

## Algebra I

Algebra I provides a curriculum focused on the mastery of critical skills and the understanding of key algebraic concepts, preparing students to recognize and work with these concepts. Through a "Discovery-Confirmation-Practice" based exploration of algebraic concepts, students are challenged to work toward a mastery of computational skills, to deepen their conceptual understanding of key ideas and solution strategies, and to extend their knowledge in a variety of problem-solving applications. Course topics include an Introductory Algebra review; measurement; an introduction to functions; problem solving with functions; graphing; linear equations and systems of linear equations; polynomials and factoring; and data analysis and probability.

Within each Algebra I lesson, students are supplied with a scaffolded note-taking guide, called a "Study Sheet," as well as a post-study "Checkup" activity, providing them the opportunity to hone their computational skills by working through a low-stakes, 10-question problem set before moving on to a formal assessment. Unit-level Algebra I assessments include a computer-scored test and a scaffolded, teacher-scored test.

To assist students for whom language presents a barrier to learning or who are not reading at grade level, Algebra I includes audio resources in both Spanish and English.

The content is based on the National Council of Teachers of Mathematics (NCTM) standards and is aligned to state standards.