example:

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

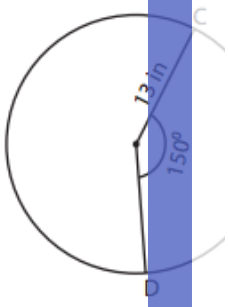


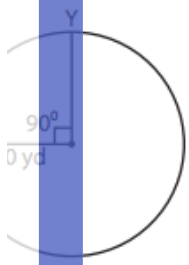
$= \frac{140^0 \times 3.14 \times 7}{180^0}$

Length of the arc AB = 17.10 in

Find the arc length of eac

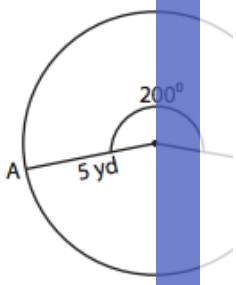
1)

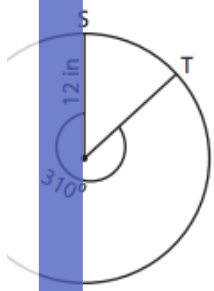




Length of the arc CD = _____ arc XY = _____

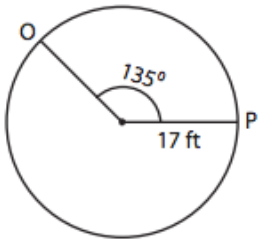
4)

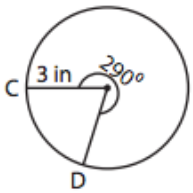


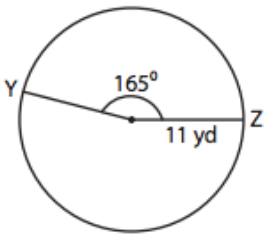


Length of the arc AB = _____ f the arc ST = _____

7) 8) 9)







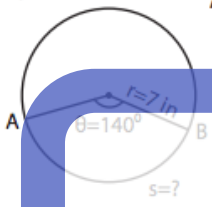
Length of the arc OP = _____ Length of the arc CD = _____ Length of the arc YZ = _____

Arc Length of a Sector

Answers

Example:

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

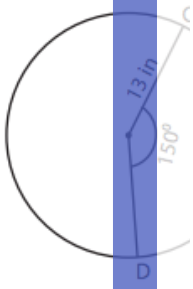


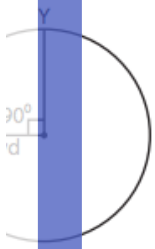
$= \frac{140^0 \times 3.14 \times 7}{180^0}$

Length of the arc AB = 17.10 in

Find the arc length of e

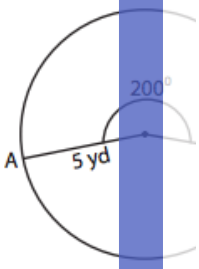
1)

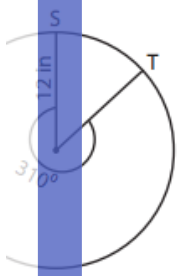




Length of the arc CD = _____ rc XY = 15.7 yd

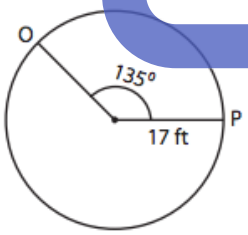
4)

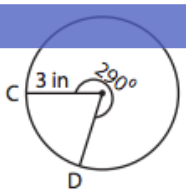


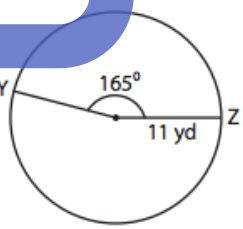


Length of the arc AB = 17.44 yd Length of the arc EF = 3.14 ft Length of the arc ST = 64.89 in

7)







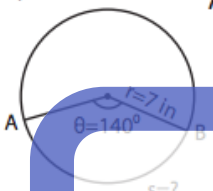
Length of the arc OP = 40.04 ft Length of the arc CD = 15.18 in Length of the arc YZ = 31.66 yd

Name: Date:

Arc Length of a Sector

Example:

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

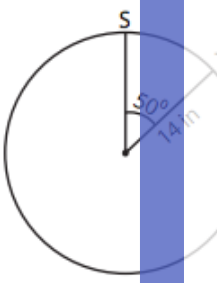


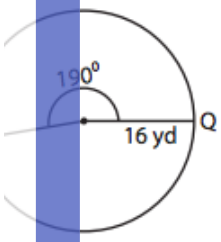
$= \frac{140^0 \times 3.14 \times 7}{180^0}$

Length of the arc AB = 17.10 in

Find the arc length of each

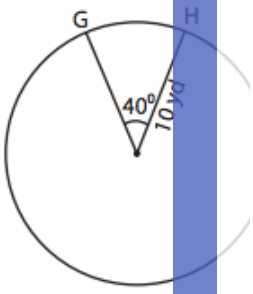
1)

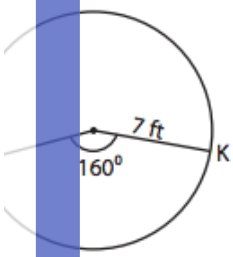




Length of the arc ST = _____ arc PQ = _____

4)



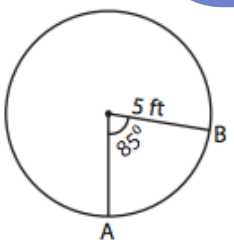


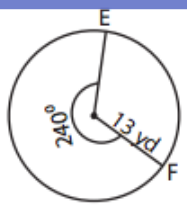
Length of the arc GH = _____ the arc JK = _____

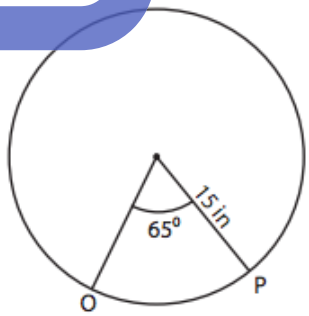
7)

8)

9)







Length of the arc AB = _____ Length of the arc EF = _____ Length of the arc OP = _____

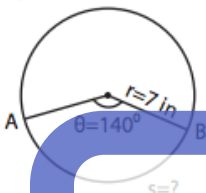
Arc Length of a Sector

Answers

Example:

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

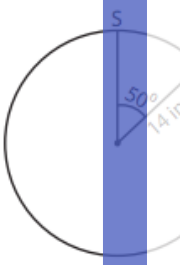
$= \frac{140^0 \times 3.14 \times 7}{180^0}$

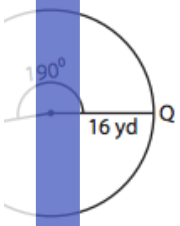


Length of the arc AB = 17.10 in

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

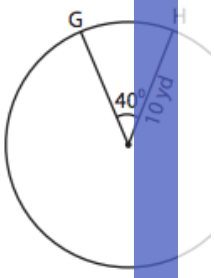
1)

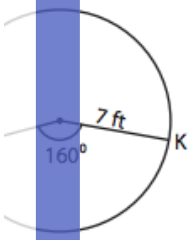




Length of the arc ST = _____ Length of the arc PQ = 53.03 yd

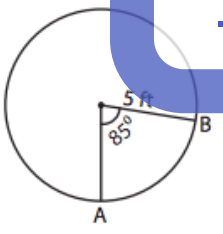
4)

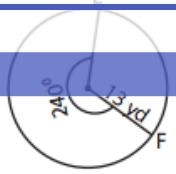


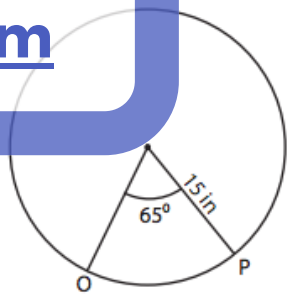


Length of the arc GH = 6.98 yd Length of the arc MN = 18.84 in Length of the arc JK = 19.54 ft

7)





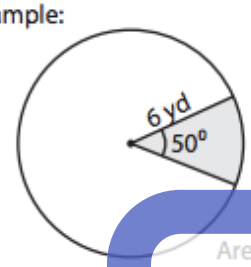


Length of the arc AB = 7.41 ft Length of the arc EF = 54.43 yd Length of the arc OP = 17.01 in

Name: Date:

Area of a Sector

Example:



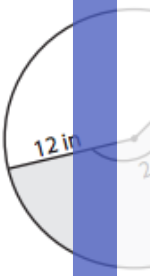
$$\text{Area of a sector} = \frac{\text{central angle}}{360^0} \times \pi \times \text{radius}^2 = \frac{\theta \times \pi \times r^2}{360^0}$$

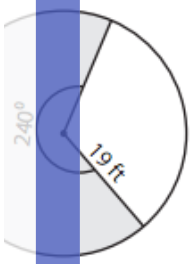
$$= \frac{50^0 \times 3.14 \times 6 \times 6}{360^0}$$

$$= 15.7 \text{ yd}^2$$

Find the area of each shaded region. Round the answer to two decimal places. (use π=3.14)

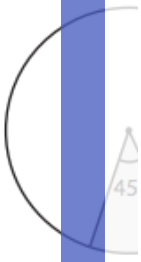
1)

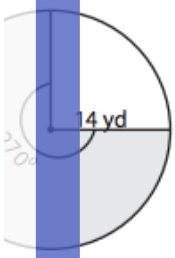




Area = _____ Area = _____

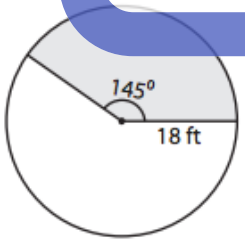
4)

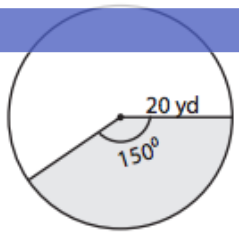




Area = _____ Area = _____ Area = _____

7)

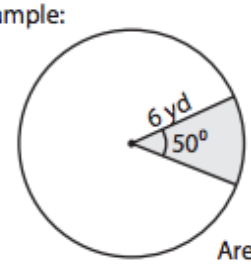




Area = _____ Area = _____ Area = _____

Answers

Example:



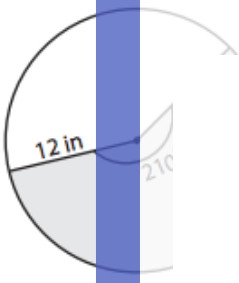
$$\text{Area of a sector} = \frac{\text{central angle}}{360^0} \times \pi \times \text{radius}^2 = \frac{\theta \times \pi \times r^2}{360^0}$$

$$= \frac{50^0 \times 3.14 \times 6 \times 6}{360^0}$$

$$= 15.7 \text{ yd}^2$$

Find the area of each shaded region. Round the answer to two decimal places. (use π=3.14)

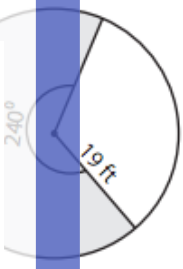
1)



Area = 263.

2)

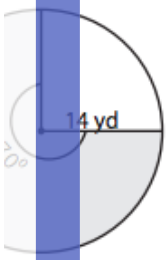
3)



= 755.69 ft²

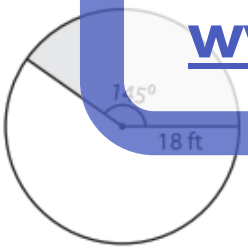
4)

Area = 100.



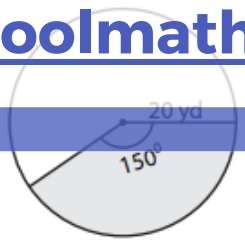
= 461.58 yd²

7)



Area = 409.77 ft²

8)



Area = 523.33 yd²

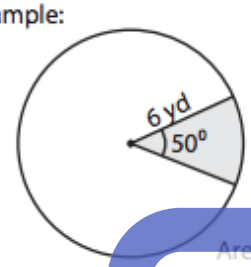
9)

Area = 412.13 in²

Name: Date:

Area of a Sector

Example:



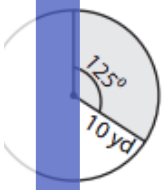
$$\text{Area of a sector} = \frac{\text{central angle}}{360^0} \times \pi \times \text{radius}^2 = \frac{\theta \times \pi \times r^2}{360^0}$$

$$= \frac{50^0 \times 3.14 \times 6 \times 6}{360^0}$$

Area=? $= 15.7\ yd^2$

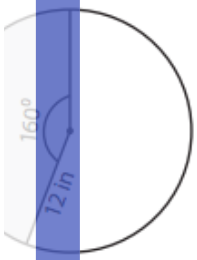
Find the area of each shaded region. Round the answer to two decimal places. (use π=3.14)

1)



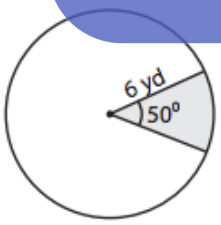
Area = _____ a = _____

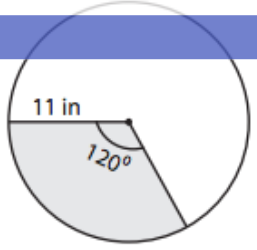
4)

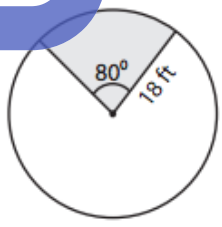


Area = _____ Area = _____ Area = _____

7)



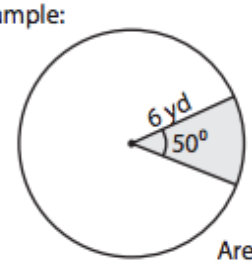




Area = _____ Area = _____ Area = _____

Answers

Example:



Area=?

$$\text{Area of a sector} = \frac{\text{central angle}}{360^0} \times \pi \times \text{radius}^2 = \frac{\theta \times \pi \times r^2}{360^0}$$

$$= \frac{50^0 \times 3.14 \times 6 \times 6}{360^0}$$

$$= 15.7 \text{ yd}^2$$

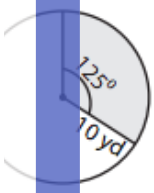
Find the area of each shaded region. Round the answer to two decimal places. (use π=3.14)

1)

Area = 102.

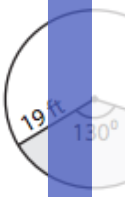
2)

3)



= 109.03 yd²

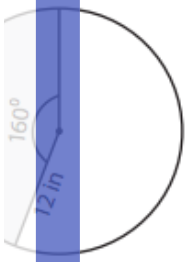
4)



Area = 409.

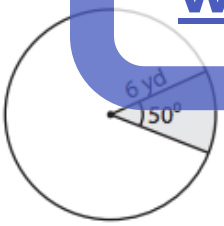
5)

6)



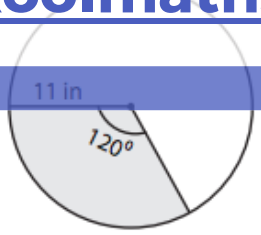
= 200.96 in²

7)



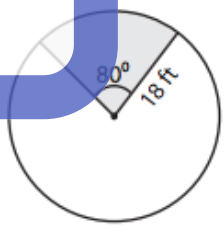
Area = 15.7 yd²

8)



Area = 126.65 in²

9)



Area = 226.08 ft²