Geometry Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Formative Assessment #2

Unit 4 -- Circles Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block: \_\_\_\_\_\_

**\*\*\*\*ALL work must be shown for credit!!!\*\*\*\***

**Quiz 1 Revisited**



For #s 1 and 2, fill in the blank with one of the words below:

 Tangent Semicircle Diameter

 Radius Secant Chord

1.  is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

2.  is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .



3. Use the image to the right, is segment FG tangent to Circle H? Justify answer with work and/or explanation.

4. Find the perimeter of the triangle.

 Perimeter = \_\_\_\_\_\_\_\_\_\_\_

5. Find the length of  6. If AB = 5, AD = 8 and DE =2, then find BC.



 BD = \_\_\_\_\_\_ BC = \_\_\_\_\_\_\_

**I can use the relationship between central angles and their arcs to determine missing measures.**



7. Determine the value of x. 8. Determine the value of x.

 x = \_\_\_\_\_\_\_\_ x = \_\_\_\_\_\_\_\_

9. $\overbar{BE}$ and $\overbar{CF}$ are diameters of the circle $⊙$A. Find the measure of the indicated arcs.



 a. $m\hat{FE}$ = \_\_\_\_\_\_\_\_\_ b. $m\hat{CD}$ = \_\_\_\_\_\_\_\_\_

 c. $m\hat{CFD}$ = \_\_\_\_\_\_\_\_ d. $m\hat{EBC}$ = \_\_\_\_\_\_\_\_

 e. $m\hat{CE}$ = \_\_\_\_\_\_\_\_ f. $m\hat{BDF}$ = \_\_\_\_\_\_\_\_

**I can use the relationship between inscribed angles and their arcs to determine missing measures.**

10. Find the measure of . 11. Find the measure of .



 = \_\_\_\_\_\_\_ = \_\_\_\_\_\_\_

12. Find the measure of x. 13. Find the value of x and y.

 x = \_\_\_\_\_\_ x = \_\_\_\_\_\_

 y = \_\_\_\_\_\_

**I can use the relationship between inside and outside angles and their arcs to determine missing measures.**

14. Find the value of x. 15. Find the value of x.

 x = \_\_\_\_\_\_\_ x = \_\_\_\_\_\_\_

16. Find the value of x. 17. Find the value of x.

 x = \_\_\_\_\_\_\_\_ x = \_\_\_\_\_\_\_\_

**Mixed/Extension**

18. **is tangent to Circle *D* and . 19. Given that point B is the center of the circle,

 Find the value of x. Find the .

 x = \_\_\_\_\_\_  = \_\_\_\_\_\_\_

20. In Circle O, . 21. Find the value of x.

 Find the .

  = \_\_\_\_\_\_\_ x = \_\_\_\_\_\_\_

22. Given that  is a tangent 23. Find the value of x.

 And , find the

 .

  = \_\_\_\_\_\_ x = \_\_\_\_\_\_

24. In the circle below,  is a diameter. Determine the value of the following: x = \_\_\_\_\_\_



 y = \_\_\_\_\_\_

  = \_\_\_\_\_\_

25. If  and , find the value of x and y.

 x = \_\_\_\_\_\_

 y = \_\_\_\_\_\_

Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Work will still be checked, this sheet is for convenient grading. If correct work isn’t present on your test, you won’t receive credit.

Record all answers from quiz below:

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. \_\_\_\_\_\_\_\_ 4. \_\_\_\_\_\_\_\_ 5. \_\_\_\_\_\_\_\_ 6. \_\_\_\_\_\_\_\_

7. \_\_\_\_\_\_\_\_ 8. \_\_\_\_\_\_\_\_ 9a. \_\_\_\_\_\_\_\_ 9b. \_\_\_\_\_\_\_\_

9c. \_\_\_\_\_\_\_\_ 9d. \_\_\_\_\_\_\_\_ 9e. \_\_\_\_\_\_\_\_\_ 9f. \_\_\_\_\_\_\_\_\_

10. \_\_\_\_\_\_\_\_ 11. \_\_\_\_\_\_\_\_ 12. \_\_\_\_\_\_\_\_\_ 13. x = \_\_\_\_\_\_

 y = \_\_\_\_\_\_

14. \_\_\_\_\_\_\_\_ 15. \_\_\_\_\_\_\_\_ 16. \_\_\_\_\_\_\_\_\_ 17. \_\_\_\_\_\_\_\_\_

18. \_\_\_\_\_\_\_\_ 19. \_\_\_\_\_\_\_\_ 20. \_\_\_\_\_\_\_\_\_ 21. \_\_\_\_\_\_\_\_\_\_

22. \_\_\_\_\_\_\_\_ 23. \_\_\_\_\_\_\_\_\_ 24. x = \_\_\_\_\_\_\_\_\_\_ 25. \_\_\_\_\_\_\_\_\_\_\_

 y = \_\_\_\_\_\_\_\_\_\_\_

  = \_\_\_\_\_\_\_