

All topics are based on Georgia Standards. These are the primary topics that are required to master Algebra 2. We will explore/learn these elements in detail.

<https://www.georgiastandards.org/Georgia-Standards/Frameworks/Acc-Geometry-B-Algebra-II-Curriculum-Map.pdf>

Algebra 2 topics for Summer Program:

- 1) Circles and volume – 3D figures, Circle equations, area/circumference, chords, secant, tangents
- 2) Right triangles – special right, ratios, Pythagorean theorem and distance formula application
- 3) Coordinate system – revisit and connection with geometry and coordinate algebra
- 4) Quadratics – forms, graphing, solving/zeros, factoring, vertex, discriminant
- 5) Probability – mutually exclusive, given $P(A|B)$, independent, combinations
- 6) Polynomials – operations with polynomials, long division
- 7) Rational functions – Asymptotes, holes, predicting graphs, zeros, vertical/horizontal/slant

Costs & Timings:

TBA (4 hours per week – Saturday/Sunday or Thursday/Saturday)

Cost: \$1000*

TOTAL HOURS: 40 hours

*Discounts available for special cases & Weekly cost is \$120.

Materials needed:

- 1) 3-ring binder with paper
- 2) Pencils and pens
- 3) Calculator
- 4) Printer @ home

Note: Requiring students to bring their own binders only this summer.