Geometry 2nd Semester Final Study Guide

**You will be allowed one (1) notecard filled out with handwritten information of your choice. The following is a recommendation on what to focus on as you write notes on your card. Remember, there are quite a few formulas in this chapter (especially lateral/surface area and volume), so be sure to use the space on your card wisely.**

**(Chapter 7)**

- How to set up ratios and solve proportions

- How to set up ratios with similar polygons and solve for missing values

- How to prove triangles similar

- AA~ Postulate - SAS~ Theorem

- SSS~ Theorem - Properties of Similar Right Triangles

**(Chapter 8)**

- How to use the Pythagorean Theorem and its Converse

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- The properties of Special Right Triangles

- 45-45-90 triangles - 30-60-90 triangles

- How to properly use Sine/Cosine/Tangent ratios

- SOH / CAH / TOA

- How to use angles of elevation and angles of depression

**(Chapter 9)**

- The various properties of images/figures

- Translation - Reflection

- Rotation - Symmetry

- Dilation - Tessellation

**(Chapter 10)**

- How to use the formulas for areas of different figures

- Parallelograms/Triangles

- Trapezoids/Rhombuses/Kites

- Regular Polygons

- Using Trigonometry to find area

- Circles/Arcs/Sectors

**(Chapter 11)**

- The various properties of space figures

- Euler’s Formula (F + V = E + 2)

- Lateral Area/Surface Area of:

- Prisms/Cylinders

- Pyramids/Cones

- Spheres

- Volumes of:

- Prisms/Cylinders

- Pyramids/Cones

- Spheres

**(Chapter 12)**

- How to use the various properties of:

- Tangent Lines

- Chords and Arcs

- Inscribed Angles

- Secants