PEAK MATH | SYLLABUS

SUMMIT EDUCATIONAL GROUP

GEOMETRY – PART 1

Session 1: Intro to Geometry
- Terminology
  Point, Line Segment, Endpoints & Midpoints, Ray & Origin, Line & Collinear, Plane
- Circles
- Burden of Proof
  Axioms & Postulates, Theorems & Conjectures

Session 2: Angles
- Vertex & Sides
- Measuring Angles
- Straight & Vertical Angles
- Parallel Lines
- Angles in a Triangle
- Exterior Angles

Session 3: Congruent Triangles and Perimeter & Area
- SSS, SAS, & ASA Congruence
- Isosceles & Equilateral
- Perimeter
- Area

Session 4: Similar Triangles
- AA, SAS, & SSS Similarity

Session 5: Right Triangles
- Pythagorean Theorem
- Special Right Triangles
- Pythagorean Triples
- Heron's Formula

Session 6: Review

Session 7: Special Parts a Triangle
- Bisectors
- Perpendicular Bisections
- Angle Bisectors

Session 8: Special Parts of a Triangle
- Medians
- Altitudes

Session 9: Quadrilaterals
- Trapezoids
- Parallelograms
- Rhombi
- Rectangles
- Squares
- If and Only If

Session 10: Polygons
- Angles in a Polygon
- Polygon Area

Session 11: Geometric Inequalities
- Sides and Angles of a Triangle
- Pythagoras
- The Triangle Inequality

Session 12: Review