

Why Algebra 1 in Two Years?

In our increasingly competitive and technological world, more and more students need to take algebra. However, the abstract concepts of algebra are difficult for some students to grasp. One solution to this problem is to teach the normal Algebra 1 curriculum in a period of two years. This extended time frame allows students to spend more time on each concept. Most importantly, students will have more time to complete hands-on labs and activities that develop these abstract concepts.

Algebra 1 in Two Years Resources provides a plan and additional resources for using Glencoe's *Algebra 1: Integration, Applications, Connections* and its various components for such a program. One advantage of using *Algebra 1 in Two Years Resources* is that school systems already using Glencoe's *Algebra 1: Integration, Applications, Connections* for their regular Algebra 1 classes will not need to buy new books. Also, this is a complete Algebra 1 course and not just a simplified version of the course. Students will be asked to solve the same types of problems as one-year students, including critical thinking questions and application questions.

Glencoe adds even more flexibility by also making available a two-volume hardbound Algebra 1 program. *Algebra 1 in Two Years Resources* can also be used with Glencoe's *Algebra 1: Integration, Applications, Connections; Volume One* and *Volume Two*.

Algebra 1 in Two Years Resources includes two binders—one for each year. Each binder includes four booklets: a Lesson Planning Guide, a Review and Assessment Booklet, an Activities Booklet, and a Block Scheduling Booklet.

Lesson Planning Guide, Year One

This booklet provides a day-to-day plan for teaching Chapters 1-7 over the period of one school year. Covering the first seven chapters in Year One allows approximately two days for each lesson and three or four days for each chapter review and testing. Students study the following chapters.

- Chapter 1 Exploring Expressions, Equations, and Functions
- Chapter 2 Exploring Rational Numbers
- Chapter 3 Solving Linear Equations
- Chapter 4 Using Proportional Reasoning
- Chapter 5 Graphing Relations and Functions
- Chapter 6 Analyzing Linear Equations
- Chapter 7 Solving Linear Inequalities

Although some lessons require special treatment, a pattern is used for teaching most lessons. In general, students should be asked to read the lesson and answer the Communicating Mathematics questions the night before the start of the lesson. Please

note that the Communicating Mathematics questions check students' understanding of the reading material. On the first day of the lesson, the teacher uses the 5-Minute Check, the Motivating the Lesson activity, the In-Class Examples (all in the Teacher's Wraparound Edition), any introductory labs or activities and the Guided Practice questions (in the Student Edition) to teach the lesson. The students are then assigned some of the exercises in the Practice section of the lesson. The answers for the odd exercises are found in the Selected Answers in the back of the Student Edition. Therefore, the students will be able to check their work as they complete the exercises.

On the second day, the teacher may use the Reteaching Activity, Alternative Learning Styles, Alternative Teaching Strategy, Error Analysis, Closing Activity, the Extension (all in the Teacher's Wraparound Edition), and any more in-depth activities.

Teachers should encourage their students to ask questions if they encountered difficulties with the previous assignment. Then students are assigned more of the Practice exercises, the Critical Thinking, Applications and Problem Solving, and the Mixed Review exercises. The students should be challenged, but well prepared, for this assignment.

In the days that follow, students are given another look at the lesson when they are assigned Mixed Review exercises from subsequent lessons. Since the Mixed Review exercises always include one exercise from the previous lesson, students will be confronted with exercises from most lessons for several consecutive school days.

Lesson Planning Guide, Year Two

Students start Year Two by reviewing the first six chapters. Review Worksheets are found in the Review and Assessment booklet, as well as in Chapter B of *Algebra 1: Integration, Applications, Connections, Volume Two*. The pacing guide suggests spending one week on each chapter. Teachers may need to adjust the time frame for the review to meet the needs of their students. If less time is used for reviewing Chapters 1-6, teachers can plan to spend more time on Chapters 8-13.

After the review, the lesson plans for Chapters 8-13 use the same format as in the first year. Students will study the following chapters.

- Chapter 8 Solving Systems of Linear Equations and Inequalities
- Chapter 9 Exploring Polynomials
- Chapter 10 Using Factoring
- Chapter 11 Exploring Quadratic and Exponential Functions
- Chapter 12 Exploring Rational Expressions and Equations
- Chapter 13 Exploring Radical Expressions and Equations

Review and Assessment Masters, Year One and Year Two

In the booklet for Year One, you will find masters for 12 Prerequisite Concepts, along with a Pretest and Posttest. This is called Chapter A. These masters can be used to check students' preparation for algebra concepts in the beginning of the first year. This booklet also contains two parallel forms of semester tests for Chapters 1-4 and Chapters 5-7, and two parallel forms of year-end tests.

In the booklet for Year Two, you will find masters for Review Worksheets for each lesson in Chapters 1-6, along with a Pretest and Posttest. This is called Chapter B. These masters can be used for review in the beginning of the second year. This booklet also contains two parallel forms of semester tests for Chapters 8-10 and Chapters 11-13, and two parallel forms of year-end tests.

Activities Masters, Year One and Year Two

The Algebra 1: Integration, Applications, Connections components have many activities and labs. The Activities Masters contain masters for even more activities specifically designed for students studying Algebra 1 in two years. The booklet for Year One contains a school-to-career activity, technology activity, modeling activity, and review game for each of Chapters 1-7. The booklet for Year Two contains these same activities for each of Chapters 8-13.

Block Scheduling Booklets, Year One and Year Two

The booklet for Year One provides a day-to-day plan for teaching Chapters 1-7 over the period of one school year when using block scheduling. The booklet for Year Two provides these plans for teaching Chapters 8-13 over one school year when using block scheduling.