Grade 9 Math
June Exam Review
Unit 8: Circle Geometry
1A). Describe the Tangent-Radius Property. B). Describe the Perpendicular Chord Property.
C). Describe the Central Angle Property.
D). Describe the Inscribed Angle Property.
2. What is the measure of $\angle \mathrm{DGF}$ ?

3. What are the measures of $x$ and $y$ ?

4.
(i) What is the value of $x$ ?
(ii) What is the measure of $\angle \mathrm{ABE}$ ?

5. Point 0 is the center of the circle.

Determine the values of $x^{0}$ and $y^{0}$.
6. Point 0 is the center of the circle.
$\mathrm{OF}=15 \mathrm{~cm}$ and $\mathrm{GJ}=11 \mathrm{~cm}$.
Determine the values of $x$ and $y$ to the nearest tenth of a centimeter where necessary.

7. A circle has a diameter of 80 cm . A chord in the circle is 60 cm long. How far is the chord from the center of the circle, to the nearest tenth of a centimeter?
8. A circle has a diameter of 24 cm . Two chords are drawn on opposite side of the center of the circle. One chord is 17 cm long and the other chord is 13 cm long. Which chord is closer to the center of the circle? How much closer if this chord, to the nearest tenth of a centimeter?
9. Point 0 is the center of each circle. Determine the values of $x^{0}$ and $y^{0}$. Justify your solutions.
a)

b)

c)

10. Point 0 is the center of the circle and $D B$ is the diameter. Determine the values of $w^{0}, x^{0}, y^{0}$ and $z^{0}$. Justify your solutions.


