McGraw Hill LLC

English Mathematics, 7

Texas Math Course 2 (Grade 7)

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
Full-Subject, Tier-1	**9781264987726**	**Both Print and Digital**	**Static**

Rating Overview

TEKS SCORE	ELPS SCORE	ERROR CORRECTIONS (IMRA Reviewers)	SUITABILITY NONCOMPLIANCE	SUITABILITY EXCELLENCE	PUBLIC FEEDBACK (COUNT)
100%	100%	31	Flags Not in Report	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	0	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	10
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 include a scope and sequence that identifies the Texas Essential Knowledge and Skills (TEKS), English Language Proficiency Standards (ELPS), and concepts addressed in each unit. For example, the "Scope and Sequence" indicates that the Chapter 3,"Focal Area" of "Proportionality," covers TEKS 7.4D and 7.13E, and ELPS d.1.B, d.1.C, d.1.D, d.1.E.

The "Scope and Sequence" includes the "Focal Area" concepts covered throughout the year-long course. For example, each "Focal Area" has a suggested lesson sequence with TEKS, ELPS, concepts, objectives, and suggested pacing.

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 140-150 days.

The "Pacing Guide" includes a suggested range of days for each chapter and the total range for the year of 140-150 days.

The materials include alternative pacing guides or calendars to support various instructional calendars of 140 and 150 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 *Texas Math, Course 2 (Grade 7)* materials include a rationale for the progression of concepts at the beginning of each chapter. In Chapter 2: "Proportional Relationships," the materials note that students previously "developed an understanding of proportional relationships in problem situations." Students will now "represent and solve problems involving proportional relationships," and next, students will continue to represent and solve problems. This progression supports the connection of grade-level TEKS within the course.

The *Course 2* materials include sections that explain how concepts connect throughout the course. These sections include "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 foundational for all other areas of mathematics. Students begin by exploring rational numbers to establish number sense and prepare for proportional reasoning."

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

The materials include a "Texas Math, Grades 6–12 Lesson Internalization Protocol" that "provides key questions to consider and steps to complete to digest the content and pedagogy of a lesson prior to teaching." The protocol consists of four steps that allow teachers to internalize the lesson content before teaching. For example, in Step 2 of the four-step process, teachers can "understand the lesson structure" by reviewing, annotating, analyzing, and exploring the *Course 2* unit lesson to prepare effectively for instruction.

The "Texas Math, Grades 6–12 Chapter Internalization Guide" includes protocols for unit internalization. For example, the materials specify "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 3 of the "Practice and Apply" section expects students to work independently on tasks with varying levels of difficulty. The lesson cycle is designed for teachers and does not provide guidance for instructional leaders.

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 2* materials include a comprehensive chapter overview that lists academic vocabulary needed for each chapter. For example, Chapter 6: "Multiple Representations of Linear Relationships" states that students will need to know the terms *family of linear relationships, linear equations, linear relationships, slope, slope-intercept form*, and *y-intercept*.

The chapter overview also outlines previously taught skills and provides guidance for activating prior knowledge, supporting teachers to help students connect new learning to earlier content. For example, in Chapter 4: "Apply Proportionality to Geometry," the overview features writing prompts that ask students to reflect on whether they agree, disagree, or are unsure about specific mathematical statements. These prompts elicit students' prior understanding of ratios and their application to geometric figures. Two examples of prompts are, "Another way to say ratios of corresponding sides are equivalent is to say they are proportional," and "Similar figures are the same shape and size."

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 contain a "Family Letter" at the beginning of each chapter, which provides support for families in both Spanish and English, including suggestions for supporting their student's progress at home. The letters include a brief overview of the skills taught in the unit, key vocabulary words and definitions, and activities for families to complete with their students.

For example, the "Family Letter" in Chapter 3: "Apply Proportionality to Percent" explains that students will learn "how to solve percent problems" that include "taxes, tips, discounts, simple interest, and percents of increase and decrease." Some of the key vocabulary words include *discount, gratuity*, and *principal*. The hands-on activity asks students to survey family members or friends about cell phone ownership, organize the data in a table, and find the percent of those surveyed who have a cell phone. There is also a real-world activity where families sketch a circle graph that displays the percentage of time doing daily activities, such as school, homework, and sleep.

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 self-check quizzes. For example, the objective of Lesson 8-2: "Complementary and Supplementary Angles" is to "write and solve equations involving complementary and supplementary ranges."

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

The lesson overviews include a list of materials required for each lesson. For example, the "Lesson Overview" for Lesson 1-1: "Terminating and Repeating Decimals" includes the materials "eBook, journal/scratch paper, and pencil."

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 "Planning Information" section, located at the beginning of each lesson, includes a lesson overview providing teachers with "Pacing," "Lesson Objectives," "TEKS Skill Development," "Previous, Now, Next," "Essential Questions," "Unpacking the TEKS," "Mathematical Processes," and "English Language Proficiency Standards."

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).

The *Course 2* materials provide a lesson overview that includes the necessary teacher and student materials. The "Lesson Overview" includes a list of materials for students, such as "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.

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

The materials include guidance on the effective use of lesson materials for extended practice through enrichment activities, listed in the course's teacher-facing eBook under the "Differentiate Instruction" tab. For example, in Lesson 9-4: "Unbiased and Biased Samples," the enrichment activity guidance for beyond-level students instructs teachers to have students create a file of product surveys and opinion polls that they encounter in different forms of media, and then classify, evaluate, and use them as models for their own surveys.

The *Course 2* 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 7-1: "Equations and Inequalities," "Independent Practice," students performing on-level should complete odd problems 1-11 and 14-20, which reinforce key concepts and promote grade-level proficiency.

The *Texas Math, Course 2 Teacher's Guide* provides explicit guidance to support educators in selecting curriculum resources that align with students' learning levels. Based on diagnostic data, the guide helps teachers make informed decisions about tiered assignments. For example, in Chapter 5: "Apply Proportionality to Probability," the materials recommend that approaching-level students complete Tier 2 assignments in "Are You Ready? Review" and the *Personal Tutor* tool, which focus on building prerequisite skills and supporting conceptual understanding needed for success with grade-level content.

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 2* 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. Each chapter provides a variety of diagnostic assessments, such as a "Chapter Diagnostic Test" and a "Chapter Pretest," with varying types of tasks to gauge students' prior knowledge and readiness. For example, in Chapter 9: "Statistics and Sampling," the "Chapter Diagnostic Test" asks students to interpret bar graphs and utilize the information in a table to determine the percent.

Assessment and Learning in Knowledge Spaces (ALEKS), Course 2 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 3: "Operations with Integers," Lesson 3-2, the types of tasks and questions vary and include using a number line to subtract integers, word problems with addition and subtraction of integers, and finding the distance between two rational numbers on a number line in context.

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

The *Course 2* materials include the definition and intended purpose for the types of instructional assessments. The "Texas Math, Courses 1-3 (Grades 6-8): Assessment Guidelines" document defines and explains the purpose of each assessment type, including diagnostic, formative, summative, and optional assessments. The document also explains the purpose behind each assessment activity and provides administration guidance on how to use assessment results.

For example, the document defines formative assessments as "ongoing assessments that take place during the instructional process" to help "teachers monitor and adjust instruction as well as provide students with feedback." The document also breaks down the variety of formative assessment activities throughout the course, such as "Exit Tickets," "Self-Check Quizzes," "Are You Ready? Quick Checks," "Mid-Chapter Quizzes," "Mid-Chapter Checks," and "End-of-Chapter Quizzes."

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

The *Course 2* materials include teacher guidance to ensure accurate administration of instructional assessments. The "Assessment Guidelines" document explains the purpose behind each assessment activity, provides administration guidance, and explains how to use assessment results to ensure that assessments provide insight into students' knowledge and skills. For example, "Mid-Chapter Quizzes" are administered halfway through the chapter and allow students to "demonstrate their progress in the first half of the chapter." Teachers can use these results to identify which concepts need reinforcement and to form small groups for targeted instruction.

The "Assessment Guidelines" document also includes 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 2* diagnostic, formative, and summative assessments are aligned to the TEKS and objectives of the course, unit, and lesson. For example, the "Chapter Diagnostic Test" in Chapter 1: "Rational Numbers," assesses TEKS 7.1A, 7.1C, 7.1D, and 7.2. All of the included TEKS meet grade-level standards and contain the prior knowledge and skills necessary for students to be successful in Chapter 1.

Lesson 5-3: "Probability of Compound Events" includes an "Exit Ticket" that has students "use any method to give the sample space for rolling a number cube and flipping a coin." This aligns with the lesson TEKS 7.6(I) "Determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces," and the lesson objective of "Determine probabilities of compound events."

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

The *Course 2* instructional assessments include TEKS-aligned items at varying levels of complexity. For example, Test 3A in Chapter 10: "Personal Financial Literacy" aligns with TEKS 7.1A and 7.13A-F, and includes multiple choice questions that require basic computation, such as "What is the simple interest paid after two years on a $900 loan at 16% per year?" The multiple choice questions progress in

complexity by requiring the student to create a financial assets and liabilities record based on a given list. The test concludes with financial word problem questions that require students to "use a problem-solving model to solve each problem."

The "Differentiate Instruction" tab includes formative assessments with tasks that assess both application-level and higher-order thinking skills. In Lesson 8-2: "Complementary and Supplementary Angles," the "Enrich: Classify or Give the Angle!" activity prompts students to apply their understanding of angle relationships through a "guess, check, and revise" strategy. Students engage in higher-level reasoning as they analyze a riddle to determine the correct solution.

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 2* 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, Chapter 9: "Statistics and Sampling" designates a Tier 2 intervention for approaching-level students who missed three of Exercises 1–5. Teachers can choose to provide these students with the "Are You Ready? Review" activity, "Quick Review Math Handbook" pages, or the *Personal Tutor* tool.

The *Course 2* materials include a "Key Concept Check" assessment that provides guidance on which lessons to review when students miss specific questions. For example, in Chapter 8: "Develop Geometry with Algebra," if a student gets Exercise 3 incorrect, the materials advise that they may need help with "Volume of Prisms," Lesson 6.

The "Assessment Guidelines," "How to Use the Results" section, provides teachers with information on interpreting student performance. For example, the "Online Chapter Tests" system automatically grades the test and provides immediate feedback to students. The "results provide comprehensive data on student understanding of the entire chapter," and "teachers can analyze the performance patterns to differentiate instruction."

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

The *Course 2* materials provide guidance for using the 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 8-4: "Area of Circles" includes guidance for using activities and tasks. The "Rally Coach" activity for approaching-level students requires students to work in pairs to complete Exercises 1–6. One student

reads aloud the problem and talks through their procedure for determining the area, while the other student watches, listens, coaches, and encourages. The "Pairs Consult" activity for beyond-level students requires students to work with a partner to write a formula that gives the area of one-eighth of a circle and draw what one-eighth of a circle would look like. Students use the internet or another source to research sectors of circles.

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 2* 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 6: "Multiple Representations of Linear Relationships" remind teachers to have students rate their knowledge of TEKS 7.7.

ALEKS Course 2 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 2* 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, Lesson 6-3: "Slope," Example 1, shows students how to determine the slope from a graph and explain what it represents. The provided scaffolded questions include, "What are we asked to do?" and "How do we graph each ordered pair?"

The "Differentiated Activities" section includes scaffolded support activities to guide teachers in differentiating activities for approaching-level students. For example, Lesson 7-2: "Volume of Cones," includes a "Team-Pair-Solo" activity and guidance for teachers on how to use it to differentiate Exercises 1–7 for students who need additional support. This activity instructs teachers to have students complete Exercises 1 and 2 in a four-person team, Exercises 3 and 4 in pairs, and Exercises 5 and 6 independently.

In Lesson 7-3a Hands-On Lab: "Model and Solve Equations with Rational Coefficients," the "Differentiate Instruction" section provides additional materials for teachers to assign to approaching-level students. A "Kinesthetic Learners" activity instructs students to use cups, unit cubes, and a balance to visualize how to keep one-step equations balanced.

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 2* 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 5: "Apply Proportionality to Probability" provides an example instructional routine for the term *probability*. The teacher says *probability* aloud, and students repeat the term. The teacher defines the term as, "the chance that an event will happen," represented as "the ratio of the number of favorable outcomes to the number of possible outcomes." The materials provide the example, "Peter has a blue, a black, and a red pen in his schoolbag. The probability that he will pull a blue pen out of his schoolbag is 1:3." Finally, the materials provide the question, "What is the probability that a coin, when tossed, will land on tails?"

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 2* 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, in Lesson 1-5a Hands-On Lab: "Use Models to Add and Subtract Rational Numbers," the first activity explains how students can use multiple representations to add and subtract positive and negative fractions using a vertical number line. The differentiated task for beyond-level students requires them to write their own addition and subtraction problems, drawing a new number line for each problem.

The "Differentiate Instruction" section provides enrichment and extension activities for beyond-level students. For example, Lesson 5-2: "Theoretical and Experimental Probability" includes an "Enrich Worksheet" that "provides students with valuable opportunities for extending this lesson." The worksheet, titled "Enrich: Rolling a Dodecahedron," instructs students to use a dodecahedron to determine the theoretical probability of each event, such as the probability of rolling a prime number. Students then use their dodecahedron, rolled 100 times, to determine the experimental probability of each event, such as the probability of rolling a number less than four.

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 2* 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. For example, in Lesson 3-7: "Discount," Example 1 shows students how to calculate the sale price of a movie using a bar diagram by either subtracting the discount from the regular price or subtracting the percent of discount from 100 percent. The scaffolded questions for approaching-level students include, "If the discount is 25%, what percent of the original price will we actually pay?" and "How do we express 25% as a decimal? 75%?"

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, Lesson 7-2: "Solve One-Step Equations" states, "students often forget whether to add or subtract to solve an addition or subtraction equation." To address this misconception, teachers should "remind them to use the inverse operation in the equation. To solve an addition equation, use subtraction. To solve a subtraction equation, use addition."

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

The *Course 2* 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 multiple sections: "Develop the Concept," "Hands-On Activities," "Analyze and Reflect," "Create," and "Inquiry." For example, in the "Develop the Concept" section of "Hands-On Lab 8-7a: Volume Relationships of Prisms and Pyramids," the materials instruct teachers to show students models or drawings of pyramids. The guidance then states, "Have students describe the properties of the shapes and name real-world objects that are shaped like pyramids."

Each lesson begins with a "Launch the Lesson" section that includes teacher moves to support differentiated instruction. For example, in Lesson 5-1: "Probability of Simple Events," the "Launch the Lesson" section incorporates the "Pairs-Consult" instructional strategy to guide students through two vocabulary development questions related to simple events. The teacher guidance states, "Have students

think of real-world experiences they have encountered in which they described the probability of an event occurring, such as weather or sporting events. Then, have them work with a partner to complete the Real-World Link."

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 2* 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 5-1: "Probability of Simple Events," 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 4-2: "Proportional and Nonproportional Relationships," the "Guided Practice" section includes an instructional strategy titled "Three Stay, One Stray." 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 6-2: "Equations of Linear Relationships" instructs teachers to "use these exercises to assess students' understanding of the concepts in this lesson. If some of your students are not ready for assignments, use the differentiated activities below." The lesson also includes guidance for implementing the exercises as a small group activity, called "Find the Fib."

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 2* 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 9-7: "Select an Appropriate Display," students work in small groups and discuss which type of display they should make for three sets of different types of data. Students then write sentences on the displays they chose, explaining what kind of data they had and why the chosen display was a good representation of their data.

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: "Statistics and Sampling" 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. A vocabulary writing activity suggests that EB students read about ways to display data, examine a completed table, and respond to questions to ensure comprehension.

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 2* 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 7-5a Hands-On Lab: "Model Two-Step Equations using the Distributive Property," students use algebra tiles as a concrete model to demonstrate using the distributive property to solve two-step equations. Students then extend their knowledge by using a representational model with a bar diagram to solve two-step equations. Finally, in Lesson 7-5: "Solve Two-Step Equations using the Distributive Property," students use symbolic representations of two-step equations to solve algebraically.

Each lesson includes a "Practice" tab that allows teachers to assign multiple practice opportunities that require students to demonstrate depth of understanding aligned to the TEKS. In Lesson 10-3: "Assets and Liabilities," the materials include a "Skills Practice" that provides students with 14 targeted practice problems designed to build conceptual understanding. These tasks range from basic recall, such as identifying net worth, to more complex reasoning, including interpreting an assets and liabilities table and selecting appropriate values to calculate net worth. This tab also includes "Homework Practice," "Problem-Solving Practice," and "Extra Practice" to further students' understanding.

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

The *Course 2* materials include questions and tasks that progressively increase in rigor and complexity, leading to grade-level proficiency in the mathematics TEKS. Each lesson follows a logical progression that supports learning across a unit. For example, in Lesson 1-5: "Fluently Add and Subtract Rational Numbers, Like Fractions," students move through an introduction, worked examples, guided practice, independent practice, critical and creative thinking applications, and multi-step problems.

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). In Lesson 2-1: "Unit Rates," when practicing making comparisons using unit rates, the materials instruct the teacher to ask an approaching-level student, "what are you trying to determine?" The teacher should ask an on-level student, "how do you know which is the best buy?" The teacher should ask a beyond-level student, "how can you use mental math to determine whether the 40-pound bag or the 20-pound bag has a lower unit price?"

The "Independent Practice" section of each chapter identifies the complexity level of each exercise using a "Complexity Levels by Exercise Set" chart. For instance, Lesson 4-2: "Critical Attributes of Similar Figures" includes 18 questions, with Exercises 1–4 at Level 1 complexity, Exercises 5–6 at Level 2 complexity, Exercises 7–13 at Level 3 complexity, and Exercises 14–18 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 2* 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 4: "Apply Proportionality to Geometry" specifies that students currently use geometry to describe or solve problems involving proportional relationships, previously represented and solved problems involving proportional relationships, and will later use probability and statistics to describe or solve problems involving proportional relationships.

The "Scope and Sequence" shows the progressions of skills taught in the course. For example, Chapter 2: "Proportional Relationships" includes several lessons on unit rates, fractions, and understanding proportionality. Then, in Chapter 3: "Applying Proportionality to Percents," the lessons cover using proportions to solve problems involving percents. This connects the understanding of the previous concepts in Chapter 2 to the current concepts in Chapter 3.

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 2* 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, in Chapter 1: "Rational Numbers," the "Mathematical Background" for Lesson 1-3: "Add and Subtract Integers" and Lesson 1-4: "Multiply and Divide Integers" states that "in previous grades, students learned how to add, subtract, multiply, and divide with integers," and students will now "continue to work on their fluency with integers."

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 7: "Equations and Inequalities" asks students to access prior knowledge from grade 6 on writing algebraic expressions and identifying solutions of equations.

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. For example, in Chapter 8: "Develop Geometry with Algebra," the "Now" section states, "7.3. Students will add, subtract, multiply, and divide while solving problems and justifying solutions." The "Next" section states, "8.2. Students will represent real numbers in a variety of forms."

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 2* 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.

Lesson 9-1: "Bar Graphs and Dot Plots" states that students previously summarized categorical data with numerical and graphical summaries in grade 6 (TEKS 6.12D), and will now solve problems using data represented in bar graphs and dot plots (TEKS 7.6G). Lesson 9-3: "Make Predictions about a Population" states that students previously solved problems using data presented in bar graphs and dot plots earlier in the course (TEKS 7.6G), and will now use data from a random sample to make inferences about a population (TEKS 7.6F, 7.6G, and 7.12B).

The "TEKS Skills Development" section includes a "Previous, Now, Next" section. Chapter 7: "Equations and Inequalities" states that students previously represented linear equations using verbal descriptions, tables, graphs, and equations that simplify to the form $y = mx + b$. Now, students will use one-variable equations and inequalities to represent situations. Next, students will develop geometric relationships with volume.

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 2* 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 10: "Personal Financial Literacy," students learn about simple and compound interest in Lesson 10-4. Students take what they previously learned about solving problems involving simple interest, and apply it to comparing simple interest and compound interest.

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 7.3A (add, subtract, multiply, and divide rational numbers fluently) is in both Chapter 1: "Rational Numbers" and Chapter 2: "Proportional Relationships." In Lesson 1-4: "Multiply and Divide Integers," students multiply and divide integers. In Lesson 2-7: "Convert Between Systems," students use the multiplication and division of integers to convert between measurement systems.

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

The *Course 2* 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 3: "Apply Proportionality to Percent," "Mid-Chapter Check," includes a "Vocabulary Check" that requires students to write sentences comparing and contrasting the percent equation and the percent proportion. This pulls from concepts presented in Lesson 3-3: "The Percent Proportion" and Lesson 3-4: "The Percent Equation." The "Mid-Chapter Check" also includes a "Key Concept Check" that requires students to complete a graphic organizer by providing a real-world example for determining the part, the whole, and the percent. Students must also determine a reasonable estimate for the cost of a hard drive if the hard drive is 61.3 percent of a computer's given cost. This pulls from concepts presented in Lesson 3-1: "Percent of a Number" and Lesson 3-2: "Percent and Estimation."

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 8: "Develop Geometry with Algebra," "Texas State Assessment Practice," includes a mixed review of Chapter 8 skills and concepts (finding missing angle values, surface area of composite figures, volume of rectangular prisms, and triangular prisms), along with Chapter 7 skills and concepts (writing and solving equations).

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 2* questions and tasks require students to interpret, analyze, and evaluate models and representations for mathematical concepts and situations. For example, in Lesson 7-4a Hands-On Lab: "Model and Solve Two-Step Equations," students use multiple models and representations, such as bar diagrams and algebra tiles, to model, solve, and write two-step equations. Students interpret a bar diagram to write and solve a two-step equation.

The *Course 2* materials include problem-solving models throughout the chapters. In Lesson 8-2: "Complementary and Supplementary Angles," "Multi-Step Problem Solving," students apply a problem-solving model to a real-world context involving engineers and a building support joist. Students use their knowledge of angle relationships to create and solve an equation that represents the relationship of adjacent angles on a straight line. 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 2* questions and tasks require students to create models to represent mathematical situations. For example, in Lesson 3-1a Hands-On Lab: "Percent Diagrams," the activity explains how students can use multiple representations to solve real-world problems about percents. In the "Investigate" section of the exercise, students draw bar diagrams to solve each real-world problem, determining the part when given the whole and a percent. The "Create" section then prompts students to refer to the models they drew to answer the question, "How can I use multiple representations to solve real-world problems about percents?"

The "Launch" page at the beginning of each lesson includes questions and tasks that require students to create models to represent mathematical situations. For example, in Lesson 2-1: "Unit Rates," students

model the concept of unit rates by creating a bar diagram to represent the number of beats in two minutes and the number of beats in one minute. Students then use the number of beats in one minute to determine the number of beats in half a minute.

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

The *Course 2* 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, the Chapter 7: "Equations and Inequalities," "Chapter Performance Task," requires students to apply their understanding of two-step equations to write and solve an equation based on the following: "By October 19th, Gordon had read 35 pages. Starting on October 20th, he decides to read the same number of pages each day until he finishes the book on October 30th. Let *p* represent the number of pages read per day. How many pages does Gordon read per day?"

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 3-7: "Discount," students apply their understanding of discounts and sales tax. Students must calculate the cost of each umbrella with a specific percent discount and 6 percent sales tax, and determine which umbrella would be the least expensive to purchase after the discount and sales tax are applied.

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?" question in Lesson 9-2: "Circle Graphs" is, "Refer to the circle graph above. A total of 300 students were surveyed. What fraction of the total number of students prefer cheese as their favorite topping?" This question follows the launch of the lesson and the introduction of key concepts.

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 2* 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 3-1: "Percent of a Number," the worksheet includes repeated practice determining the percent of a number.

Each lesson provides targeted opportunities to build fluency through extension activities aligned to lesson content. For example, Lesson 7-7: "Solve and Write Two-Step Inequalities," provides an extension activity for approaching-level students. The materials direct teachers to "have pairs of students fill in the blanks to solve the inequality."

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 2* 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 the Lesson 7-4a Hands-On Lab: "Model and Solve Two-Step Equations" exercises, students use bar diagrams and algebra tiles to solve two-step equations. The materials instruct students to draw and use a bar diagram to write and solve an equation representing a real-world scenario, and to use algebra tiles to solve various equations.

Lesson 2-1: "Unit Rates" introduces students to multiple methods for determining the unit rate. Method 1 uses equivalent fractions and simplifying, while Method 2 uses a bar diagram. Following each example, lesson prompts provide opportunities for students to choose their preferred method to solve questions.

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 2* 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 8-4: "Area of Circles," students apply their understanding of finding the area of circles by determining the total area of a section of ground around a tree. Students find the area of the larger circle of leaves and subtract the area of the tree's trunk to determine the area that needs to be raked. At the end of the problem-solving process, the materials ask, "How do you know your solution is accurate?"

The *Course* 2 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 8-5: "Area of Composite Figures," students calculate the area of a composite shape. During this activity, the teacher guidance suggests posing the question, "To determine the area of the shaded region, what would you do? Explain."

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

The *Course 2* 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 8-1: "Angle Relationships," Example 3 uses what students previously learned about vertical and adjacent angles to determine the value of a missing measure. Teachers ask students, "What type of angles are the 130-degree angle and the angle labeled ($2x + 2$) degrees?" "What is true about the measures of vertical angles?" "What angles are adjacent to the 50-degree angle?" and "What is the value of y?"

The "Scaffolded Support" sections include guidance for teachers to implement various scaffolded activities for students at various levels of understanding. For example, in Lesson 1-5a Hands-On Lab: "Use Models to Add and Subtract Rational Numbers," Activity 2 includes a "Think-Pair-Share" activity where approaching-level students work in pairs using a number line to determine the difference of three-sixths minus four-sixths. Teachers ask students, "Why is the number line divided into sixths?" "In step 2, will three-sixths be graphed to the right or left of zero on the number line?" and "In step 3, why did you move to the left on the number line?"

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 2* materials explicitly state how the conceptual and procedural emphasis of the TEKS are addressed. For example, Lesson 4-2: "Critical Attributes of Similar Figures" addresses TEKS 7.5A (generalize the critical attributes of similarity, including ratios within and between similar shapes). The "Key Concept" box shows that students can use models of shapes with corresponding congruent angles and corresponding sides with equivalent ratios to develop a conceptual understanding of similarity and similar figures. Students can then apply that understanding to use a proportion or scale factor to determine the measure of the sides of similar figures when one or more measures are unknown.

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 7: "Equations and Inequalities," Lessons 4 and 5, explains that as students transition to solving two-step equations, "A two-step equation is an equation having two different operations. Bar diagrams and algebra tiles can be used to solve two-step equations, but as the equations become more complicated, it becomes necessary to learn and use the properties of equality to solve equations algebraically."

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 2* 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 7-4a Hands-On Lab: "Model and Solve Two-Step Equations," students first model and solve two-step equations using algebra tiles as concrete models and manipulatives. Then, students solve two-step equations using drawings of algebra tiles as pictorial representations. In the following lesson, Lesson 7-4: "Solve and Write Two-Step Equations," students solve two-step equations algebraically using abstract representations by undoing the operations in the reverse order.

In Lesson 7-5a Hands-On Lab: "Model Two-Step Equations using the Distributive Property," students model and solve two-step equations with the distributive property using algebra tiles as concrete models,

and manipulatives and bar diagrams as pictorial representations. In the following lesson, Lesson 7-5: "Solve Two-Step Equations using the Distributive Property," students solve two-step equations with the distributive property algebraically using abstract representations, and the properties of equality.

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 2* materials support 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 the Lesson 8-4a Hands-On Lab: "Model Area of Circles" activity, students use a paper plate to model a circle and determine the formula for the area of a circle. Students fold the plate to divide it into sixteen equal sections, label the circle's radius (r) and circumference (C), cut out each section, and reassemble the sections to form a parallelogram-shaped figure. The materials ask students what expressions represent the measurements of the base and the height of the parallelogram. Then, students must substitute these values into the formula for the area of the parallelogram.

Each chapter features a planning document that outlines tools and manipulatives students can use to build conceptual understanding from concrete to abstract. For example, in "Hands-On Lab 5a: Model Two-Step Equations using the Distributive Property," the "Planning" tab recommends using the *eSolutions Manual* as students model two-step equations using the distributive property. The teacher guidance includes the instructional strategy "Pairs-to-Groups," in which student pairs use algebra tiles to model and solve equations, then join another pair to share their solution processes and discuss any discrepancies.

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 2* materials provide opportunities for students to develop academic mathematical language using visuals, manipulatives, and other language development strategies. For example, in the Chapter 8: "Develop Geometry with Algebra," "Vocabulary Check" section, students define *complementary angles* in their own words and provide an example of two angles that would be complementary.

In Lesson 1-2a Hands-On Lab: "Sets of Rational Numbers," students use note cards as hands-on manipulatives to distinguish between whole numbers, integers, and rational numbers. Students sort specific numbers into each category and describe the relationships between sets of rational numbers. The materials then ask students, "Which number(s) could be placed into more than one category?"

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 7: "Equations and Inequalities," students engage in a "Reading Math" activity to build their academic vocabulary. Students identify key information in a word problem and connect its importance to solving the problem mathematically.

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

The *Course 2* 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, an activity in Chapter 9: "Statistics and Sampling" instructs teachers to have students work in small groups to define *sample*, provide an example of a sample of students in a middle school, and provide examples of types of inferences that can be made from that sample. The teacher ensures each group member understands the term *sample* before they share their definitions with the class.

The "What Math Language and Strategies Do You Need?" section at the beginning of each chapter provides teacher guidance to form an instructional routine when introducing new vocabulary terms. For example, Chapter 10: "Personal Financial Literacy" provides an example instructional routine for the term

net worth. The teacher says *net worth* aloud, and students repeat the term. The teacher defines the term as, "the value of your assets, the things you own, minus the value of your liabilities, or the things that you owe." The materials provide an example that involves subtracting, as well as a question using the term in context.

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 2* 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 4-4a Hands-On Lab: "Model Circumference," the "Create" section activity instructs teachers to have students work in pairs to complete exercises that lead them to discover the formula for the circumference of a circle. Students then create a brief oral presentation explaining how they generated their formula for the circumference of a circle, providing examples, models, and illustrations.

The materials include "Exit Tickets" with teacher guidance that provides syntax to support mathematical conversations. For example, in Lesson 6-3: "Slope," the teacher guidance states, "Ask students to give an example of how being able to determine the constant rate of change helped them with this lesson on determining slope. Have them use the writing prompt below. Learning how to determine the constant rate of change helps me to determine the slope 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 2* materials. For example, in Lesson 9-2: "Circle Graphs," students use a problem-solving model to analyze, plan, solve, justify, and evaluate their solution to a circle graph that represents the percentages of 150 surveyed student's favorite ice cream flavor. Students must determine how many more students selected vanilla than mint chocolate chip as their favorite flavor.

Each chapter features a "21st Century Career" activity where students apply mathematical thinking to real-world contexts. For example, in Chapter 7: "Equations and Inequalities," the "21st Century Career" activity aligns with Process Standard 7.1A as students explore the role of mathematics in the work of a veterinary technician. The activity moves beyond just writing and solving equations by incorporating the instructional strategy "Trade-a-Problem," where students create and exchange original math problems based on information 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 2* 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 7.1B, 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 2* materials include a description, for each unit, of how the TEKS process standards are incorporated throughout the unit. For example, in Chapter 3: "Apply Proportionality to Percent," the "Planning" section indicates that the chapter incorporates the TEKS 7.1A, 7.1B, 7.1C, 7.1D, 7.1E, 7.1F, and 7.1G.

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 7.1A, 7.1B, 7.1C, 7.1D, 7.1E, 7.1F, and 7.1G are in lessons throughout Chapter 9: "Statistics and Sampling." The "Focus on Mathematical Processes: Use a Graph" lesson in the middle of the chapter addresses TEKS 7.1B and 7.6G.

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 2* 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 8-3: "Sum of Angles in Triangles" incorporates TEKS 7.1A into Exercises 3–5, with an emphasis on applying math to the real world. The lesson incorporates TEKS 7.1B into Exercises 9–24, 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 3-1: "Percent of a Number" includes TEKS 7.1A, 7.1B, and 7.1C to meet the objective, "determine the percent of a number." Integrating the TEKS process standards helps students answer the essential question, "Give an example of a real-world situation in which you would determine the percent of a number."

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 2* 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 8-7: "Volume of Pyramids," students use a problem-solving model to determine the fraction of a pyramid that can be filled with sand when given an image of a triangular pyramid and its dimensions.

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 4-4: "Circumference," students analyze how the circumference of a circle would change if the diameter were doubled, and provide an example to support their explanation. Students also determine whether the relationship between the circumference of a circle and its diameter is a direct variation, and if so, students identify the constant of proportionality.

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 2* 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 7-5a Hands-On Lab: "Model Two-Step Equations using the Distributive Property," the activities require students to use bar diagrams and algebra tiles to model and solve two-step equations using the distributive property.

The "Teacher Notes" for the "Hands-On Lab: Exercises," "Analyze and Reflect" section, provides guidance for teachers to have students work in pairs using the model of their choice to write and solve equations for given situations. Students share their processes and solutions and discuss and resolve any discrepancies. At the end of the lab, students explain and justify how they can select tools to differentiate between equations written in $px + q = r$ and $p(x + q) = r$ forms.

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 3-7: "Discount," Exercise 14 requires students to describe two methods for determining the sale price of an item that is discounted 30 percent and explain which method they prefer.

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 2* 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. For example, in Lesson 3-5a Hands-On Lab: "Model Percent of Change," students work with a partner to determine the new height of an eight-foot-tall tree that increased in height by 25 percent, using a bar diagram.

In Lesson 9-2a Hands-On Lab: "Connect Bar Graphs to Circle Graphs," the "Teacher Notes" in the "Launch the Lesson" section include questions for teachers to ask students to discuss the concepts introduced in the activities. The questions include, "How could you record the different answers to this question?" and "Is this the only way you could record all of the answers?"

The "Scaffolded Support" section of the "Hands-On Labs" explains that the "Hands-On Activities" should be whole group activities with the teacher. In the "Hands-On Activity," students use a table with survey results to construct a bar graph that represents those results.

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 2* 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 5-4: "Simulations," students use a problem-solving model to determine by what percent more games Natasha won compared to Rico, given a simulation and its results.

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 2* 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 8-7: "Volume of Pyramids" explains that a common misconception is "students may forget to multiply the product of the base and height by one-half when calculating the volume of triangular pyramids." To address this misconception, the materials prompt teachers to "remind students that the formula for determining the area of the base of a pyramid, B, differs depending on the shape of the base. It can be $B = lw$ for a rectangle, $B = s^2$ for a square, or $B = 1/2bh$ for a triangle."

In the same lesson, "Multi-Step Problem Solving," "Teacher Notes," "Analyze Student Errors: Exercise 16," prompts and guides teachers that D is the correct answer for Exercise 16. If students chose A, they

"incorrectly calculated the volume of the pyramid as 20,000 cubic centimeters." If students chose *B*, they "incorrectly calculated the volume of the pyramid as 18,000 cubic centimeters." If students chose *C*, they "incorrectly calculated the volume of the pyramid before determining the fraction of the pyramid that she can fill."