



Semester 1

Term 1

- **Introduction to Geometry**
 - Points, Lines, Planes, Postulates
 - Inductive and Deductive Reasoning
 - Conditional and Bi-Conditional Statements
 - **Transformations**
 - Reflections and Translations
 - Rotations
 - Compositions and Symmetry
 - **Angles**
 - Angle Relationships
 - Parallels and Transversals
 - **Triangles**
 - Definitions and Theorems
 - Congruency
 - Types of Triangles
 - **Relationships in Triangles**
 - Special Segments
 - Inequalities in Triangles
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Term 2

- **Relationships in Triangles**
 - Special Segments
 - Inequalities in Triangles
- **Quadrilaterals**
 - Polygons of n-sides
 - Parallelograms and Rectangles
 - Squares and Rhombi
 - Kites and Trapezoids
- **Lines**
 - Slopes and Equations of Lines
 - Distance and Midpoint

Semester Review and Exam



Semester 2

Term 3

- **Similarity**
 - Proportions, Ratios, and Geometric Mean
 - Triangles
 - Dilations
 - Scale Factor

 - **Right Triangles**
 - Pythagorean Theorem
 - Special Right Triangles
 - Trigonometric Ratios
 - Applications

 - **Circles**
 - Circumference and Area
 - Angles and Segments
 - Arc Length and Sector Area
 - Equation
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Term 4

- **Volume and Surface Area**
 - Volume: Prisms, Cylinders, Pyramids, Cones, Composite Figures
 - Surface Area: Prisms, Cylinders, Pyramids, Cones, Composite Figures
 - Spheres and Spherical Geometry
 - Cross Sections and Solids of Rotation

 - **Perimeter and Area**
 - Regular Polygons
 - Problem Solving

 - **Probability**
 - Geometric Probability
 - Set Theory
 - Permutations and Combinations
 - Mutually Exclusive and Overlapping Events
 - Conditional Probability
 - Independent and Dependent Events
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