Teacher's Annotated Edition

Algebra 2 with Trigonometry

Merrill Secondary Mathematics Series

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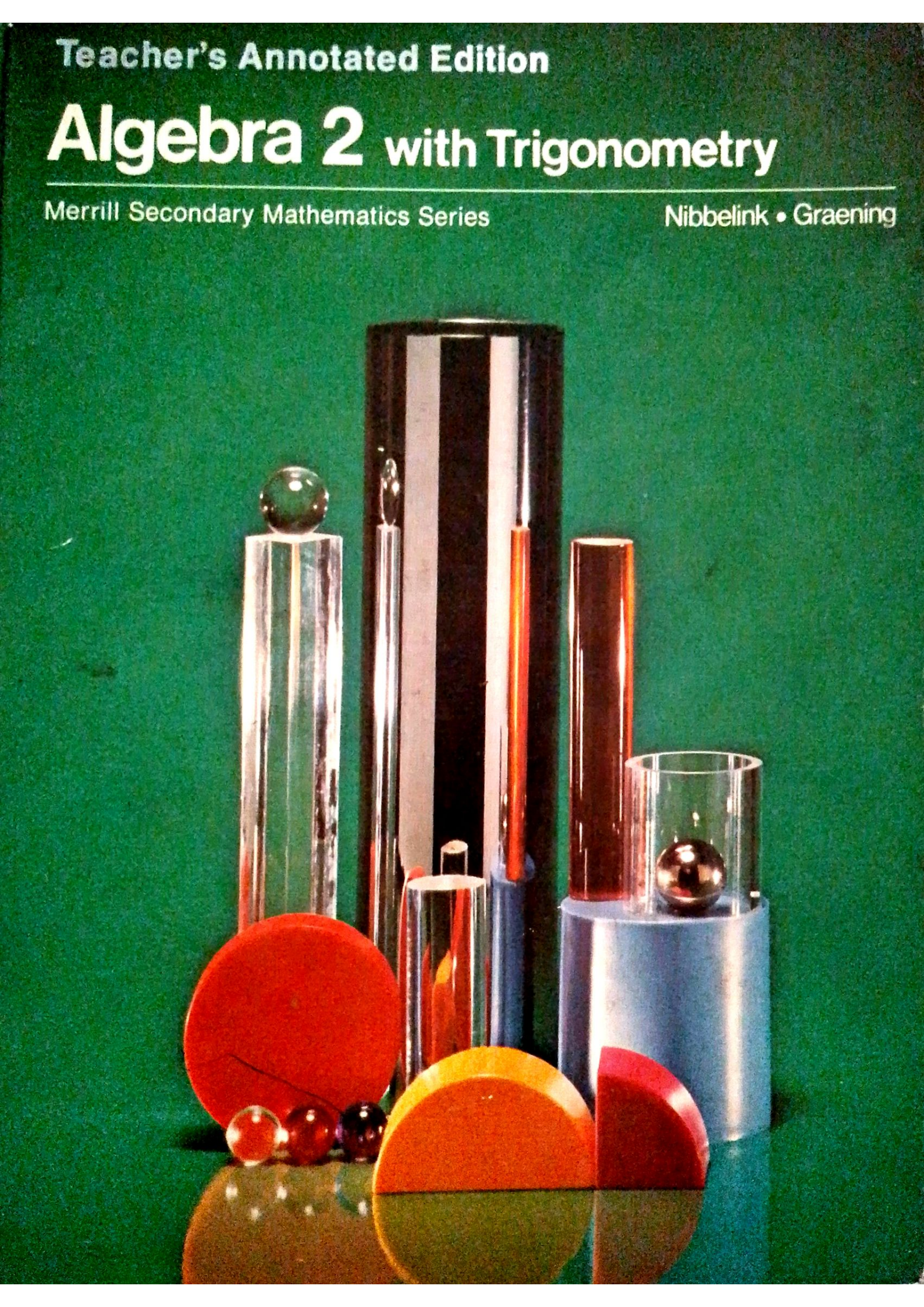

Contents of The Teacher's Guide

Chapter Overview

Each Chapter Overview contains information about such things as the relative importance of the various sections, teaching strategies for the chapter, and how a particular chapter relates to the text as a whole. Some Chapter Overviews present alternative sequencing of chapters and the prerequisites necessary for those alternatives.

Teaching Notes

The teaching notes on each section contain specific information on how to present material. Common student errors are identified to help the teacher recognize student difficulties. Suggestions for alternative methods are made where one method of presentation may not satisfy all students. Material and exercises critical to the development of the course are identified.

Time Schedules

There are two types of time schedules. The first applies to homogeneously grouped classes. The chart contains a maximum, an average, and a minimum course with suggested assignments of exercises. The second type of schedule applies to classes that contain students with widely varying abilities. The chart shows how the text may be used even in these heterogeneously grouped classes. By using this schedule, *all* students can be challenged throughout the year.

Answers

Whenever possible, answers to exercises and to any questions in the text appear on the annotated page of the student edition. However, because of space limitations some answers have been placed at the end of the related teaching notes in the Teacher's Guide.

Performance Objectives

Performance Objectives appear as annotations on the text pages near the beginning of each section. Phrases such as "The student should be able . . ." or "The student will be able . . ." are omitted from the beginning of each Performance Objective. It is left to the teacher to determine the percent of correct responses on exercises or tests that will indicate that an objective has been met.

Evaluation Program

A complete separate evaluation program is available in spirit duplicating form. Each question on Pretests and Posttests is keyed to a Performance Objective by the section number. The section numbers and answers are printed in nonreproducing form near the question.

Coding Exercises

In this Teacher's Annotated Edition certain exercises are coded either with a color dot (•) or a color ring (◯) around the numeral that identifies the exercise. This coding does not appear in the student edition.

• Exercises marked with this symbol provide a minimal but adequate assignment for a section. For slow students, especially those with reading handicaps, it may be appropriate to treat some of these exercises as class discussion rather than as homework assignments.

◯ Exercises marked with this symbo are provided to challenge able student These exercises may be assigned in add tion to those needed to teach or reinfor the material in a section.

Exercises not marked with either sym may be assigned at the teacher's discret to some or all students for additional p tice and reinforcement.

Ideal pacing and an accommodation

variety of student abilities may be accomplished by using the exercises to the best advantage.

Italics, Boldface, and Color Bars

Many words appear in the text in either **boldface** or *italic* type. The use of boldface type indicates an important concept that will be used throughout the text. The words are in boldface type when they appear in a "defining situation." (Some words, such as **set**, are undefined terms and students are usually given examples to clarify the use of the term as much as possible.) The use of italic type indicates words that are important in developing a concept but that are not a basic part of the course.

Students need not know these distinctions. For review purposes, a study of the words in boldface type is sufficient. Students need not be concerned about words in italic type for tests or quizzes.

Often, statements are set off between two color bars. These statements present either a summary of a discussion or a concept the students will use again. They are not necessarily definitions or theorems, but rather, important concepts students should learn.

Suggested Activities, Excursions in Mathematics, and Special Interest Pages

These optional materials appear throughout the book. They are provided as motivational aids and as a ready source of supplemental material for the teacher.

Excursions in Mathematics range in difficulty from very easy to very difficult. Some Excursions in Mathematics are merely interesting problems. Others contain material required by certain curriculums but which are not essential to the flow of this text. Some Excursions in Mathematics raise questions that extend concepts beyond what is presented in the text. Others clarify or reinforce material already presented in the text. Excursions in Mathematics should be assigned with care according to the needs and abilities of students. Some slow students may become discouraged by the open-ended questions designed to challenge able students to further inquiry. On the other hand, some able students may view the easy Excursions in Mathematics as unnecessary drill. All Excursions in Mathematics may be used for class discussion or assigned for independent work.

Suggested Activities are primarily student-centered research or experiments to be completed outside of class. Reports may be made in class concerning student experiences with these activities.

Special Interest Pages occur throughout the text. These motivating pages stress careers, recreations, history, or applications of mathematics. They may be used as starting points for class discussions or for further independent investigation by students.