Geometry Curriculum

Geometry Topics:

Semester 1

Ch. 1: Foundations for Geometry
- Points, Lines, Planes, etc.

Ch. 2: Geometric Reasoning
- Algebraic and Geometric Proofs

Ch. 3: Parallel and Perpendicular Lines

Ch. 4: Triangle Congruence

Ch. 5: Properties and Attributes of Triangles
- Bisectors, Altitudes, Pythagorean Theorem

Ch. 6: Polygons and Quadrilaterals

Semester 2

Ch. 7: Similarity
- Ratios and Proportion

Ch. 8: Right Triangles and Trigonometry
- Intro to Trig Ratios, Law of Sines, Law of Cosines

Ch. 9: Extending Perimeter, Circumference, and Area

Ch. 10: Spatial Reasoning
- Finding Surface Area and Volume of 3-D figures

Ch. 11: Circles

Ch. 12: Extending Transformational Geometry
- Reflections, Translations, Rotations

Grading Practices

- In order to receive *full credit* for assignments, students must turn-in high quality work
    - Assignments that are graded for completeness should have all problems attempted *thoughtfully*
        - Don't erase work you think is incorrect, then leave it blank. It is helpful for me to see your thought process.
        - If you get stuck, write a specific question that addresses the issue you are having.
        - If it is a story problem, at the very least you should draw a picture and write down important information.
- Work needs to be shown!
    - On many assessments, points are assigned to logical steps in the solving process. Failure to "explain" the process with mathematical steps, will result in forfeiture of points.
    - I understand you may do some steps on the calculator or in your head. Unfortunately, you do not turn those in with your assessment, so if it is an integral part of the solving process you should include it in your solution.
    - Most directions on assessments are specific in which method you need to use in order to receive full credit, so read them carefully.
        - For example, if we are taking a test on logs and the directions say "Solve using logarithms" you will not receive full credit if you solve using a graph.
        - Also, incorrect steps that somehow produce the correct answer will not receive full credit. (Ex: Forgetting a negative in one step, then dividing the positive by a negative and writing your answer as positive.)

- There are many assessments this year that will have a “no calculator” portion. You need to be proficient with and without a calculator.
    - This helps build understanding and fluidity
    - This is also great practice for the SAT
- We will be writing and analyzing problems and thought processes to build understanding and communication. Complete sentences are always appreciated.
    - Writing about mathematics and being able to explain your thought process is an extremely useful tool for both the student and the teacher.
- There are no-retakes for assessments; you need to study and prepare accordingly

- Solutions should always be in simplest form unless otherwise stated; this includes simplifying radicals and rational expressions and reducing fractions