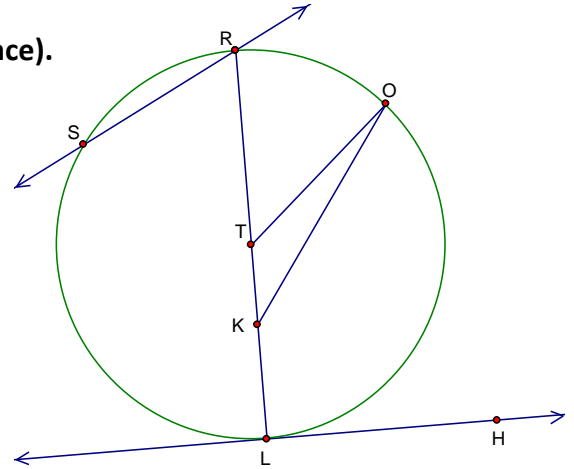


## 1. Why are all circles similar?

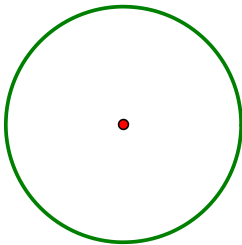
## 2. List one of each of the following for Circle T (use each item once).

- a. \_\_\_\_\_ Major Arc      f. \_\_\_\_\_ Interior Point  
 b. \_\_\_\_\_ Diameter      g. \_\_\_\_\_ Secant line  
 c. \_\_\_\_\_ Chord      h. \_\_\_\_\_ Exterior Point  
 d. \_\_\_\_\_ Minor Arc      i. \_\_\_\_\_ Center  
 e. \_\_\_\_\_ Tangent line      j. \_\_\_\_\_ Semi-Circle

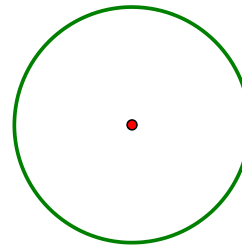


## 3. Draw the following relationships.

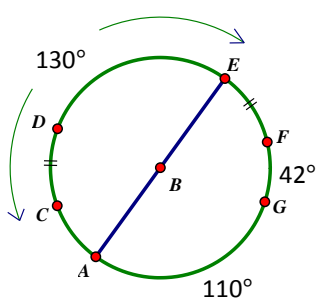
- a) Secant  $\overleftrightarrow{GE}$  and chord  $\overline{AB}$  intersect on Circle K.



- b) Diameter  $\overline{BE}$  and tangent  $\overleftrightarrow{GE}$  intersect at E.



## 4. Determine the measure of the following arcs.



$$m\widehat{AC} =$$

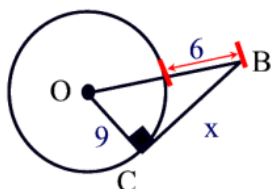
$$m\widehat{DAG} =$$

$$m\widehat{AD} =$$

$$m\widehat{DAF} =$$

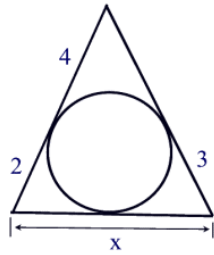
## 5. Assume that segments/lines which appear tangent are.

Find the perimeter of  $\triangle OCB$ .

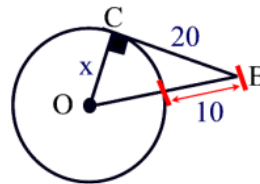


6. Assume that segments/lines which appear tangent are.

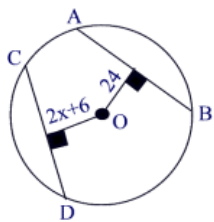
a) Find the perimeter of the triangle.



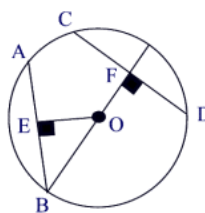
b) Find OB.



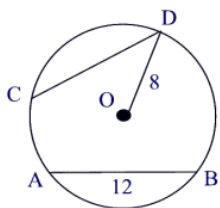
c) Given  $\overline{CD} \cong \overline{AB}$ . Find x.



d) Given  $\overline{OE} \cong \overline{OF}$ ,  $AE = 6$ ,  $OB = 10$ . Find OF.

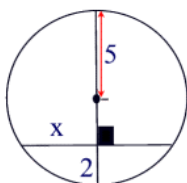


e)

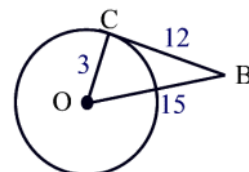


Given: Circle O,  
 $\widehat{AB} \cong \widehat{CD}$   
 $AB = 12$   
 $OD = 8$   
 Find  $CD$ .

f) Find x.



g) Is  $\overline{BC}$  tangent to the circle?



7. Determine the equation of circle C, C(-2,5) with the given information.

a) is tangent to the x axis

b) goes through D(-2,1)

c) is tangent to the y axis

$$(x+2)^2 + (y-5)^2 = \underline{\hspace{2cm}}$$

$$(x+2)^2 + (y-5)^2 = \underline{\hspace{2cm}}$$

$$(x+2)^2 + (y-5)^2 = \underline{\hspace{2cm}}$$

d) has a radius of 7 cm.

e) goes through D(4,-3)

f) goes through D(0,3)

$$(x+2)^2 + (y-5)^2 = \underline{\hspace{2cm}}$$

$$(x+2)^2 + (y-5)^2 = \underline{\hspace{2cm}}$$

$$(x+2)^2 + (y-5)^2 = \underline{\hspace{2cm}}$$

8. What is the center and radius of the circle?  $(x-5)^2 + (y+3)^2 = 25$

c =                                 ; r =