General Course Outline for Mathematics

1. *Number Systems*

   - Real numbers (rationals, irrationals)

   - Integers, fractions, decimals

   - Complex numbers (a+bi)

2. *Algebra*

   - Linear equations & inequalities

   - Quadratic equations, polynomials

   - Functions (input-output)

3. *Geometry*

   - Points, lines, planes

- Angles, triangles, circles

- Trigonometry (sine, cosine)

4. *Calculus*

   - Limits (approaching values)

   - Derivatives (rates of change)

   - Integrals (area under curves)

5. *Statistics & Probability*

   - Mean, median, mode (data summary)

   - Probability (chance of events)

   - Inference (drawing conclusions)