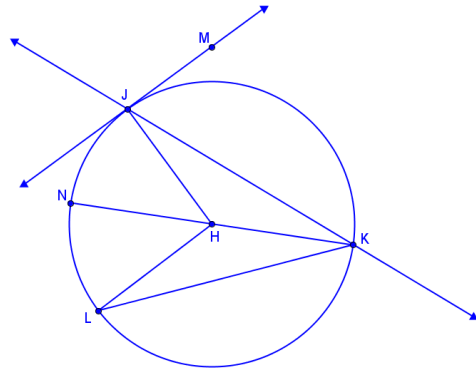


### SM2 Unit 9B Extra Practice

Matching: Select the vocabulary term that describes each object listed from the list on the right. Each vocabulary term must be used exactly once.



\_\_\_\_\_

1)  $\overline{LK}$

A. Radius

\_\_\_\_\_

2)  $\overline{NH}$

B. Point of tangency

\_\_\_\_\_

3)  $\overline{KN}$

C. Chord that is not a diameter

\_\_\_\_\_

4)  $\vec{JK}$

D. Diameter

\_\_\_\_\_

5)  $\vec{MJ}$

E. Center of circle

\_\_\_\_\_

6)  $H$

F. Secant Line

\_\_\_\_\_

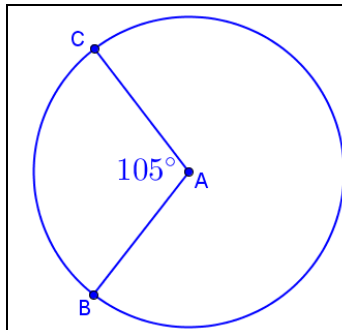
7)  $J$

G. Tangent Line

Free Response: Find the exact ( $=$ ) length of the arc, approximate ( $\approx$ ) length of the arc to the nearest tenth, and classify the arc. (Assume radii are in centimeters.)

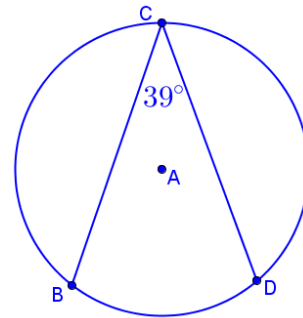
<p>8) Length of <math>\widehat{BC} =</math></p> <p>9) Length of <math>\widehat{BC} \approx</math></p> <p>10) Classify <math>\widehat{BC}</math>: minor semicircle major</p>	<p>11) Length of <math>\widehat{BCE} =</math></p> <p>12) Length of <math>\widehat{BCE} \approx</math></p> <p>13) Classify <math>\widehat{BCE}</math>: minor semicircle major</p>

Classify the object and then find the indicated measure.



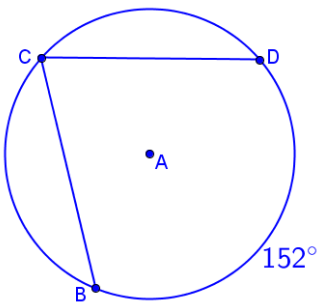
14) What type of angle is  $\angle CAB$  ?

15)  $m\widehat{CB} =$



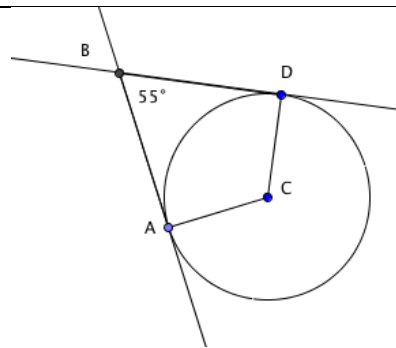
16) What type of angle is  $\angle BCD$  ?

17)  $m\widehat{BD} =$



18) What type of angle is  $\angle BCD$  ?

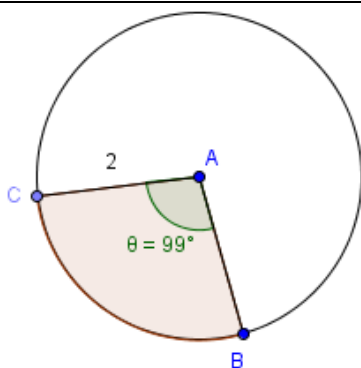
19)  $m\angle BCD =$



20) What type of angle is  $\angle ACD$  ?

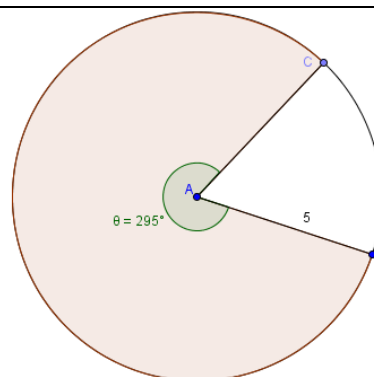
21)  $m\angle ACD =$

Find the exact ( $=$ ) area of the sector and the approximate ( $\approx$ ) area of the sector to the nearest hundredth. (Assume radii are in yards.)



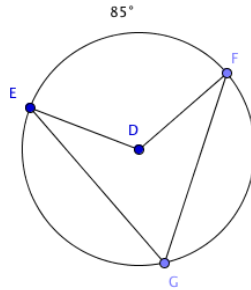
26) Area of the sector =

27) Area of the sector  $\approx$



28) Area of the sector =

29) Area of the sector  $\approx$



30) What type of angle is  $\angle EDF$ ?

- a. Central Angle                  b. Inscribed Angle                  c. Interior Angle                  d. Isosceles Angle

31) What type of angle is  $\angle EGF$ ?

- a. Central Angle                  b. Inscribed Angle                  c. Interior Angle                  d. Isosceles Angle

32) What is  $m\angle EDF$ ?

- a. 170                                  b.  $85\pi$                                   c. 42.5                                  d. 85

33) What is  $m\angle EGF$ ?

- a. 170                                  b.  $85\pi$                                   c. 42.5                                  d. 85

34) What is the area of the sector bounded by  $\angle EDF$  and  $\widehat{EF}$  if the radius of the circle is 10 in?

- a. 14.82                                  b. 850                                  c. 74.18                                  d.  $85\pi$

35) The ferris wheel at Lagoon is 150 *ft* tall with 36 gondolas. If you get in at the bottom of the ride and you get to go one-fourth of the way around before it stops to let on more passengers, what is the distance that you have traveled around the ferris wheel to the nearest foot?