



Course Description: Integrated Math 3

Integrated Math 3 is the third course of a three-year integrated math sequence. This course is a college prep course that follows the Integrated Pathway in the Common Core State Standards. Students will analyze properties, features, and structures (roots, solutions of systems, intervals of increasing/decreasing, asymptotic behavior, composition, etc.) of inverse functions, logarithmic functions, polynomial functions, rational functions, and trigonometric functions. Students will extend trigonometry to the unit circle and non-right triangles. Students will prove relationships between trigonometric functions. All types of functions will be used to model real-life situations. Students will build connections between algebra, geometry, and trigonometry through investigations with volume and area. Students will use statistical methods and the standard normal curve to make inferences and draw conclusions. Students will be expected to work collaboratively, individually and demonstrate their learning through the Standards of Mathematical Practice. Students will be exposed to rich instruction that develops their conceptual understanding, procedural skill, problem-solving skills, critical thinking abilities, and strengthen situational analysis abilities.

Unit list:

- Unit 1: Functions and their Inverses
- Unit 2: Logarithmic Functions
- Unit 3: Polynomial Functions
- Unit 4: Rational Functions
- Unit 5: Modeling with Geometry
- Unit 6: Trigonometric Functions
- Unit 7: Modeling with Functions
- Unit 8: Statistics

Textbook:

Mathematics Vision Project (MVP) *Integrated Math 3* Modules, San Dieguito Union High School District Custom Edition, 2021.

Prerequisite:

Integrated Math 2

High Bluff Academy is accredited by the Western Association of Schools and Colleges (WASC). The above course is approved by the University of California system (A-G) and the National Collegiate Athletic Association (NCAA).