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At-A-Glance

Appropriate Grade Levels

Grade Levels 8-12

Intended Use

The Glencoe/McGraw-Hill *Pre-Algebra*, *Algebra 1*, *Geometry*, and *Algebra 2* series:

- is intended for all secondary mathematics students;
- provides a balanced instructional approach to teaching mathematics;
- covers state standards and aligns to national standards, including American Diploma Project, The College Board Standards for Student Success, and the NCTM Standards.
- develops mathematics from the perspectives of skills and problem solving, real-world applications, and includes more rigor and depth of coverage in all topics within each title and across the series; and
- is vertically aligned to the Macmillan/Glencoe PK-8 series through content organization and development, visual design, and instructional approach.

Key Selling Points

- Vertically Aligned PreK-12 series for seamless transition between grade levels
- Strong emphasis on conceptual development, problem solving, and real-life applications
- Provides more in-depth and rigorous mathematics yet meets the needs of all students

- Includes problems and activities using the power of the new TI-Nspire graphing calculator
- Includes a thoughtfully planned and ongoing diagnostic and progress monitoring assessment system integrated with the Student Edition, the Teacher Edition and Teacher Resources, and online
- New, easy-to-use, and powerful CD-ROM, DVD, and online technologies

The Important Details

Glencoe *Pre-Algebra, Algebra 1, Geometry, and Algebra 2* is a new high school mathematics series. The series incorporates the objectives of the American Diploma Project from [achieve.org](http://www.achieve.org), the College Board Standards for Student Success, and NCTM Standards. Incorporated throughout each program in the series is a seamless approach to Response to Intervention (RTI). RTI is a new and highly-effective approach to help identify students at risk for learning disabilities and to work with all students to ensure their educational success.

Glencoe's *Pre-Algebra, Algebra 1, Geometry, and Algebra 2* programs include several key features intended to engage students' learning of high school mathematics.

- A new Chapter 0 conveniently placed at the beginning of the Student Edition provides instruction and practice on essential skills used throughout the textbook.
- An open lesson design provides more space between instruction, examples, and illustrations to aid students in reading mathematically, engages student interests, and encourages students to achieve new levels of mathematical success
- Student Edition activities incorporating the powerful features of the new TI-Nspire™ graphing calculator from Texas Instruments.
- Personal Tutor videos available for each example so students may receive additional instruction from a professional mathematics teacher anywhere they may have access to a computer.
- Increased depth in content development to meet the trend for more rigorous content in high school mathematics.
- A balance set of exercise problems for homework includes conceptual, skills, and application problems that are leveled accordingly for individualized assignments.
- Response to Intervention (RTI) resources permit teachers to quickly and easily address Tier I (Core), Tier II (Targeted), and Tier III (Intensive) levels of intervention.
- A new vision of e-Books with student monitoring capability through Glencoe's AdvanceTracker online system.
- Real-world Problem Solving Graphic Novels that deliver high interest and relevant applications in a format that is popular with today's students.
- Added chapter themes
- Dramatically increased teen relevance
- Added vertical method to equation solving
- Improved instructional plan by increasing use of Step 1, Step 2 and Method 1, Method 2
- Watched for items that impact learning disabled students; for example, avoided use of red and green, use of m and n and p and q in definitions, edited to reduce text, etc.
- Strengthened Probability and Statistics strand throughout the program, including adding a chapter on Probability to Geometry
- Organized the lesson bookmark to provide important information for the lesson in one convenient location

Focus on the Student Edition

- Sequencing of content is aligned to today's state standards.
- New lesson design that engages student interest and delivers mathematical content in a manner that encourages students to succeed.
- Complete Assessment System for continuous monitoring of students progress:
 - New **Get Ready for the Chapter** – helps diagnose student understanding of the prerequisite skills and concepts with targeted intervention, provides new and review vocabulary lists in English and Spanish, and helps students organize their notes with the proven effective of FOLDABLES®
 - New **Check Your Progress** – for immediate assessment of students' understanding of the concepts before moving forward
 - **Check Your Understanding** includes exercises aligned to the lesson examples to help students obtain help quickly and easily before starting on homework
 - New **Standardized Test Practice** section – covers the content of the lesson by mirroring today's state assessment and SAT/ACT formats
 - **Mid-Chapter** and **Chapter Tests** include a variety of assessment formats including short response, extended response, and multiple choice questions all keyed to the lessons for quick and easy help
 - Four-page **Standardized Test Preparation** at the end of each chapter includes a two-page detailed problem solving strategies with examples and practice followed by two pages of **Standardized Test Practice** by type
- New **Chapter 0** – provides focused review/instruction of skills and problem solving strategies
- **H.O.T. Problems** – Higher Order Thinking problems provides more in-depth problems for advance learners within the textbook
- New **Watch Out** labels are positioned throughout the lessons to alert students on possible misconceptions
- New exercises in the homework have added helpful labels such as **Multiple Representations**, **Standardized Test Practice**, and **Skills Review** to alert students and teachers on important exercise formats

Focus on the Teacher Edition

- **Differentiated Instruction** in lesson interleafs provide more instructional options to reach the variety of learners within the classroom.
- **Differentiated Homework Options** provides a guide to permit lessons assignments for all students within the textbook and not using worksheets.
- Step 4, Assess, provides formative assessment activities: **Name the Math**, **Ticket Out the Door**, **Yesterday's News**, and **Crystal Ball** providing a quick check for understanding at the end of each lesson.
- **Data Driven Decision Making** provides the teacher with the tools needed to help with intervention of struggling students.
- Correlations to **Algebra 1 Triumphs**, **Geometry Triumphs**, etc (intervention) permits the teacher to seamlessly transition between the Student Edition and Tier III intervention support

Focus on Print Resources

New Math Triumphs (Algebra 1, Geometry, and Algebra 2)

Exclusive Glencoe intensive intervention resources for students who are two or more years below grade level. The Math Triumphs series accompanies the *Algebra 1*, *Geometry*, and *Algebra 2* books with a similar design, providing step-by-step intervention, vocabulary support, and data-driven decision making to help students succeed in high school mathematics. Each

Triumph product includes an SE and TE and may be purchased separately for use with your other high school programs.

Chapter Resource Masters

Chapter and lesson level resources in one convenient location for the teacher

New Homework Study Workbook

Gives students the tools necessary to be active note-takers.

- Each lesson contains Active Vocabulary exercises for both new vocabulary terms and review vocabulary.
- Opportunities for students to use graphic organizers to organize their notes.
- Mnemonic devices to help students remember what they have learned.

Study Guide & Intervention Workbook

Provides additional reteaching opportunity for each lesson.

Real-World Problem Solving Graphic Novels (Algebra 1, Geometry, and Algebra 2)

Glencoe exclusive items that approach problem solving using high interest graphic novels covering topics in number sense, algebraic thinking, geometry, measurement, probability, statistics, and reasoning.

ELL Strategies for Success

Provides additional instructional strategies to help with the English Learning Learner.

Quick Review Math Handbook (Pre-Algebra and Algebra 1)

A one-stop reference resource for teachers, students, and parents.

Dinah Zike's Teaching Math with Foldables®

Provides instruction for use of this unique hands-on note-taking activity.

New Diagnostic and Placement Tests

Permits teachers to identify and place students into the appropriate textbook.

5-Minute Check Transparencies with Standardized Test Practice

Assists review of prior lessons with questions on transparencies.

Teaching with Manipulatives

Custom designed for each program to make it easier for teachers to incorporate manipulatives in each high school mathematics subject

Spanish Assessment Masters

Provide the chapter assessments in Spanish.

Focus on Technology Resources

All Glencoe software is Interactive Smart Board ready and includes:

StudentWorks™ Plus (CD-ROM or DVD)

Provides the complete student edition, student worksheets, personal tutors, concepts in motion, audio, and virtual manipulatives all in one location.

TeacherWorks™ Plus (CD-ROM or DVD)

This lesson planner and resource center allows the teacher to customize daily lesson plans and edit lesson level worksheets.

Exam View® Assessment Suite (version 6.1)

Correlated to all state standards and now permits 2-column assessment. A new feature also permits teachers the ability to download new state standards if the standards change after an adoption.

Interactive Classroom

Includes editable PowerPoint™ presentations for every lesson. Built-in resources include additional examples, 5-minute check questions, and concepts in motion. This software is compatible with TurningPoint classroom response systems.

eSolutions Manual Plus (formerly AssignmentWorks™)

Provides customized textbook practice sets with answer keys and worked out solutions.

Professional Development (Both DVD & online)

Videos and facilitators guides are perfect for individual mathematics teachers or departments and cover numerous content topics in mathematics as well as mathematics instruction and mathematics assessment

StudentWorks Online with Advance Tracker

The newest version of online eBooks one- or two-page viewing formats, audio, and concepts in motion, personal tutors, and all student worksheets at point of use along with the ability to monitor student progress and assign intervention to individuals, groups, or classes.

Differences from Prior Editions

(All new for ©2003, ©2004, ©2005, and ©2006 series and, except as qualified, are new when compared to the ©2008 series.)

Virtually everything has changed when compared to the 2008 and earlier copyrights. A few highlights are provided below:

- New lesson design, new photographs, new art and illustrations, new exercises, new lessons, new exercises, more content depth, and new print and technology components Chapter and Units have been rearranged to cover today's state curriculum and to provide timely completion of all content prior to the state assessments
- New **Chapter 0** provides coverage of essential skills, concepts, and problem solving strategies prior to beginning the first chapter. The chapter is designed for use as a beginning unit or as a convenient reference for students in need as mathematics refreshers on an ongoing basis
- New two-page **Get Ready for Chapter** format adds note-taking organizers (FOLDABLES®) and vocabulary prior to the start of the first lesson. The first [age continues our effective diagnostics on skills and concepts.
- Lessons begin with **Why?, Then, and Now** to make it easier for students to see the bigger picture of how mathematics is developed. The Why? feature presents very exciting real life connections to help students begin each lesson. Vocabulary and the lesson's **Math Online** support are all conveniently listed at the start of the lesson
- More Examples added within each lesson and **Personal Tutors** for every example
- **Check Your Progress** after examples to assess students understanding.
- **Check Your Understanding** practice set correlated to examples from the lesson.
- **H.O.T. Problems** designed for students to use Higher Order Thinking skills
- **Test Practice** directly correlated to the content of the lesson.
- **Real-World Problem-Solving Graphic Novels**
- **Data-Driven Decision Making** permits the teachers to identify gaps in learning and provide intervention.
- **Lesson Interleaf** provides new differentiated instructional strategies for teachers.



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