

Liberal Arts Mathematics 1 addresses the need for an elective course that focuses on reinforcing, deepening, and extending a student's mathematical understanding. Liberal Arts Mathematics 1 starts with a review of problem-solving skills before moving on to a variety of key algebraic, geometric, and statistical concepts. Throughout the course, students hone their computational skills and extend their knowledge through problem solving and real-world applications.

Course topics include problem solving; real numbers and operations; functions and graphing; systems of linear equations; polynomials and factoring; geometric concepts such as coordinate geometry and properties of geometric shapes; and descriptive statistics.

Within each Liberal Arts Mathematics 1 lesson, students are supplied with a scaffolded note-taking guide, called a Study Sheet, and are given ample opportunity to practice computations in low-stakes Checkup activities before moving on to formal assessment. Additionally, students will have the opportunity to formulate and justify conclusions as they extend and apply concepts through printable exercises and "in-your-own-words" interactive activities.

No required or optional materials.

Length: Two Semesters

**Unit 1: Solving Equations and Inequalities**

**Unit 2: Functions**

**Unit 3: Linear Equations**

**Unit 4: Exponents and Exponential Functions**

**Unit 5: Polynomials**

**Unit 6: Quadratic Equations and Functions**

**Unit 7: Nonlinear Functions**

**Unit 8: Semester 1 Exam**

**Unit 9: Descriptive Statistics**

**Unit 10: Foundations of Geometry**

**Unit 11: Triangles**

**Unit 12: Right Triangles**

**Unit 13: Circles Without Coordinates**

**Unit 14: Constructions and Transformations**

**Unit 15: Three-Dimensional Solids**



Unit 16: Semester 2 Exam

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