**Advanced Geometry 1st Semester Final Exam Topics**

* Points, Lines, Segments, Rays, Angles, and Triangles
* Congruent angles and segments
* Collinear and Noncollinear points

Chapter 1

* Interpret geometric diagrams
* Bisectors and Trisectors of segments and angles
* Conditional statements and Converse statements
* Perpendicularity
* Complementary and Supplementary angles
* Addition Property and Subtraction Property

Chapter 2

* Multiplication and Division Properties
* Transitive Property
* Substitution Property
* Vertical Angles
* SSS, SAS, ASA, AAS, and HL
* CPCTC
* Circles: radius, circumference, area

Chapter 3

* Medians and Altitudes of triangles
* Classify triangles
  + Scalene, Isosceles, Equilateral
  + Acute, Right, Obtuse, Equiangular
* Auxiliary Lines
* Midpoint formula

Chapter 4

* Equidistance theorems
* Transversals and parallel lines
* Pairs of angles formed by transversals
* Proving lines parallel
* Crook Problems

Chapter 5

* Quadrilaterals – know the properties!
* Prove that figures are parallelograms
* Prove that figures are special quadrilaterals
* Midline Theorem

Chapter 7

* Exterior and Interior angles
* No-Choice Theorem
* Two-Column
* Paragraph

PROOFS

* Detour
* Missing Diagram
* Indirect
* Transformations

Worksheets

* + Reflections, rotations, translations
  + Composition of transformations
* Symmetry

The final exam will consist of the following types of problems:

* Multiple choice
* Proofs (all types)