

## Summer Geometry

- 1-2 Points, Lines, and Planes
- 1-3 Segments, Rays, and Distance
- 1-4 Angles
- 1-5 Postulates and Theorems Relating Points, Lines, and Planes
- 2-1 If-Then Statements; Converses
- 2-2 Properties from Algebra
- 2-3 Proving Theorems
- 2-4 Special Pairs of Angles
- 2-5 Perpendicular Lines
- 2-6 Planning a Proof
- 3-1 Definitions for When Lines and Planes are Parallel
- 3-2 Properties of Parallel Lines
- 3-3 Proving Lines Parallel
- 3-4 Angles of a Triangle
- 3-5 Angles of a Polygon
- 3-6 Inductive Reasoning
- 4-1 Congruent Figures
- 4-2 Some Ways to Prove Triangles Congruent
- 4-3 Using Congruent Triangles
- 4-4 The Isosceles Triangle Theorems
- 4-5 Other Methods of Proving Triangles Congruent
- 4-6 Using More Than One Pair of Congruent Triangles
- 4-7 Medians, Altitudes, and Perpendicular Bisectors
- 5-1 Properties of Parallelograms
- 5-2 Ways to Prove that Quadrilaterals are Parallelograms
- 5-3 Theorems Involving Parallel Lines
- 5-4 Special Parallelograms
- 5-5 Trapezoid
- 6-1 Inequalities
- 6-2 Inverses and Contrapositives
- 6-4 Inequalities for one triangle
- 7-1 Ratio and Proportion
- 7-2 Properties of Proportions
- 7-3 Similar Polygons
- 7-4 A Postulate for Similar Triangles
- 7-5 Theorems for Similar Triangles
- 7-6 Proportional Lengths
- 8-1 Similarity in Right Triangles
- 8-2 Pythagorean Theorem
- 8-3 The Converse of the Pythagorean Theorem
- 8-4 Special Right Triangles
- 8-5 The Tangent Ratio
- 8-6 The Sine and Cosine Ratios
- 8-7 Application of Right Triangle Trigonometry
- 9-1 Basic Terms
- 9-2 Tangents
- 9-3 Arcs and Central Angles
- 9-4 Arcs and Chords
- 9-5 Inscribed Angles
- 9-6 Other Angles
- 9-7 Circles and Lengths of Segments
- 11-1 Area of Rectangles
- 11-2 Area of Parallelograms, Triangles, and Rhombuses
- 11-3 Areas of Trapezoids
- 11-4 Areas of Regular Polygons
- 11-5 Circumferences and Areas of Circles
- 11-6 Arc Lengths and Sector Areas
- 11-7 Ratios of Areas
- 13-1 Distance Formula
- 13-2 Slope of a Line
- 13-3 Parallel and Perpendicular Lines
- 13-7 Writing Linear Equation
- 13-8 Organizing Coordinate Proofs
- 13-9 Coordinate Geometry Proofs