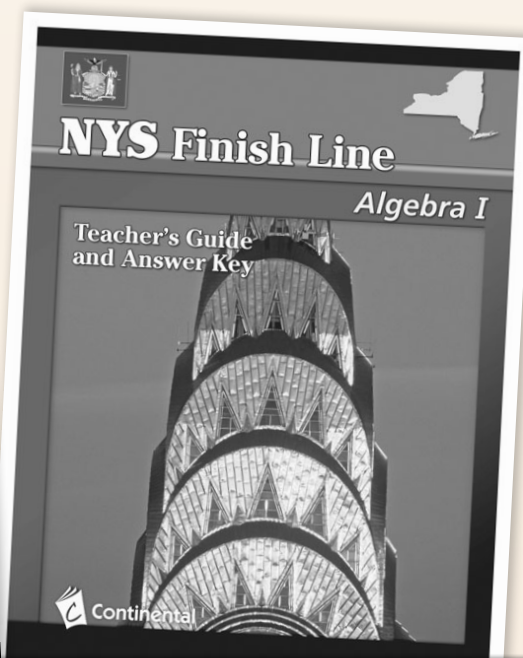
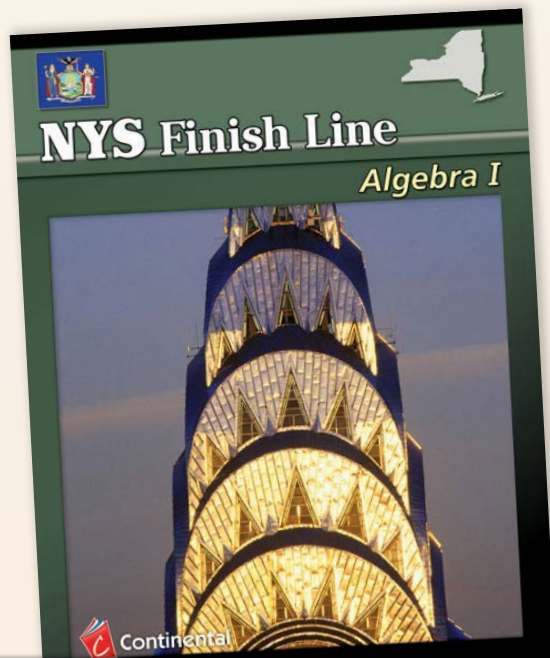


What does the book do?

NYS Finish Line Algebra I provides instruction and practice for the New York Common Core Learning Standards (CCLS) and prepares students for the Regents Algebra I (Common Core) exam. Components include a student workbook and a teacher's guide in print and eBook formats.



Grades 8–12

Standards Alignment

The content addresses all focus standards identified for the traditional Algebra I course assessed by the exam. The modules follow the same sequence as those identified for this course in the *NYS Common Core Mathematics Curriculum for Algebra I* as described by EngageNY.org. Each module is broken down into lessons that address one or more standards.

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Module Overview M1
ALGEBRA I

Algebra I • Module 1
Relationships Between Quantities and Reasoning with Equations and Their Graphs

OVERVIEW

By the end of Grade 8, students have learned to solve linear equations in one variable and have applied graphical and algebraic methods to analyze and solve systems of linear equations in two variables. Now, students are introduced to non-linear equations and their graphs. They formalize their understanding of there are some actions that, when applied to the expressions on both sides of an equal sign, will not result in an equation with the same solution set as the original equation. Finally, they encounter problems that induce the full modeling cycle, as it is described in the Common Core Learning Standards for Mathematics.

In Topic A, students explore the main functions that they will work with in Grade 9: linear, quadratic, and exponential. The goal is to introduce students to these functions by having them make graphs of situations abstractly and quantitatively as they choose and interpret units to solve problems related to the graphs they create (N-Q.1, N-Q.2, N-Q.3).

In middle school, students applied the properties of operations to add, subtract, factor, and expand expressions (6.EE.3, 6.EE.4, 7.EE.1, 8.EE.1). Now, in Topic B, students use the structure of expressions to define what it means for two algebraic expressions to be equivalent. In doing so, they discern that the commutative, associative, and distributive properties help link each of the expressions in the collection together, even if the expressions look very different themselves (A-SSE.2). They learn the definition of a polynomial expression and build fluency in identifying and generating polynomial expressions as well as adding, subtracting, and multiplying polynomial expressions (A-APR.1). The Mid-Module Assessment is located at the end of Topic B.