Name _____ Period ___

Angles In Circles

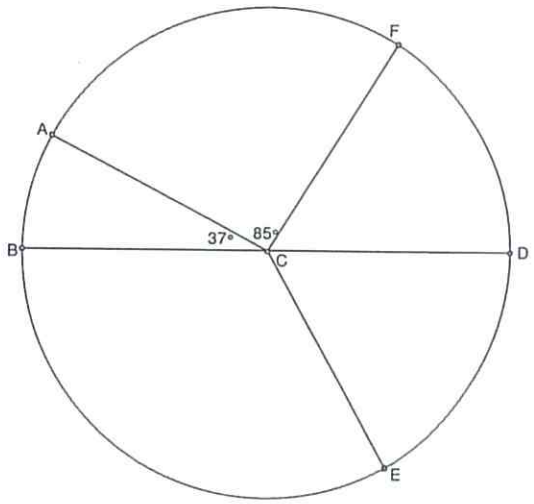
Part I – Central Angles

The measure of a central angle is _____ the measure or the intercepted arc created by the angle.

The total number of degrees in a circle is _____.

The total number of degrees in a semicircle is _____.

Use the picture of ⊙C at right for the example questions. Tell whether each arc is a major arc, minor arc, or a semi-circle. Then, find the degree measure of each arc. $\overline{BD}$ is a diameter and $\overline{CD}$ is an angle bisector.



Ex 1: $m\widehat{AB}$

Ex 2: $m\widehat{AF}$

Ex 3: $m\widehat{BE}$

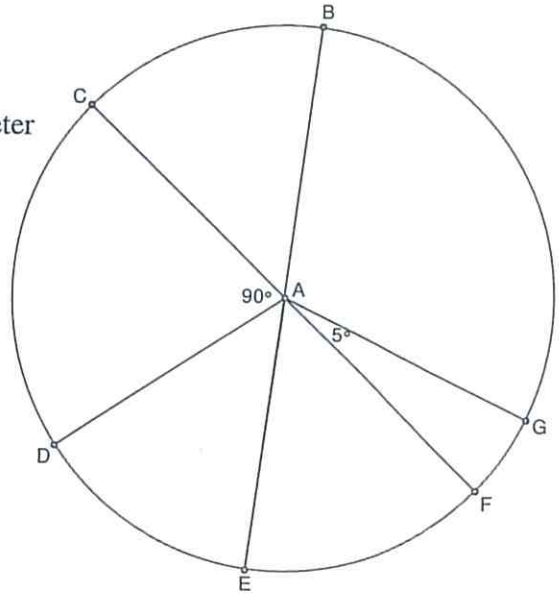
Ex 4: $m\widehat{FBE}$

Ex 5: $m\widehat{BD}$

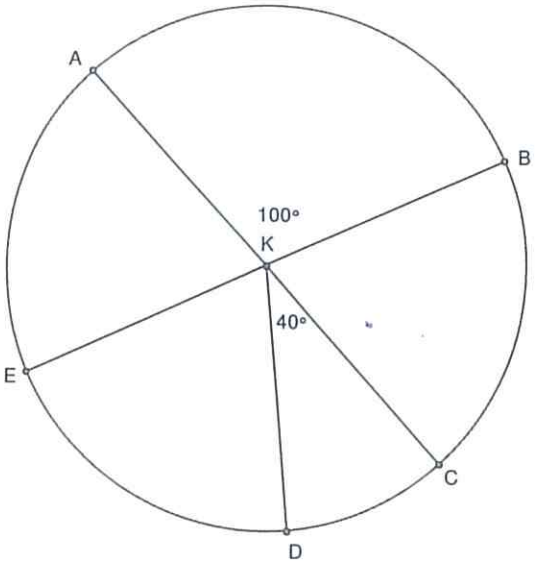
Ex 6: $m\widehat{FD}$

Ex 7: $m\widehat{DAE}$

Use the picture of ⊙A at right for questions 1-10. $\overline{CF}$ is a diameter and $\overline{AE}$ is an angle bisector. Tell whether each arc is a major arc, minor arc, or a semi-circle. Then, find the degree measure of each arc.



1. $m\overline{CB}$
2. $m\overline{CG}$
3. $m\overline{DF}$
4. $m\overline{CF}$
5. $m\overline{DFB}$
6. $m\overline{CE}$
7. $m\overline{CFE}$
8. $m\overline{DC}$
9. $m\overline{FG}$
10. $m\overline{ED}$



Use the picture at left to answer questions 11 -20. $\overline{AC}$ and $\overline{BE}$ are diameters of ⊙K. Tell whether each arc is a major arc, minor arc, or a semi-circle. Then, find the degree measure of each arc.

11. $m\overline{BC}$
12. $m\overline{BKC}$
13. $m\overline{AKE}$
14. $m\overline{ED}$
15. $m\overline{CD}$
16. $m\overline{AKD}$
17. $m\overline{ABC}$
18. $m\overline{DKB}$
19. $m\overline{CD}$
20. $m\overline{ACE}$

* Change circled problems to ∠'s (angles) not arcs!