

CR Algebra I S1

Description

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 1 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.

Materials/Textbook/Technical Requirements

Materials: Scientific Calculator

Textbook: No Textbook is required for this course.

Module 01: Algebra Basics

- Introduction to Algebra Basics and Module Pretest
- Algebraic Expressions
- Solving One-Variable Equations
- Creating One-Variable Equations
- One-Variable Inequalities
- One-Variable Compound Inequalities
- Literal Equations
- Algebra Basics Review and Practice Test
- Algebra Basics Test Part One and Two

Module 02: Linear Functions

- Introduction to Linear Functions and Module Pretest
- Relations and Functions

- Evaluating Functions
- Key Features of Linear Functions
- Writing Linear Functions
- Comparing Linear Functions
- Module Review and Practice Test
- Linear Functions Test Part One and Two

Module 03: Exponential Functions

- Introduction to Exponential Functions and Pretest
- Exponents and Radicals
- Exponential Equations and Functions
- Key Features of Exponential Functions
- Graphing Exponential Functions
- Sequences
- Exploring Linear and Exponential Functions
- Module Review and Practice Test
- Exponential Functions Test Part One and Two

Module 04: Systems of Equations and Inequalities

- Introduction to Systems of Equations and Inequalities and Pretest
- Solving Systems of Equations Graphically
- Solving Systems of Equations Algebraically
- Equivalent Systems
- Solving systems of Equations Approximately
- Two-variable Linear Inequalities
- Systems of Linear Inequalities
- Systems of Equations and Inequalities Test