**Geometry – Semester Two Final Exam Outline**

Area

* Special Right Triangles 45 – 45 – 90
* Special Right Triangles 30 – 60 – 90
* Area – Trapezoid, Rhombus, Kite
* Area – Regular Polygons
* Circles, Arcs, Arc Length, Circumference
* Area of Circles and Sectors

Similarity

* Ratios and Proportions
* Similar Polygons
* Similar Triangles
* Similar Right Triangles
* Applying Similarity
* Proportions in Triangles
* Perimeters and Area in Similar Figures

Trigonometry

* Tangent, Sine, Cosine
* Solving for side lengths or angle measures
* Angles of Elevation and word problems
* Area with Trigonometry

Surface Area and Volume

* Space Figures and Nets
* Space and Drawings
* Surface Area – Pyramids, Cones, Prisms, Cylinders, Spheres
* Volume – Pyramids, Cones, Prisms, Cylinders, Spheres
* Similar Solids

Circles

* Tangent Lines
* Chords and Arcs
* Inscribed Angles
* Angle Measures – Chords and Secants
* Segment Lengths – Chords and Secants
* Circle Equations in the Coordinate Plane

Transformations

* Symmetry
* Composition of Reflections
* Tessellations

Provided reference material is on the back

**Reference Material**

Prism: SA = 2B + ph

V = Bh

Cylinder: SA = 2B + Ch = 2 πr2 + 2πrh

V = πr2h

Pyramid: SA = B + ½ p; =½ p ( a + )

V = 1/3 Bh

Cone: SA = πr2 + πr *=* πr ( r + *)*

V = 1/3 πr2h

Sphere: V = 4/3 πr3

SA = 4 πr2