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  .

(1) 59

(2) 64

(3) 118

(4) 128

\_\_\_\_\_\_\_\_\_\_ 6. In the diagram of Circle F, the Which of the following is true about

Circle F?

1. <DFC = 90
2. BE = CD

Part II. Show all work and all formulas.

7. If the m<A = 70, m <B \_\_\_\_\_\_\_\_\_\_\_\_\_

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

\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_

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, \_\_\_\_\_\_\_\_\_\_\_\_\_

10. If <ACD = 85, find the m \_\_\_\_\_\_\_\_\_\_\_\_\_

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 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° \_\_\_\_\_\_\_\_\_\_\_\_\_