Geometry- Mrs. Tilus Unit 10- Worksheet #2: Find Arc Measures. Name:

In $\bigcirc F$, determine whether the given arc is a minor arc, major arc or semicircle.

1. \overrightarrow{AB}	$2. \overrightarrow{AE}$	AB
3. <i>EAC</i>	$4. \widehat{ACD}$	c
5. <i>CAD</i>	6. DEB	E
7. BAE	8. <i>DEC</i>	D

In the figure, \overline{PR} and \overline{QS} are diameters of $\bigcirc U$. Find the measure of the indicated arc.



18. mPTR

 \overrightarrow{PQ} has a measure of 90° in $\bigcirc R$. Find the length of \overrightarrow{PQ} .



Find the indicated arc measure.







23. mDAB



20.



24. Two diameters of $\bigcirc T$ are \overline{PQ} and \overline{RS} . Find the given arc measure in $mPR = 35^{\circ}$ **It helps to draw the circle**

c.)
$$mPRQ$$
 d.) $mPRS$

Tell whether the given arc are congruent. Show work to support your answer.





29. A water sprinkler covers the area shown in the figure. It moves through the covered area at a rate of about 5° per second. Show work to support your answer.

- a.) What is the measure of the arc coverd by the sprinkler?
- b.) If the sprinkler starts at the far left position, how long will it take for the sprinkler to reach the far right position?

30. A surveillance camera is mounted in a corner of a building. It rotates clockwise and counterclockwise continuously between Wall A and Wall B at a rate of 10° per minute. Show work to support your answer.

- a.) What is the measure of the arc surveyed by the camera?
- b.) How long does it take the camera to survey the entire area once?
- c.) If the camera is at an angle of 85 from Wall B while rotating Counterclockwise, how long will it take for the camera to return to that same position?







28. STV and UVT