Intro to Geometry (G.C.1, 2) Unit Five: Circle Vocab & Arc Measure (HW1)

Name:	
Date:	Period:

1. Using the diagram to the right, name objects that meet the description.

a. Chords	,,,,,	b. Radii ,	
c. Central $\angle$	,,,,,,	d. Exterior Points	_' <sup>B</sup> C
2. Jeff wonders if radii and diameters of circles are chords. Are they? Explain.		H E	

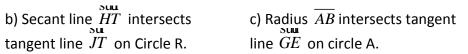
#### 3. A textbook had the following true and false question.

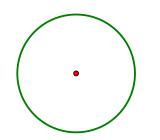
Two radii always form a diameter. T or F The answer is false. a) Can you find the counter example to this statement to establish it be false.

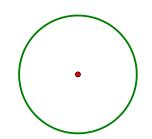
b) Most of students put true. What makes this statement confusing?

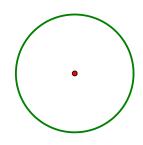
## 4. Draw the following relationships.

SUU a) Tangent line GE has a point of tangency at Point F on Circle M.

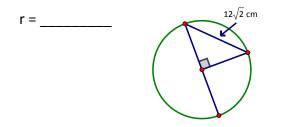








5. Solve for the radius of the circle below.



6. Determine whether the arc described is a Major, Minor or Semi-Circle.

a) From D to I counter-clockwise

b) From C to A counter-clockwise

c) From F to J clockwise

d) From G to I counter-clockwise

7. The teacher asks a student to write the name for the arc from A to B on the board. Jackie comes up writes  $\widehat{AB}$  or  $\widehat{BA}$ . Jeff raises his hand and says that he has a different answer. What might his answer be if it is different than Jackie's?

## 8. Given Circle B with diameters $\overline{HC}$ , $\overline{EG}$ and $\overline{DA}$ .

a) m∠DBH =	b) $\widehat{mDCE}$ =
c) $\widehat{mHG}$ =	d) $\widehat{mHCF}$ =
e) m∠HBA =	f) m∠DBA =

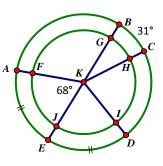
# 9. Determine the missing information. Given

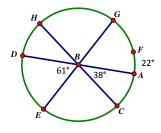
concentric circles with  $\widehat{mBC} = 31^\circ$ , m $\angle$ FKJ = 68° and  $\overline{EB}$  is a diameter.

$$m\widehat{ED}$$
 =

m∠GKH=

 $m\widehat{ABD} =$ 





## 10. Given the regular octagon below, determine:

a)  $m \angle APB =$  b)  $m \angle HPF =$ 

c) 
$$mAE =$$
\_\_\_\_\_ d)  $mGEA =$ \_\_\_\_\_

e)  $m \angle GPF = f) m \angle PAH =$ 

g) m $\angle$ PGE = h) If HD is 12, GE =

