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

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| **Topic** | **Things to remember** | **Examples** |
| Find the measure of parts of a chord in a circle | part • part = part • part | **1. Find the value of x** | **2. Find the value of x** |
| Find the measure of segments when two secants intersect a circle. | outside • whole = outside • whole | **3. Find the value of x**  | **4. Find the value of x.** |
| Find the measure of segments when a secant and a tangent intersect a circle. | tan2 = outside • whole | **5. Find the value of x.** | **6. Find the value of x.** |
| Use the properties of congruent tangents | Tangents coming from the same external point are congruent | **7. Find JK.** | **8. Find JM.** |
| Use the properties of congruent chords to find the measures of chords and arcs. | If two chords are congruent then their arcs are congruent | **9. Find the value of KM.**  | **10. Find the  if .** |
| Determine if two chords are congruent | Two chords are congruent if they are equidistant from the center of the circle | **11. Are and  congruent?** | **12. Are and  congruent?** |
| Use the properties of congruent chords to find the measure of arcs and segments | Two chords are congruent if and only if they are equidistant from the center of the circle. | **13. Find the measure of YX.** | **14. Find the measure of GF.** |
| Determine if a chord is a diameter. | To be a diameter the chord must be a perpendicular bisector of another chord. | **15. Is  a diameter? Why or why not?** | **16. Is  a diameter? Why or why not?** |
| Use the properties of diameters and perpendicular chords to find the radius of a circle. | Set up the problem so that you can use Pythagorean theorem. | **17. A chord in a circle is 18 cm long and is 5 cm from the center of the circle. How long is the radius of the circle?** | **18. The radius of a circle is 15 inches. A chord is drawn 4 inches from the center of the circle. How long is the chord?** |
| Use properties of tangents to determine if the line is a tangent | You must satisfy the Pythagorean Theorem. | 19. Is  **a tangent? Why or why not?**  | 20. Is  **a tangent? Why or why not?**  |
| Use properties of tangents to find missing measures. | Pythagorean Theorem | 21. Find the measure of x.  | 22. Find the value of x.  |
| Find the surface area of spheres. | $$S=4πr^{2}$$ | 23. Find the surface area of the sphere. | 24. What is the diameter of a sphere with a surface area of 44$π$ $cm^{2}$? |
| Find the volume of spheres. | $$V=\frac{4}{3}πr^{3}$$ | 25. A beach ball has a diameter of 8 inches. Find its volume. | 26. Find the volume of the hemisphere. |
| Find the volume of prisms and cylinders. | V=Bh(where B is the area of the base)ARectangle= bhACircle= πr2ATriangle= ½ bhATrapezoid = ½(b1+b2)h | 27. Find the volume. 4 m 2 m 10 m | 28. Find the volume. 12 inhttp://etc.usf.edu/clipart/42200/42221/cylprism_42221_lg.gif  20 in |
| 29. Find the volume.   22cm 35cm 25cm   21 cm | 30. Find the volume.http://preview.channel4learning.com/espresso/clipbank/images/students/learning_paths/lp_maths_prisms_ws3_3.jpg |
| Find the volume of pyramids and cones. | V = 1/3 Bh | 31. Find the volume.http://www.clker.com/cliparts/b/T/d/V/N/B/cone-md.png 15 yd 15.8 yd 5 yd | 32. Find the volume.http://etc.usf.edu/clipart/43200/43200/quad9_43200_lg.gif 44 in   30 in 28 in |
| Find the shape of the cross-section of a 3D figure. | When cutting a 3D figure by a plane, the result is a 2D figure. | 33. Name the cross-section. | 34. Name the cross-section. |