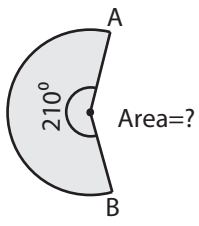


Finding Area of a Sector

Example:



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

$$33.27 = \frac{210^\circ \times 3.14 \times r}{180^\circ}$$

$r = 9 \text{ ft}$

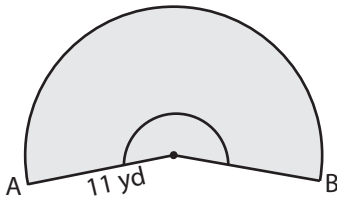
Area of a sector = $\frac{\theta \times \pi \times r^2}{360^\circ}$

$$= \frac{210 \times 3.14 \times 9 \times 9}{360^\circ}$$

$= 148.37 \text{ ft}^2$

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

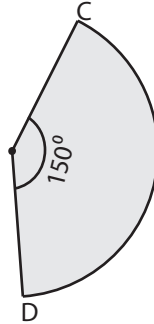
1)



Length of the arc AB = 38.38 yd

Area = _____

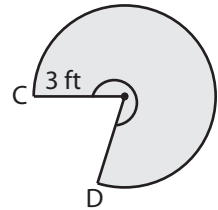
2)



Length of the arc CD = 18.32 in

Area = _____

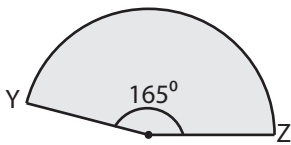
3)



Length of the arc CD = 15.18 ft

Area = _____

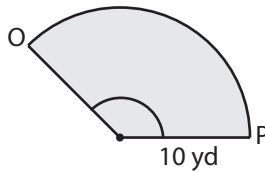
4)



Length of the arc YZ = 37.42 in

Area = _____

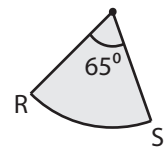
5)



Length of the arc OP = 23.55 yd

Area = _____

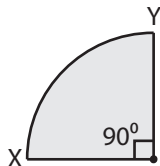
6)



Length of the arc RS = 9.07 ft

Area = _____

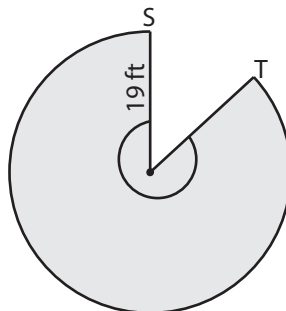
7)



Length of the arc XY = 25.12 yd

Area = _____

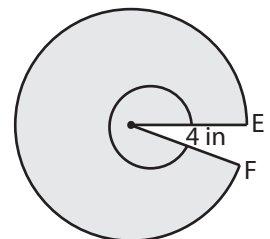
8)



Length of the arc ST = 102.75 ft

Area = _____

9)




Length of the arc EF = 23.72 in

Area = _____

Finding Area of a Sector

Example:



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

$$33.27 = \frac{210^\circ \times 3.14 \times r}{180^\circ}$$

$r = 9 \text{ ft}$

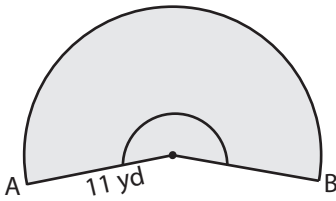
Area of a sector = $\frac{\theta \times \pi \times r^2}{360^\circ}$

$$= \frac{210 \times 3.14 \times 9 \times 9}{360^\circ}$$

$= 148.37 \text{ ft}^2$

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

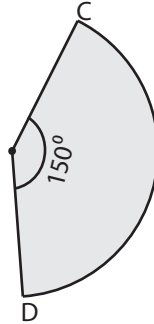
1)



Length of the arc AB = 38.38 yd

Area = 211.08 yd²

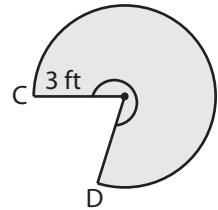
2)



Length of the arc CD = 18.32 in

Area = 64.11 in²

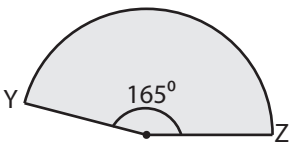
3)



Length of the arc CD = 15.18 ft

Area = 22.77 ft²

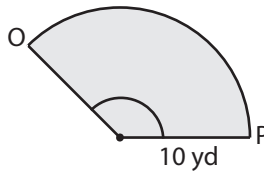
4)



Length of the arc YZ = 37.42 in

Area = 243.22 in²

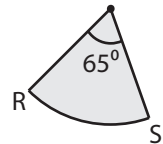
5)



Length of the arc OP = 23.55 yd

Area = 117.75 yd²

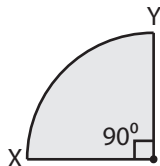
6)



Length of the arc RS = 9.07 ft

Area = 36.28 ft²

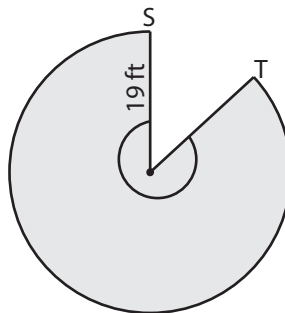
7)



Length of the arc XY = 25.12 yd

Area = 200.96 yd²

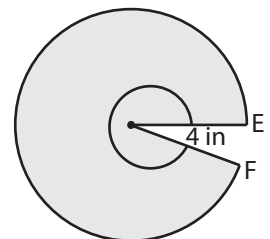
8)



Length of the arc ST = 102.75 ft

Area = 976.10 ft²

9)

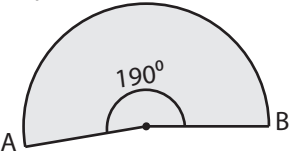


Length of the arc EF = 23.72 in

Area = 47.45 in²

Finding Area of a Sector

Example:



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

$$26.40 = \frac{190^\circ \times 3.14 \times r}{180^\circ}$$

$r = \mathbf{8 \text{ in}}$

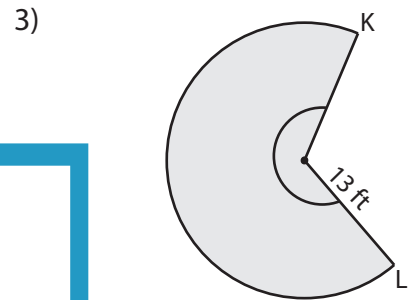
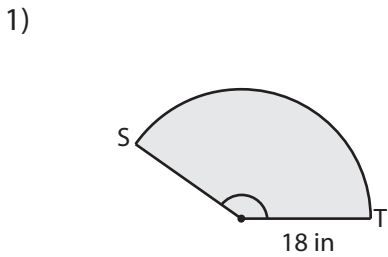
Area of a sector = $\frac{\theta \times \pi \times r^2}{360^\circ}$

$$= \frac{190 \times 3.14 \times 8 \times 8}{360^\circ}$$

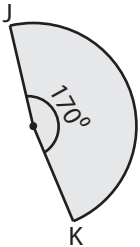
$= \mathbf{106.06 \text{ in}^2}$

Length of the arc = 26.40 in
Area = ?

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



4)



Length of the arc JK = 26.69 ft

Area = _____

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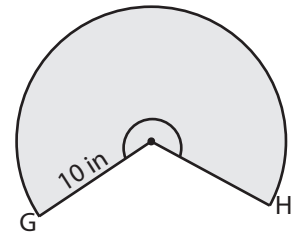
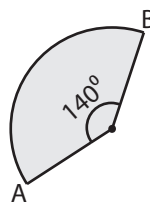
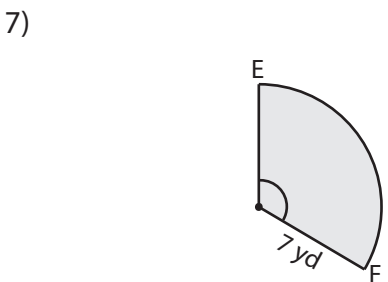
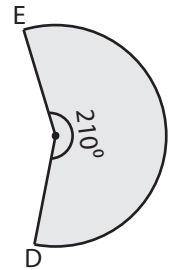
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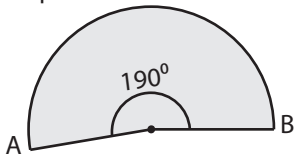
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Finding Area of a Sector

Example:



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

$$26.40 = \frac{190^\circ \times 3.14 \times r}{180^\circ}$$

$r = 8 \text{ in}$

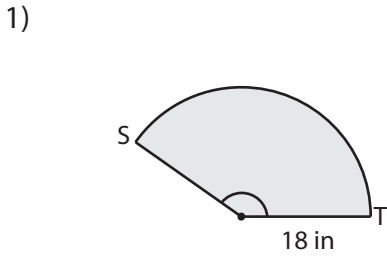
Area of a sector = $\frac{\theta \times \pi \times r^2}{360^\circ}$

$$= \frac{190 \times 3.14 \times 8 \times 8}{360^\circ}$$

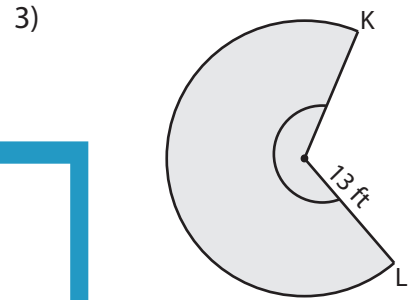
$= 106.06 \text{ in}^2$

Length of the arc = 26.40 in
Area = ?

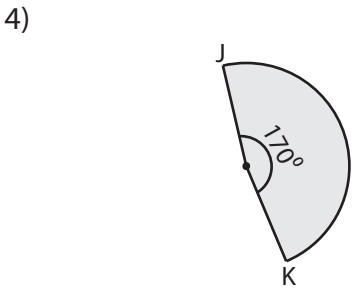
Find the area of each shaded region. Round the answer to two decimal places. (use $\pi=3.14$)



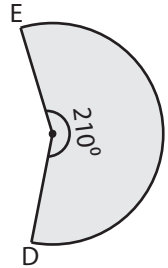
Area = 409.7



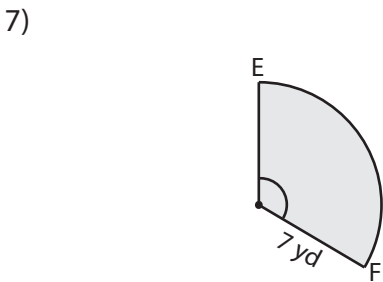
Area = 353.77 ft²



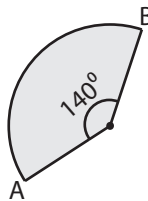
Area = 120.1



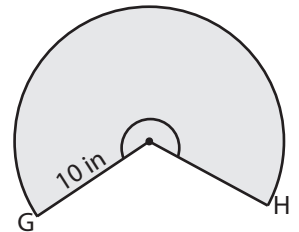
Area = 45.79 yd²



Area = 51.29 yd²



Area = 147.75 ft²



Area = 209.33 in²

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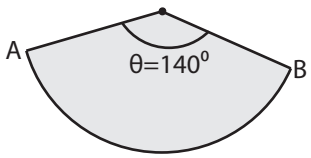
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Finding Area of a Sector

Example:



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

$$17.10 = \frac{140^\circ \times 3.14 \times r}{180^\circ}$$

$r = 7 \text{ yd}$

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

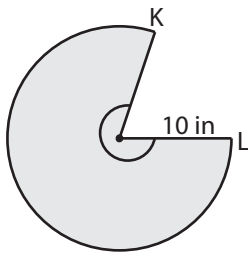
$$= \frac{140 \times 3.14 \times 7 \times 7}{360^\circ}$$

= **59.83 yd²**

Length of the arc = 17.10 yd
Area = ?

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

1)



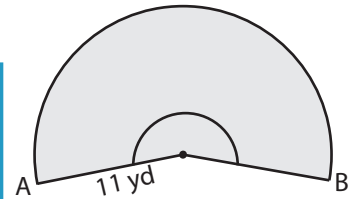
Length of the arc KL = 49.72 in

Area = _____

2)



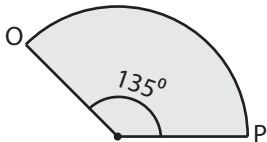
3)



Length of the arc AB = 38.38 yd

Area = _____

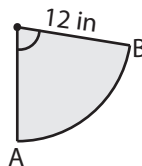
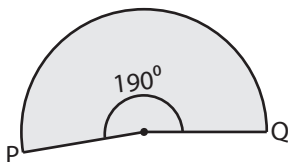
4)



Length of the arc OP = 44.75 ft

Area = _____

7)



Length of the arc PQ = 46.40 yd

Area = _____

Length of the arc AB = 17.79 in

Area = _____

Length of the arc MN = 37.68 ft

Area = _____

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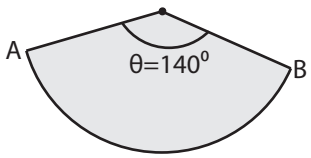
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Finding Area of a Sector

Example:



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

$$17.10 = \frac{140^\circ \times 3.14 \times r}{180^\circ}$$

$r = 7 \text{ yd}$

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

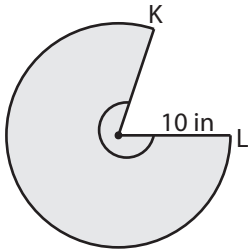
$$= \frac{140 \times 3.14 \times 7 \times 7}{360^\circ}$$

$= 59.83 \text{ yd}^2$

Length of the arc = 17.10 yd
Area = ?

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

1)



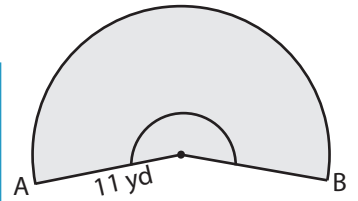
Length of the arc KL = 49.72 in

Area = 248.5

2)



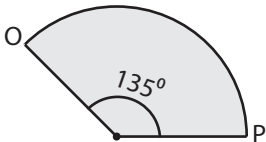
3)



Length of the arc AB = 38.38 yd

Area = 211.08 yd²

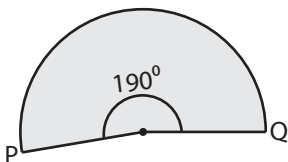
4)



Length of the arc OP = 44.75 ft

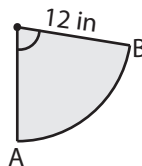
Area = 425.0

7)



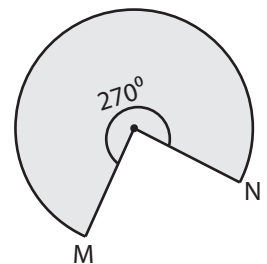
Length of the arc PQ = 46.40 yd

Area = 324.82 yd²



Length of the arc AB = 17.79 in

Area = 106.76 in²



Length of the arc MN = 37.68 ft

Area = 150.72 ft²

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