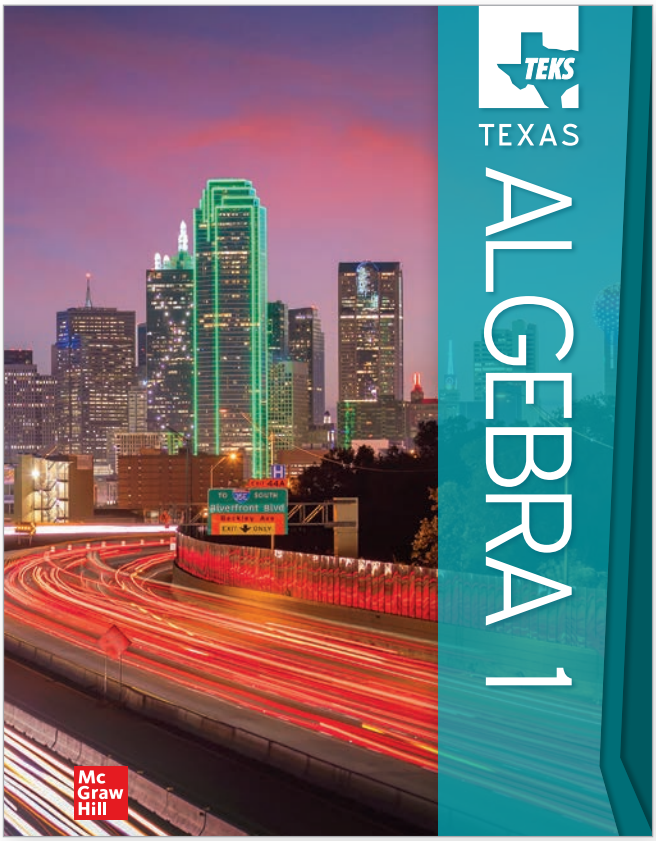
Mc Graw Hill

Program Overview

GRADES 9–12

TEKS TEXAS MATH

Algebra 1 • Geometry • Algebra 2 • Precalculus


TEKS
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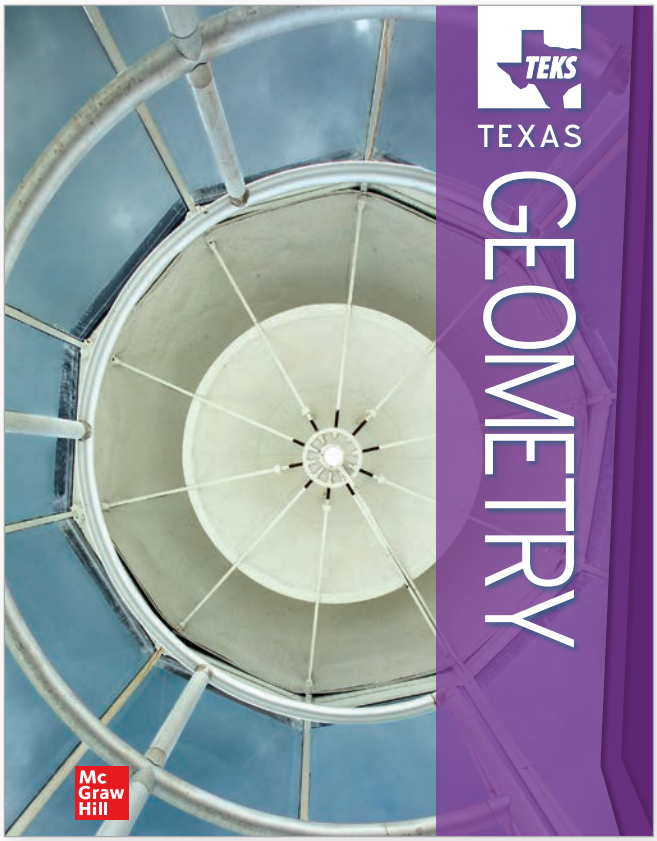
ALGEBRA 1
Mc Graw Hill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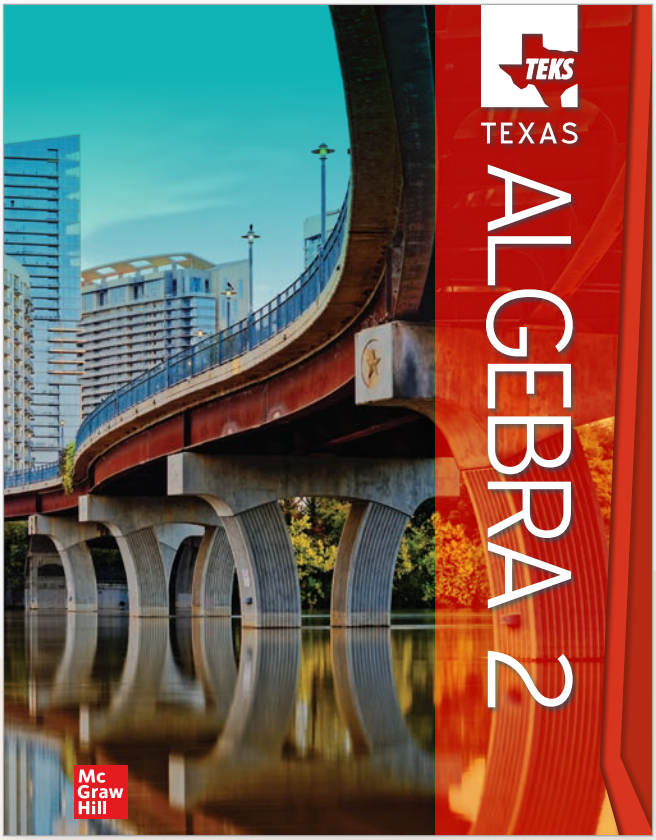
GEOMETRY
Mc Graw Hill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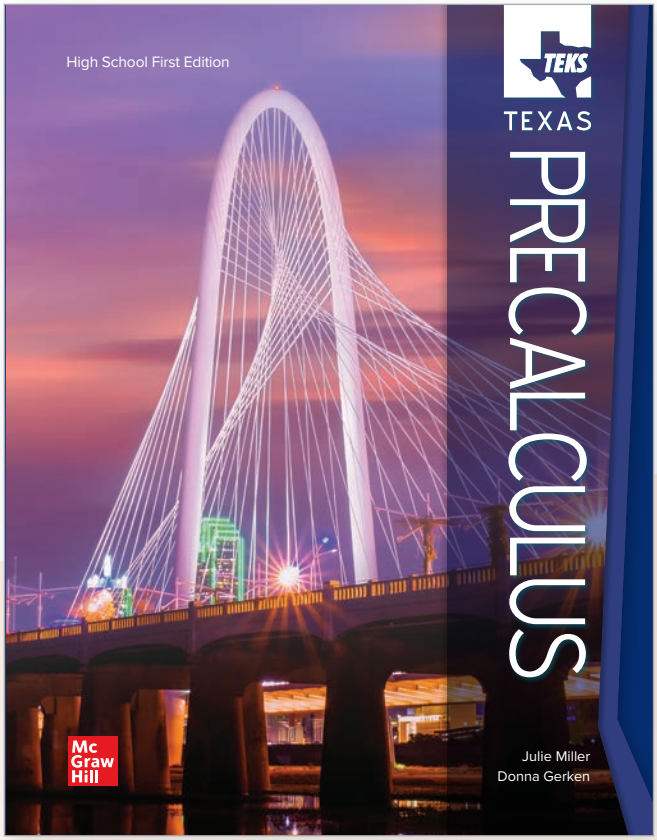

High School First Edition
TEKS
TEXAS
PRECALCULUS
Mc Graw Hill
Julie Miller
Donna Gerken

Welcome to McGraw Hill *Texas Math!*

Designed for Texas teachers, fully aligned to the TEKS, and built for student success.

We designed McGraw Hill *Texas Math* from the ground up to reflect the standards, rigor, and spirit of Texas classrooms, while supporting you with tools that make planning, teaching, and reaching every learner easier and more effective.

Inside *Texas Math* you'll find:

- Texas Essential Knowledge and Skills (TEKS) guidance in every lesson to help you plan with confidence.
- State of Texas Assessments of Academic Readiness (STAAR) and college placement test-aligned support, including item types, question stems, and practice that reflects the test.
- Step-by-step teaching support for every lesson.
- Embedded differentiation and scaffolded supports for diverse learners.
- Authentic connections to make math meaningful and relevant.
- Formative checks and summative assessments to guide instruction and monitor progress.

Built for Texas

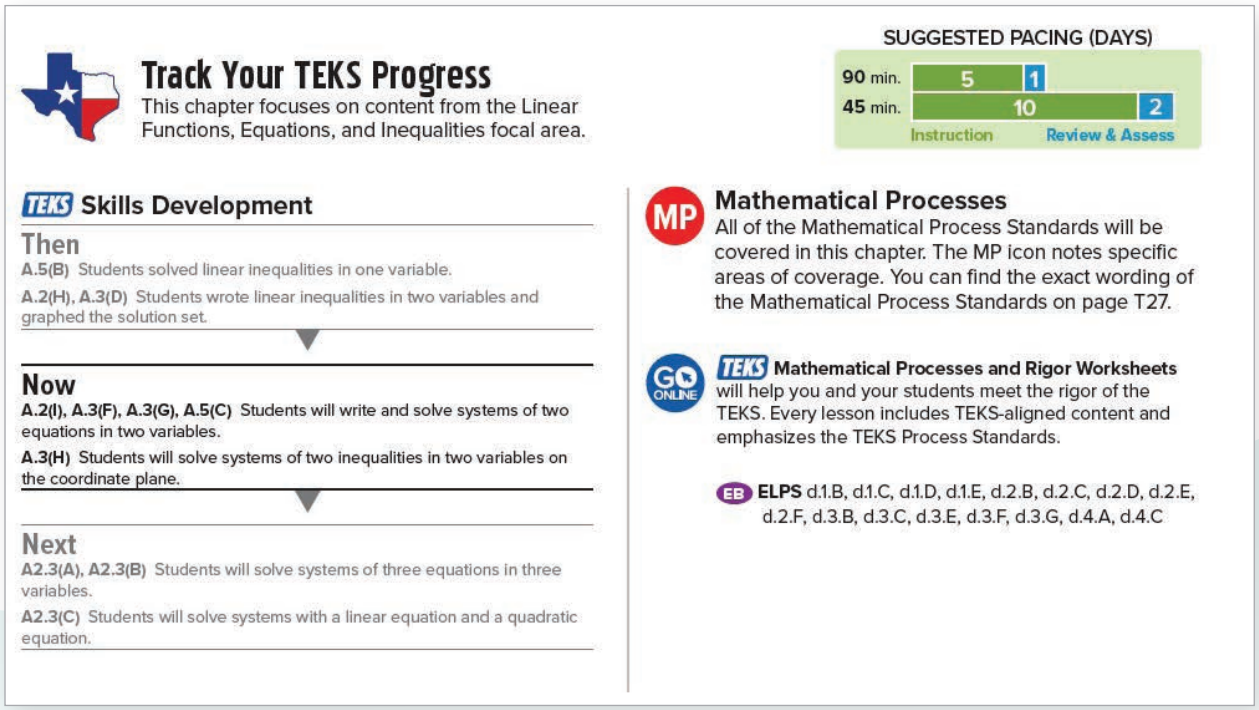
Instruction that meets the highest standards

Within each chapter of McGraw Hill *Texas Math*, you'll find:

- **Content-rich lessons** grounded in the TEKS, with a focus on conceptual understanding, procedural fluency, and real-world application.
- **Coherent progressions** across grade levels that build knowledge logically and intentionally.
- **Instructional support** to help you plan, teach, and assess with confidence.

Support every learner with seamless differentiation and English Language Proficiency Standards (ELPS) integration, including:

- **Language objectives** in each lesson supporting math and language learning together.
- **Key vocabulary** that is highlighted and reinforced in student-friendly ways.
- **Sentence starters, visual supports, and speaking opportunities** to encourage discourse and promote student confidence.
- **Differentiation** built into every lesson with tiered practice, scaffolds, and *ALEKS*® adaptive learning.



Track Your TEKS Progress
This chapter focuses on content from the Linear Functions, Equations, and Inequalities focal area.

SUGGESTED PACING (DAYS)

	Instruction	Review & Assess
90 min.	5	1
45 min.	10	2

TEKS Skills Development

Then
A.5(B) Students solved linear inequalities in one variable.
A.2(H), A.3(D) Students wrote linear inequalities in two variables and graphed the solution set.

Now
A.2(I), A.3(F), A.3(G), A.5(C) Students will write and solve systems of two equations in two variables.
A.3(H) Students will solve systems of two inequalities in two variables on the coordinate plane.

Next
A2.3(A), A2.3(B) Students will solve systems of three equations in three variables.
A2.3(C) Students will solve systems with a linear equation and a quadratic equation.

Mathematical Processes
All of the Mathematical Process Standards will be covered in this chapter. The MP icon notes specific areas of coverage. You can find the exact wording of the Mathematical Process Standards on page T27.

TEKS Mathematical Processes and Rigor Worksheets will help you and your students meet the rigor of the TEKS. Every lesson includes TEKS-aligned content and emphasizes the TEKS Process Standards.

ELPS d.1.B, d.1.C, d.1.D, d.1.E, d.2.B, d.2.C, d.2.D, d.2.E, d.2.F, d.3.B, d.3.C, d.3.E, d.3.F, d.3.G, d.4.A, d.4.C

Powered by McGraw Hill's Cutting-Edge Digital Platform

McGraw Hill *Texas Math* is more than a textbook—it's an interactive teaching and learning experience, powered by a dynamic digital platform. Designed with Texas educators in mind, the digital platform gives you the flexibility, visibility, and support you need to make every math minute count.

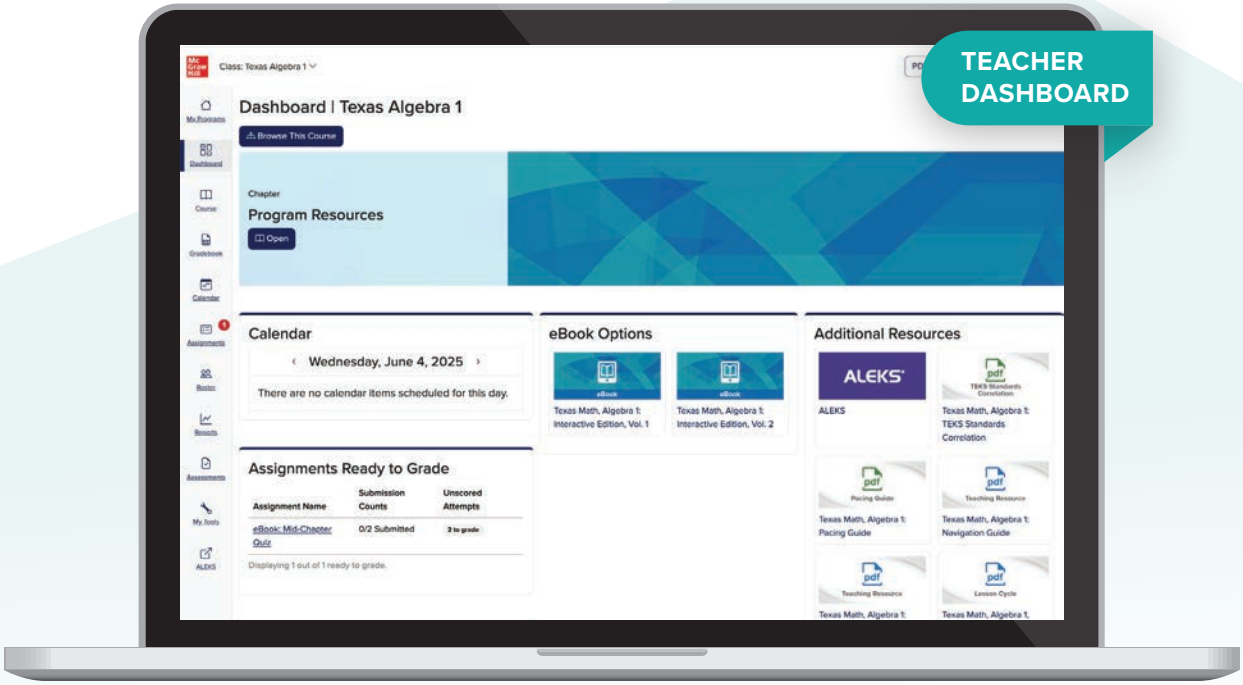
Your students have access to their own version of the digital platform, with resources such as the Student Edition eBook, calendar, and assignments. This setup empowers students to take ownership of learning by allowing them to manage schedules and track progress independently.

Learning that follows you

With the **McGraw Hill K–12 Portal Mobile App**, your students can study anywhere, even offline. Videos, eBooks, and tools are always accessible, so they can continue learning wherever they go.

Texas-led professional learning and expert support

Professional learning delivered by real Texas educators and ongoing support from the McGraw Hill team helps empower you to develop your teaching practice and implement the program with ease.

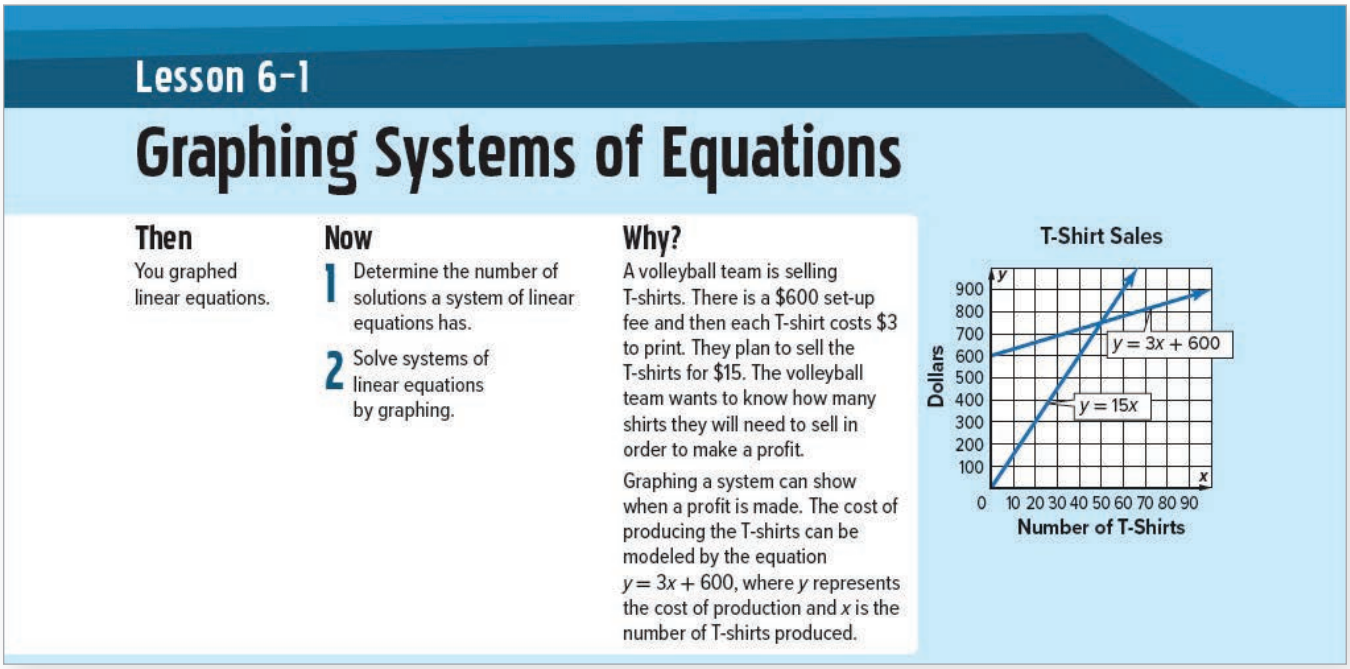


Built for Thinking Classrooms

In the best math classrooms, students don't just listen—they think! Every lesson in McGraw Hill *Texas Math* invites students to make sense of problems, share their reasoning, and learn from one another. You'll find opportunities to foster deep thinking at every level—including for accelerated learners and those who need a boost.

Problem-based learning starts every lesson

Begin with the **Launch**, an engaging task that gets students **talking, reasoning, and asking "why?"** from the start.



Lesson 6-1

Graphing Systems of Equations

Then

You graphed linear equations.

Now

1. Determine the number of solutions a system of linear equations has.
2. Solve systems of linear equations by graphing.

Why?

A volleyball team is selling T-shirts. There is a $600 set-up fee and then each T-shirt costs $3 to print. They plan to sell the T-shirts for $15. The volleyball team wants to know how many shirts they will need to sell in order to make a profit.

Graphing a system can show when a profit is made. The cost of producing the T-shirts can be modeled by the equation $y = 3x + 600$, where y represents the cost of production and x is the number of T-shirts produced.

Tasks that cultivate divergent thinking

Lessons encourage students to use different tools and approaches to solve problems and justify their thinking. **Open-ended questions and activities** promote self-analysis and collaboration.

Structured collaboration and discussion

Partner and group tasks are built into each lesson, supported by teacher prompts that guide students toward constructive dialogue and deeper understanding.

Designed to stretch, structured for growth

Teachers guide learning with **intentionally scaffolded activities** that help students wrestle with ideas before formal instruction.

McGraw Hill *Texas Math* gives you exclusive, ready-to-use tools and lesson features that make it simple to get students **thinking, talking, and exploring every day.**

Apply Math to the Real World

- **Explore open-ended problems**. Each unit starts with a real-world scenario connected with the chapter topics, encouraging sense-making and reasoning before formal procedures are introduced.

Foldables by Dinah Zike

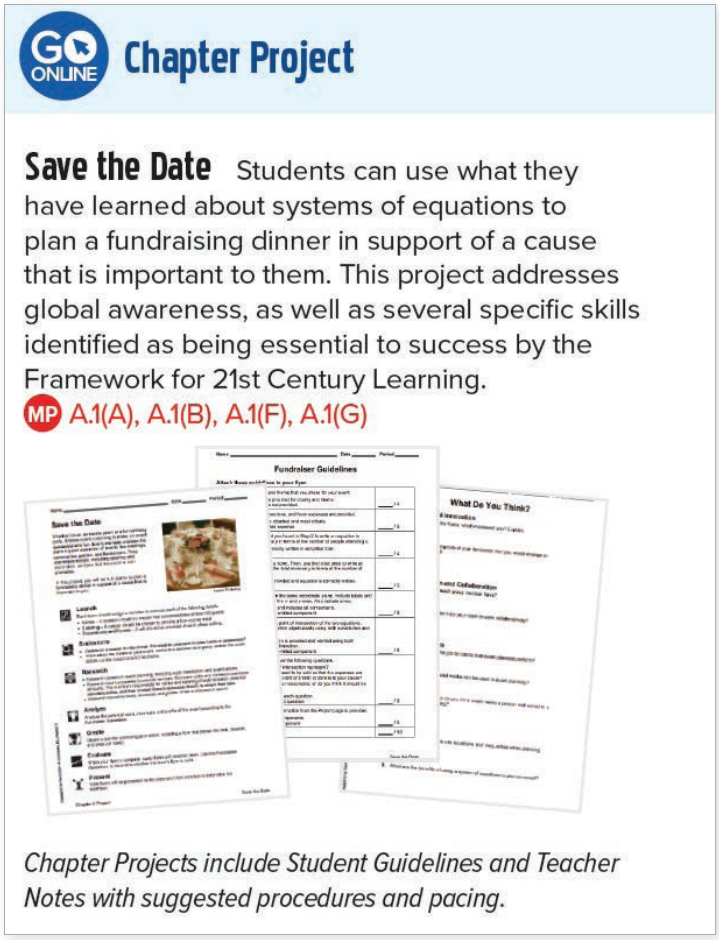
- **Make thinking visible.** Foldables help students organize and reflect on concepts by creating personalized visual references.

Chapter Projects

- **Engage in hands-on application**. Chapter projects challenge students to synthesize multiple skills learned across a chapter to solve a complex problem or complete an authentic task.

Error Analysis

- **Learn from mistakes together.** Students critique incorrect solutions, deepening their understanding of math and building critical thinking.



Chapter Projects include Student Guidelines and Teacher Notes with suggested procedures and pacing.

Structured for Success: The High School Lesson Model

The McGraw Hill *Texas Math* lesson model is structured to engage students through a clear progression. Interactive tools, real-world connections, and differentiated activities ensure mastery of mathematical concepts.

LAUNCH

Engage students in the **Launch** by activating prior knowledge, sparking curiosity, and connecting the lesson to real-world contexts through warm-up activities and essential questions.

TEACH

Throughout the **Teach**, scaffolded questions for each example build conceptual understanding for students at all levels. Visual aids and **Guided Practice** build fluency and ensure understanding.

Mathematical Process Standards

Emphasis On	Exercises
A.1(A) Apply math to the real world	9, 25, 26, 40
A.1(B) Use a problem-solving model	39, 53–55
A.1(D) Use multiple representations	46
A.1(E) Organize ideas	1–8, 10–24, 27–38, 41–45, 51, 53
A.1(F) Analyze relationships	47, 50, 52
A.1(G) Justify arguments	48, 49

MP

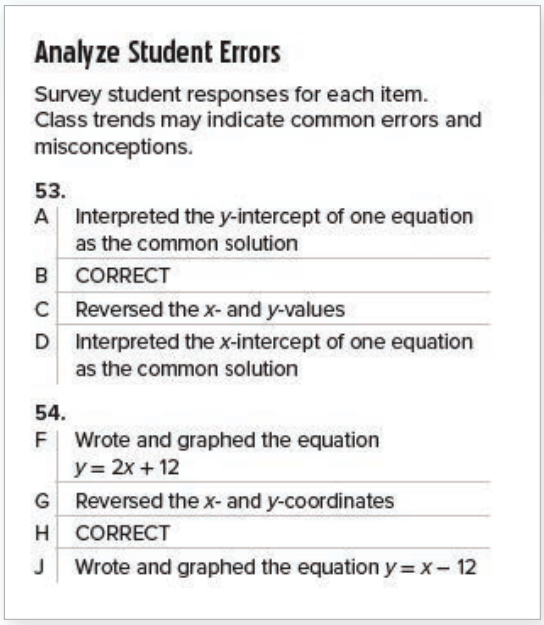
Standards for Mathematical Practice (MPs) are intentionally and strategically integrated into each lesson component.

PRACTICE

Students **Practice** and apply their learning through independent exercises, collaborative activities, and real-world problems, reinforcing skills and promoting deeper comprehension.

ASSESS

Assess student understanding through formative checks, quizzes, and digital tools that provide immediate feedback, helping you and your students identify areas for improvement.



Analyze Student Errors

Survey student responses for each item. Class trends may indicate common errors and misconceptions.

53.

A	Interpreted the *y*-intercept of one equation as the common solution
B	CORRECT
C	Reversed the *x*- and *y*-values
D	Interpreted the *x*-intercept of one equation as the common solution

54.

F	Wrote and graphed the equation $y = 2x + 12$
G	Reversed the *x*- and *y*-coordinates
H	CORRECT
J	Wrote and graphed the equation $y = x - 12$

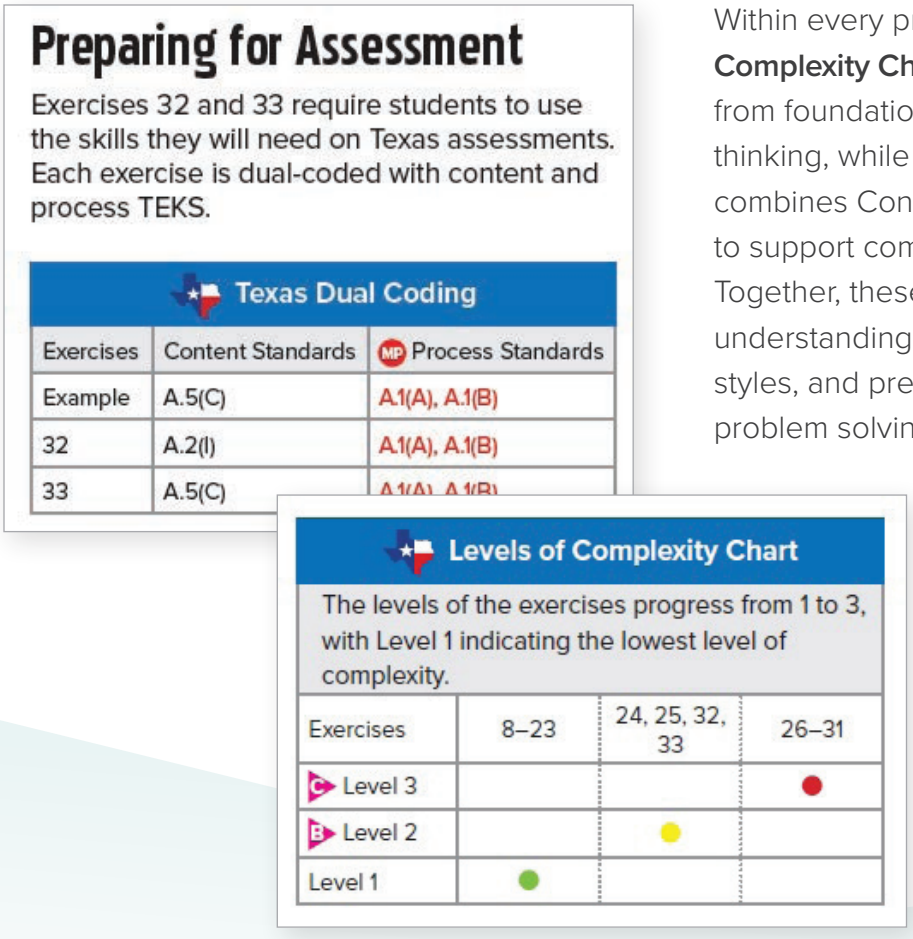
Built-in guidance helps to analyze student errors during assessment, diagnose the nature of the errors, and provide meaningful feedback.

Practice

McGraw Hill *Texas Math* provides cycles of learning, practice, and assessment to help you pinpoint where students need support and keep them on the path to TEKS mastery.

Targeted practice types are designed to build mathematical proficiency and prepare students for advanced concepts and authentic applications:

- **Conceptual practice** focuses on understanding key concepts and developing a strong foundation.
- **Problem-solving practice** offers multistep problems that require critical thinking and application of multiple concepts, enhancing analytical and reasoning skills.
- **Contextualized problems** connect math concepts to authentic practice scenarios, fostering relevance and engagement.
- **Test preparation** practice aligned with state assessments and college readiness exams helps students build confidence and competence for standardized tests.



Preparing for Assessment

Exercises 32 and 33 require students to use the skills they will need on Texas assessments. Each exercise is dual-coded with content and process TEKS.

Texas Dual Coding

Exercises	Content Standards	MP Process Standards
Example	A.5(C)	A.1(A), A.1(B)
32	A.2(I)	A.1(A), A.1(B)
33	A.5(C)	A.1(A), A.1(B)

Levels of Complexity Chart

The levels of the exercises progress from 1 to 3, with Level 1 indicating the lowest level of complexity.

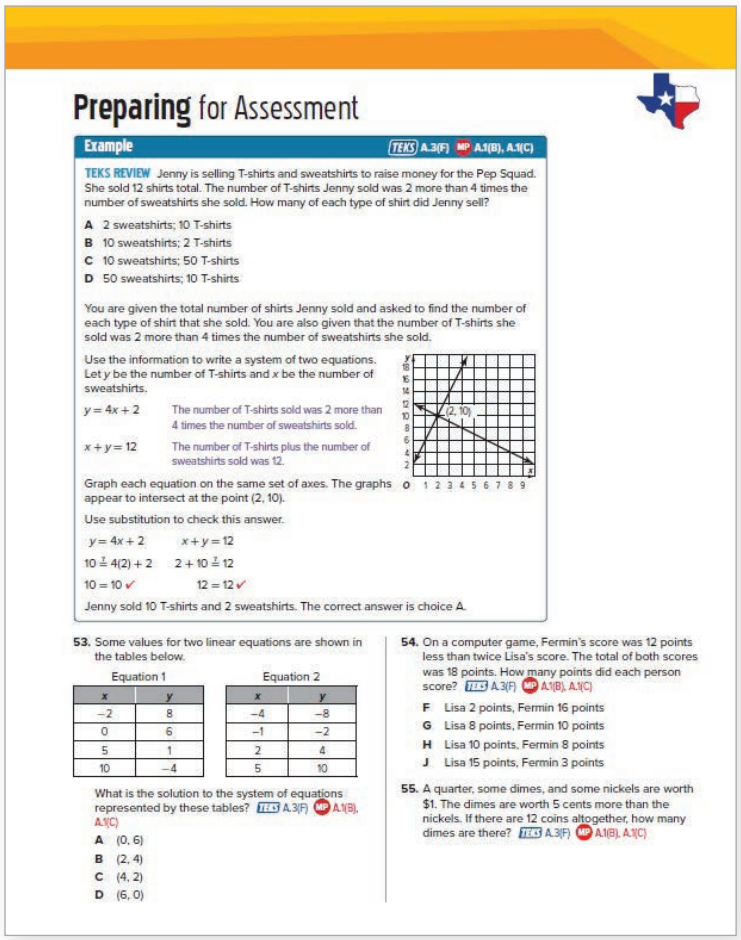
Exercises	8–23	24, 25, 32, 33	26–31
C Level 3			●
B Level 2		●	
Level 1	●		

Within every practice set, the **Levels of Complexity Chart** indicates the progression from foundational skills to higher-order thinking, while **Texas Dual Coding** combines Content and Process Standards to support comprehension and retention. Together, these strategies promote deeper understanding, cater to diverse learning styles, and prepare students for complex problem solving.

Assessment That Works for You

Flexible, easy-to-use tools that help drive instruction

McGraw Hill *Texas Math* gives you the tools to understand how your students are doing—and what to do next. With a wide variety of assessments built into the program, it's easy to check in on student learning, adjust instruction, and keep everyone moving forward.



Preparing for Assessment

Example TEKS A.3(F) MP A.1(B), A.1(C)

TEKS REVIEW Jenny is selling T-shirts and sweatshirts to raise money for the Pep Squad. She sold 12 shirts total. The number of T-shirts Jenny sold was 2 more than 4 times the number of sweatshirts she sold. How many of each type of shirt did Jenny sell?

A 2 sweatshirts; 10 T-shirts
B 10 sweatshirts; 2 T-shirts
C 10 sweatshirts; 50 T-shirts
D 50 sweatshirts; 10 T-shirts

You are given the total number of shirts Jenny sold and asked to find the number of each type of shirt that she sold. You are also given that the number of T-shirts she sold was 2 more than 4 times the number of sweatshirts she sold.

Use the information to write a system of two equations. Let y be the number of T-shirts and x be the number of sweatshirts.

$y = 4x + 2$ The number of T-shirts sold was 2 more than 4 times the number of sweatshirts sold.

$x + y = 12$ The number of T-shirts plus the number of sweatshirts sold was 12.

Graph each equation on the same set of axes. The graphs appear to intersect at the point (2, 10).

Use substitution to check this answer.

$y = 4x + 2$ $\quad x + y = 12$

$10 \stackrel{?}{=} 4(2) + 2$ $\quad 2 + 10 \stackrel{?}{=} 12$

$10 = 10$ ✓ $\quad 12 = 12$ ✓

Jenny sold 10 T-shirts and 2 sweatshirts. The correct answer is choice A.

53. Some values for two linear equations are shown in the tables below.

Equation 1

x	y
−2	8
0	6
5	1
10	−4

Equation 2

x	y
−4	−8
−1	−2
2	4
5	10

What is the solution to the system of equations represented by these tables? TEKS A.3(F) MP A.1(B), A.1(C)

A (0, 6)
B (2, 4)
C (4, 2)
D (6, 0)

54. On a computer game, Fermin's score was 12 points less than twice Lisa's score. The total of both scores was 18 points. How many points did each person score? TEKS A.3(F) MP A.1(B), A.1(C)

F Lisa 2 points, Fermin 16 points
G Lisa 8 points, Fermin 10 points
H Lisa 10 points, Fermin 8 points
J Lisa 15 points, Fermin 3 points

55. A quarter, some dimes, and some nickels are worth $1. The dimes are worth 5 cents more than the nickels. If there are 12 coins altogether, how many dimes are there? TEKS A.3(F) MP A.1(B), A.1(C)

Are You Ready?

Spot gaps before new content is taught so you can target just-right support from the start.

Chapter Pretests

Pinpoint students' skill levels early to guide review and instruction.

Mid-Chapter Checks

Get a quick read on where students are and what they've picked up so far.

Vocabulary Checks

Make sure students have the language they need to talk and think about math.

Chapter Tests

Track progress with flexible options for all learners, from on-level to advanced.

Standardized Test Practice

Help students feel prepared with questions that mirror what they'll see on state tests.

Smarter Data to Drive Instruction

Powerful reporting tools built into the digital platform make it easier than ever for teachers to access the information they need, when they need it. Whether you're reviewing individual student progress or trends across your entire class, reports are designed to be intuitive, actionable, and TEKS-aligned.

Real-time information

TEKS-Aligned Mastery Reports

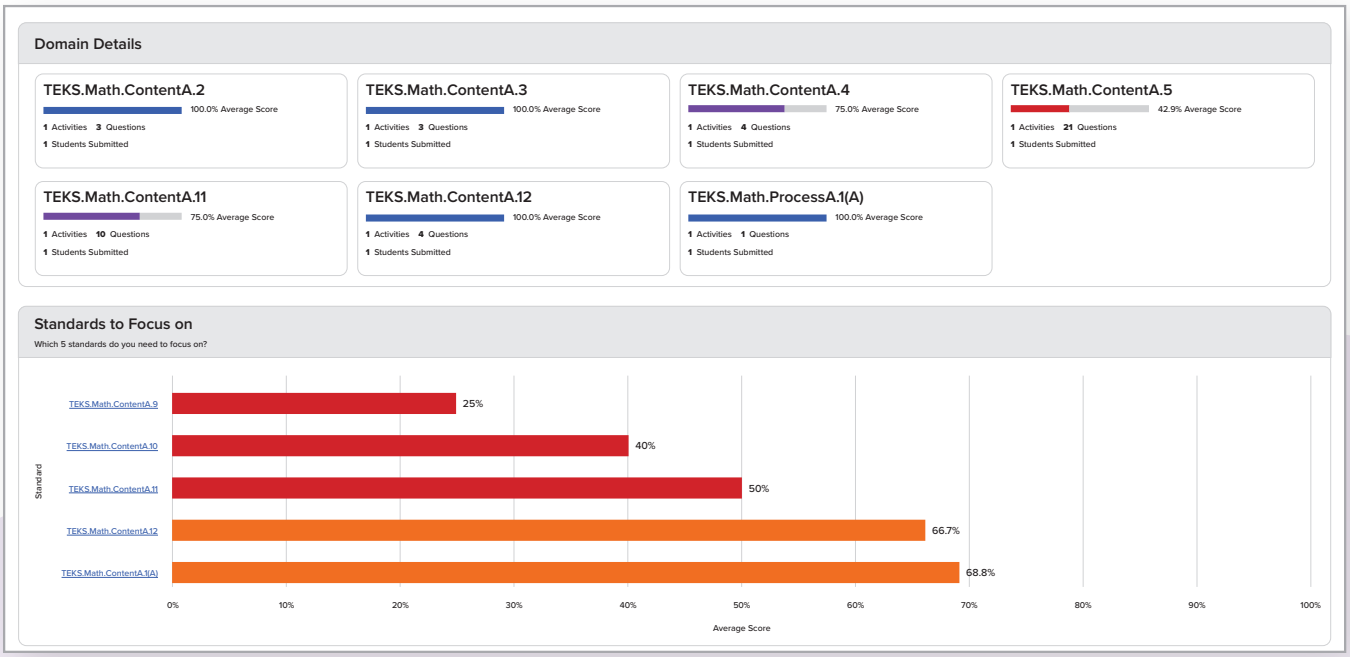
See exactly which standards students have mastered—and which ones need more support. Whether you're planning a whole class review or for differentiated instruction, these reports make it easy to pinpoint the next steps.

Assignment and Assessment Reports

Get quick, color-coded summaries of student performance on assignments, quizzes, and tests. Filter by question type, standard, or objective to learn more about where students are thriving or struggling.

Growth Over Time

Monitor student progress across units, semesters, or the full year. These longitudinal views help you celebrate growth and quickly identify learning gaps.

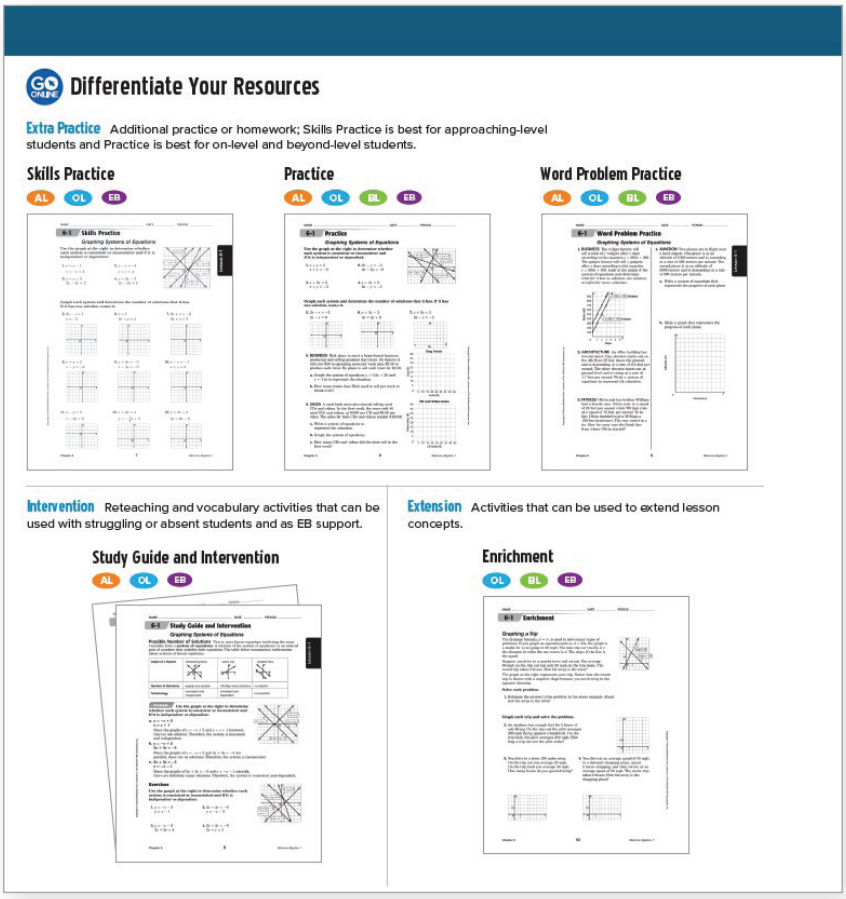


Support Every Learner, Every Day

McGraw Hill *Texas Math* is built to make differentiation easier, so you can meet students where they are—freeing your time to focus on what matters most.

Differentiation is built into every lesson, with multiple entry points, practice options, and a mix of supports and extensions to serve every learner.

- **Reteach Practice** provides additional examples and practice for students who need extra support.
- **Enrich Practice** provides students with valuable opportunities for extension.
- **Differentiated Activities** offer practice opportunities for On-Level, Approaching-Level, and Beyond-Level Learners.

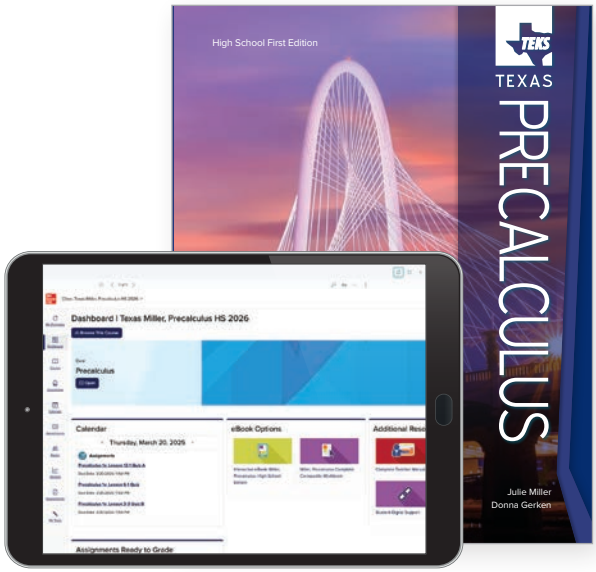


Built-in support like sentence frames, graphic organizers, and worked examples help all students access rigorous content.

ELPS-aligned supports, with 100% ELPS coverage built right into lessons, give you guidance and strategies to help students develop math understanding and academic language together.

Texas Precalculus
High School, First Edition, ©2026

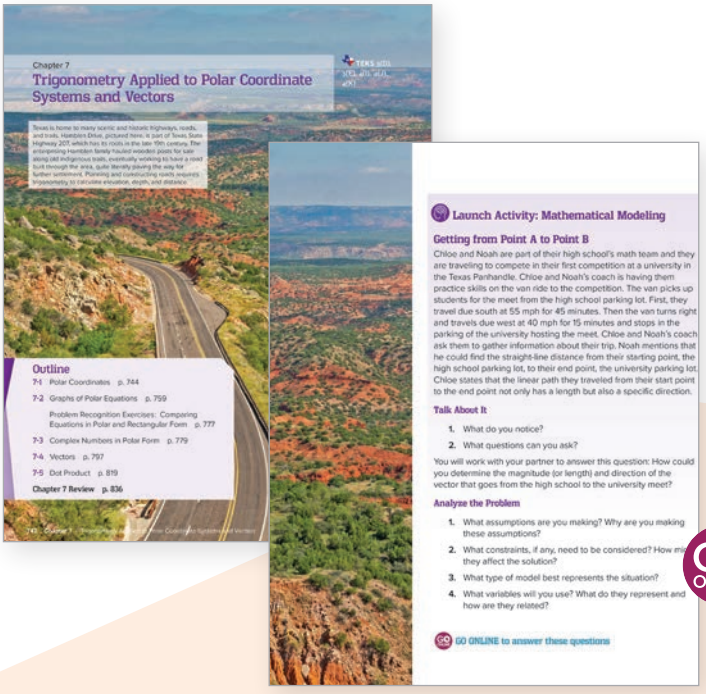
Texas Precalculus is fully aligned to the TEKS and crafted specifically for the diverse group of students who will take this course as part of their high school math pathway. This text is organized around clear objectives, with abundant examples, and opportunities for students to develop mastery.



Examples and concepts are connected to a wide range of applied topics, certain to appeal to students from a wide range of backgrounds and interests, including business, chemistry, health, astronautics, education, sports, travel, and more.

Stunning visuals, intuitive layout

Each chapter opens with a bright visual related to the topic of the **Launch Activity**, many of which are specifically chosen for the Texas classroom. Captions emphasize the state's rich history, culture, and foundational principles, while helpful icons indicate the TEKS standards covered.



The **Launch Activity** helps students to develop their comfort and confidence with the mathematical practices, including modeling, asking questions, and using mathematical reasoning.

GO ONLINE

Students can work independently or collaboratively in groups to answer the **Launch Activity** questions provided in the digital course.

Guided learning

Each chapter is divided into lessons, which follow a predictable pattern. This structure and repetition help students build their foundational understanding of the concepts.

Learn: Use the Distance and Midpoint Formulas

Recall that the distance between two points A and B on a number line can be represented by $|A - B|$ or $|B - A|$. Now we want to find the distance between two points in a coordinate plane. For example, consider the points (1, 5) and (4, 9). The distance d between the points is labeled in Figure 1-3. The dashed horizontal and vertical line segments form a right triangle with hypotenuse d.

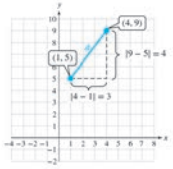


Figure 1-3

The horizontal distance between the points is $|4 - 1| = 3$.

The vertical distance between the points is $|9 - 5| = 4$.

Chapter Lessons are divided into **Learn** sections, which focus on a particular topic or skill. Each **Learn** section starts with a **Learn** statement and models a fully guided example for students to follow.

Examples are fully worked out with step-by-step explanations, illustrations, and detailed solutions. Students build confidence in their own problem-solving ability and are immediately able to apply the skills they've learned in the **Apply the Skills** exercise.

Example 1: Finding the Distance Between Two Points

Find the distance between the points (−5, 1) and (7, −3). Give the exact distance and an approximation to 2 decimal places.

Solution:

$(-5, 1)$ and $(7, -3)$ (x_1, y_1) and (x_2, y_2)	Label the points. Note that the choice for (x_1, y_1) and (x_2, y_2) will not affect the outcome.
$d = \sqrt{[7 - (-5)]^2 + (-3 - 1)^2}$	Apply the distance formula. $d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$
$= \sqrt{(12)^2 + (-4)^2}$	Simplify the radical.
$= \sqrt{160}$	
$= 4\sqrt{10} \approx 12.65$	The exact distance is $4\sqrt{10}$ units. This is approximately 12.65 units.

Apply the Skills

1. Find the distance between the points (−1, 4) and (3, −6). Give the exact distance and an approximation to 2 decimal places.

Meaningful practice

Scaffolded practice helps students build toward independent problem-solving. Several boxed reminders prompt students to double-check the assumptions they are making while problem solving.

Insights

Since $(x_2 - x_1)^2 = (x_1 - x_2)^2$ and $(y_2 - y_1)^2 = (y_1 - y_2)^2$, the distance formula can also be expressed as

$$d = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}.$$

Good Practices

The name of a function can be represented by any letter or symbol. However, lowercase letters such as f, g, h, and so on are often used.

Check Your Work

By clearing fractions, the result of Example 1 can be checked by multiplication.

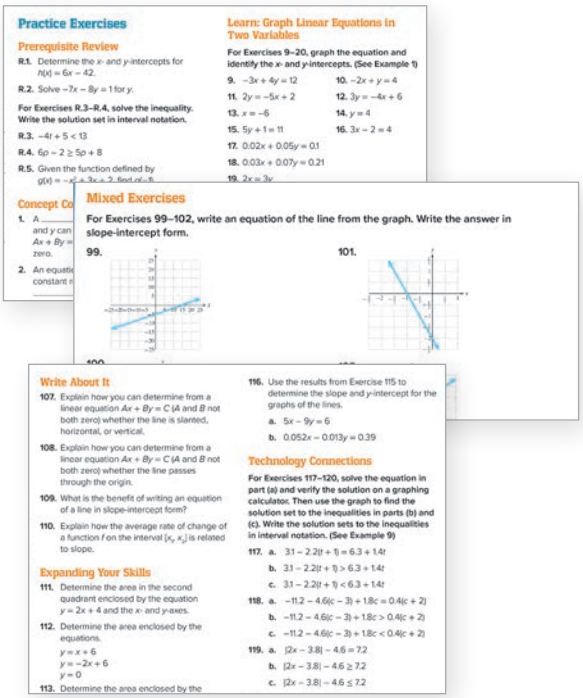
$$\text{Dividend} = (\text{Divisor})(\text{Quotient}) + \text{Remainder}$$
$$6x^3 - 5x^2 - 3 \stackrel{?}{=} (3x + 2)(2x^2 - 3x + 2) + (-7)$$
$$\stackrel{?}{=} 6x^3 - 5x^2 + 4 + (-7)$$
$$\stackrel{?}{=} 6x^3 - 5x^2 - 3 \checkmark$$

Insights provide additional context or explanations, offering an alternate formula or way of thinking about a problem.

Good Practices and **Check Your Work** encourage students to slow down and refresh their problem-solving skills.

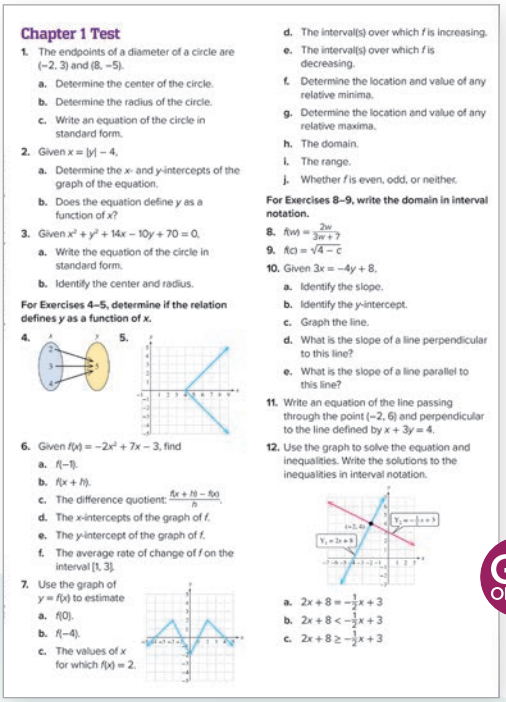
Abundant and varied lesson assessments

Each lesson ends with a graded, varied, and carefully organized set of **Practice Exercises**. Several strands of problems are present to review the full breadth of knowledge covered in each lesson:



- **Prerequisite Review** opens each practice set.
- **Concept Connections** provide vocabulary and key concept review.
- **Mixed Exercises** review topics across multiple learning objectives.
- **Write About It** emphasizes mathematical language.
- **Expanding Your Skills** broadens students' understanding.
- **Technology Connections** offer problems to solve and verify with students' graphing calculators.

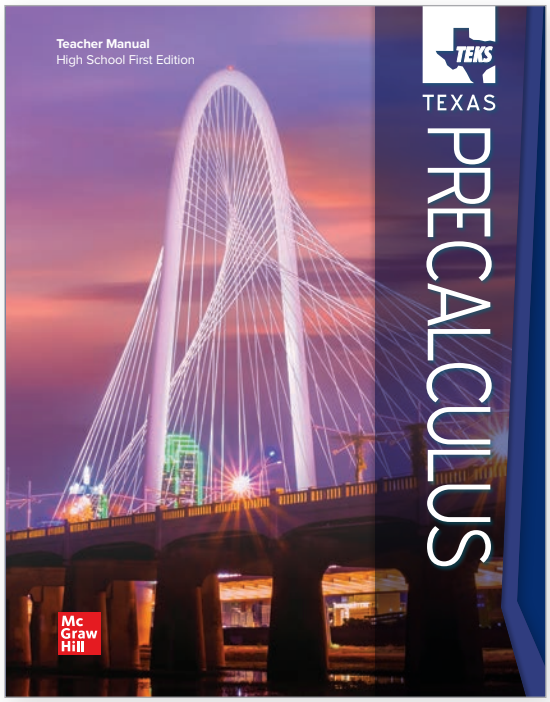
Robust, versioned assessments



The **Chapter Test** assesses students on all the learning objectives covered in the chapter and can be used for self-study and review.

Additional online, versioned **Lesson Quizzes**, with varied questions and order, ensure academic integrity. The digital resources also include an expansive, editable question bank.

Key features for *Texas Precalculus* teachers



The *Texas Precalculus* Teacher Manual provides pacing charts, answer keys, and teaching tips and helps to build inclusive, engaging lectures with guided notes and support for differentiated instruction and language learning.

TEKS correlations are listed throughout to easily pinpoint where the course aligns to essential state standards. A full correlation is available in the digital course.

- **Pairing Examples and Exercises** save teachers time and help to build lectures and presentations.
- **Guided Lecture Notes** are keyed to the objectives in each section of the text. The notes step through the material with a series of questions and exercises that can be used in conjunction with lecture.
- **Classroom Activities**, including online and in-class exercises, encourage collaboration and build confidence:
  - **WolframAlpha® activities** foster active learning.
  - **Group Activities** for each chapter promote classroom discussion and collaboration.
  - **Problem Recognition Exercises** used as worksheets help students determine appropriate methods of solutions for related problem types.
  - **ELPS activities** available for each chapter support language acquisition and mastery with full standards alignment.

Personalized, TEKS-Aligned Support, Powered by *ALEKS*®

ALEKS is an adaptive learning platform that uses artificial intelligence to pinpoint what each student knows, what they're ready to learn next, and how best to get them there. Built on decades of research and aligned to the TEKS, *ALEKS* is seamlessly integrated into McGraw Hill *Texas Math* and *Texas Precalculus*.

Adapts to the individual

ALEKS provides a personalized learning experience tailored to students' unique needs. It helps students identify their current knowledge level, pinpoint gaps in understanding, and focus on mastering concepts at their own pace.

Builds real mastery

ALEKS provides an individual learning pathway for each student that includes both instructional support and supplemental practice opportunities. TEKS mastery is maintained over time with periodic Knowledge Checks that reinforce learning.

Closes gaps and accelerates growth

Whether a student is working below grade level or ready to advance, *ALEKS* meets them where they are and targets the exact skills they need to grow. Students can progress faster than the pace of the core classroom when they're ready, empowering ownership of learning.

Flexible and empowering

Whether used in class, in tutoring, or at home, *ALEKS* is fully accessible and supports all learners through intuitive design and read-aloud options.

Actionable data and built-in tools

ALEKS includes powerful tools and insights to assess student learning and adapt instruction, including:

- Real-time reports
- Automatic assignment suggestions
- Data-driven grouping tools
- Support for differentiation and response to intervention

TEXAS MATH

Algebra 1 • Geometry • Algebra 2 • Precalculus

Scan the QR code or visit **mhetexas.com/math** to learn more about McGraw Hill *Texas Math*.

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