

Introductory Algebra provides a curriculum focused on foundational concepts that prepare students for success in Algebra I. Through a "Discovery-Confirmation-Practice"-based exploration of basic concepts, students are challenged to work toward a mastery of computational skills, to deepen their understanding of key ideas and solution strategies, and to extend their knowledge through a variety of problem-solving applications.

Course topics include integers; the language of algebra; solving equations with addition, subtraction, multiplication, and division; fractions and decimals; measurement; exponents; solving equations with roots and powers; multi-step equations; and linear equations.

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

The course is built to state standards and informed by the National Council of Teachers of Mathematics (NCTM).

Length: Two Semesters

Unit 1: Integers

Unit 2: The Language of Algebra

Unit 3: Solving Equations with Addition and Subtraction

Unit 4: Fractions and Decimals

Unit 5: Measurement

Unit 6: Semester 1 Review and Exam

Unit 7: Solving Equations with Multiplication and Division

Unit 8: Exponents

Unit 9: Solving Equations with Roots and Powers

Unit 10: Multi-Step Equations

Unit 11: Linear Equations

Unit 12: Semester 2 Review and Exam