# Topics List Intended for IDEA MATH Geometry 

## Session 1

- Basic Term of Geometry (Points, Lines, Planes, Segments, Rays, Distance, Angles)
- Parallel Lines
- Angles of a Triangle
- Angles of a Polygon
- Congruent Triangles
- Some Theorems Based on Congruent Triangles
- Medians, Altitudes, Angle Bisectors, and Perpendicular Bisectors
- If-Then Statements
- Parallelograms and Trapezoids
- Geometry Inequalities
- Similarity I


## Session 2

- Similarity II
- Proportional Lengths
- The Pythagorean Theorem
- Right Triangles
- Trigonometry
- Tangents, Arcs, and Chords
- Angles Formed by Chords, Secants, and Tangents
- Lengths of Chords, Secant Segments, and Tangent Segments
- Areas of Squares, Rectangles, Parallelograms, and Triangles
- Areas of Trapezoids and Right Polygons
- Circumference and Area of a Circle
- Area and Volume of Prisms and Pyramids

