Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

Geometry B - Chapter 12 – HW #7 Segments Period: \_\_\_\_\_\_\_\_\_\_\_

Use the following diagram to answer questions 1 – 5. Remember to show all work, including formulas!! DRAW THE DIAGRAM FOR EACH PROBLEM!

1. If CE = 12, ED = 2, and AE = 3, find EB. \_\_\_\_\_\_\_\_\_\_\_

2. If AE = 5, EB = 7, and CE = 10, find ED. \_\_\_\_\_\_\_\_\_\_\_

3. If AB = 16, BE = 3, and CE = 9, find ED. \_\_\_\_\_\_\_\_\_\_\_

4. If CE = 5, ED = 10, and AE = EB, find AE. \_\_\_\_\_\_\_\_\_\_\_

5. If AB = 12, AE = 5, and CE = ED, find CE. \_\_\_\_\_\_\_\_\_\_\_

Use the following diagram to answer questions 6 – 10. Remember to show all work, including formulas!!

 is tangent to the circle at F and secant  intersects the circle at B and C.

6. IF AF = 8 and AB = 4, find AC. \_\_\_\_\_\_\_\_\_\_\_

7. If AB = 3 and AC = 10, find AF. \_\_\_\_\_\_\_\_\_\_\_

8. If AF = 6 and AC = 8, find AB. \_\_\_\_\_\_\_\_\_\_\_

9. If AB = 4 and BC = 21, find AF. \_\_\_\_\_\_\_\_\_\_\_

10. If AB : BC = 1 : 3 and AF = 7, find AB. \_\_\_\_\_\_\_\_\_\_\_

Use the following diagram to answer questions 11 – 15. Remember to show all work, including formulas!!

Secants  and  intersect at point A outside of the given circle.



11. If AC = 15, AB = 6, and AE = 10, find AD. \_\_\_\_\_\_\_\_\_\_\_

12. If AC = 20, AB = 5, and AD = 4, find AE. \_\_\_\_\_\_\_\_\_\_\_

13. If AB = 3, BC = 7, and AD = 5, find DE. \_\_\_\_\_\_\_\_\_\_\_

14. If AB = BC = 4, and AD = 5, find AE. \_\_\_\_\_\_\_\_\_\_\_

15. If AC = 18, AB = 4, and ED = 1, find AD. \_\_\_\_\_\_\_\_