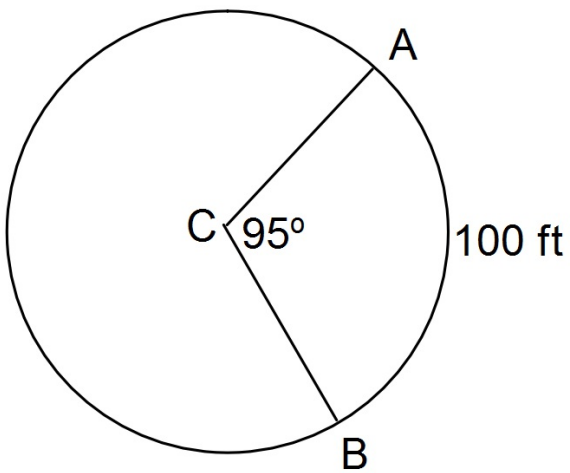


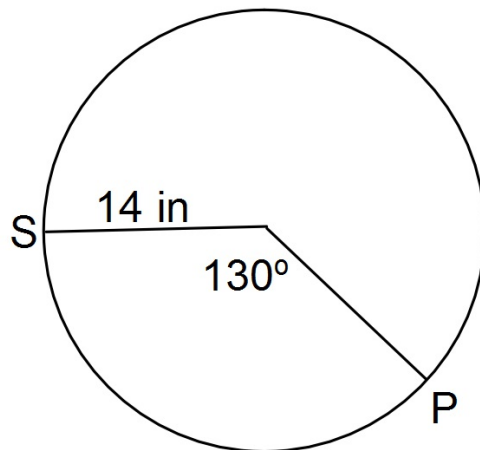
## Bellwork

Solve for indicated measure:

1. Circumference of C



2. Length of  $\widehat{SP}$



## **Area**

What is Area?

The measurement of the surface covered by an object.

How do you find the area of a circle?

$$A = \pi r^2$$

## Examples

Find the indicated measure:

1. The area of a circle is  $105 \text{ m}^2$ . Find the radius of the circle.
  
2. The area of a circle is  $45 \text{ in}^2$ . Find the diameter of the circle.

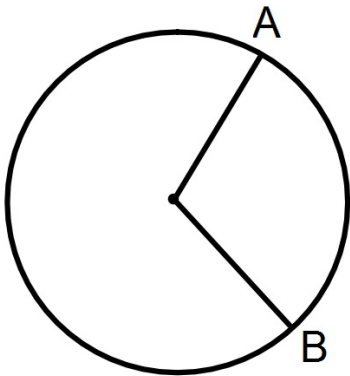
## Area of a Sector

What is a sector?

A portion of the area of a circle.

How do you find the area of a sector?

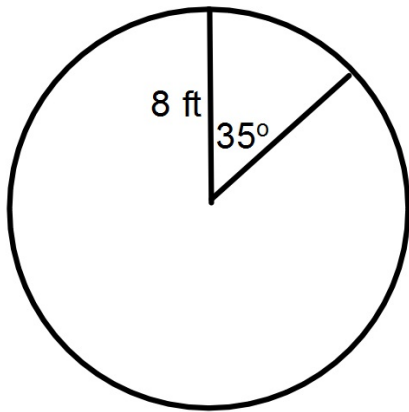
$$\text{Area of a Sector} = \frac{m\widehat{AB}}{360^\circ} \cdot \pi r^2$$



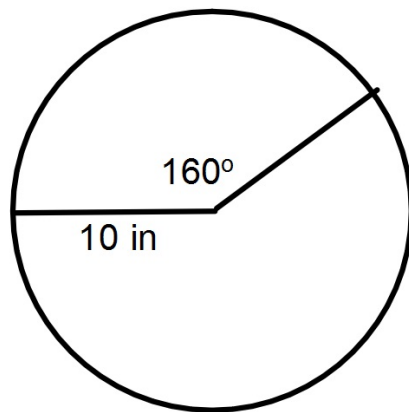
## Examples

Find the Area of the sector :

1.



2.



## Examples

Find the Area of the circle given the central angle and the area of a sector:

1. Sector Area =  $125 \text{ in}^2$   
Central Angle =  $55^\circ$

2. Sector Area =  $720 \text{ m}^2$   
Central Angle =  $115^\circ$