## ACCELERATE TO GEOMETRY

Credits: 0.5

## COURSE OVERVIEW AND GOALS

Accelerate to Geometry is a short course designed to prepare you for success in Geometry. It focuses on reviewing the essential skills and mathematical concepts that serve as the foundation for your upcoming learning. You will apply your understanding of algebraic techniques to rewrite and solve expressions and equations. You will also explore simple probability and revisit fundamental geometric relationships.

By the end of this course, you will be able to do the following:

- ♦ Rewrite and interpret expressions using algebraic properties.
- Write one-variable and two-variable linear equations and use them to solve problems.
- Use key features to describe and compare correspondences among representations of functions.
- Solve systems of linear equations using algebraic methods.
- Determine probabilities of compound events.
- Understand and apply the Pythagorean theorem to solve problems.
- Identify congruent and similar figures using transformations on the coordinate plane.

## COURSE COMPONENTS AND GRADING RUBRIC

The table gives a breakdown of the weight for each component in the course. Weight represents the percentage of the total score coming from each activity.

Course Components	Count	Weight <sup>*</sup>
<b>Pretest.</b> A pretest is an optional assessment, typically designed for credit recovery. If a student shows mastery of a lesson objective, the student may be automatically exempted from the upcoming activities associated with the mastered objective. Pretests are not included as a component of the student's final grade.	1	0%

## **edmentum**<sup>™</sup> Course Overview and Syllabus

Course Components	Count	Weight <sup>*</sup>
<b>Module.</b> Each module in this course contains an interactive tutorial or study and an associated mastery test. Tutorials and studies combine instruction and practice to prepare students for the mastery test, which is a computer-scored lesson-level summative assessment. The module score comes from a student's score on the mastery test.	12	50%
<b>Posttest.</b> A posttest appears at the end of each unit.		50%
Total	14	100%

Weight<sup>\*</sup> Teachers may manually adjust these weights if desired, per district grading requirements.

## SCOPE AND SEQUENCE

### **ESSENTIAL LEARNING**

Lesson	Lesson Objective
Syllabus	Review the Course Syllabus at the beginning of the course.
Radical Expressions	In this lesson, you will rewrite numerical radical expressions involving square roots.
Expressions	In this lesson, you will rewrite expressions in equivalent forms.
Equations and Inequalities	In this lesson, you will write and solve equations and inequalities that model relationships.
Solving Systems of Equations	In this lesson, you will solve systems of linear equations using algebraic and graphical methods.
Functions	In this lesson, you will use a function to model and analyze a relationship between two quantities.

# **edmentum**<sup>™</sup> Course Overview and Syllabus

Lesson	Lesson Objective
Comparing Functions	In this lesson, you will compare and translate representations of linear, exponential, and quadratic functions.
Two-Way Frequency Tables	In this lesson, you will construct two-way frequency tables for categorical data and interpret measures and associations within the data, including relative frequencies.
Probability of Compound Events	In this lesson, you will understand that the probability of a compound event occurring is a fraction of all possible outcomes.
Introduction to the Pythagorean Theorem	In this lesson, you will examine the Pythagorean Theorem and its converse, and apply the Pythagorean Theorem to find unknown side lengths.
The Pythagorean Theorem and the Coordinate Plane	In this lesson, you will apply the Pythagorean Theorem to find distances between two points in a coordinate system.
Congruence and Transformations	In this lesson, you will understand that two figures are congruent if one can be obtained from the other by a sequence of rotations, reflections, or translations.
Similarity and Transformations	In this lesson, you will understand that two figures are similar if one can be obtained from the other by a sequence of dilations, rotations, reflections, or translations.