

McGraw Hill LLC

English Mathematics, 6
 Texas Math Course 1 (Grade 6)

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
Full-Subject, Tier-1	9781266559365	Both Print and Digital	Static

Rating Overview

TEKS SCORE	ELPS SCORE	ERROR CORRECTIONS (IMRA Reviewers)	SUITABILITY NONCOMPLIANCE	SUITABILITY EXCELLENCE	PUBLIC FEEDBACK (COUNT)
100%	100%	42	Flags Addressed	Flags in Report	0

Quality Rubric Section

RUBRIC SECTION	RAW SCORE	PERCENTAGE
1. Intentional Instructional Design	28 out of 28	100%
2. Progress Monitoring	26 out of 26	100%
3. Supports for All Learners	27 out of 27	100%
4. Depth and Coherence of Key Concepts	19 out of 19	100%
5. Balance of Conceptual and Procedural Understanding	40 out of 41	98%
6. Productive Struggle	22 out of 22	100%

Breakdown by Suitability Noncompliance and Excellence Categories

SUITABILITY NONCOMPLIANCE FLAGS BY CATEGORY	IMRA REVIEWERS	PUBLIC	Flags NOT Addressed by November Vote
1. Prohibition on Common Core	0	0	0
2. Alignment with Public Education's Constitutional Goal	0	0	0
3. Parental Rights and Responsibilities	0	0	0
4. Prohibition on Forced Political Activity	0	0	0
5. Protecting Children's Innocence	2	0	0
6. Promoting Sexual Risk Avoidance	0	0	0
7. Compliance with the Children's Internet Protection Act (CIPA)	0	0	0

SUITABILITY EXCELLENCE FLAGS BY CATEGORY	IMRA REVIEWERS
Category 2: Alignment with Public Education's Constitutional Goal	11
Category 6: Promoting Sexual Risk Avoidance	0

IMRA Quality Report

1. Intentional Instructional Design

Materials support educators in effective implementation through intentional course and lesson-level design.

1.1 Course-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.1a	All criteria for guidance met.	4/4
1.1b	All criteria for guidance met.	2/2
1.1c	All criteria for guidance met.	2/2
1.1d	All criteria for guidance met.	2/2
1.1e	All criteria for guidance met.	2/2
—	TOTAL	12/12

1.1a – Materials include a scope and sequence outlining the TEKS, ELPS, and concepts taught in the course.

The materials provide a detailed scope and sequence outlining the concepts taught in *Texas Math, Course 1 (Grade 6)*. For example, the "Scope and Sequence" states that in Lesson 2-2: "Divide Decimals by Decimals," students address TEKS 6.3E, which requires them to "fluently divide decimals."

The materials include a scope and sequence that identifies the Texas Essential Knowledge and Skills (TEKS) and English Language Proficiency Standards (ELPS) addressed in each unit. For example, the grade 6 "Scope and Sequence" indicates that the "Focal Area: Measurement and Data" covers TEKS 6.12A, 6.12B, 6.12C, and 6.12D, as well as ELPS d.1.B, d.1.C, d.1.D, d.1.E, d.2.B, and d.2.C.

1.1b – Materials include suggested pacing (pacing guide/calendar) to support effective implementation for various instructional calendars (e.g., varying numbers of instructional days – 165, 180, 210).

The materials provide a suggested "Pacing Guide" that gives a detailed view of teaching content material over 143-154 days.

The "Pacing Guide" includes the aligned TEKS and ELPS, with a range of pacing options. For example, the TEKS 6.1(A), 6.1(B), 6.4(B), 6.4(C), 6.4(D), 6.4(E), 6.4(H), and 6.5(A) are included in Chapter 4: "Understand Proportions" within the "Focal Area: Proportionality" with a suggested pacing of 12-14 days.

The materials include alternative pacing guides or calendars to support instructional calendars of 143 and 154 days.

1.1c – Materials include an explanation for the rationale of unit order as well as how concepts to be learned connect throughout the course.

The materials include a rationale for the progression of concepts at the beginning of each chapter. In *Course 1*, Chapter 3: "Operations with Integers," the materials note that, "in previous lessons, students learned about integers and their absolute values. In these lessons, they will apply those concepts to adding and subtracting integers." This progression supports the connection of grade-level TEKS within the course.

The *Course 1* materials include sections that explain how concepts connect throughout the course, such as, "Previous/Now/Next TEKS skills development," "What Do You Already Know?" and "When Will You Use This?"

The materials include an explanation for the rationale of unit order in the "Chapter Order Rationale." For example, "Numbers and Operations" states that "this section introduces essential numerical concepts and operations, which are the foundation for all other areas of mathematics. Students begin by exploring rational numbers and their representations on the coordinate plane, followed by operations with rational numbers and integers."

1.1d – Materials include protocols with corresponding guidance for unit and lesson internalization.

The *Course 1* materials include detailed guidance for lesson internalization in the "Texas Math, Grades 6–12 Lesson Internalization Protocol," to help teachers understand key learning objectives, sequence, and instructional strategies. For example, Step 3 of the four-step process suggests that teachers "prepare for rigorous instruction" by working through math problems, reviewing scaffolding questions, and identifying teacher supports.

The "Texas Math, Grades 6–12 Chapter Internalization Guide" includes protocols for unit internalization. For example, the materials list "Step 1: Identify the Chapter's Purpose, Objectives, Essential Questions and Pacing" and "Step 2: Identify All Chapter Assessments" as the first two steps to "ensure that teachers understand the chapter's content and pedagogy, align instructions with TEKS standards, and plan for rigorous and engaging learning experiences for all students."

1.1e – Materials include resources and guidance for instructional leaders to support teachers with implementing the materials as designed.

The "Texas Math, Grades 6–12 Lesson Internalization Guide for Instructional Leaders" includes resources and guidance for instructional leaders to support teachers with implementing the materials as designed.

For example, "Step 1: Support Teachers in Identifying Lesson Purpose and Objectives" says to "support teachers in identifying and annotating the key mathematical concepts and skills students are expected to

understand and master by the end of the lesson." As part of this process, instructional leaders should guide teachers in creating a two-column chart.

The materials include a "Lesson Cycle" that outlines the parts of each lesson and suggests timing for each component for teachers. For example, Step 4 of the "Evaluate Learning" section expects teachers to engage students in multi-step problem solving and formatively assess students using exit tickets.

1.2 Unit-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.2a	All criteria for guidance met.	2/2
1.2b	All criteria for guidance met.	2/2
—	TOTAL	4/4

1.2a – Materials include comprehensive unit overviews that provide the background content knowledge and academic vocabulary necessary to effectively teach the concepts in the unit.

The *Course 1* materials include comprehensive unit overviews at the beginning of each unit. The unit overviews include a "Mathematical Background" section that provides the background content knowledge and academic vocabulary necessary to effectively teach the concepts in the unit. This section includes what students learned in previous lessons, what students will learn in the current lesson, and what students will learn in future lessons, along with vertically aligned TEKS.

In Chapter 7: "Algebraic Expressions," the "Mathematical Background" section in Lessons 4 and 5 states that, "students have previously used variables to represent algebraic relationships. Here, they will use variables to evaluate and write algebraic expressions." The background section defines *algebraic expressions* as "expressions that contain at least one variable and at least one operation," and provides a step-by-step example of how to use substitution to evaluate an algebraic expression.

Throughout *Course 1*, each unit overview lists necessary academic vocabulary. For example, Chapter 3: "Operations with Integers," states that students will need to know *additive inverse*, *opposites*, and *the zero pair*.

1.2b – Materials contain supports for families in both Spanish and English for each unit with suggestions on supporting the progress of their student.

The materials include Spanish and English family letters at the start of each unit to support learning at home. Each letter provides a brief unit overview, key vocabulary, and at-home activities.

For example, in Chapter 1: "Rational Numbers and the Coordinate Plane," the activity guides students to explore positive and negative counters and use a globe to understand coordinates. The family letter encourages students to "research how positions on Earth are described using degrees of latitude and longitude."

The Chapter 7: "Algebraic Expressions Family Letter" includes key vocabulary words, such as equivalent expressions, numerical expression, and power. The letter also includes an activity that states, "Go to a local park, beach, or playground. Write algebraic expressions for amounts of objects or people."

1.3 Lesson-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.3a	All criteria for guidance met.	8/8
1.3b	All criteria for guidance met.	3/3
1.3c	All criteria for guidance met.	1/1
—	TOTAL	12/12

1.3a – Materials include comprehensive, structured, detailed lesson plans that include daily objectives, questions, tasks, materials, and instructional assessments required to meet the content and language standards of the lesson (aligned with the TEKS and the ELPS).

Each lesson includes a daily objective, corresponding TEKS, scaffolding questions with examples, lesson structure with options for differentiation, assessments, independent practice questions, and various tasks. For example, the objective in Lesson 8-1: "Equations," is "Determine if given values make equations true." The materials also suggest assigning worksheets to further student understanding.

The "Planning Information" section of this lesson includes information such as "Lesson Objective," "TEKS Skill Development," "Previous, Now, Next," "Essential Question," "Unpacking the TEKS," and "Mathematical Processes."

The lesson overviews include a list of materials required for each lesson. For example, the "Lesson Overview" for Lesson 6-2: "Algebraic Relationships: Rules" lists the materials, "eBook, journal/scratch paper, pencil, and blank number line."

1.3b – Materials include a lesson overview listing the teacher and student materials necessary to effectively deliver the lesson, and the suggested timing for each lesson component.

The *Course 1* materials list the necessary teacher and student materials in the "Lesson Overview." The student materials for one lesson include, "eBook, journal/scratch paper, pencil, and blank number line." The necessary teacher materials are embedded in the "Lesson Overview" pacing section for each lesson component.

The materials needed for the chapter are included in the "Scope and Sequence" or at the beginning of each chapter. For example, Chapter 6: "Multiple Representations" states, "Coordinate Planes can be used to present the topics to students in a hands-on way."

The materials include a "Lesson Cycle" document to guide teachers through each lesson component with a suggested timeline. The cycle consists of the following steps: "Present" (5 minutes), "Launch the Lesson"

(5 minutes), "Teach the Concept" (20 minutes), "Practice and Apply" (10 minutes), and "Assess" (15 minutes).

1.3c – Materials include guidance on the effective use of lesson materials for extended practice (e.g., homework, extension, enrichment).

The *Course 1* eBook provides differentiated practice exercises designed to meet the needs of students at various performance levels. The resource embeds teacher guidance throughout to support instructional decisions for students identified as approaching-level, on-level, and beyond-level. For instance, in Lesson 10-2: "Median and Mode," beyond-level students should complete Problems 4–15, which extend their understanding and challenge their mathematical thinking.

The "Assess" and "Differentiate Instruction" tabs instruct teachers to have students complete a "Self-Check Quiz." The teacher can then use the quiz results to differentiate options for extended practice for each level of learner.

For example, in Lesson 10-3: "Measures of Spread," students take the "Self-Check Quiz." Teachers then address which students continue to struggle with finding measures of variation. The teacher can assign the reteach or skills practice worksheet, or facilitate activities designed for visual/spatial learners, kinesthetic learners, or logical learners.

2. Progress Monitoring

Materials support educators in effective implementation through frequent, strategic opportunities to monitor and respond to student progress.

2.1 Instructional Assessments

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.1a	All criteria for guidance met.	9/9
2.1b	All criteria for guidance met.	2/2
2.1c	All criteria for guidance met.	2/2
2.1d	All criteria for guidance met.	6/6
2.1e	All criteria for guidance met.	2/2
—	TOTAL	21/21

2.1a – Materials include a variety of instructional assessments at the unit and lesson level (including diagnostic, formative, and summative) that vary in types of tasks and questions.

The *Course 1* materials include a variety of instructional assessments at the unit level (including diagnostic, formative, and summative) and lesson level (including diagnostic and formative) that vary in types of tasks. Each chapter provides a variety of diagnostic assessments, such as a "Chapter Diagnostic Test" and a "Chapter Pretest," with varying types of tasks and questions to gauge students' prior knowledge and readiness for the upcoming chapter's content and skills. For example, in Chapter 11: "Personal Financial Literacy," the "Chapter Pretest" requires students to balance a check register, describe the advantages and disadvantages of using debit cards versus credit cards, determine whether financial statements are accurate, and calculate the amount of money needed to pay for college tuition after factoring in savings and grants.

Assessment and Learning in Knowledge Spaces (ALEKS), Course 1, allows teachers to create their own "exams, quizzes, or extra practice aligned to standards" that vary in types of tasks and questions. Teachers can select which lessons they would like to include questions from and access question banks to customize their assessments. For example, when creating a quiz on Chapter 8: "Area," Lesson 8-2, the types of tasks and questions vary and include finding the area of a trapezoid, finding the area of a trapezoid on a grid by using triangles and rectangles, and decomposing a trapezoid or parallelogram to find its area given a situation in context.

2.1b – Materials include the definition and intended purpose for the types of instructional assessments included.

The materials include the definition and intended purpose for the types of instructional assessments included. The "Texas Math, Course 1-3 (Grades 6-8): Assessment Guidelines" provide teachers with guidance on the various types of instructional assessments and the specific purpose each serves.

For example, the document identifies the "End-of-Chapter Project" as a summative assessment designed to measure student learning in a real-world context. It emphasizes the application of knowledge by stating, "Students use 21st century skills and what they have learned in the chapter to complete a chapter project."

Additionally, the document states that the purpose of the "Self-Check Quiz" is to "allow students to review concepts from each lesson," and that, "Based on scores, teachers can plan additional support or enrichment activities as needed."

2.1c – Materials include teacher guidance to ensure consistent and accurate administration of instructional assessments.

The materials include teacher guidance to ensure accurate administration of instructional assessments. For example, the "Assessment Guidelines" document instructs teachers to "administer the 'Initial Knowledge Check' at the beginning of the course to identify knowledge gaps and provide a personalized path for students."

The "Assessment Guidelines" document gives an overview of the assessment, outlines the sequence for administering each task, and provides step-by-step guidance for administering each assessment component. The document also includes information to support teachers in understanding the assessments.

The "Assessment Guidelines" also include administration guidance with suggested time limits, administration windows, and student materials. For example, the "Online Chapter Test" guidance states, "allocate 45-60 minutes."

2.1d – Diagnostic, formative, and summative assessments are aligned to the TEKS and objectives of the course, unit, or lesson.

The *Course 1* diagnostic, formative, and summative assessments are aligned to the TEKS and objectives of the course, unit, or lesson. For example, the Chapter 6: "Multiple Representations," "Chapter Diagnostic Test," assesses TEKS 6.1B, 6.1C, 6.2C, 6.3B, and 6.3D. All of the included TEKS meet grade-level standards and contain the prior knowledge and skills necessary for students to be successful in Chapter 6.

The "Texas Math, Course 1: Interactive Edition Volume 1" eBook states the objective for Lesson 3-1 is "fluently add integers," and that the lesson connects to TEKS 6.3.D: "Add, subtract, multiply, and divide integers fluently." In addition, Lesson 3-1: "Add Integers (Homework Practice)" lists the connected standards for each of 15 questions. For example, Question 1 connects to TEKS 6.1.C and 6.3.D and asks students to solve $34 + 22$."

2.1e – Instructional assessments include TEKS-aligned items at varying levels of complexity.

The *Course 1* instructional assessments include TEKS-aligned items at varying levels of complexity. For example, Chapter 3: "Operations with Integers Test 2B" includes basic operations with integers, multi-step problems with integers, and application problems involving integers. This test also provides questions that increase the level of complexity by asking the students to solve and evaluate the answer.

In addition, Chapter 2: "Multiply and Divide Rational Numbers Test 3B" aligns with TEKS 6.3A, 6.3B, and 6.3E. The test questions increase in complexity from multiplying and dividing rational numbers, to understanding what happens to a product when multiplying by a fraction. The test also includes word problems involving multiplying and dividing rational numbers.

2.2 Data Analysis and Progress Monitoring

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.2a	All criteria for guidance met.	2/2
2.2b	All criteria for guidance met.	1/1
2.2c	All criteria for guidance met.	2/2
—	TOTAL	5/5

2.2a – Instructional assessments and scoring information provide guidance for interpreting student performance.

The *Course 1* instructional assessments and scoring information provide guidance for interpreting student performance. The "Differentiate Instruction" tab provides "Response to Intervention" guidance and activities broken up into Tier 1, 2, and 3 interventions based on results from each chapter's "Diagnostic Test." For example, in Chapter 10: "Statistical Measures and Displays," a Tier 2 intervention is designed for approaching-level students who missed five to six exercises in Exercises 1–11. Teachers can choose to provide these students with the "Are You Ready? Review" activity or the *Personal Tutor* tool.

The *Course 1* materials also include a "Key Concept Check" assessment that provides guidance on which lessons to review when students miss certain questions. For example, in Chapter 3: "Operations with Integers," if a student gets Exercise 1 incorrect, the materials advise that they may need help with "Adding Integers," Lesson 1.

The "Assessment Guidelines," "How to Use the Results" section, provides teachers with information on interpreting student performance.

2.2b – Materials provide guidance for the use of included tasks and activities to respond to student trends in performance on assessments.

The *Course 1* materials provide guidance for the use of included tasks and activities to respond to student trends in performance on assessments. The "Differentiated Activities" section provides guidance for using "Guided Practice" exercises as a formative assessment of students' understanding of the concepts taught in each lesson, and for the use of differentiated activities to support students based on their understanding of lesson concepts.

Lesson 9-2: "Triangles" includes guidance to respond to student trends in a "Think-Pair-Share" activity for approaching-level students. The activity requires students to think about how they would classify specific triangles, work in pairs to classify those triangles by either their angles or sides, and share their answers in small groups. The "Trade-a-Problem" activity for beyond-level students requires students to draw a triangle that can be represented by an equation. The students trade drawings with peers to check their work, and work in pairs to solve the equation to determine a missing angle measure.

2.2c – Materials include tools for teachers to track student progress and growth, and tools for students to track their own progress and growth.

The *Course 1* materials include tools for teachers to track student progress and growth, and tools for students to track their own progress and growth. For example, the "Track Your TEKS Progress" section of the student-facing eBook includes a "Student Self-Assessment" chart. Students complete this chart at the beginning and end of each chapter to rate their knowledge and understanding of the TEKS each chapter covers. The options for rating understanding include, "I have no clue," "I have heard of it," and "I know it." The chart allows students to see which of their knowledge and skills have increased at the end of each chapter and throughout the course.

The materials remind teachers to have students return to their "Student Self-Assessment" chart to complete their end-of-chapter ratings. For example, the "Teacher Notes" at the end of Chapter 4: "Understand Proportions" remind teachers to have students rate their knowledge of TEKS 6.4B-E, 6.4H, and 6.5A.

ALEKS Course 1 is an online, data-driven program that allows students and teachers to monitor student growth. This system provides many types of student-friendly data trackers, such as charts, that allow students to see their scores on assessments and practice problems, and visualize their progress. Teachers can generate reports in *ALEKS* to see student progress towards mastery in each area on their personalized pathway. From the "Student View," students can see their progress on their personalized pathway as well as individual topics, what they have mastered, and how many topics remain.

3. Supports for All Learners

Materials support educators in reaching all learners through design focused on engagement, representation, and action/expression for learner variability.

3.1 Differentiation and Scaffolds

Guidance marked with a (T) refers to teacher-facing components. Guidance with an (S) refers to student-facing components.

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.1a	All criteria for guidance met.	3/3
3.1b	All criteria for guidance met.	2/2
3.1c	All criteria for guidance met.	2/2
—	TOTAL	7/7

3.1a – Materials include teacher guidance for differentiated instruction, activities, and paired (scaffolded) lessons for students who have not yet reached proficiency on grade-level content and skills.

The *Course 1* materials include teacher guidance for differentiated instruction, activities, and paired (scaffolded) lessons for students who have not yet reached proficiency on grade-level content and skills. The "Scaffolding Questions" section includes scaffolded support questions to guide teachers in differentiating instruction for approaching-level students. For example, in Lesson 5-1: "Percents and Fractions," Example 1 shows students how to express 50 percent as a fraction in simplest form, and provides scaffolded questions such as, "What is a percent?" and "What does 50% mean in words?"

The "Differentiated Activities" section includes scaffolded support to guide teachers in differentiating activities for approaching-level students. For example, Lesson 4-2: "Rates," provides a "Think-Pair-Share" activity and guidance for teachers on how to use it to differentiate Exercises 1–6 for students who need additional support. The activity instructs teachers to have students first think through their solutions independently and then work in pairs to determine solutions, before sharing solutions with the class.

In Lesson 5-5: "Find the Part of a Whole," the "Differentiate Instruction" section provides additional materials for teachers to assign to approaching-level students. A "Reteach" worksheet provides additional examples and practice problems, and guides teachers to use it with students "who may have difficulty in grasping the math concepts in the lesson."

3.1b – Materials include pre-teaching or embedded supports for unfamiliar vocabulary and references in text (e.g., figurative language, idioms, academic language). (T/S)

The *Course 1* materials include pre-teaching or embedded supports for unfamiliar vocabulary and references in text (e.g., figurative language, idioms, academic language). The "Vocabulary Activity" section

is an embedded support that includes guidance and an example of an instructional routine for teachers to use throughout the chapter to introduce new academic vocabulary terms. The instructional routine includes having students repeat each term aloud after the teacher, defining the term, providing an example, and asking mathematical questions that include the term.

Chapter 6: "Multiple Representations" provides an example instructional routine for the term *multiplicative relationship*. The teacher says *multiplicative relationship* aloud, and students repeat the term. The teacher defines the term as, "using multiplication to compare the independent and dependent quantities of a relationship." The materials provide the example, $y = 7x$, and the question, "How would you check to see if the equation $y = 12x$ is a multiplicative relationship?"

3.1c – Materials include teacher guidance for differentiated instruction, enrichment, and extension activities for students who have demonstrated proficiency in grade-level content and skill.

The *Course 1* materials include teacher guidance for differentiated instruction, enrichment, and extension activities for students who have demonstrated proficiency in grade-level content and skills. The "Scaffolded Support" section includes scaffolded tasks and questions, such as higher-order thinking questions, real-world applications, and problems that extend into future learning, to accompany the "Hands-On Activities." For example, Lesson 1-1a Hands-On Lab: "Integers," provides differentiated questions for beyond-level students, including "where else might we see negative numbers?" and "what other key words could be used to indicate a negative number?"

The "Differentiate Instruction" section provides enrichment and extension activities for beyond-level students. For example, Lesson 6-1: "Algebraic Relationships: Tables" includes an "Enrich Worksheet" that "provides students with valuable opportunities for extending the lesson." The worksheet, titled "Enrich: Algebra Rules and Dot Patterns," asks students to "write a function rule to describe each dot pattern," and "Create your own dot pattern. Then exchange patterns with a classmate. Try to find the rule for each other's patterns."

3.2 Instructional Methods

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.2a	All criteria for guidance met.	4/4
3.2b	All criteria for guidance met.	2/2
3.2c	All criteria for guidance met.	3/3
—	TOTAL	9/9

3.2a – Materials include explicit (direct) prompts and guidance to support the teacher in modeling and explaining the concept(s) to be learned.

The *Course 1* materials include explicit (direct) prompts and guidance to support the teacher in modeling and explaining the concept(s) to be learned. The "Scaffolding Questions" section includes explicit scaffolded support questions and prompts for teachers to ask and present to students at various levels. For example, in Lesson 1-2: "Absolute Value," Example 1 shows students how to identify the opposite of the integer -5 using a number line and symbols. The scaffolded questions for approaching-level students include, "To locate -5 on the number line, in which direction from 0 should we move?" and "How far is -5 from zero on a number line?"

The "Think About: Common Error" section provides teachers with common student misconceptions they may encounter throughout instruction, and guidance to help address and correct these misconceptions. For example, in Lesson 7-3: "Order of Operations," teachers should "watch for students who think that you must perform operations in an expression in the order in which they appear." To address this misconception, teachers "may want to suggest to students that when they first read a problem, they underline or circle the multiplication and division to remind them when to perform those operations."

3.2b – Materials include teacher guidance and recommendations for effective lesson delivery and facilitation using a variety of instructional approaches.

The *Course 1* materials include teacher guidance and recommendations for effective lesson delivery and facilitation using a variety of instructional approaches. Each chapter features "Hands-On Labs" organized into the sections, "Develop the Concept," "Hands-On Activities," "Analyze and Reflect," "Create," and "Inquiry." For example, in the "Investigate" section of "Hands-On Lab 8-4a: Model and Solve Multiplication and Division Equations," students work with a partner to complete two examples using cups and counters, then draw the solution process. The materials provide specific teacher guidance to support differentiated instruction, allowing students at varying levels to demonstrate mastery. For example, teachers can use the "Numbered Heads Together" strategy for approaching-level students, and the "Pairs Consult" strategy for beyond-level students.

Each lesson begins with a "Launch the Lesson" section that includes teacher moves to support differentiated instruction. For example, in Lesson 1-7: "The Coordinate Plane," the "Launch the Lesson"

section incorporates the "Think-Pair-Share" instructional strategy to guide students through five real-world questions related to the coordinate plane. The teacher guidance states: "Have students work in pairs. Give them time to think through their solution to each exercise. Have them share their responses with their partner first, then with the entire class."

3.2c – Materials support multiple types of practice (e.g., guided, independent, collaborative) and include guidance for teachers and recommended structures (e.g., whole group, small group, individual) to support effective implementation.

The *Course 1* materials support multiple types of practice (e.g., guided, independent, collaborative) and include guidance for teachers and recommended structures (e.g., whole group, small group, individual) to support effective implementation. Each lesson begins with a "Launch the Lesson" section that provides recommended classroom structuring, suggested "Teacher Moves," and "Scaffolded Support" to promote student engagement and understanding. For example, in Lesson 8-1: "Equations," the "Launch the Lesson" section offers the following guidance for classroom structure: "You may wish to launch the lesson using a whole group, small group, think-pair-share activity, or independent activity."

Each lesson features a variety of practice formats, including "Guided Practice," "Independent Practice," "Critical and Creative Thinking Problems," and a "Multi-Step Problem Solving" section to support students' progression through content. Teacher guidance is embedded throughout the materials and includes instructional strategies, suggested teacher moves, and guiding questions. For example, in Lesson 6-2: "Algebraic Relationship Rules," the "Guided Practice" section includes an instructional strategy titled "Pairs Discussion." The materials recommend using this strategy to support differentiation, stating, "If some of your students are not ready for assignments, use the differentiated activity below."

The "Differentiated Activities" section includes the purpose of the guided practice exercises and guidance for the teacher to implement specific structures while students complete the exercises. For example, Lesson 3-2: "Subtract Integers," includes guidance for implementing the exercises as a small group activity, called "Numbered Heads Together."

3.3 Support for Emergent Bilingual Students

An emergent bilingual student is a student who is in the process of acquiring English and has another language as the primary language. The term emergent bilingual student replaced the term English learner in the Texas Education Code 29, Subchapter B after the September 1, 2021 update. Some instructional materials still use English language learner or English learner and these terms have been retained in direct quotations and titles.

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.3a	All criteria for guidance met.	2/2
3.3b	All criteria for guidance met.	1/1
3.3c	All criteria for guidance met.	8/8
3.3d	This guidance is not applicable to the program.	N/A
—	TOTAL	11/11

3.3a – Materials include teacher guidance on providing linguistic accommodations for various levels of language proficiency [as defined by the English Language Proficiency Standards (ELPS)], which are designed to engage students in using increasingly more academic language.

The *Emergent Bilingual (EB) Guidebook* provides linguistic accommodations for various levels of language proficiency (as defined by the ELPS), which are designed to engage students in using increasingly academic language.

For example, the *EB Guidebook* section, "How to Use the ELPS Proficiency Levels," provides a table breaking down ways to support students at each proficiency level. For beginning-level students, teachers should "continue visual support while encouraging verbal responses, use sentence frames and word banks, [and] practice high-frequency vocabulary and phrases . . ."

The "Bridging Language and Math" section of the *EB Guidebook* includes "Best Practices for Empowering Emergent Bilinguals" that suggest "adding cognates and sentence stems" to lessons to "help EBs see the connections between their native language and math terms."

3.3b – Materials include implementation guidance to support teachers in effectively using the materials in state-approved bilingual/ESL programs.

The *EB Guidebook* includes implementation guidance to support teachers in effectively using the materials in state-approved bilingual/ESL programs.

For example, the "How to Incorporate ELPS" section includes "Understanding EBs," "Key Principles for Supporting EBs," "Explicit ELPS Integration Strategies," and "Best Practices."

3.3c – Materials include embedded guidance for teachers to support emergent bilingual students in developing academic vocabulary, increasing comprehension, building background knowledge, and making cross-linguistic connections through oral and written discourse.

The *Course 1* materials include embedded guidance for teachers to support EB students in developing academic vocabulary, increasing comprehension, and building background knowledge through oral and written discourse. For example, in Lesson 10-6: "Histograms," students work in pairs to make a list of vocabulary and other terms introduced, such as *interval*, *scale*, and *frequency*. Students then discuss the differences between the everyday meanings of the words and the mathematical meanings they have learned. Finally, students make a table to write and organize the terms and definitions.

Each chapter features a section, "What Math Language and Strategies Do You Need?" which provides an instructional routine and activity for teachers to implement across all lessons in the chapter. For example, the Chapter 9: "Algebraic Representations" teacher guidance recommends following a structured routine to help EB students build vocabulary: define the word, provide an example, and ask a related question to deepen understanding. The materials also include a vocabulary review graphic organizer, with guidance suggesting that EB students "need to be reminded that the area of a closed figure is the number of square units needed to cover the surface of the figure."

The *EB Guidebook* includes scaffolded sentence stems that students can use for both oral and written discourse. The materials provide sentence stems for explanation, and for comparing and constructing. For example, a beginning level student could use the sentence stems, "First, I _____. Then, I _____. Finally, I _____."

3.3d – If designed for dual language immersion (DLI) programs, materials include resources that outline opportunities to address metalinguistic transfer from English to the partner language.

This guidance is not applicable because the program is not designed for dual language immersion (DLI) programs.

4. Depth and Coherence of Key Concepts

Materials are designed to meet the rigor of the standards while connecting concepts within and across grade levels/courses.

4.1 Depth of Key Concepts

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.1a	All criteria for guidance met.	2/2
4.1b	All criteria for guidance met.	1/1
—	TOTAL	3/3

4.1a – Practice opportunities over the course of a lesson and/or unit (including instructional assessments) require students to demonstrate depth of understanding aligned to the TEKS.

The *Course 1* materials include practice opportunities over the course of a lesson and/or unit (including instructional assessments) that require students to demonstrate depth of understanding aligned to the TEKS. For example, in Lesson 8-3a Hands-On Lab: "Model and Solve Addition and Subtraction Equations," students use cups and counters as a concrete model to demonstrate using subtraction to solve one-step equations. Students then extend their knowledge of solving one-step equations using representational models, such as a bar diagram, to write and solve a one-step equation. Finally, in Lesson 8-3: "Solve Addition and Subtraction Equations," students use symbolic representations of one-step equations to solve algebraically.

Each chapter in *Course 1* includes instructional assessments that feature TEKS-aligned items designed to address varying depths of understanding. For example, Chapter 3, "Diagnostic Test: Operations with Integers," includes tasks that assess both basic recall and conceptual application. Students recall foundational concepts, such as identifying the absolute value of a number, and demonstrate a deeper understanding by ordering a set of integers using comparative reasoning.

4.1b – Questions and tasks progressively increase in rigor and complexity, leading to grade-level proficiency in the mathematics TEKS.

The *Course 1* questions and tasks progressively increase in rigor and complexity, leading to grade-level proficiency in the mathematics TEKS. For example, Lesson 1-4: "Decimals and Fractions" aligns with TEKS 6.4G, and students complete basic computations, such as expressing each decimal as a fraction in simplest form and expressing each fraction or mixed number as a decimal. The tasks progress to require students to use a problem-solving model to solve a multi-step problem, such as analyzing a table displaying distances run as mixed numbers and decimals to answer the question "on which of these days she did not meet her goal" of running at least one-fourth mile more than what she ran the previous day.

The materials provide scaffolded questions to support student understanding throughout instruction based on each student's current level (approaching-level, on-level, and beyond-level). For example, when practicing expressing decimals as mixed numbers in Lesson 1-4: "Decimals and Fractions," the materials instruct the teacher to ask an approaching-level student, "how do you know that the mixed number will be greater than one?" The teacher should ask an on-level student, "is this in simplest form?" The teacher should ask a beyond-level student, "how do you know that the simplified fraction will have a denominator of 20?"

The "Independent Practice" section of each chapter includes a drop-down titled "Levels of Complexity" with a "Complexity Levels by Exercise Sets" chart. This chart states, "The levels of the exercises progress from one to 4-I, with Level 1 indicating the lowest level of complexity. Level 4-I indicates dual-coded exercises." For example, Lesson 6-5: "Additive Relationships: $y = x + a$ " includes 15 exercises, with Exercises 1–4 at Level 1 complexity, Exercise 5 at Level 2 complexity, Exercises 6–10 at Level 3 complexity, and Exercises 11–15 at Level 4-I complexity.

4.2 Coherence of Key Concepts

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.2a	All criteria for guidance met.	1/1
4.2b	All criteria for guidance met.	3/3
4.2c	All criteria for guidance met.	4/4
—	TOTAL	8/8

4.2a – Materials demonstrate coherence across units by explicitly connecting patterns, big ideas, and relationships between mathematical concepts.

The *Course 1* materials demonstrate coherence across units by explicitly connecting patterns, big ideas, and relationships between mathematical concepts. The "TEKS Skills Development" section provides connections between previously learned concepts, current concepts, and upcoming concepts. For example, Chapter 6: "Multiple Representations" specifies that students currently use multiple representations to describe algebraic relationships, previously applied proportions to percents, and will later develop concepts of algebraic expressions.

The "Scope and Sequence" shows the progressions of skills taught in the course. For example, Chapter 4: "Understand Proportions" includes lessons on ratios, rates, and converting measurement units. Then, in Chapter 5: "Apply Proportions to Percents," the lessons cover finding parts and percents of a whole. This connects the understanding of the previous concepts in Chapter 4 to the current concepts in Chapter 5.

4.2b – Materials demonstrate coherence across units by connecting the content and language learned in previous courses/grade levels and what will be learned in future courses/grade levels to the content to be learned in the current course/grade level.

The *Course 1* materials demonstrate coherence across units by connecting the content and language learned in previous courses/grade levels to the content to be learned in the current course/grade level. The "Mathematical Background" section details the skills and concepts presented throughout the chapter's lessons and explains the connection between prior and current course content. For example, Chapter 1: "Rational Numbers and the Coordinate Plane," Lesson 1-4: "Decimals and Fractions," "Mathematical Background," states that "in previous grades, students related decimals to fractions using place value," and students "will now generate equivalent forms of decimals and fractions."

The "Are You Ready? Quick Review/Check" demonstrates coherence across units by connecting the content from previous courses/grade levels to the content in the current course/grade level. The "Quick Review" in Chapter 6: "Multiple Representations" asks students to access prior knowledge on TEKS 5.4(F), simplifying expressions from grade 5.

The "Previous/Now/Next" sections demonstrate coherence across units by connecting the content that students will learn in future courses/grade levels to the content in the current course/grade level.

4.2c – Materials demonstrate coherence at the lesson level by connecting students' prior knowledge of concepts and procedures from the current and prior grade level(s) to new mathematical knowledge and skills.

The materials demonstrate coherence at the lesson level by connecting students' prior knowledge of concepts and procedures from the current and prior grade level(s) to new mathematical knowledge and skills. Each lesson in *Course 1* includes a "TEKS Skills Development" section, which shows the connection between prior concepts and procedures taught in the current grade level, and new mathematical knowledge and skills.

In Lesson 4-1: "Ratios," the "TEKS Skills Development" section includes a "Previous, Now, Next" teacher note explaining the progression of TEKS related to ratios from previously learned (6.5E), to learning now (6.4C), and learning next (6.4D).

The "TEKS Skills Development" section for Chapter 3: "Operations with Integers" states that previously, "students multiplied and divided decimals," and now "students will perform operations with integers." Next, "students will understand proportional relationships."

4.3 Coherence and Variety of Practice

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.3a	All criteria for guidance met.	4/4
4.3b	All criteria for guidance met.	4/4
—	TOTAL	8/8

4.3a – Materials provide spaced retrieval opportunities with previously learned skills and concepts across lessons and units.

The *Course 1* materials provide spaced retrieval opportunities with previously learned skills and concepts across lessons and units. The "Mathematical Background" section breaks down the skills and concepts presented throughout the chapter's lessons and explains the connection between what students learned previously and what they are currently learning. For example, in Chapter 3: "Operations with Integers," students learn about adding and subtracting integers in Lessons 3-1, 3-2, and 3-5. Students take what they previously learned about integers and their absolute values, and apply it to adding and subtracting integers.

The "TEKS Standards Correlation" section lists all grade-level TEKS, skills, concepts, and documents, and specifies the corresponding lessons and page numbers throughout the course. For example, TEKS 6.10A (model and solve one-variable, one-step equations and inequalities that represent problems, including geometric concepts) is in both Chapter 8: "Equations and Inequalities" and Chapter 9: "Represent Geometry with Algebra." In Lesson 8-7: "Solve One-Step Inequalities," students learn how to solve one-step inequalities. In Lesson 9-4: "Triangle Inequalities," students use inequalities to represent the relationship between the sides of a triangle.

4.3b – Materials provide interleaved practice opportunities with previously learned skills and concepts across lessons and units.

The *Course 1* materials provide interleaved practice opportunities with previously learned skills and concepts across learning pathways. The "Mid-Chapter Checks" provide students the opportunity to practice multiple skills and concepts from the lessons in the first half of a chapter. For example, the Chapter 10: "Statistical Measures and Displays," "Mid-Chapter Check," includes a "Vocabulary Check" that requires students to define *interquartile range* and determine the interquartile range of a given data set. This pulls from concepts presented in Lesson 10-3: "Measures of Spread." The "Mid-Chapter Check" also includes a "Key Concept Check" that requires students to complete a graphic organizer by defining each measure of center and determining and comparing the median and mode of a given data set. This pulls from concepts presented in Lesson 10-1: "Mean" and Lesson 10-2: "Median and Mode."

The materials provide a "Texas State Assessment Practice" in the "Review" section of each chapter that includes interleaved practice opportunities with previously learned skills and concepts. For example, the

Chapter 3: "Operations with Integers," "Texas State Assessment Practice," includes a mixed review of Chapter 3 concepts and skills (addition, subtraction, multiplication, and division of integers), along with Chapter 2 concepts and skills (addition, subtraction, multiplication, and division of rational numbers).

5. Balance of Conceptual and Procedural Understanding

Materials are designed to balance conceptual understanding, procedural skills, and fluency.

5.1 Development of Conceptual Understanding

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.1a	All criteria for guidance met.	3/3
5.1b	All criteria for guidance met.	1/1
5.1c	All criteria for guidance met.	1/1
—	TOTAL	5/5

5.1a – Questions and tasks require students to interpret, analyze, and evaluate models and representations for mathematical concepts and situations.

The *Course 1* questions and tasks require students to interpret, analyze, and evaluate models and representations for mathematical concepts and situations. For example, in Lesson 8-3a Hands-On Lab: "Model and Solve Addition and Subtraction Equations," students use multiple models and representations, such as bar diagrams and cups and counters, to model, solve, and write addition and subtraction equations. Students interpret a bar diagram to determine the numbers and variables representing the whole and two parts, write the equation as an addition sentence, and solve.

The *Course 1* materials include problem-solving models throughout the chapters. In the Lesson 7-8: "Simplifying Expressions," "Multi-Step Problem Solving" section, students apply a problem-solving model to a real-world context involving purchasing frozen yogurt. Students use a table listing items and their prices to create and simplify an expression that represents a specific combination of purchases. In Step 3 of the problem-solving process, the materials provide a partially completed model for students to finish the remaining steps. The task concludes with students justifying and evaluating their solution, as prompted by the question, "How do you know your solution is accurate?"

5.1b – Questions and tasks require students to create models to represent mathematical situations.

The *Course 1* questions and tasks require students to create models to represent mathematical situations. For example, in Lesson 2-5a Hands-On Lab: "Use Models to Divide Whole Numbers by Fractions," the activity explains how students can select tools and techniques to help understand what it means to divide whole numbers by fractions. In the "Investigate" section of the exercise, students draw bar diagrams to represent each division problem and determine its quotient, such as three divided by one-third. The "Analyze and Reflect" section then prompts students to refer to the models they drew to answer the questions, "Is the quotient less than or greater than the dividend?" and "When a whole number is divided by a fraction that is less than one, will the quotient be less than or greater than the whole number?"

In Lesson 1-2: "Absolute Value," the "Launch the Lesson: Vocabulary" activity defines the term *absolute value* as the distance between a number and zero on a number line. Students model the concept of *absolute value* by drawing a number line with a house in the center, and then drawing a tree three units to the west of the house and a mailbox three units to the east of the house. Students then compare the distance between the house and the tree to the distance between the house and the mailbox, and the positions of the tree and the mailbox to the house.

5.1c – Questions and tasks provide opportunities for students to apply conceptual understanding to new problem situations and contexts.

The *Course 1* questions and tasks provide opportunities for students to apply conceptual understanding to new problem situations and contexts. In the "Chapter Performance-Based Task" sections, students apply their understanding of mathematical concepts to real-world situations. For example, in the Chapter 9: "Represent Geometry with Algebra," "Chapter Performance-Based Task," students apply their understanding of area to determine the area of a trapezoid-shaped plot of land. Students also determine the areas of a rectangular house, wooded area, and front yard, to determine how much land is left for farming.

In the "Multi-Step Problem Solving" exercises, students use a problem-solving model that includes analyzing, planning, solving, justifying, and evaluating to apply their understanding of mathematical concepts to real-world situations. For example, in Lesson 5-6: "Find the Percent and the Whole," students apply their understanding of finding the whole by engaging with questions and tasks that require them to use a percent proportion to determine the whole. Students must determine the total amount of bags of popcorn a store has when given the percentage of bags of each flavor.

Each lesson in the materials includes a "Got it? Do this problem to find out" section where students apply their conceptual understanding to new problem situations and contexts. For example, the "Got it?" problems in Lesson 6-4: "Multiple Representations" include, "A mouse can travel 8 miles per hour. Write an equation to find the total distance d a mouse can travel in h hours," and "Samantha can make 36 cookies each hour. Write an equation to find the total number of cookies c , that she can make in h hours." These questions follow the launch of the lesson and introduction of the key concept.

5.2 Development of Fluency

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.2a	All criteria for guidance met.	2/2
5.2b	All criteria for guidance met.	3/3
5.2c	All criteria for guidance met.	3/3
5.2d	All criteria for guidance met.	1/1
—	TOTAL	9/9

5.2a – Materials provide tasks that are designed to build student automaticity and fluency necessary to complete grade-level tasks.

The *Course 1* materials provide tasks designed to build student automaticity and fluency necessary to complete grade-level tasks. Students use the "Skills Practice" worksheets to practice the skills taught in each lesson and develop automaticity and fluency. For example, in Lesson 1-7: "The Coordinate Plane," the worksheet includes repeated practice identifying and writing ordered pairs using a coordinate plane, identifying the quadrant in which ordered pairs are located, and graphing and labeling ordered pairs on a coordinate plane.

Each lesson provides targeted opportunities to build fluency through extension activities aligned to lesson content that are differentiated for students at varying levels of understanding. For example, in Lesson 7-6: "Properties," the materials include two extension activities for beyond-level students. The materials direct teachers to "ask students whether there are Commutative and Associative Properties of Subtraction. Have them explain their reasoning and give examples. Repeat the question for division, again having students explain their reasoning and give examples."

5.2b – Materials provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures within the lesson and/or throughout a unit.

The *Course 1* materials provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures within the lesson and/or throughout a unit. For example, in Lesson 3-1a Hands-On Lab: "Use Models to Add Integers," students use counters to determine the sum of various integer addition expressions. The materials direct teachers to ask, "How would the model and sum change if the addition expression was $4 + (-2)$ instead of $-4 + 2$?"

Lesson 3-2: "Multiply Fractions and Whole Numbers" introduces students to multiple methods for finding the product of fractions and whole numbers. Method 1 uses an area model to represent the multiplication visually, while Method 2 applies the standard algorithm. Following each example, lesson prompts provide opportunities for students to choose their preferred method to solve a set of three practice problems.

5.2c – Materials provide opportunities for students to evaluate procedures, processes, and solutions for efficiency, flexibility, and accuracy within the lesson and throughout a unit.

The *Course 1* materials provide opportunities for students to evaluate procedures, processes, and solutions for efficiency, flexibility, and accuracy within the lesson and throughout a unit. In the "Multi-Step Problem Solving" exercises, students use a problem-solving model that includes analyzing, planning, solving, justifying, and evaluating to apply their understanding of mathematical concepts to real-world situations. In the "Justify and Evaluate" step, students evaluate the procedures, processes, and solutions for accuracy. For example, in Lesson 9-5: "Area of Rectangles," students apply their understanding of finding the area of rectangles by determining the total area taken up by a deck. At the end of the problem-solving process, the materials ask, "How do you know your solution is accurate?"

The *Course 1* materials provide opportunities for students to evaluate procedures, processes, and solutions for efficiency, flexibility, and accuracy through teacher guidance and embedded questions within and across lessons and units. For example, in Lesson 9-2: "Triangles," students simplify and solve an equation related to the interior angle measures of a triangle. During this activity, the teacher guidance suggests posing the question, "Is there another way you could solve this equation? Explain."

5.2d – Materials contain embedded supports for teachers to guide students toward increasingly efficient approaches.

The *Course 1* materials contain embedded supports for teachers to guide students toward increasingly efficient approaches. The "Scaffolding Questions" section includes explicit scaffolded support questions and prompts for teachers to ask and present to students at various levels of understanding. For example, in Lesson 5-6: "Find the Percent and the Whole," Example 1 uses a bar diagram to model determining a percent. Teachers ask students, "What number is the part? What number is the whole?" "What should be the four percent labels on the bar diagram?" and "Explain another method you could use to find the percent."

The "Scaffolded Support" sections include guidance for teachers to implement various scaffolded activities for students at various levels of understanding. For example, in Lesson 3-3a Hands-On Lab: "Use Models to Multiply Integers," Activity 2 includes a "Think-Pair-Model" activity where approaching-level students work in pairs using counters to determine the product of -2×3 . Teachers ask students, "How can we remove counters from the mat when there were no counters originally on the mat?" "How many zero pairs do we need to add?" and "Why is the product negative?"

5.3 Balance of Conceptual Understanding and Procedural Fluency

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.3a	All criteria for guidance met.	2/2
5.3b	All criteria for guidance met.	3/3
5.3c	All criteria for guidance met.	6/6
—	TOTAL	11/11

5.3a – Materials explicitly state how the conceptual and procedural emphasis of the TEKS are addressed.

The *Course 1* materials explicitly state how the conceptual and procedural emphasis of the TEKS are addressed. For example, Lesson 2-4: "Multiply Fractions" addresses TEKS 6.3E (multiply and divide positive rational numbers fluently). The "Key Concept" box shows that students can use an area model to develop a conceptual understanding of multiplying fractions and then apply that understanding to use the standard algorithm for multiplication.

Each chapter opener identifies the TEKS addressed and includes a detailed mathematical background to support teachers in making connections between conceptual understanding and procedural skills. The background for Chapter 4: "Understand Proportions," Lesson 5-6: "Equivalent Ratios and Rates," states that as students transition to solving prediction and comparison problems, they "can use any previously learned method (bar diagrams, proportions, equivalent fractions, unit rates, double number lines) to solve prediction and comparison problems involving ratios and rates."

5.3b – Questions and tasks include the use of concrete models and manipulatives, pictorial representations (figures/drawings), and abstract representations, as required by the TEKS.

The *Course 1* questions and tasks include the use of concrete models and manipulatives, pictorial representations (figures/drawings), and abstract representations, as required by the TEKS. For example, in Lesson 7-8a Hands-On Lab: "Model Equivalent Expressions," students model equivalent expressions using algebra tiles as concrete models and manipulatives, and then generate equivalent expressions using drawings of algebra tiles as pictorial representations. In the following lesson, Lesson 7-8: "Simplify Expressions," students generate equivalent expressions using the commutative, associative, and distributive properties of operations as abstract representations.

In Lesson 4-1a Hands-On Lab: "Model Ratios," students model ratios using red and yellow counters as concrete models and manipulatives, and then model equal-sized groups and equivalent ratios using drawings of counters as pictorial representations. In the following lesson, Lesson 4-1: "Ratios," students generate ratios as multiplicative comparisons using simplified fractions and decimals as abstract representations.

5.3c – Materials include supports for students in connecting, creating, defining, and explaining concrete and representational models to abstract (symbolic/numeric/algorithmic) concepts, as required by the TEKS.

The *Course 1* materials include supports for students in connecting, creating, defining, and explaining concrete and representational models to abstract (symbolic/numeric/algorithmic) concepts, as required by the TEKS. For example, in Lesson 3-1a Hands-On Lab: "Use Models to Add Integers," Activity 1, students use red and yellow counters to model an additive relationship with two negative integers; the model shows that adding a negative number to another negative number results in a negative sum. In the "Hands-On Lab Exercises," students make connections between the model and the algorithm by answering, "How would the model and sum change if the addition expression was $4 + (-2)$?"

Each chapter features a planning document that outlines tools and manipulatives students can use to build conceptual understanding from concrete to abstract. For example, the Lesson 8.5a Hands-On Lab: "Model Inequalities," "Instruction" section, recommends using the eToolKit to "help students develop a conceptual understanding of math concepts" as students model inequalities. The teacher guidance includes the instructional strategy "Think-Pair-Write," in which students first read the problem, take a minute to consider how to draw a bar diagram, and then share their thinking through discourse with a partner.

5.4 Development of Academic Mathematical Language

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.4a	All criteria for guidance met.	3/3
5.4b	All criteria for guidance met.	1/1
5.4c	All criteria for guidance met.	6/6
—	TOTAL	10/10

5.4a – Materials provide opportunities for students to develop academic mathematical language using visuals, manipulatives, and other language development strategies.

The *Course 1* materials provide opportunities for students to develop academic mathematical language using visuals, manipulatives, and other language development strategies. For example, in Chapter 9: "Represent Geometry with Algebra," the "Vocabulary Check" section requires students to define *triangles* in their own words and provide an example drawing of an obtuse isosceles triangle.

In Lesson 3-1a Hands-On Lab: "Use Models to Add Integers," students use red and yellow counters as hands-on manipulatives to distinguish between positive integers and negative integers, while modeling addition with integers and representing zero pairs. Students then follow the instructions, "write a rule you can use to find the sum of two negative integers," and "write a rule you can use to find the sum of a positive integer and a negative integer."

Each chapter features a "What Math Language and Strategies Do You Need?" section that provides students with opportunities to develop academic mathematical language. For example, in Chapter 5: "Apply Proportions to Percents," students engage in a "Reading Math" activity to build their academic vocabulary. Students complete a table about *factors* and *multiples* by identifying the everyday meaning of each term, its mathematical meaning, and the connection between the two.

5.4b – Materials include embedded teacher guidance to scaffold and support students' development and use of academic mathematical vocabulary in context.

The *Course 1* materials include embedded teacher guidance to scaffold and support students' development and use of academic mathematical vocabulary in context when communicating with peers and educators. For example, in Chapter 10: "Statistical Measures and Displays," teachers instruct students to work in small groups to define the term *interquartile range* and determine the interquartile range of a given data set. The teacher ensures each group member understands the term *interquartile range* before they share their definitions with the class.

The "What Math Language and Strategies Do You Need?" section at the beginning of each chapter includes teacher guidance to scaffold vocabulary development. For example, in Chapter 11: "Personal Financial Literacy," the "Vocabulary Activity" guidance recommends introducing *deposits* and *withdrawals*

by giving real-world examples and asking questions using those new terms, such as, "What was the balance of Gina's checking account after the withdrawal on November 3, but before the deposit on November 7?"

5.4c – Materials include embedded teacher guidance to support the application of appropriate mathematical language to include vocabulary, syntax, and discourse to include guidance to support mathematical conversations that provide opportunities for students to hear, refine, and use math language with peers and develop their math language toolkit over time as well as guide teachers to support student responses using exemplar responses to questions and tasks.

The *Course 1* materials include embedded teacher guidance to support the application of appropriate mathematical language to include vocabulary and discourse, to include guidance to support mathematical conversations that provide opportunities for students to hear, refine, and use math language with peers, and develop their math language toolkit over time, as well as guide teachers to support student responses using exemplary responses to questions and tasks.

The "Investigate," "Analyze and Reflect," and "Create" sections in the "Hands-On Lab" activities provide a variety of instructional approaches with teacher guidance and recommendations to support students in the application of mathematical language, including vocabulary and discourse to support mathematical conversations with peers. For example, in Lesson 3-1a Hands-On Lab: "Use Models to Add Integers," the "Create" section activity instructs teachers to have students model in front of the class two addition sentences where the sum is zero, and explain how they decided on the numbers and signs they used. Then, teachers ask students, "What observation can you make about the sign of the sum of a positive number and a negative number?" after writing a rule that can be used to find the sum of a positive integer and a negative integer.

The materials include "Exit Tickets" with teacher guidance that provides syntax to support mathematical conversations. For example, in Lesson 1-5: "Rational Numbers," the teacher guidance states, "Have students explain how the previous lesson on decimals and fractions helped them understand this lesson on classifying rational numbers. Give them the following prompts: In the previous lesson, I learned . . . In this lesson, I learned . . . What I learned in the previous lesson helped me with this lesson because . . ."

5.5 Process Standards Connection

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.5a	All criteria for guidance met.	1/1
5.5b	All criteria for guidance met.	2/2
5.5c	Materials do not include a description for each unit of how the TEKS process standards are connected throughout the unit.	1/2
5.5d	All criteria for guidance met.	1/1
—	TOTAL	5/6

5.5a – TEKS process standards are integrated appropriately into the materials.

The TEKS process standards are integrated appropriately into the *Course 1* materials. For example, in Lesson 10-6: "Histograms," students use a problem-solving model to analyze, plan, solve, justify, and evaluate their solution to a histogram that represents the distances traveled by a volleyball team for games. Students must determine the percentage of games the team traveled more than 24 miles.

Each chapter features a "21st Century Career" activity where students apply mathematical thinking to real-world contexts. For example, in Chapter 1: "Rational Numbers and the Coordinate Plane," the "21st Century Career" activity aligns with Process Standard 6.1A as students explore the role of mathematics in the work of a scientific illustrator. The activity moves beyond basic computation with rational numbers by incorporating the instructional strategy "Trade-a-Problem," where students create and exchange original math problems based on dinosaur measurements presented in a data table.

5.5b – Materials include a description of how TEKS process standards are incorporated and connected throughout the course.

The *Course 1* materials include a description of how the TEKS process standards are incorporated and connected throughout the course. The "Teacher Notes" in the "What is the Mathematical Processes Handbook" section explain that the red circles with "MP" in the middle note when students use the TEKS process standards throughout the eBook. The section also explains that the TEKS process standards "weave the other Texas Essential Knowledge and Skills together so that students may become successful problem solvers and use what they learn in math class efficiently and effectively in daily life."

The "Apply the Mathematical Processes to Every Lesson" section instructs students to use the "Which Mathematical Processes Did You Use?" section at the beginning of each lesson to select which processes they used to solve a particular problem.

The materials include activities and exercises that provide students the opportunity to become familiar with using each TEKS process standard. For example, the activity "Focus on Mathematical Process B: Use a Problem-Solving Model" focuses on TEKS 6.1B, and lets students practice using a problem-solving model.

5.5c – Materials include a description for each unit of how TEKS process standards are incorporated and connected throughout the unit.

The *Course 1* materials include a description, for each unit, of how the TEKS process standards are incorporated throughout the unit. For example, in Chapter 4: "Understand Proportions," the "Planning" section indicates that the chapter incorporates the TEKS 6.1A, 6.1B, 6.1C, 6.1D, 6.1E, 6.1F, and 6.1G process standards.

The "Scope and Sequence," "TEKS Mathematical Process Standards" section, indicates the TEKS process standards incorporated into the lessons in a chapter. There is also a section, "Focus on Mathematical Processes," that indicates which TEKS process standards and TEKS content standards are incorporated into a lesson focused on mathematical processes in the middle of a chapter. For example, TEKS 6.1A, 6.1B, 6.1C, 6.1D, 6.1E, 6.1F, and 6.1G are in lessons throughout Chapter 10: "Statistical Measures and Displays." The "Focus on Mathematical Processes: Use Logical Reasoning" lesson in the middle of the chapter addresses TEKS 6.1B and 6.12A.

The materials do not include a description, for each unit, of how the TEKS process standards are connected throughout the unit.

5.5d – Materials include an overview of the TEKS process standards incorporated into each lesson.

The *Course 1* materials include an overview of the TEKS process standards incorporated into each lesson. The "Mathematical Process Standards" section includes a table that indicates which TEKS process standards each practice exercise incorporates throughout the lesson. For example, the table indicates that Lesson 9-4: "Triangle Inequalities" incorporates TEKS 6.1A into Exercises 7, 9, 11, 17, and 18, with an emphasis on applying math to the real world. The Lesson incorporates TEKS 6.1B into Exercises 17–21, with an emphasis on using a problem-solving model.

The "Planning Information" section indicates the TEKS process standards in a lesson and connects them to the learning objective and an essential question. For example, Lesson 4-5: "Equivalent Ratios and Rates" includes TEKS 6.1A, 6.1B, 6.1C, 6.1D, and 6.1F to meet the objective, "determine equivalent ratios and rates by using unit rates, equivalent fractions, and proportions." Integrating the TEKS process standards helps students answer the essential question, "How do you use equivalent ratios and rates in the real world?"

6. Productive Struggle

Materials support students in applying disciplinary practices to productive problem-solving, including explaining and revising their thinking.

6.1 Student Self-Efficacy

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.1a	All criteria for guidance met.	3/3
6.1b	All criteria for guidance met.	6/6
6.1c	All criteria for guidance met.	3/3
—	TOTAL	12/12

6.1a – Materials provide opportunities for students to think mathematically, persevere through solving problems, and to make sense of mathematics.

The *Course 1* materials provide opportunities for students to think mathematically, persevere through solving problems, and to make sense of mathematics in the "Multi-Step Problem Solving" exercises in each lesson. For example, in Lesson 10-1: "Mean," students use a problem-solving model to determine how much greater the mean number of trees was for Week 2 than Week 1, when given the number of trees sold each day for two weeks.

The materials include guiding questions and prompts to encourage students to think critically about their next steps and persevere through the problem-solving process. The prompts include, "Identify the information you know," "Determine what the problem is asking you to find," "What will you need to do to solve the problem? Write your plan in steps," and "Use your plan to solve the problem. Show your steps." To justify and make sense of their solution, students answer, "How do you know your solution is reasonable?"

Each lesson includes a "Critical and Creative Thinking Problems" exercise. For example, in Lesson 7-5: "Write Algebraic Expressions," students analyze the meaning of the expressions $n + 7$, $n - 2$, $4n$, and $n/2$ in the context that n represents the number of songs stored on an MP3 player. Students also write a real-world situation that requires two operations and a variable, define the variable, write an algebraic expression to represent the situation, and justify their response.

6.1b – Materials support students in understanding, explaining, and justifying that there can be multiple ways to represent and solve problems and complete tasks.

The *Course 1* materials support students in understanding, explaining, and justifying that there can be multiple ways to represent and solve problems and complete tasks. For example, in Lesson 8-3a Hands-On Lab: "Model and Solve Addition and Subtraction Equations," the activities require students to use bar diagrams, cups, and counters to model and solve addition and subtraction one-step equations.

The "Teacher Notes" for the "Hands-On Lab: Exercises," "Analyze and Reflect" section, provides guidance for teachers to have students work in small groups, sharing their processes for completing exercises, and their solutions. At the end of the lab, students explain and justify how they can select tools to model and solve addition and subtraction equations.

The "Critical and Creative Thinking Problems" section supports students in understanding, explaining, and justifying that there can be multiple ways to represent and solve problems and complete tasks. For example, in Lesson 3-1: "Add integers," Exercise 14 requires students to use number lines or counters to "explain why you add to find the sum of two negative integers, but subtract to find the sum of a positive and a negative integer."

6.1c – Materials are designed to require students to make sense of mathematics through multiple opportunities for students to do, write about, and discuss math with peers and teachers.

The *Course 1* materials are designed to require students to make sense of mathematics through multiple opportunities to do, write about, and discuss math with peers and teachers. For example, in Lesson 5-6a Hands-On Lab: "Find the Percent and the Whole," students work with a partner to determine the whole using a number line and the percent using a bar diagram.

In Lesson 4-6a Hands-On Lab: "Model Prediction and Comparison Problems," the "Teacher Notes" in the "Launch the Lab" section include questions for teachers to ask students to discuss the concepts introduced in the lab activities. The questions include, "When would you use rates to describe travel?" and "When would you use unit rates to describe costs?"

The "Scaffolded Support" section of the "Hands-On Labs" explains that the "Hands-On Activities" should be whole group activities with the teacher. In "Hands-On Activity 3," students use given rates to determine how many more miles Logan can drive in seven hours than Devon, using a bar diagram. In the "Scaffolded Support" section, students write to explain how they solved the problem in Hands-On Activity 3.

6.2 Facilitating Productive Struggle

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.2a	All criteria for guidance met.	6/6
6.2b	All criteria for guidance met.	4/4
—	TOTAL	10/10

6.2a – Materials support teachers in guiding students to share and reflect on their problem-solving approaches, including explanations, arguments, and justifications.

The *Course 1* materials support teachers in guiding students to share and reflect on their problem-solving approaches, including explanations, arguments, and justifications. Each lesson includes a "Multi-Step Problem Solving" page with the steps "Analyze," "Plan," "Solve," and "Justify and Evaluate." For example, in Lesson 6-3: "Algebraic Relationships: Equations," students use a problem-solving model to create a table of values, plot the ordered pairs on a graph, and determine which ordered pair will not be on the graph, given the equation $y = x - 3$.

The "Teacher Moves" section of the same lesson provides guidance for teachers to have students complete the exercise with peers, ensuring that each student understands each stage of the problem-solving process. Teachers should also ensure that students share, discuss, and reflect upon their process and solution as they work through the problem, and once the problem is completed. In the "Plan" and "Solve" stages of the process, students explain the necessary steps to solve the problem, and then solve it. In the "Justify and Evaluate" stage of the process, students reflect and share their arguments and justifications for how their process ensures their solution is accurate.

6.2b – Materials include prompts and guidance to support teachers in providing explanatory feedback based on student responses and anticipated misconceptions.

The *Course 1* materials include prompts and guidance to support teachers in providing explanatory feedback based on student responses and anticipated misconceptions. The "Think About: Common Error" section provides teachers with guidance to anticipate common misconceptions that students may have throughout the exercises, and prompts to address those misconceptions through feedback to students.

For example, Lesson 9-4: "Triangle Inequalities" explains that a common misconception is "some students may check the triangle inequality relationship for only one or two sides of the triangle." To address this misconception, the materials prompt teachers to "remind students that the length of any side of a triangle must always be less than the sum of the lengths of the other two sides" and "all three side lengths must be checked to be sure a triangle can be formed."

In the same lesson, the "More Multi-Step Problem Solving" section prompts and guides teachers that *A* is the correct answer for Exercise 18. If students chose *B*, they "used side lengths of 32 feet and 3 feet to calculate the difference instead of 32 feet and 4 feet." If students chose *C*, they "used 33 feet and 3 feet to calculate the difference instead of 32 feet and 4 feet." If students chose *D*, they "found the cost of a 32-foot piece of fencing."