

Prerequisite courses: none

Grade level: 9-12

Course Description

Basic Algebra I is an introductory high school course covering fundamental algebraic concepts. The curriculum encompasses number sense and operations, including prime factorization, greatest common factor, and least common multiple. Students will learn to work with fractions, decimals, integers, and absolute value. The course explores ratios, proportions, and percentages, applying these concepts to real-world problems and analyzing data. Finally, it introduces algebraic expressions and equations, emphasizing simplification using properties of operations and solving one-step equations. The course culminates in a comprehensive cumulative exam.

This course is part of the Exceptional Students Course Suite, designed for high school students working three or more grade levels behind. The Exceptional Students courses are ideal for students whose IEPs allow them to earn credit for below-grade-level coursework. This particular course, because it addresses content and skills from elementary grades, is also appropriate for middle school students who are behind.

Course Objectives

Students will meet the following goals in this course.

- Determine the greatest common factor (GCF) and least common multiple (LCM) of two numbers and use these in real-life applications.
- Use models to divide one fraction by another, and divide whole numbers and decimals by decimals, using estimation for accuracy.
- Identify and graph integers on a number line, and find and use absolute values in real-world situations.
- Write and simplify algebraic expressions, including those with multiple operations, to represent real-world situations.
- Write and evaluate numerical expressions containing whole-number exponents.
- Solve one-step equations involving addition, subtraction, multiplication, and division in real-world contexts.

Student Expectations

This course requires the same level of commitment from students as a traditional classroom course. Students are expected to spend approximately 5–7 hours per week online on:

- interactive lessons, which include a mixture of instructional videos and tasks.
- assignments, in which they apply and extend learning in each lesson.
- assessments, including quizzes, tests, and cumulative exams.

Basic Algebra I

Communication

Teachers will communicate with students regularly through discussions, emails, chats, and system announcements. Students will also communicate with classmates, either via online tools or face to face, to collaborate, ask and answer questions in peer groups, and develop speaking and listening skills.

Grading Policy

Students will be graded on work completed online and work submitted electronically to the teacher. The weighting for each category of graded activity is listed below.

Grading Category	Weight
Assignments	20%
Lesson quizzes	30%
Unit tests	30%
Cumulative exams	20%

Scope and Sequence

When students log on to Imagine Edgenuity, they can view the entire course map—an interactive scope and sequence of all topics under study. The units of study are listed below

Course Units
Unit 1: Number Sense and Operations
Unit 2: Ratios and Proportional Relationships
Unit 3: Proportional Reasoning with Percentages
Unit 4: Expressions and Equations