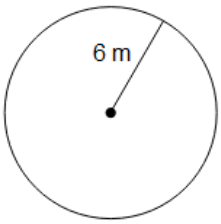
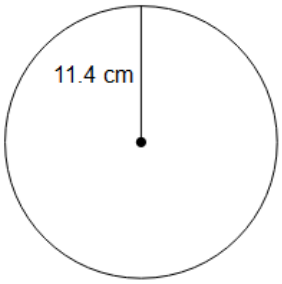
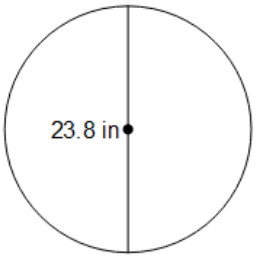
**Topic:** Area **Date**: _____

**Learning Objective(s)**:

_____

_____

| **Main Ideas/ Questions** | **Notes** |
|---|---|
| Area | **Area** – The total _____ INSIDE a figure.<br><br>**Formula**: r = |
| Examples | **Find the area in terms of pi and a decimal rounded to the tenths.**<br><br>1)  <br><br>2)  <br><br>3)  <br><br>4) diameter = 22 km<br><br>**Find the radius using the given area.**<br>7. Area = $81\pi\ in^2$<br><br>8) area = 444.9 $cm^2$<br><br>9) A circle has a area of $24\pi\ ft^2$ What is the length of the diameter? |

**Topic:** Sector Area

**Date**: _____

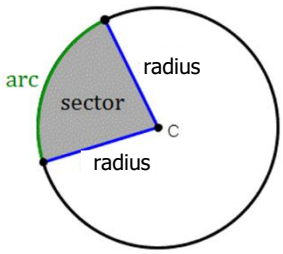
**Main Ideas/ Questions**

Sector Area Characteristics

**Notes**

**Sector Area** – The area of a _____ of the whole circle

**Funny way to remember:**
Sector Area = Pie _____



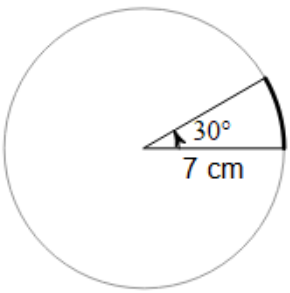

**Formula**:

$$\frac{Sector\ Area}{Area\ (\pi r^2)} = \frac{Central\ Angle\ (\theta)}{Whole\ Circle\ in\ degrees\ (360°)}$$

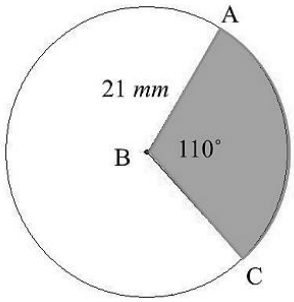
Examples

**Find the sector area of the wanted sector.**

1)

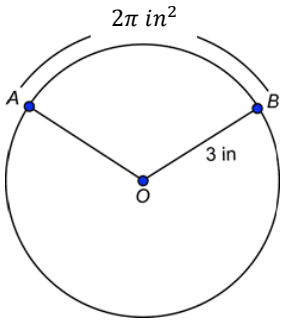



2)

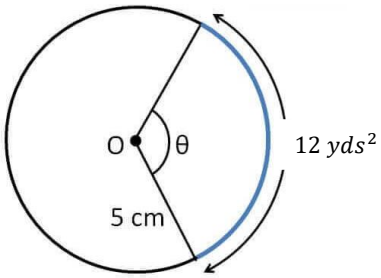



**Find the angle of the given sector.**

3)




4)



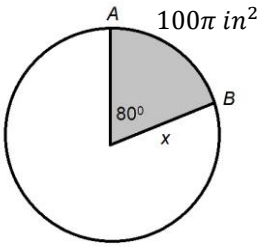
**Topic:** Sector Area (cont.) **Date**: _____

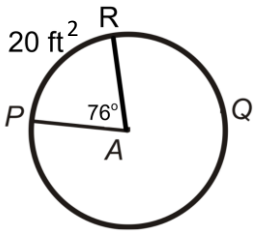
**Main Ideas/ Questions**

Examples

**Notes**

**Find the radius of the given sector.**

5) 


6) 


7) A circle has an arc whose measure is $80°$ and whose area is $88\pi$. What is the diameter of the circle?

8) The area of a circle is $36\pi\ ft^2$. Find the area of the sector that has a central angle of $70°$.

9) A windshield wiper is 24 inches long. In one sweep, it covers $628.32\ in^2$. What is the angle of the windshield wiper?

10) A clock is at 7 o'clock. If the radius of the hour hand is 5 inches long, what is the area that the hour hand has covered?