Name:_____ Geometry

Date:_____ Unit 5- quiz 1 review ws

1. **Match the following for Circle A (use each item once).**

a. _____ Major Arc

b. _____ Diameter

c. _____ Chord

d. _____ Minor Arc

e. _____ Tangent line

f. _____ Interior Point

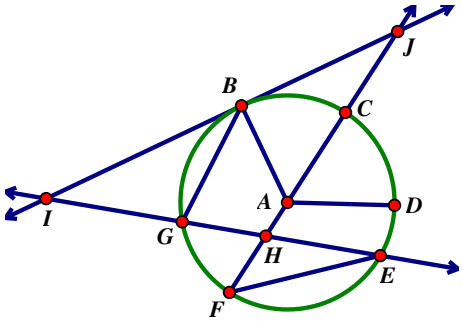
g. _____ Secant line

h. _____ Exterior Point

i. _____ Center

j. _____ Semi-Circle

1. $\overline{EG}$
2. Point H
3. $\overleftrightarrow{GE}$
4. Point A
5. $FD$
6. Point I
7. $\overline{FC}$
8. $CBF$
9. $CEG$
10. $\overleftrightarrow{IJ}$

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**2. Using the diagram in question #1, name objects that meet the description.**

a. Chords _____ , _____, _____, _____ b. Radii _____ , _____, _____, _____

c. Central ∠ _____ , _____ , _____ d. Exterior Points _____ , _____

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3. A tangent line to a circle is _____ to a radius that intersects the tangent line at the point of tangency.

4. If a radius of a circle bisects a chord, then the radius _____ the chord.

5. Congruent arcs in the same circle are _____ from the center of the circle.

6. To convert from radians to degrees multiply by _____.

7. To convert from degrees to radians multiply by _____.

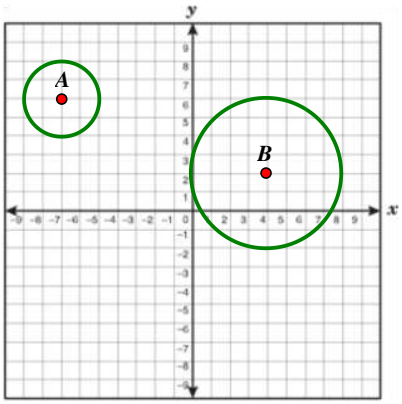
8. In degrees: Arc length formula: _____

9. In radians: Arc length formula:_____

10. In degrees: Area of Sector formula:_____

11. In radians: Area of Sector formula:_____

12. Show the two circles are similar by stating the necessary transformations from circle B to circle A.

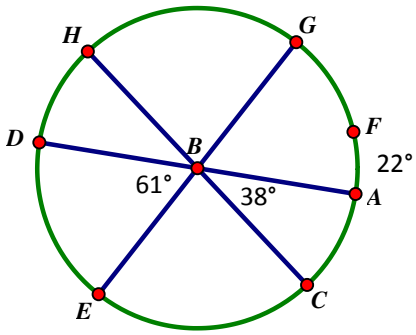



**13. Given Circle B with diameters $\overline{HC}$, $\overline{EG}$ and $\overline{DA}$.**

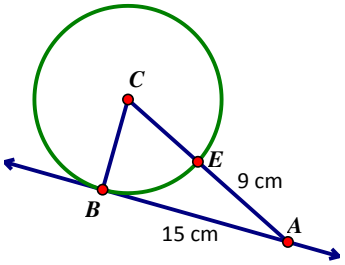
a) m∠DBH = _____ b) $mDCE$ = _____

c) $mHG$ = _____ d) $mHCF$ = _____

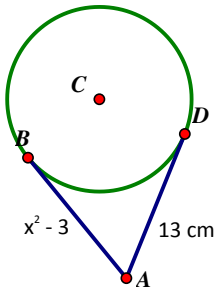
e) m∠HBA = _____ f) m∠DBA = _____




**14. Given that $\overleftrightarrow{AB}$ is tangent to circle C and EA = 9 cm and AB = 15 cm, determine CB.**
**(Hint: Label the two radii with x)**



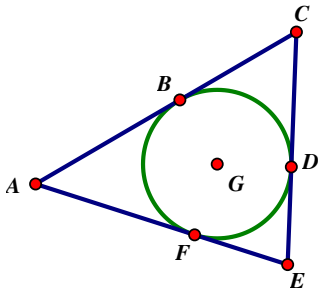
15. Find x.



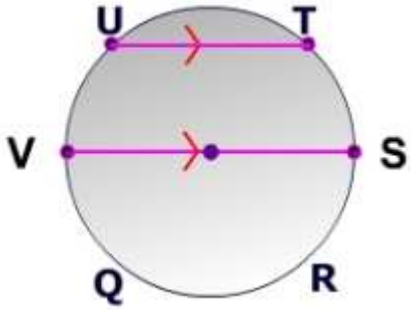

16.

Perimeter = 40 cm, AC = 15 cm, AF = 8.5 cm.

Find the measure of segment FE.

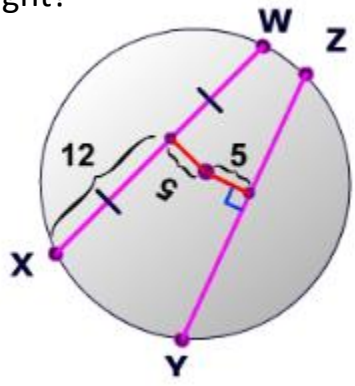



17. If $\overset{\frown}{UT} = 30°$, what is the measure of $\overset{\frown}{UV}$?

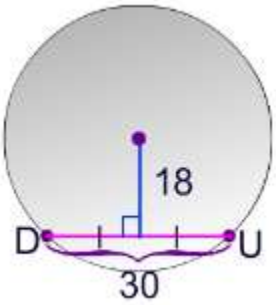



18. What is the length of the radius of the circle on the right?

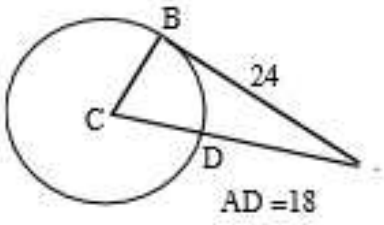
What is the length of YZ?



19. What is the length of the radius of the circle?




**20. What is the length of the radius of the circle?**




**21. Convert the degree measures into radians. Leave answers as exact values in most reduced form.**

a) 315° b) 135°

**22. Convert the following radian measures into degrees.**

a) $\frac{5\pi}{3}$ b) $\frac{9\pi}{20}$

**23. Determine the arc length.**
**Write answer in exact form and rounded to nearest tenth.**

**a) Central Angle of 30°,**
**radius of 3 cm**

**b) Central Angle of** $\frac{\pi}{4}\ rad.$**,**
**radius of 12 cm**

24. Determine the area of the sector. **Write the answer in exact form and rounded to nearest tenth.**

a) r = 8 cm, Θ = $\frac{\pi}{4}\ rad.$

A = _____

A = _____

b) r = 3 cm, Θ = $\frac{5\pi}{3}\ rad.$

A = _____

A = _____

c) d = 4 cm, Θ = 60°

A = _____

A = _____