Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
Geometry B – Chapter 12 – Chapter Review #1 Period: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Show all work. Correct answers given without the appropriate work shown will not be given credit. Incomplete packets will not be graded.

\_\_\_\_\_\_\_\_\_\_ 1. Determine the measure of an inscribed angle that intercepts an arc measuring 110°.

 (1) 55° (2) 110° (3) 180° (4) 220°

\_\_\_\_\_\_\_\_\_\_ 2. Find the area of a sector with an arc length of 40 cm and a radius of 12 cm.

1. 480
2. 240
3. 120
4. 180

\_\_\_\_\_\_\_\_\_\_ 3. Circle O has tangents CD and BD. If CD = 14x – 12 and BD = 4x + 27, find the

value of x.

1. 2
2. 3.9
3. 4.5
4. 6.4



\_\_\_\_\_\_\_\_\_\_ 4. If AE = ED, BE = 12, and CE = 3, find the length of AD.

1. 6
2. 12
3. 18
4. 36



\_\_\_\_\_\_\_\_\_\_ 5. If  $170, m<A=52, find m\hat{DB}$.

 (1) 59

 (2) 64

 (3) 118

 (4) 128

\_\_\_\_\_\_\_\_\_\_ 6. In the diagram of Circle F, the $m\hat{ED}=m\hat{BC}. $ Which of the following is true about

 Circle F?

1. <DFC = 90
2. $\hat{BE}=\hat{DC}$
3. $\hat{ED}=\hat{BC}$
4. BE = CD

Part II. Show all work and all formulas.

7. If the m<A = 70, m$\hat{AB}=100, find each of the following:$ <B \_\_\_\_\_\_\_\_\_\_\_\_\_

 <C \_\_\_\_\_\_\_\_\_\_\_\_\_

 $\hat{BC}$ \_\_\_\_\_\_\_\_\_\_\_\_\_

 $\hat{CA}$ \_\_\_\_\_\_\_\_\_\_\_\_\_

8. In the diagram below, AE = x + 4, CE = x, DE = 5, and EB = 12. Find each: x \_\_\_\_\_\_\_\_\_\_\_\_\_

 AE \_\_\_\_\_\_\_\_\_\_\_\_\_

 CE \_\_\_\_\_\_\_\_\_\_\_\_\_

 AC \_\_\_\_\_\_\_\_\_\_\_\_\_

9. In the diagram below, $\hat{CB}=200, <A=54, find \hat{ED}.$ \_\_\_\_\_\_\_\_\_\_\_\_\_

10. If <ACD = 85, find the m$\hat{ABC}.$ \_\_\_\_\_\_\_\_\_\_\_\_\_

11. In the diagram below, AB is perpendicular to DE and O is the center of the Circle. \_\_\_\_\_\_\_\_\_\_\_\_\_

 If AB = 70, and OC = 12, find the length of AO.

12. If $\hat{AB}=100, m\hat{CD}=60, find each of the following:$ m<AEB \_\_\_\_\_\_\_\_\_\_\_\_\_

 M<AED \_\_\_\_\_\_\_\_\_\_\_\_\_

13. If the length of DE = 2, FE = 8, find the length of DC is simplest radical form. \_\_\_\_\_\_\_\_\_\_\_\_\_

14.  <P \_\_\_\_\_\_\_\_\_\_\_\_

15. In the diagram of Circle O, , OB = 20, and . Find each:



 (a) OD \_\_\_\_\_\_\_\_\_\_

 (b)  \_\_\_\_\_\_\_\_\_\_

 (c)  \_\_\_\_\_\_\_\_\_\_

 (d)  \_\_\_\_\_\_\_\_\_\_

 (e) CO \_\_\_\_\_\_\_\_\_\_

 (f) BC \_\_\_\_\_\_\_\_\_\_

 (g) CD \_\_\_\_\_\_\_\_\_\_

16. Determine the area of each sector:

 (a) radius = 8 and angle of 45° \_\_\_\_\_\_\_\_\_\_\_\_\_

 (b) arc length = 80 cm and radius = 10 \_\_\_\_\_\_\_\_\_\_\_\_\_

 (c) radius = 15 and angle of 60° \_\_\_\_\_\_\_\_\_\_\_\_\_