



Course Description: Integrated Math 2

Integrated Math 2 is the second course of a three-year integrated math sequence. This course is a college prep course and 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, etc.) of quadratic functions, absolute value functions, piece-wise functions, and circles. Multiple representations will be used to connect numerical, algebraic, and graphical scenarios to real-life situations. Students will formalize geometric theorems, create, and prove conjectures about two-dimensional geometric shapes (including triangles, quadrilaterals, and circles). Students will begin trigonometry by exploring similarity in right triangles. Students will calculate probability for independent, dependent, and conditional events through multiple representations (two-way tables, tree diagrams, Venn diagrams), experimental and theoretical models. 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: Introduction to Quadratics
- Unit 2: More Quadratics
- Unit 3: Solving Quadratics
- Unit 4: More Functions, More Features
- Unit 5: Geometric Figures
- Unit 6: Similarity
- Unit 7: Right Triangle Trigonometry
- Unit 8: Circles: A Geometric Perspective
- Unit 9: Quadratics and Other Relations
- Unit 10: Probability

Textbook:

Mathematics Vision Project (MVP) *Integrated Math 2* Modules, San Dieguito Union High School District Custom Edition, 2021.

Prerequisite:

Integrated Math 1

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).