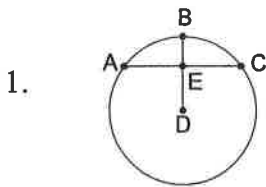


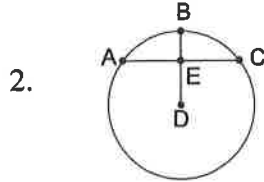
**Chapter 8: Circles**  
**Arcs and Chords**

Name \_\_\_\_\_  
 Date \_\_\_\_\_  
 Period \_\_\_\_\_

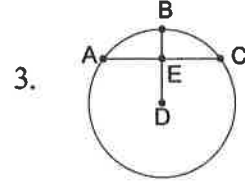
**Classwork**



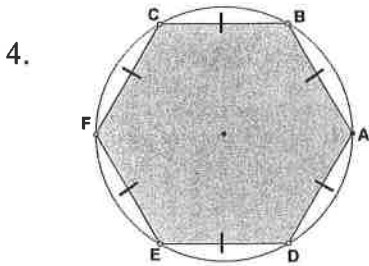
$AC \perp BD$   
 $m\widehat{ABC} = 94^\circ$   
 Find  $\widehat{AB}$  \_\_\_\_\_



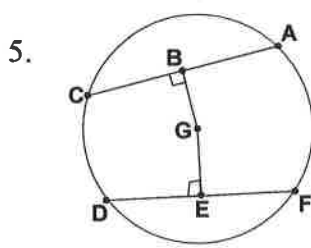
$AC \perp BD$   
 $m\widehat{AE} = 4$   
 Find  $\widehat{AC}$  \_\_\_\_\_



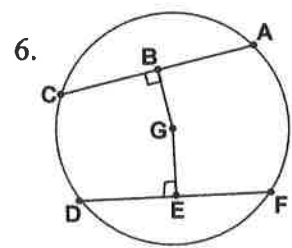
$AC \perp BD$   
 $m\widehat{AC} = 12$   
 $m\widehat{DE} = 8$   
 Find the radius \_\_\_\_\_



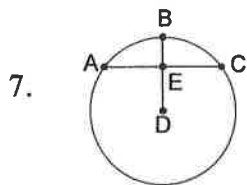
Find  $\widehat{AB}$  \_\_\_\_\_  
 Find  $\widehat{ABF}$  \_\_\_\_\_  
 Find  $\widehat{ABD}$  \_\_\_\_\_



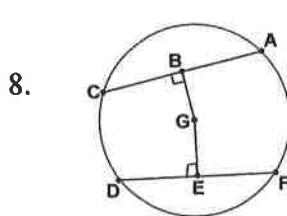
$\overline{GB} \cong \overline{GE}$   
 $m\widehat{EF} = 10$   
 Find  $\widehat{DF}$  \_\_\_\_\_



$\overline{GB} \cong \overline{GE}$   
 $m\widehat{EF} = 5$   
 Find  $m\widehat{CA} =$  \_\_\_\_\_



$AC \perp BD$   
 $DA = 17$   
 $m\widehat{ED} = 8$   
 Find AC \_\_\_\_\_



$\overline{AC} \cong \overline{DF}$   
 $m\widehat{AC} = 100^\circ$   
 Find  $m\widehat{DF}$  \_\_\_\_\_

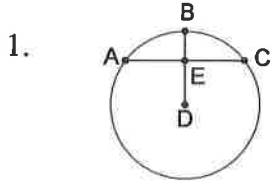
9. Suppose a chord is 9 meters from the center of a circle. It is 20 meters long. Find the length of the radius. \_\_\_\_\_

10. Find the length of a chord 4 inches from the center of a circle with a radius of 5 inches.  
 \_\_\_\_\_

**Circles**  
Arcs and Chords

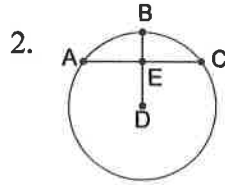
**Homework**

Name \_\_\_\_\_  
Date \_\_\_\_\_  
Period \_\_\_\_\_



$$\overline{AE} \cong \overline{EC}$$

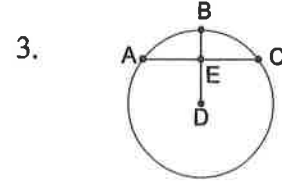
Find  $m\angle AEB$  \_\_\_\_\_



$$AC \perp BD$$

$$m\widehat{AC} = 10$$

Find  $m\overline{AE}$  \_\_\_\_\_

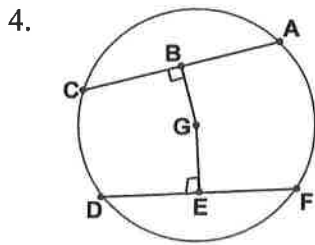


$$AC \perp BD$$

$$m\widehat{ED} = 22$$

$$DC = 32$$

Find  $m\overline{EB}$  \_\_\_\_\_

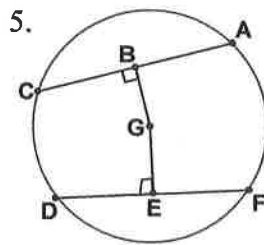


$$\overline{AC} \cong \overline{DF}$$

$$m\widehat{AF} = 80^\circ$$

$$m\widehat{CD} = 60^\circ$$

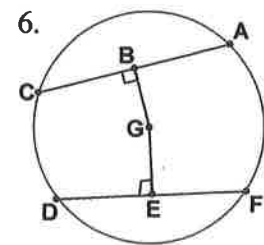
Find  $m\widehat{AC}$  \_\_\_\_\_



$$\overline{AC} \cong \overline{DF}$$

$$m\overline{BG} = 4$$

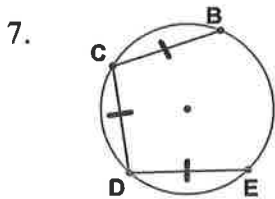
Find  $m\overline{GE}$  \_\_\_\_\_



$$m\overline{GE} = 7$$

$$GF = 25$$

Find  $m\widehat{DF}$  \_\_\_\_\_



$$m\widehat{BE} = 210^\circ$$

Find  $m\widehat{CD}$  \_\_\_\_\_

8. Suppose that a circle has a radius of 35 units and a chord is 56 units. Find the distance from the center to the chord.

\_\_\_\_\_.

9. Suppose the diameter of a circle is 20 feet long and a non-intersecting chord is 12 feet long. Find the distance between the chord and the center. \_\_\_\_\_