

## Syllabus: Algebra I B for Credit Recovery

Algebra I is the foundation—the skills acquired in this course contain the basic knowledge needed for all future high school math courses. The material covered in this course is important, but everyone can do it. Everyone can have a good time solving the hundreds of real-world problems algebra can help answer. Course activities make the numbers, graphs, and equations more real. The content in this course is tied to real-world applications like sports, travel, business, and health. This course is designed to give students the skills and strategies to solve all kinds of mathematical problems. Students will also acquire the confidence needed to handle everything high school math has in store for them. Algebra I emphasizes the importance of algebra in everyday life through hundreds of real-world examples. Assessments are designed to ensure that your understanding goes beyond rote memorization of steps and procedures. Upon successful course completion, you will have a strong foundation in Algebra I and will be prepared for other higher level math courses.

### Segment II

#### Module 06: Statistics

- 06.00: Module Six Introduction and Pretest
- 06.01: Representing Data
- 06.02: Comparing Data Sets
- 06.03: Data Sets and Outliers
- 06.04: Module Six Quiz
- 06.05: Two-Way Frequency Tables
- 06.06: Scatter Plots and Line of Best Fit
- 06.07: Correlation and Causation
- 06.08: Reflection
- 06.09: Module Six Review and Practice Test
- 06.10: Reflection
- 06.11: Discussion-Based Assessment
- 06.12: Module Six Test

#### Module 07: Polynomials

- 07.00: Module Seven Pretest
- 07.01: Introduction to Polynomials
- 07.02: Addition and Subtraction of Polynomials
- 07.03: Multiplication of Monomials
- 07.04: Division of Monomials
- 07.05: Module Seven Quiz
- 07.06: Multiplication of Polynomials
- 07.07: Special Products
- 07.08: Division of Polynomials
- 07.09: Function Operations
- 07.10: Module Seven Review and Practice Test
- 07.11: Discussion-Based Assessment
- 07.12: Module Seven Test

### Module 08: Factoring

- 08.00: Module Eight Pretest
- 08.01: Greatest Common Factor
- 08.02: Factoring By Grouping
- 08.03: Factoring Trinomials
- 08.04: Module Eight Quiz
- 08.05: Perfect Square Trinomials
- 08.06: Difference of Perfect Squares
- 08.07: Polynomial Functions
- 08.08: Reflection
- 08.09: Module Eight Review and Practice Test
- 08.10: Discussion-Based Assessment
- 08.11: Module Eight Test

### Module 09: Quadratic Functions

- 09.00: Module Nine Pretest
- 09.01: Quadratic Models
- 09.02: Quadratics and Completing the Square
- 09.03: Module Nine Quiz
- 09.04: Quadratics and the Quadratic Formula
- 09.05: Applications of Quadratic Functions
- 09.06: Exploring Non-Linear Systems and Growth
- 09.07: Reflection
- 09.08: Module Nine Review and Practice Test
- 09.09: Discussion-Based Assessment
- 09.10: Module Nine Test
- 09.11: Segment Two Review and Practice Test
- 09.12: Exam Preparation
- 09.13: Segment Two Exam

### Course Assessment and Participation Requirements:

To achieve success, students are expected to submit work in each course weekly. To measure learning, students complete self-checks, practice lessons, multiple choice questions, projects, discussion-based assessments, and discussions. Students are expected to maintain regular contact with teachers. When teachers, students, and parents work together, students are successful.