

Bridge Math is a fourth year math course focused on reinforcing core concepts from Algebra I, Geometry and Algebra II. Bridge Math is intended for students who need to review concepts before continuing their studies. It starts with a review of algebraic concepts before moving on to a variety of key algebraic, geometric, statistical, and probability concepts. Course topics include rational and irrational numbers, systems of linear equations, quadratic functions, exponential functions, triangles, coordinate geometry, solid geometry, conditional probability, independence, data analysis, scatterplots, and linear and non-linear models of data.

Throughout the course, students hone their computational skills and extend their knowledge through problem solving and real-world applications. Within each Bridge Math lesson, students are supplied with scaffolded note-taking study guides 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.

The course is built to state standards, including Tennessee's Bridge Math standards.

Length: Two Semesters

Unit 1: Foundations of Algebra

Unit 2: Functions

Unit 3: Systems of Linear Equations

Unit 4: Quadratic Functions

Unit 5: Polynomial Functions

Unit 6: Semester Exam

Unit 7: Exponents and Exponential Functions

Unit 8: Triangles

Unit 9: 2-D and 3-D Geometry

Unit 10: Applications of Probability

Unit 11: Data and Mathematical Modeling

Unit 12: Semester 2 Exam