

Algebra 2 • Algebra 2 Advanced • Algebra 2 / Pre-Calculus Honors

The following topics / units are covered across the three classes:

Quadratics	Polynomials
Exponentials and Logarithms	Radical Equations and Functions
Rational Functions	Trigonometry (A2 intro only)
Sequences and Series (A2A and A2PCH only)	Probability (A2A and A2PCH only)
Vectors (A2PCH only)	Conic Sections (A2PCH only)
Matrices (A2PCH only)	Limits and Derivatives (A2PCH only)

Algebra 2

- Besides having the least amount of content of the three courses, students are expected to work with and solve only basic or introductory level equations and graphs in each topic/unit.
- The trigonometry unit in particular is very limited in scope and rigor. It is not a sufficient preparation to go to Pre-Calculus Honors.
- Exiting Algebra 2, students will go to Math Analysis, with some opting to take Statistics or AP Statistics.

Algebra 2 Advanced

- Beyond having more content than Algebra 2, students are exposed to more advanced versions of equations, problem solving, and graphs.
- Exam questions often require applying skills learned in previous units and in Algebra 1 without additional review or instruction.
- Exiting Algebra 2 Advanced, students will generally move on to Pre-Calculus Honors, with some opting to take Statistics or AP Statistics.

Algebra 2 / Pre-Calculus Honors

- The course includes Algebra 2 and Pre-Calculus content and is taught at a higher level of depth and rigor than either Algebra 2 Advanced or Pre-Calculus Honors. It is two years of math all in one year, so the curriculum moves at a very quick pace.
- Students are expected to enter the course with very strong Algebra 1 skills.
- Most students require extra practice beyond the homework and classwork in order to be successful.
- Students are taught and expected to have mastery of various features of graphing calculators.
- Exam questions are often extensions beyond what has been shown in class or in the assigned work.
- Exiting A2PCH, students with a high level of performance will move on to AP Calculus AB. Some will need an additional year of preparation in Pre-Calculus Honors before moving on to Calculus.