Publisher Name	Program Name
Agile Mind, Inc.	*Texas Algebra II*
Subject	**Course**
Mathematics	Algebra II

Texas Essential Knowledge and Skills (TEKS) Coverage: **100%**

English Language Proficiency Standards (ELPS) Coverage: **100%**

Quality Review Overall Score: **227 / 227**

Quality Review Summary

Rubric Section	Quality Rating
1. Intentional Instructional Design	**53 / 53**
2. Progress Monitoring	**28 / 28**
3. Supports for All Learners	**32 / 32**
4. Depth and Coherence of Key Concepts	**23 / 23**
5. Balance of Conceptual and Procedural Understanding	**66 / 66**
6. Productive Struggle	**25 /25**

Strengths

- 1.1 Course-Level Design: Materials include a scope and sequence outlining the TEKS, ELPS, concepts, and knowledge taught in the course, with suggested pacing guides for various instructional calendars, explanations for the rationale of unit order and concept connections, guidance for unit and lesson internalization, and resources to support administrators and instructional coaches in implementing the materials as designed.
- 1.2 Unit-Level Design: Materials include comprehensive unit overviews that provide background content knowledge and academic vocabulary necessary for effective teaching and contain support for families in both Spanish and English with suggestions for supporting their student's progress.
- 1.3 Lesson-Level Design: Materials include comprehensive, structured lesson plans with daily objectives, questions, tasks, materials, and instructional assessments required to meet the content and language standards. They also provide a lesson overview outlining the suggested timing for each component, a list of necessary teacher and student materials, and guidance on the effective use of lesson

materials for extended practice, such as homework, extension, and enrichment.

- 2.1 Instructional Assessments: Materials include a variety of instructional assessments at the unit and lesson levels, including diagnostic, formative, and summative assessments with varied tasks and questions, along with definitions and purposes, teacher guidance for consistent administration, alignment to TEKS and objectives, and standards-aligned items at different levels of complexity.
- 2.2 Data Analysis and Progress Monitoring: Materials include instructional assessments and scoring information that provide guidance for interpreting and responding to student performance, offer guidance on using tasks and activities to address student performance trends, and include tools for students to track their own progress and growth.
- 3.1 Differentiation and Scaffolds: Materials include teacher guidance for differentiated instruction, activities, and scaffolded lessons for students who have not yet reached proficiency, pre-teaching or embedded supports for unfamiliar vocabulary and references in text, and guidance for differentiated instruction, enrichment, and extension activities for students who have demonstrated proficiency in grade-level content and skills.
- 3.2 Instructional Methods: Materials include prompts and guidance to support teachers in modeling, explaining, and directly and explicitly communicating concepts to be learned. They provide teacher guidance and recommendations for effective lesson delivery using various instructional approaches and support multiple types of practice with guidance on recommended structures, such as whole group, small group, and individual settings, to ensure effective implementation.
- 3.3 Support for Emergent Bilingual Students: Materials provide guidance for teachers in bilingual/ESL programs, support academic vocabulary and comprehension, and include resources for metalinguistic transfer in dual language immersion programs.
- 4.1 Depth of Key Concepts: Materials provide practice opportunities and instructional assessments that require students to demonstrate depth of understanding aligned to the TEKS, with questions and tasks that progressively increase in rigor and complexity, leading to grade-level proficiency in mathematics standards.
- 4.2 Coherence of Key Concepts: Materials demonstrate coherence across courses and grade bands through a logically sequenced scope and sequence, explicitly connecting patterns, big ideas, and relationships between mathematical concepts, linking content and language across grade levels, and connecting students' prior knowledge to new mathematical knowledge and skills.
- 4.3 Spaced and Interleaved Practice: Materials provide spaced retrieval opportunities and interleaved practice with previously learned skills and concepts.

- 5.1 Development of Conceptual Understanding: Materials include questions and tasks that require students to interpret, analyze, and evaluate various models for mathematical concepts, create models to represent mathematical situations, and apply conceptual understanding to new problem situations and contexts.
- 5.2 Development of Fluency: Materials provide tasks designed to build student automaticity and fluency for grade-level tasks, offer opportunities to practice efficient and accurate mathematical procedures, evaluate procedures for efficiency and accuracy, and include embedded supports for teachers to guide students toward more efficient approaches.
- 5.3 Balance of Conceptual Understanding and Procedural Fluency: Materials explicitly state how the conceptual and procedural emphasis of the TEKS are addressed, include questions and tasks that use concrete models, pictorial representations, and abstract representations, and provide supports for students in connecting and explaining these models to abstract concepts.
- 5.4 Development of Academic Mathematical Language: Materials provide opportunities for students to develop academic mathematical language using visuals, manipulatives, and language strategies, with embedded teacher guidance on scaffolding vocabulary, syntax, and discourse, and supporting mathematical conversations to refine and use math language.
- 5.5 Process Standards Connections: Materials integrate process standards appropriately, providing descriptions of how they are incorporated and connected throughout the course, within each unit, and in each lesson.
- 6.1 Student Self-Efficacy: Materials provide opportunities for students to think mathematically, persevere through problem-solving, and make sense of mathematics, while supporting them in understanding multiple ways to solve problems and requiring them to engage with math through doing, writing, and discussion.
- 6.2 Facilitating Productive Struggle: Materials support teachers in guiding students to share and reflect on their problem-solving approaches, offering prompts and guidance for providing explanatory feedback based on student responses and anticipated misconceptions.

Challenges

- No challenges in this material

Summary

Agile Mind *Texas Algebra II* is a 9–12 Mathematics program. This instructional material provides a comprehensive approach to teaching Algebra II, featuring a well-structured scope and sequence that clearly outlines the concepts and knowledge covered in each unit. Each unit is accompanied by an

Advice for Instruction that includes pacing, detailed unit overviews, essential background information, academic vocabulary, and detailed daily lesson guides to support effective instruction.

Campus and district instructional leaders should consider the following:

- Teachers may benefit from additional guidance in interpreting student performance data and identifying actionable next steps to address individual student needs. Providing professional development or resources in this area can strengthen their ability to implement data-driven instruction effectively. The program includes tools for students to track their progress and growth, which promotes self-directed learning, but offering targeted support for teachers will ensure they can fully utilize these tools to benefit all students.
- The program includes professional support essays for teachers and instructional leaders, offering guidance on how to effectively use the materials to support all students. However, both novice and experienced teachers may benefit from additional support to navigate the materials and ensure that all students, including students receiving Special Education services and Emergent Bilingual students, receive the appropriate support throughout their learning journey.

Intentional Instructional Design

1.1	Course-Level Design	15/15
1.1a	Materials include a scope and sequence outlining the TEKS, ELPS, concepts, and knowledge taught in the course.	**5/5**
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).	**2/2**
1.1c	Materials include an explanation for the rationale of unit order as well as how concepts to be learned connect throughout the course.	**2/2**
1.1d	Materials include guidance, protocols, and/or templates for unit and lesson internalization.	**2/2**
1.1e	Materials include resources and guidance to support administrators and instructional coaches with implementing the materials as designed.	**4/4**

The materials include a scope and sequence outlining the Texas Essential Knowledge and Skills (TEKS), English Language Proficiency Standards (ELPS), concepts, and knowledge taught in the course. 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). Materials include an explanation for the rationale of unit order as well as how concepts to be learned connect through the course. Materials include guidance, protocols, and/or templates for unit and lesson internalization. Materials include resources and guidance to support administrators and instructional coaches in implementing the materials as designed.

Evidence includes, but is not limited to:

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

- The materials include a scope and sequence for the Algebra II course in the professional support materials sidebar. This scope and sequence outline the concepts covered and the knowledge taught throughout the course.
- The materials list each topic with descriptions of concepts, readiness, and supporting standards, and the ELPS.
- The scope and sequence outline the TEKS and ELPS for each of the 18 Agile Mind topics. Each topic has descriptions that provide details about the concepts and knowledge. For example, Topic 6: Quadratic and square root inequalities states, "This topic builds students' understanding of quadratic and square root functions and equations." It lists TEKS 2A.4H and ELPS 1.F, 2.I, and 3.C.

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

- The course planning and pacing documents include an Algebra II "Year-at-a-Glance" document, which offers three separate pacing guides for 117–121 days, 165 days, and 180 days of instruction. The materials suggest the number of days teachers should devote to each topic and outline the corresponding TEKS covered in that timeframe.
- The "Year-at-a-Glance" document includes three pacing guides, including 117–121, 165, 180 days. Each pacing document outlines the recommended allocation of days for each topic, along with corresponding lessons and TEKS.
- The resources contain lessons and activities for an entire school year, as indicated by the course planning and pacing guides. The topics can be implemented for various instructional calendars, including 165 and 180 days of instruction.

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

- The course planning and pacing documents include a course rationale that provides an overview, describes the connection to the TEKS and ELPS, and explains how the concepts connect throughout the course. The document states, "The Agile Mind Texas Algebra II course was designed to provide students with the tools needed to analyze functions, then use functions to create equations in order to solve problems."
- The materials describe how the Algebra II program builds on students' work with linear, quadratic, and exponential functions and equations in Algebra I. It deepens students' understanding of important mathematical ideas related to these functions while extending this work to new function types and problem solving.
- The materials include a progression chart that demonstrates how units relate to the TEKS, competencies, and recurring topics throughout the lessons.

Materials include guidance, protocols, and/or templates for unit and lesson internalization.

- The materials provide teacher guidance for the instructional block, including goals and objectives, opening and framing questions, and detailed lesson activities for each page. The lesson activities, "Deliver Instruction" (located under the Topic Content sidebar for each topic below "Advice for Instruction"), include strategies, technology tips, and questioning guidance, all of which support lesson internalization.
- The materials provide explanations of the connections to prior grade levels and the significance of the skills for current and future lessons. Goals and objectives for the unit are presented in a bulleted list, followed by a list of prerequisite skills students need to be successful. Each lesson includes a summary of the skills students will learn by the end of the class.
- The materials provide protocols to help internalize topics and lessons, offering guidance on reviewing and annotating lessons, linking lessons to tasks or assessments, and identifying

areas where students may need support. Each topic also includes specific advice for instruction under the Topic Content sidebar.

Materials include resources and guidance to support administrators and instructional coaches with implementing the materials as designed.

- The "Leadership Guide to Success" resource, included in the "Professional Support Overview" tab, contains a checklist, timeline, and key milestones for leaders to ensure successful implementation. A classroom observation guide is also provided to rate various implementation indicators based on the teacher's level of use. This guide includes four categories, each with specific indicators. Administrators and/or instructional coaches can use the guide to offer feedback to teachers. In the section "Structures for Successful Implementation: A Checklist for Leaders," it states, "The following are some critical elements of a successful implementation. Use this chart to develop plans and monitor progress for each structure or strategy within your school or district." The checklist serves as a tool for administrators to utilize while observing a classroom to ensure that the materials are being implemented as designed.
- The materials include a Professional Support sidebar within the Professional Support Overview that provides information about live lessons, stating, "In addition to the support in our system, we offer ongoing professional learning opportunities to teachers and leaders to assist you in making the best use of our programs." The description for coaches and instructional leaders states, "These sessions explore how education leaders can make the most of their implementation and equip leaders with tools and guidance to support their teachers."

Intentional Instructional Design

1.2	Unit-Level Design	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.	**2/2**
1.2b	Materials contain supports for families in both Spanish and English for each unit with suggestions on supporting the progress of their student.	**2/2**

The materials include comprehensive unit overviews that provide the background content knowledge and academic vocabulary necessary to effectively teach the concepts in the unit. Materials contain support for families both Spanish and English for each unit with suggestions on supporting the progress of their student.

Evidence includes, but is not limited to:

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

- For each topic, the materials include a Prepare Instruction section, which includes an overview of the topic, goals and objectives, a topic at a glance, prerequisite skills, additional resources, and language support. The "Language support" section includes the academic vocabulary necessary to effectively teach the concepts in the unit. It states, "All students should become proficient with using the core vocabulary of domain, inequality, opposite, absolute value, solution set, interval notation, and set notation."
- The materials in the Prepare Instruction section include "About This Topic" and "Prerequisite skills," which provide context on how topics connect to prior lessons and grade levels, along with the necessary background knowledge for instruction. For example, in Topic 1. Absolute value functions, equations, and inequalities state that multiple representations are used to "build on student understanding of the absolute value of a number to introduce the absolute value function...Students expand on their prior knowledge of linear functions to develop the idea of an absolute value function as a piecewise-defined function."

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

- The sidebar Course Materials includes the tab Support for Families. The link takes you to the Support for Student and Families site. Included on this site is a video to help families get started with Agile Mind. The video "provides an introduction to Agile Mind programs and tools, and how these resources are used to support students' learning."
- The Support for Families site includes a video for families on "Monitoring Progress with Agile Mind." The video " provides guidance for engaging with Agile Mind's Assignments and Quizzes and using their associated reports to monitor progress."

- The Support for Families site includes a downloadable PDF titled "Quick Start Guide for Families" that "shares key features and navigation tools." This document is available in both Spanish and English.

Intentional Instructional Design

1.3	Lesson-Level Design	34/34
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.	**30/30**
1.3b	Materials include a lesson overview outlining the suggested timing for each lesson component.	**1/1**
1.3c	Materials include a lesson overview listing the teacher and student materials necessary to effectively deliver the lesson.	**2/2**
1.3d	Materials include guidance on the effective use of lesson materials for extended practice (e.g., homework, extension, enrichment).	**1/1**

The 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. Materials include a lesson overview outlining the suggested timing for each lesson component. Materials include a lesson overview listing the teacher and student materials necessary to effectively deliver the lesson. Materials include guidance on the effective use of lesson materials for extended practice (e.g., homework, extension, enrichment).

Evidence includes, but is not limited to:

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.

- The materials include a comprehensive list of information and teaching activities in the "Prepare Instruction" section, along with additional materials.
- The materials include exercises and questions under the "Deliver Instruction" section designed to enhance students' language skills, aligned with the ELPS and teaching strategies for grade-level competencies.
- The materials include structured lesson plans in the "Deliver Instruction" section, which detail timing, objectives, questions, assignments, and assessments with step-by-step support.
- These strategies include multiple opportunities for practice and discussion, as well as engagement in constructive problem-solving.

Materials include a lesson overview outlining the suggested timing for each lesson component.

- The materials include instructions from "Deliver Instruction" for tasks that balance conceptual understanding, procedural skill fluency, and application, helping students apply their learning.
- The materials include suggestions from "Deliver Instruction" for delivering instruction, including pacing and timing for lessons and activities.

- The materials include a "Deliver Instruction" section with detailed lesson plans that specify total and component-specific timing, such as allocating 45 minutes for Topic 1 with breakdowns for each part.

Materials include a lesson overview listing the teacher and student materials necessary to effectively deliver the lesson.

- The materials include a "Deliver Instruction" section with suggested readings, resources, advice, and teacher notes.
- The materials include teacher files, such as printable overviews and answer keys, as well as student-facing files like activity sheets and constructed response items.
- The materials include a "Prepare Instruction" section with lesson files and additional resources, including specific materials such as algebra tiles and modeling clay.

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

- The materials provide opportunities for students to study and apply new information, connecting their learning to real-world activities and spiraling throughout the year to promote retention and mastery, including further questions and suggested assignments found at the bottom of the "Deliver Instruction" section.
- The materials include detailed differentiation strategies, suggested activities, and group or partner exercises for each lesson, found at the bottom of the "Deliver Instruction" section.
- The materials include "Further Questions" and "Suggested Assignments" at the end of each section, with each topic featuring a list of questions to answer or activities to complete at the bottom of the "Deliver Instruction" tab. Some topics also provide extra homework practice that offers immediate feedback on the skills learned.

Progress Monitoring

2.1	Instructional Assessments	24/24
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.	**12/12**
2.1b	Materials include the definition and intended purpose for the types of instructional assessments included.	**2/2**
2.1c	Materials include teacher guidance to ensure consistent and accurate administration of instructional assessments.	**2/2**
2.1d	Diagnostic, formative, and summative assessments are aligned to the TEKS and objectives of the course, unit, or lesson.	**6/6**
2.1e	Instructional assessments include standards-aligned items at varying levels of complexity.	**2/2**

The 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. Materials include the definition and intended purpose for the types of instructional assessments included. Materials include teacher guidance to ensure consistent and accurate administration of instructional assessments. Diagnostic, formative, and summative assessments are aligned to the TEKS and objectives of the course, unit, or lesson. Instructional assessments include standards–aligned items at varying levels of complexity.

Evidence includes, but is not limited to:

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 materials include the "Agile Mind's Approach to Assessment" guide, which provides a range of diagnostic, formative, and summative tests at the topic and lesson levels to gauge students' comprehension of mathematical concepts and skills.
- The materials include different formats for online assessment questions, including short constructed responses, drag and drop, short answer, multiple choice, graphing, and multiple selection item types.
- The materials include lesson activity pages with interactive components, checks, and problems to solve, where students can demonstrate mastery, practice learning, and receive immediate feedback. The online materials provide teachers with an assessment bank of questions and examples of diagnostic tests for topics/units and lessons. Summative assessments are addressed in the Student Activity Sheets (SAS) assignments suggested for teachers in the "Advice for Instruction" tab to the left under each topic.

- The materials include a "Topic Content" sidebar that offers a variety of assessment opportunities at the lesson level. The "Deliver Instruction" page provides guidance on facilitating classroom conversations to assess students prior to the lesson and for acquired knowledge throughout the lesson. Lesson activities are designed to formally assess students' progress through various methods, including videos, questioning with built-in check buttons for immediate feedback, and interactive graphs. Each lesson concludes with practice activities such as additional questions on the student activity sheet, constructed responses, staying sharp review skills, and online items.
- The materials include an "Agile Assessment" sample diagnostic test, which "assesses students' prerequisite knowledge of graphs of linear, quadratic, and exponential functions." This assessment provides an opportunity to review Algebra I skills to help guide instruction for the upcoming Algebra II topic.
- The "Professional Supports" sidebar provides guidelines for interim assessments. The blueprint provides a detailed list of assessment items that can be used to assess a student over the course of several topics.

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

- The materials include the definition of diagnostic tests, which aim to supply baseline information about a student's basic knowledge or proficiency. In the "Agile Mind's Approach to Assessment" guide, formative assessments are also defined, with goals that include guiding instructional decisions, identifying misconceptions, assisting teachers and students in adjusting, and gauging progress. The guide also defines summative assessments, which are used to evaluate learning, skill acquisition, and achievement after a topic, semester, or academic year has concluded.
- The materials include the "Agile Mind's Approach to Assessment" guide, which states, "Diagnostic assessments are short assessments of students' knowledge and skills, given before instruction" and "The purpose of formative assessment is to elicit evidence that helps students and teachers identify strengths, misconceptions, and errors, and monitor progress toward identified success criteria."
- The materials include the intended purpose of assessments at the end of each topic in the last lesson under the "Deliver Instruction" section.

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

- The materials include instructions under "Deliver Instruction" that teachers can use to administer tests, such as scheduling suggestions for different class periods or days. Additionally, the materials provide suggestions for how many questions to include on an assessment.
- The materials include teacher guidance for formative assessments in the "Getting Started with Agile Mind" sidebar and the "Practice and Assessments" section. This information provides

teachers with the frequency and focus of test administrations. These pages and videos also guide teachers on the use of score reports for any assignment, practice, or assessment administered to students.
- The materials include a "Deliver Instruction" section for each topic quiz that does not include details for consistent and accurate administration.

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

- The materials include an "Agile Assessment" tab that allows one to choose types of questions based on the TEKS for the assessments for each topic and lesson when needed.
- The "Agile Assessment" system has a test design alignment report for any test created within the program, including diagnostic, formative, or summative assessments. The report includes the alignment with the course topic and TEKS, as well as the question type and complexity level.
- The materials include the "Professional Supports" sidebar, which provides guidelines for designing interim assessments. Each interim assessment includes a blueprint to aid in the design of the assessment. Each question includes the course topic, TEKS, and complexity level.

Instructional assessments include standards-aligned items at varying levels of complexity.

- The materials include topic (unit) and lesson alignment including every assessment item's TEKS correlation and its correct answer listed in the key.
- The materials include an "Agile Assessment" that has a test design tool that allows the teacher to create assessments by choosing questions from a bank of TEKS-aligned items, with the type of questions based on the TEKS. Each item includes the DOK level and alignment to the topic and lesson.
- The materials include the "Agile Assessment" system that has a test design alignment report for any test created within the program, including diagnostic, formative, or summative assessments. The report includes the alignment with the course topic and TEKS, as well as the question type and complexity level.
- The materials include the "Professional Supports" sidebar that provides guidelines for designing interim assessments. Each interim assessment includes a blueprint to aid in the design of the assessment. Each question includes the course topic, TEKS, and complexity level.

Progress Monitoring

2.2	Data Analysis and Progress Monitoring	4/4
2.2a	Instructional assessments and scoring information provide guidance for interpreting and responding to student performance.	**2/2**
2.2b	Materials provide guidance for the use of included tasks and activities to respond to student trends in performance on assessments.	**1/1**
2.2c	Materials include tools for students to track their own progress and growth.	**1/1**

Instructional assessments that are standards–aligned items at varying levels of complexity. Materials provide guidance for the use of included tasks and activities to respond to student trends in performance on assessments. Materials include tools for students to track their own progress and growth.

Evidence includes, but is not limited to:

Instructional assessments and scoring information provide guidance for interpreting and responding to student performance.

- The materials include reports for teachers to help them understand student performance through the online dashboard and reports feature. The reports include the TEKS alignment, total score, and time spent on each assignment. To assist in interpreting student scores, the reports also provide information on the number of attempts made on each question and the submitted answer. The materials include guidance for interpreting scores in a training video in the "Professional Support" sidebar under "Getting Started with Agile Mind: Practice & Assessments." The video demonstrates how teachers can utilize the dashboard to interpret the assessment data.
- The materials include the "Agile Assessment" item and answer bank that provides many questions and a possible rationale for incorrect answers. The guidance aids teachers in interpreting possible student misconceptions.
- The materials provide guidance for responding to student performance in the Texas Algebra II Corequisite Guide, located in the Course Pacing and Planning Section. The Corequisite Guide provides recommendations for specific problems within a lesson to use as formative assessments, identifies specific instructional resources to use as a reteach, and a list of additional practice problems. For example, in Topic 8, Lesson 2, the materials state, "Use the animation on page 3 of the Exploring 'Polynomial division and factoring' in this Algebra II topic to formatively assess students' understanding of polynomial division." In Topic 2, Lesson 4, the materials state, "Students may need more scaffolding as they develop toward the square root function. Consider using pages 1-5 of the Exploring form the appendix topic." In Topic 3, Lesson 1 the materials include suggestions for additional practice stating, "To solidify these corequisite skills, assign additional practice from the appendix topic."

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

- The materials under "Deliver Instruction" provide instructional strategies that can be used to support students who show a need for more one-on-one support. These techniques might be unique to a lesson or skill or be part of a different resource. The materials also include instructions that teachers can use to administer tests, such as scheduling suggestions for different class periods or days. Additionally, the materials provide suggestions for how many questions to include in an assessment.
- The materials include an "Assessment Processing Routine" found toward the bottom of the list of topics/units in the "Classroom Routines" section. This leads the teacher and students to analyze which questions and skills they performed well on, and which ones are needed for improvement. Students then rework the problems they missed and record what they learned from their mistakes.
- The materials include the "Deliver Instruction" page that guides how to facilitate conversation with students and how to work together to identify strengths and areas for improvement from an assessment.
- The materials include the "Algebra II Corequisite Support" guide for "just-in-time instruction to accelerate necessary learning from prior grades to ensure students can access and engage in related Algebra II content." The guide provides a formative assessment "to assess whether your students will need corequisite supports." Based on the evaluation of the assessment, additional lessons are provided to ensure students are ready for grade-level instruction.

Materials include tools for students to track their own progress and growth.

- The materials include tools for student self-reflection and error review, allowing students to understand their learning needs and set individual goals in the "Classroom Routines" tab, which includes the "Classroom Routines" section that provides an "Assessment Process Routine" for students to track their own growth. The assessment process routine provides a structure for students to identify assessment items on which they performed well and items on which they did not perform well, with instructions to re-work missed items to identify mistakes and misconceptions.
- On the "Support for Students and Families" webpage, the "Quick Start Guide for Texas Families" includes online reports accessible to students to help them monitor their progress and performance on assignments, quizzes, and tests. This section includes support for families and tools for students to keep on track and focus on their progress.
- The materials include a student dashboard that provides direct access to monitor progress and growth on practice questions and assessments as well as online tools to help students track their progression throughout the course.

Supports for All Learners

3.1	Differentiation and Scaffolds	8/8
3.1a	Materials include teacher guidance for differentiated instruction, activities, and/or paired (scaffolded) lessons for students who have not yet reached proficiency on grade-level content and skills.	**3/3**
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)	**2/2**
3.1c	Materials include teacher guidance for differentiated instruction, enrichment, and extension activities for students who have demonstrated proficiency in grade-level content and skills.	**3/3**

The materials include teacher guidance for differentiated instruction, activities, and/or paired (scaffolded) lessons for students who have not yet reached proficiency on grade–level content and skills. Materials include pre–teaching or embedded supports for unfamiliar vocabulary and references in text (e.g., figurative language, idioms, academic language). Materials include teacher guidance for differentiated instruction, enrichment, and extension activities for students who have demonstrated proficiency in grade–level content and skills.

Evidence includes, but is not limited to:

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

- In the "Deliver Instruction" section, the materials include questions to support student comprehension and differentiated instruction. In Topic 3, Lesson 5, teachers receive suggestions for differentiating the learning environment by using pairs, small groups, and scaffolding with practice pages and lesson-related questions.
- The materials provide teacher guidance in the "Deliver Instruction" tab with the "Classroom Strategy" bolded bulleted items. For example, Topic 4, Block 3 suggests, "If students are struggling with factoring, use Algebra tiles to practice factoring other trinomials before moving on."
- The materials include the "Algebra II Corequisite Support Guide for Texas," which provides "just-in-time instruction to accelerate necessary learning from prior grades to ensure students can access and engage in related Algebra II content." The guide provides a formative assessment "to assess whether students will need corequisite support." Based on the evaluation of the assessment, paired lessons are provided to ensure students are ready for grade-level instruction.

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

- The materials include the "Algebra II Corequisite Support Guide for Texas," which incorporates pre-teaching vocabulary with student-friendly definitions.
- The materials include support for vocabulary in the teacher guidance of the "Prepare Instruction" section by providing teachers with an embedded list of bolded words students will need to familiarize themselves with during the lesson. In Topic 2, Block 1, teachers are encouraged to utilize a "word wall" using the words *relation* and *function* and later discuss the multiple meanings of the word *charge* as it relates to the real-world scenario in the lesson.
- The materials include "Lesson Activities" that include visual support for many unfamiliar references throughout the topics. For example, Topic 2, Block 6 references Mexico City and Chicago within the context of the problem. For students who may be unfamiliar with the location of these cities, an animation is included to provide a visual representation of their locations. Built-in supports like these allow students to gain clarity from unfamiliar references.
- The materials include the "Deliver Instruction" page found under the "Advice for Instruction" sidebar, which provides classroom strategies to build academic vocabulary. For example, Topic 2, Block 5 provides suggestions to help build clarity for the algebraic terms *one-to-one* and *function*. The materials state, "It may be helpful at this point to introduce the geometry of the two definitions through the 'vertical line test' for a function and the 'horizontal line test' for a one-to-one function." The classroom suggestions provide the opportunity to pre-teach the academic language needed for success throughout the lesson.

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

- The materials include Guided practice for student understanding of concepts in each topic. Teacher can make an assignment for this task in the online platform. Additionally, teachers may assign More practice for students who have demonstrated proficiency in grade-level content and skills. Every lesson ends with further questions that extend student learning at the end of a lesson.
- Materials include teacher guidance for differentiated instruction and extension activities for students proficient in grade-level content and skills. For example, in Topic 5, Block 1 (Overview), the *Deliver Instruction* states, "If time permits, have students enter the data into their graphing technology to create a scatterplot. Have them adjust the window to show the data. Have students use various regressions to look at and to discuss the strengths and weaknesses of each model. This could be done in place of playing the animation next." Later, in Exploring "Square root transformations," the Deliver Instruction states, "Technology Tip. If students have already created a scatter plot and have a regression equation to fit the data, have them record whether they agree with the values of the graphing technology suggested and to explain why or why not."
- Under the Professional Support section, essays on content, pedagogy, and practice are included, specifically an essay titled, "Differentiated Instruction for Student Success," which

provides strategies to differentiate instruction for students through the content, process, product, and learning environment.

- The focus of Topic 9, Block 4, the primary materials for the lesson are the "Modeling with inverse and joint variation Guided practice" questions. Additionally, the lesson also includes enrichment. In this instance, a suggested assignment is a project where students are asked to find interest rates for savings accounts at their local banks. Students are asked to compare the double time for the different rates using the rule of 72.

Supports for All Learners

3.2	Instructional Methods	13/13
3.2a	Materials include prompts and guidance to support the teacher in modeling, explaining, and communicating the concept(s) to be learned explicitly (directly).	**6/6**
3.2b	Materials include teacher guidance and recommendations for effective lesson delivery and facilitation using a variety of instructional approaches.	**4/4**
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.	**3/3**

Materials include prompts and guidance to support the teacher in modeling, explaining, and communicating the concept(s) to be learned explicitly (directly). Materials include teacher guidance and recommendations for effective lesson delivery and facilitation using a variety of instructional approaches. 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.

Evidence includes, but is not limited to:

Materials include prompts and guidance to support the teacher in modeling, explaining, and communicating the concept(s) to be learned explicitly (directly).

- The materials include prompts and guided instructions in the "Deliver Instruction" section of Topic 4, Blocks 1 and 2 to help the teacher clearly and directly communicate, clarify, and model the concepts.
- The materials include a "Deliver Instruction" section for each lesson, offering guidance to support the teacher through each part of the lesson. For example, Topic 2, Block 1 uses words and phrases like "Have students discuss the Framing questions in pairs. Use these questions as needed," "Ask students to predict...," "Have students record and plot the data," and "Have students work in pairs to produce."
- The materials include the "Deliver Instruction" section for each block under "Advice for Instruction," which includes questions the teacher can use. For example, in Topic 4, Deliver Instruction Blocks 1 and 2 includes prompts such as "Have students discuss the Framing questions in pairs," "Ask students to predict...," "Have students record and plot the data," and "Have students work in pairs to produce."

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

- The materials for Topic 4, "Quadratic Relationships," include the "Prepare Instruction" resources under "Advice for Instruction." These resources include guidance for teachers on

how to effectively facilitate lessons so that students can solve problems, reason, and make sense of the world.

- The "Deliver Instruction" section includes teacher guidance and recommendations for all stages of the lesson. For example, Topic 2, Block 2 incorporates questioning, comparing, peer-to-peer sharing, multiple representations, sketching, and making connections for lesson delivery and facilitation.
- The "Content Material" section under "Advice for Instruction" provides guidance and recommendations on implementing the lesson from start to finish with various instructional approaches. Lessons offer opportunities for whole-class discussion, student-led exploration of the online material, student-to-student interaction (pairs and/or groups), student presentations, and time for independent practice. The materials also provide detailed instructions on incorporating technology and manipulatives when appropriate.

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 materials include clear headers and labels. For example, under Topic 4 "Quadratic Relationships Overview," the materials include clear headers and labels to help the instructor apply the many types of differentiated practice (guided, independent, and collaborative) that are employed in the lesson framework.
- The "Content Material" section under "Advice for Instruction" provides guidance on multiple types of practice and recommended structure for students throughout the topic. The blocks for "Exploring" provide guidance on facilitating student exploration utilizing interactive animations, peer-to-peer interactions, and whole-class discussions and activities.
- In the "Content Material" section under "Advice for Instruction," the blocks for "Guided Practice" provide guidance on facilitating student progress through the online guided practice section, both independently and collaboratively. The guidance includes recommended structures throughout the activities, with pairs most commonly suggested.
- The materials include practice prompts and opportunities including guided questioning, collaboration, and independent work through the lesson cycles. One example is found in Topic 2, Block 2 where questioning is provided for the whole group instructional model, while the sketching on patty paper is done independently, and writing and evaluating functions is done collaboratively.

Supports for All Learners

3.3	Supports for Emergent Bilingual Students	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.	2/2
3.3b	Materials include implementation guidance to support teachers in effectively using the materials in state-approved bilingual/ESL programs.	1/1
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.	8/8
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.	Not scored

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

Evidence includes, but is not limited to:

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 materials in the "Prepare Instruction" section include support for students in the form of multilevel aids, including word banks, visual organizers, and sentence stems. Additionally, when applicable, the materials highlight collateral vocabulary words that non-native speakers may struggle with.
- The materials include an essay titled "Teaching English Language Learners," which includes guidance for accommodations for emergent bilingual students. The "Prepare Instruction" tab for Topic 1 includes guidance for engaging students in using increasingly more academic language, such as, "Utilize pairing strategies such as think-pair-share and echo repeat, pairing ELL students with native speakers of English."
- The materials include a "Professional Support" section with an essay offering guidance on providing linguistic accommodations. The essay offers specific high-yield teaching strategies and includes design elements of the materials that support rich learning for emergent bilingual

students. It includes explicit strategies for vocabulary acquisition, building conceptual understanding, fostering student discourse, and leveraging formative assessments.

- The Algebra II materials include teacher guidance on providing linguistic accommodations for various levels of language proficiency designed to engage students in using increasingly more academic language throughout each topic. For example, in the "Prepare Instruction" Section for Topic 15, Block 1 includes a Language strategy that states, "Have students select words from the following list and use them in complete sentences when talking about the light bulb problem," and in Block 5, it states, "Ask students to read the page and discuss what they read with a partner. Randomly select students to summarize what they read with the class."

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

- The materials include information on how the overall design of the Agile Mind program supports emergent bilingual students. For example, In Topic 8, Block 3, the Deliver Instruction states, "Support for ELL/other special populations. Puzzles like the one on page 7 can be particularly helpful to reinforce key understandings for students with a variety of learning differences, including challenges with language acquisition and processing."
- The materials include the "Algebra II Scope and Sequence," which has direct alignment with the ELPS for state-approved bilingual/ESL programs. Each topic specifically lists the ELPS addressed within the Agile Mind Algebra II topics.
- In the "Professional Support" section, the materials include an essay titled "Teaching English Language Learners," which provides teachers with strategies to support learning for emergent bilingual students. The essay includes strategies for vocabulary acquisition, building conceptual understanding, fostering student discourse, and utilizing formative assessments.

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 "Professional Support" section includes an essay titled "Teaching English Language Learners," which provides guidance on providing linguistic accommodations. The essay includes strategies such as vocabulary notebooks, think-alouds, and word walls for vocabulary acquisition, building conceptual understanding, fostering student discourse, and utilizing formative assessments.
- The materials include teacher guidance embedded within the lessons. For example, under "Topic Content, 1, Constructing Graphs, Prepare Instruction, Language Support," the materials emphasize building proficiency in core mathematical vocabulary, especially for emergent bilingual students and those with learning differences. Key terms like *domain*, *range*, *independent variable*, and *dependent variable* are defined and included on gradually built classroom word walls. Students should keep vocabulary notebooks, with emergent bilingual students adding translations and visual references. Pictorial representations and mnemonic techniques support vocabulary acquisition. Activities encourage student dialogue and

practice using mathematical vocabulary through strategies like think-pair-share and group discussions to enhance understanding and application.

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

- The materials are not designed for dual language immersion (DLI) programs. The essay "Teaching English Language Learners" provides strategies and explains the materials' design elements to support learning for emergent bilingual students. The essay includes recommendations and suggestions for building academic vocabulary with explicit strategies for vocabulary acquisition, including vocabulary notebooks and word walls. The essay explains how teachers can assist students as they bridge vocabulary acquisition to conceptual understanding by using multiple representations to develop deeper understanding. The essay includes insight into fostering student discourse, using formative assessments, and supporting other special learners. Each of those topics within the essay includes explicit strategies, such as think-write-pair-share, learning goals, exit tickets, and principles from "Universal Design for Learning." The material includes suggestions to address the transfer of metalinguistic skills from English to the partner language by having emergent bilingual students pair with native English speakers.

Depth and Coherence of Key Concepts

4.1	Depth of Key Concepts	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.	**1/1**
4.1b	Questions and tasks progressively increase in rigor and complexity, leading to grade-level proficiency in the mathematics standards.	**2/2**

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. Questions and tasks progressively increase in rigor and complexity, leading to grade–level proficiency in the mathematics standards.

Evidence includes, but is not limited to:

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 materials include topic practices and quizzes throughout, which include a variety of assessment question types, including multi-select, open-ended short answers, interactive graphs with slider tools, and constructed response items, all of which require deeper thinking from students. For example, the Topic 10 practice section includes a variety of question types.
- The materials include online practice opportunities aligned to the TEKS that offer a variety of question types. For example, the "Topic 4 Guided Practice" includes multiple-choice, numerical response, drag-and-drop, and multi-select item types. The variety of practice opportunities ensures that the students demonstrate depth of understanding.
- The activity sheets designed to accompany the online material for each topic include a variety of lesson activities ranging from defining new vocabulary, applying recently learned skills within real-world contexts, and justifying their responses. The activity sheets provide an opportunity for more than rote memorization and repeated algorithms. Students are expected to apply their knowledge in a variety of ways to demonstrate a depth of understanding of the TEKS.

Questions and tasks progressively increase in rigor and complexity, leading to grade-level proficiency in the mathematics standards.

- The materials include topic practices and quizzes throughout, which include a variety of assessment question types, including multi-select, open-ended short answers, interactive graphs with slider tools, and constructed response items, all of which require deeper thinking from students. For example, the Topic 10 practice section includes a variety of question types.
- The materials include online practice opportunities aligned to the TEKS that offer a variety of question types. For example, the "Topic 4 Guided Practice" includes multiple-choice,

numerical response, drag-and-drop, and multi-select item types. The variety of practice opportunities ensures that the students demonstrate depth of understanding.

- The activity sheets designed to accompany the online material for each topic include a variety of lesson activities ranging from defining new vocabulary, applying recently learned skills within real-world contexts, and justifying their responses. The activity sheets provide an opportunity for more than rote memorization and repeated algorithms. Students are expected to apply their knowledge in a variety of ways to demonstrate a depth of understanding of the TEKS.

Depth and Coherence of Key Concepts

4.2	Coherence of Key Concepts	12/12
4.2a	Materials demonstrate coherence across courses/grade bands through a logically sequenced and connected scope and sequence.	**2/2**
4.2b	Materials demonstrate coherence across units by explicitly connecting patterns, big ideas, and relationships between mathematical concepts.	**3/3**
4.2c	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.	**3/3**
4.2d	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.	**4/4**

The materials demonstrate coherence across courses/grade bands through a logically sequenced and connected scope and sequence. Materials demonstrate coherence across units by explicitly connecting patterns, big ideas, and relationships between mathematical concepts. 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. 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.

Evidence includes, but is not limited to:

Materials demonstrate coherence across courses/grade bands through a logically sequenced and connected scope and sequence.

- The materials demonstrate coherence across the courses and grade bands. The "Course Rationale" document states, "The Algebra II program builds on students' work with linear, quadratic, and exponential functions and equations in Algebra I and deepens students' understanding of important mathematical ideas related to these functions while extending this work to new function types and problem-solving."
- The materials include a "Scope and Sequence" document that provides a logically sequenced overview of each topic covered in Algebra II and includes a connection to the TEKS. The topics are sequenced in a way to builds upon one another as the course progresses. The "Scope and Sequence" document also includes an appendix of additional topics on key learning from earlier grades connecting the Algebra II content to grades 5–8 and Algebra I. The additional lessons and activities "provide support for key skills from earlier grades and co-requisite skills students may need to be successful with concepts in this course." The Algebra II course includes eight additional topics to solidify previously learned skills.

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

- The materials include a "Course Rationale" section that includes how concepts introduced in one unit connect to concepts in later units or courses.
- The "Course Rationale" section includes patterns, ideas, and connections made throughout the units. For example, this document states, "Topic 4 again connects to prior learning by building new functions based on functions that students know from Algebra I."
- The materials include a "Course Rationale" section that outlines the course design. It emphasizes the goal of equipping students with the tools to analyze functions and use them to create equations for problem-solving. This focus on functional analysis leading to equation solving is consistently applied throughout the course, ensuring coherence across topics. The "Course Rationale" section also groups several topics, highlighting connections and overarching patterns between them.

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 materials include interactive essays titled "Developing Concepts Across Grades" that establish a vertical connection between the language being studied and the language that will be learned in subsequent courses or later in the course.
- The materials include the "Prepare Instruction" section for each topic that provides teachers guidance for connecting to prior lessons and grade-level skills and future lessons within the course. One example is in Topic 2 "Prepare Instruction," where it indicates students "will develop a basic understanding of the concept of an inverse relation while continuing to review familiar functions from Algebra I and being introduced to two new functions that they will study in greater depth later in the course." Mention of future grade-level skills is absent because Algebra II is the last course offered by the publisher.
- The materials include the "About This Topic" section, which provides a general overview of the skills learned in that unit. The overview includes the prior knowledge students will need to be successful and how students will extend their knowledge in the future. For example, Topic 4 "builds on students' foundation of quadratic functions" from Algebra I and can extend to conic sections, which is included in a later course.
- The materials include the "Professional Support" section, which provides a series of interactive essays for educators designed to "illustrate connections and deepen understanding around what students may have already learned and where they are headed on their journey." The essay topics include Functions, Volume, Rate, and Proportionality. The materials provide an opportunity for teachers to make connections among the content and language of previous and future grades/courses.

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 from the "Topic 1 Deliver Instruction" section provide coherence at the lesson level by connecting students' prior knowledge of concepts and procedures from earlier topics or courses, helping them grasp new ideas and procedures effectively.
- The materials include a "Deliver Instruction" page for the individual blocks that discusses connections to prior learning. Topic 8, Block 5 indicates, "Page 13 asks students to attempt to solve an equation with rational exponents. In this example, students are starting out with a cubic equation, which they have seen in a prior topic, although not written with rational exponents."
- The materials include a "Deliver Instruction" page which provides guidance on connecting concepts and procedures from previous topics and/or grades. For example, Topic 8 Block 2 suggests reviewing the connection between the x-intercepts of the graph and the factors of the related expression, which was introduced in Algebra I and reviewed in Topic 4. The concept leads to factoring the sum and difference of cubes and provides an opportunity to connect the quadratic factor to the graph.
- The materials include the "Unit Overview" section that connects students' prior knowledge to the upcoming material. For example, the overview for Topic 4 reviews the multiple methods for solving quadratic equations taught in Algebra I to prepare the students to explore complex numbers. The text states, "You will refine your ability to solve quadratic equations, and you will also explore new kinds of numbers that you may encounter when you use the quadratic formula."

Depth and Coherence of Key Concepts

4.3	Spaced and Interleaved Practice	8/8
4.3a	Materials provide spaced retrieval opportunities with previously learned skills and concepts across lessons and units.	**4/4**
4.3b	Materials provide interleaved practice opportunities with previously learned skills and concepts across lessons and units.	**4/4**

The materials provide spaced retrieval opportunities with previously learned skills and concepts across lessons and units. Materials provide interleaved practice opportunities with previously learned skills and concepts across lessons and units.

Evidence includes, but is not limited to:

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

- The materials include opportunities for quick and frequent retrieval exercises that integrate previously acquired knowledge and abilities throughout lessons and units.
- The materials include teacher-led questioning that provides spaced-retrieval opportunities for skills and concepts across lessons and units.
- The materials include the "Deliver Instruction" section for each block that provides guidance for providing connections to previously learned concepts. The spaced-retrieval opportunities are focused on concepts needed for the upcoming topic and teacher-led through discussion. For example, the "Deliver instruction" section for Topic 7, Block 1 explicitly states, "Remind students of the inverse notation of f-1(x), which is a concept previously introduced in Topic 2."

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

- The materials include interleaved practice for concepts and skills such as identifying domain and range and transforming various types of functions. An example is found in "Topic 12, Student Activity Sheet 5," where students transform exponential functions (horizontal and vertical shifts, reflections, and compressions) and also find the domain and range.
- The materials include interleaved practice with previously learned concepts throughout the course with recurring concepts with different functions. For example, the concept of function transformations begins in Topic 1 with absolute value functions and recurs frequently with each new function introduced.

Balance of Conceptual and Procedural Understanding

5.1	Development of Conceptual Understanding	18/18
5.1a	Questions and tasks require students to interpret, analyze, and evaluate a variety of models and representations for mathematical concepts and situations.	**12/12**
5.1b	Questions and tasks require students to create a variety of models to represent mathematical situations.	**2/2**
5.1c	Questions and tasks provide opportunities for students to apply conceptual understanding to new problem situations and contexts.	**4/4**

Questions and tasks that require students to interpret, analyze, and evaluate a variety of models and representations for mathematical concepts and situations. Questions and tasks that require students to create a variety of models to represent mathematical situations. Questions and tasks that provide opportunities for students to apply conceptual understanding to new problem situations and contexts.

Evidence includes, but is not limited to:

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

- The materials include Topic 6 "Constructed Response" questions and assignments that offer problem situations encouraging students to work with various models and representations to understand, assess, and evaluate different ideas.
- The materials include questions and tasks that require students to work with models and representations to interpret, analyze, and evaluate. One example is found in Topic 4 "Student Activity Sheet 2," where students are asked to revisit a quadratic model function from previous lessons, rewrite it using a new method, graph it, and identify key features.
- The materials include lessons that begin with a real-world application related to the upcoming concepts that require students to analyze, interpret, and evaluate the given information presented in a variety of ways. For example, Topic 2, Blocks 1 and 2 are focused on a T-shirt business for students to interpret and analyze to develop an understanding of linear inverses. A visual is provided, and students are asked to create a table, function rule, and graph for both the original function and its inverse.

Questions and tasks require students to create a variety of models to represent mathematical situations.

- The materials include Topic 12, Lesson 6 "Student Activity Sheet," where there is a variety of models and representations for students to comprehend, analyze, and assess a range of topics through questions and assignments.

- The materials include questions and tasks that consistently require students to create a variety of models including graphs and scatterplots. One example can be found on questions 13–16 on "Student Activity Sheet 2" in Topic 9. Students are provided a table to complete a real-world scenario and then must create a scatterplot of the data.
- The materials include "Constructed Response" tasks for each topic which provide students with the opportunity to create a variety of models to represent a given real-world problem. The constructed responses elicit a higher level of thinking and application through the design of the questions and tasks. For example, Topic 6 "Constructed Response 1" provides students with a problem scenario in which they must represent algebraically and graphically and interpret their solution in the context of the problem. The variety of models required provides students with the opportunity to develop a conceptual understanding.

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

- The materials include prompts for students to apply their conceptual understanding to new situations throughout the materials' questions and exercises.
- The materials include opportunities for students to apply their understanding to new situations and contexts throughout the materials, usually toward the end of the "Student Activity Sheets" on the questions marked as "Reinforce." One example is found in Topic 9 "Student Activity Sheet 2," where students apply knowledge of direct and inverse variation to two new problems.
- The materials include "Constructed Response" tasks that provide students the opportunity to apply conceptual understanding from the unit to a real-world scenario. These are open-ended tasks that require a higher level of thinking. For example, Topic 11 "Constructed Response 1" requires students to apply their knowledge of rational operations and graphs to a business model on toy trains. Students must sketch a graph, write and solve an equation, and interpret their solution in the context of the problem.

Balance of Conceptual and Procedural Understanding

5.2	Development of Fluency	12/12
5.2a	Materials provide tasks that are designed to build student automaticity and fluency necessary to complete grade-level tasks.	**2/2**
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.	**3/3**
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.	**6/6**
5.2d	Materials contain embedded supports for teachers to guide students toward increasingly efficient approaches.	**1/1**

The materials provide tasks that are designed to build student automaticity and fluency necessary to complete grade–level tasks. Materials provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures within the lesson and/or throughout a unit. Materials provide opportunities for students to evaluate procedures, processes, and solutions for efficiency, flexibility, and accuracy within the lesson and throughout a unit. Materials contain embedded supports for teachers to guide students toward increasingly efficient approaches.

Evidence includes, but is not limited to:

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

- The materials include daily activities that focus on specific skills or concepts to enhance automaticity and fluency. An example can be found in the "Topic Content" under the "Appendix: Solidifying Your Skills and Numbers Overview." Additionally, the materials provide several "Appendix" topics for teachers to help students solidify their skills throughout the course. These can be used for independent practice, review work, small-group instruction, or other methods as the teacher chooses. One such topic focuses on working with rational numbers and square roots, with practice available both online and through printable "Student Activity Sheets." The materials include the "Appendix" that has three extra topics to help solidify and build fluency with previously learned skills. The first topic, "Solidifying Your Skills with Numbers," is designed so "students can review and strengthen their fluency with rational number operations as they work with integers, decimals, and fractions." The second topic, "Solidifying Your Skills with Exponents," is designed so "students develop an understanding of the laws of exponents, as well as providing significant practice using the multiplication law, division law, the power rule, the negative exponent rule, and the zero power rule." The third topic, "Solidifying your Skills with Functions and Equations," is designed so "students can review key characteristics of linear and quadratic functions." These additional lessons provide skills that are necessary to complete grade-level tasks.

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 materials include "Student Activity Sheets" with problems that reinforce and connect the learning to real-world contexts. One example is on "Student Activity Sheet 1" for Topic 3. Students are instructed to "describe a motion scenario similar to the situation you explored in the skateboarding graph. Sketch and label the graph that represents the motion scenario you describe."
- The materials include online practice opportunities for each topic where students practice newly learned skills efficiently and accurately with their choice of strategies. The online items include two sections, "Guided Practice" and "More Practice," with a variety of question types over the entire topic.
- The materials include "Student Activity Sheets" with problem sets labeled as "Reinforce" which "provide opportunities for practice and application of learned skills in familiar and new contexts." For example, Topic 5 "Student Activity Sheet 4" has three reinforced questions that require students to solve square root equations and verify their solutions.

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

- The materials include opportunities for students to evaluate their work, through teacher guidance provided in the "Deliver Instruction" pages for lessons. For example, in Topic 5, Block 5, teachers are guided to conduct a gallery walk where students "look for similarities and differences in solution strategies." This encourages students to evaluate procedures and processes for efficiency, flexibility, and accuracy by critiquing each other's strategies and justifications, and then refining their presentations based on the critiques.
- The materials include the "Deliver Instruction" page for each block, which provides questioning prompts that allow students to evaluate procedures and processes through class discussions. For instance, in Topic 16, Block 1, a classroom strategy is provided to discuss how the transitive property of equality could have been used to eliminate a variable as opposed to linear combination methods. The guidance suggests comparing the two methods and encourages students to be creative in the problem-solving process. These prompts enable students to evaluate the efficiency, flexibility, and accuracy of different strategies.
- The materials include "Constructed Response" tasks for each topic that often elicit students to evaluate their solutions for efficiency, flexibility, and accuracy. For example, in Topic 4 "Constructed Response 3," students set up two functions for two draining water tanks and determine when the tanks have the same volume. Students must find a solution both graphically and algebraically, allowing them to evaluate the accuracy and the efficiency of their methods.

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

- The materials help educators comprehend the methods that are established as well as the learning curve that leads from less efficient to more efficient methods. The materials also give students the ability to demonstrate their knowledge. They also allow students to review what other students are doing and how they worked on the problem while making comments and asking questions.
- The materials include many instances that lead students to consider various solution methods for efficiency. Topic 16, Block 1 does this in the "Deliver Instruction" teacher page, where guidance suggests revealing an additional solution strategy to students after having them begin solving by another method. Students will then discuss how two different methods arrive at the same answer, but one may be more appropriate or more efficient with the given equations.
- The materials include the "Deliver Instruction" page and also provide teacher guidance on anticipating different approaches and explaining when more efficient approaches exist. For example, in Topic 17, Block 1, classroom strategies are included to "continually ask if anyone solved the problem a different way, and then compare that method to other solutions to see if they are truly different or variations of the same answer." Conversations like these provide guidance on using the most efficient method even when multiple strategies exist.

Balance of Conceptual and Procedural Understanding

5.3	Balance of Conceptual Understanding and Procedural Fluency	16/16
5.3a	Materials explicitly state how the conceptual and procedural emphasis of the TEKS are addressed.	**2/2**
5.3b	Questions and tasks include the use of concrete models and manipulatives, pictorial representation (figures/drawings), and abstract representations.	**6/6**
5.3c	Materials include supports for students in connecting, creating, defining, and explaining concrete and representational models to abstract (symbolic/numeric/algorithmic) concepts.	**8/8**

The materials explicitly state how the conceptual and procedural emphasis of the TEKS are addressed. Questions and tasks that include the use of concrete models and manipulatives, pictorial representation (figures/drawings), and abstract representations. Materials include supports for students in connecting, creating, defining, and explaining concrete and representational models to abstract (symbolic/numerical/algorithmic) concepts.

Evidence includes, but is not limited to:

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

- The materials emphasize that the standards being addressed are purposefully targeted by the lessons. For example, Topic 9, Lesson 2, "Deliver Instruction" explicitly targets standard 2A.2A.
- The materials consistently emphasize the connection of TEKS to procedures and concepts. An example is found in Topic 4, Block 2 in the "Advice for Instruction" for the teacher. As students work through page 9 of the accompanying "Student Activity Sheet," the teacher is guided with the following instructions: "If students are only taught the rules, there are too many steps for many students to memorize and they will become frustrated. For the next few examples, encourage students to draw the visual of completing the square and to follow it up by using the process and making the connections between each method. Remind students that they can stop drawing the visual when they feel comfortable with thinking through the process and with why it works."
- The materials include the "Algebra II Scope and Sequence" that provides the TEKS and "Topic Description," which explicitly states how the standards are addressed throughout the topic.

Questions and tasks include the use of concrete models and manipulatives, pictorial representation (figures/drawings), and abstract representations.

- The materials include questions and assignments that follow a clear path that shows how mastery of fundamental concepts connects to procedural knowledge to form a mastery pathway leading to abstract representation.

- The materials include many questions and tasks throughout that use concrete models, drawings, and abstract representations. One activity that incorporates these various representations is in the Topic 4 overview for quadratic relationships. Students are faced with a real-life scenario of having a set amount of fencing for a dog fence perimeter and needing to maximize the area of the kennel. The animation panels show students how to draw the possible length and width combinations to complete a table of options and arrive at the dimensions that produce the largest area.
- The materials include online lesson activity questions for each topic and tasks that include concrete models, digital manipulatives, interactive images, and abstract representations. For example, in Topic 5, Block 4 uses a pictorial representation alongside the abstract representation to demonstrate how (3)2 and (–3)2 both yield 9 leading into the abstract concept of extraneous solutions.

Materials include supports for students in connecting, creating, defining, and explaining concrete and representational models to abstract (symbolic/numeric/algorithmic) concepts.

- The materials include support for students in connecting, creating, defining, and explaining models and their relationships to abstract concepts. The teacher is guided in this indicator in an example found in Topic 5, Block 4 where they are to direct students to the online animation and have students consider multiple solution methods for a quadratic equation including graphing and solving algebraically. Then, students make connections between the various strategies while the teacher models the processes using color coding. Finally, teachers "ask students to make judgment calls on which process would best suit a problem situation and justify their choices verbally and in written form."
- The materials include many opportunities for students to make connections from concrete and representational models to abstract concepts through the interactive lesson activities. For example, Topic 8, Block 1 investigates polynomial division through the design of a city pool. The task begins with a pictorial representation of the pool with the side lengths labeled. The process for polynomial division is introduced with a model of long division for comparison. By connecting the new content to a familiar model students can make connections between polynomial division and long division with integers.

Balance of Conceptual and Procedural Understanding

5.4	Development of Academic Mathematical Language	14/14
5.4a	Materials provide opportunities for students to develop their academic mathematical language using visuals, manipulatives, and other language development strategies.	**3/3**
5.4b	Materials include embedded guidance for the teacher addressing scaffolding and supporting student development and use of academic mathematical vocabulary in context.	**2/2**
5.4c	Materials include embedded guidance for the teacher 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.	**9/9**

The materials provide opportunities for students to develop their academic mathematical language using visuals, manipulatives, and other language development strategies. Materials include embedded guidance for the teacher addressing scaffolding and supporting student development and use of academic mathematical vocabulary in context. Materials include embedded guidance for the teacher 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.

Evidence includes, but is not limited to:

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

- The materials include numerous opportunities for students to develop their academic mathematical language through visuals, manipulatives, and other strategies. One example is found in Topic 1, Block 2 where students have an on-screen interactive graph with sliders for the different values within an absolute-value equation. Students are to describe how changing the values on the sliders changes the appearance of the graph. The teacher is to encourage students to move from informal descriptions (such as "sideways") to more precise, formal, mathematical terms (such as "horizontal").
- The materials include lesson activities that introduce and reinforce academic mathematical vocabulary through visuals and the context of real-world scenarios. The vocabulary is introduced as the need arises naturally through the exploration. For example, Topic 18, Block 1 introduces the concepts of matrices as a way to organize information. A definition for matrix and a visual is included within the context of organizing sales to determine if customers were being overcharged. The block continues to introduce many terms related to matrices as they are needed relating to the problem scenario.

- The materials include a glossary for students in both English and Spanish that includes definitions and visuals for academic mathematical language. The glossary aids students in developing grade-level vocabulary throughout the course.

Materials include embedded guidance for the teacher addressing scaffolding and supporting student development and use of academic mathematical vocabulary in context.

- The materials include guidance for the teacher on each "Deliver Instruction" page to support the student's use of vocabulary. One example is found in Topic 1, Block 2 where students have an on-screen interactive graph with sliders for the different values within an absolute-value equation. Students are to describe how changing the values on the sliders changes the appearance of the graph. The teacher is to encourage students to move from informal descriptions (such as "sideways") to more precise, formal, mathematical terms (such as "horizontal").
- The materials include the "Deliver Instruction" section that provides guidance directly related to the development of academic vocabulary. For example, Topic 9, Block 5 leads students through an exploration to develop the concept of joint variation. The guidance includes a list of questioning prompts to scaffold and support students as they reach a formal definition for the word joint variation.
- The materials include the essay "Teaching English Language Learners" which includes explicit strategies for vocabulary acquisition such as vocabulary notebooks, think-alouds, echo repeat, and word walls.

Materials include embedded guidance for the teacher 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 materials include the "Deliver Instruction" section, which provides guidance for the teacher on using language, including vocabulary and syntax, effectively to support students in using mathematical terms with their peers. For example, in Topic 1, Block 2, students transform absolute-value functions and describe the changes to the graph. The teacher is guided to help students use precise mathematical language and appropriate syntax, moving from vague statements to more structured and accurate descriptions. Students are then invited to share their descriptions with peers and test their conjectures with the class.
- The "Deliver Instruction" section for each lesson includes guidance on supporting and facilitating student conversations using academic vocabulary and proper syntax. For instance, Topic 2, Block 4 offers numerous opportunities for student discourse through small-group discussions and class presentations. Question prompts guide students to connect quadratic functions with their inverses, using specific academic terms and correct syntactic structures such as "constant second differences."

- The materials also include the essay "Teaching English Language Learners," which outlines explicit strategies for vocabulary acquisition and syntax development, such as vocabulary notebooks, think-alouds, echo repeats, and word walls. These strategies, while designed for emergent bilingual students, are beneficial for all learners and support the development of both academic vocabulary and syntactic structures.

Balance of Conceptual and Procedural Understanding

5.5	Process Standards Connections	6/6
5.5a	Process standards are integrated appropriately into the materials.	**1/1**
5.5b	Materials include a description of how process standards are incorporated and connected throughout the course.	**2/2**
5.5c	Materials include a description for each unit of how process standards are incorporated and connected throughout the unit.	**2/2**
5.5d	Materials include an overview of the process standards incorporated into each lesson.	**1/1**

Process standards that are integrated appropriately into the materials. Materials include a description of how process standards are incorporated and connected throughout the course. Materials include a description for each unit of how process standards are incorporated and connected throughout the unit. Materials include an overview of the process standards incorporated into each lesson.

Evidence includes, but is not limited to:

Process standards are integrated appropriately into the materials.

- The materials integrate the process standards into every component, including lessons, student practice, and assessments. For assessments, under Agile Assessment, Items, and Answers, multiple items reflect the process standards.
- The materials include the process standards that are integrated into each lesson. For example, the task in Topic 12 Constructed Response item incorporates several process standards including applying mathematics to everyday life, creating and using representations, and communicating mathematical ideas.
- The materials include real-world applications for each topic directly into the lessons which require students to utilize the process standards to demonstrate a conceptual understanding of mathematics. For example, Topic 4 lessons incorporate a real-world scenario involving building outdoor kennels. Students are expected to apply mathematics to a problem arising in everyday life where they must analyze the given information, communicate and make a plan, and justify their responses. These skills are directly reflected in the process standards.

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

- The material includes the integration of the process standards into the lessons The Course Rationale document states, "The Agile Mind Texas Algebra II course also provides rich contexts for engaging with the process standards. Algebraic problems and models appear in the world around us, and this course gives us the language to communicate about our world.

The course creates a natural opportunity for students to understand, experience, and do mathematics. Mathematical reasoning, effective communication with attention to precision of language, making use of the structure of mathematics, and modeling are key components of this program."

- The materials include the Algebra II Scope and Sequence that provides a list of the process standards and states, "These processes should become the natural way in which students come to understand and do mathematics."
- The Course Rationale document states, "The Agile Mind Texas Algebra II course also provides rich contexts for engaging with the process standards. Algebraic problems and models appear in the world around us, and this course gives us the language to communicate about our world. The course creates a natural opportunity for students to understand, experience, and do mathematics. Mathematical reasoning, effective communication with attention to precision of language, making use of the structure of mathematics, and modeling are key components of this program."

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

- Under Professional Support, Course Planning and Pacing, Algebra II Scope and Sequence for Texas, the materials explain how the TEKS are incorporated into the topics and connect the TEKS to topics
- The materials include the Year at a Glance and Scope and Sequence documents, which include the content and process standards covered within each unit.

Materials include an overview of the process standards incorporated into each lesson.

- The Scope and Sequence lists all process standards on the first page and details how each unit is addressed throughout the unit. It states, "Throughout this Algebra II course, students use mathematical processes to acquire and demonstrate mathematical understanding...These processes should become the natural way in which students come to understand and do mathematics." Additionally, the materials include the Algebra II Lesson Alignment for Texas document which illustrates alignment to content and process standards.
- The materials include lesson alignment documents that clarify the alignment of process standards to each lesson, as well as a narrative description for each topic. These descriptions explain how the process standards are incorporated into each lesson.
- The About this Topic section of the Prepare instruction includes an overview of the process standards incorporated into each lesson. For example, Topic 6, Quadratic and square root inequalities, states, "Students will learn to solve inequalities arising from situations that can be modeled by quadratic and square root functions." This relates to process standard, 1A, apply mathematics to problems arising in everyday life, society, and the workplace.

Productive Struggle

6.1	Student Self-Efficacy	15/15
6.1a	Materials provide opportunities for students to think mathematically, persevere through solving problems, and to make sense of mathematics.	**3/3**
6.1b	Materials support students in understanding, explaining, and justifying that there can be multiple ways to solve problems and complete tasks.	**6/6**
6.1c	Materials are designed to require students to make sense of mathematics through doing, writing about, and discussing math with peers and teachers.	**6/6**

The materials provide opportunities for students to think mathematically, persevere through solving problems, and to make sense of mathematics. Materials support students in understanding, explaining, and justifying that there can be multiple ways to solve problems and complete tasks. Materials are designed to require students to make sense of mathematics through doing, writing about, and discussing math with peers and teachers.

Evidence includes, but is not limited to:

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

- The materials offer opportunities for students to solve problems using various methods, providing opportunities for students to think mathematically and persevere through solving problems. For example, in "Course Materials," Course Topic 10: Rational Functions, Practice, Guided Practice, students are prompted to explore different approaches when initial methods do not succeed. As they work through these challenges, students are prompted to reassess their methods and outcomes, which helps them understand their solutions and refine their problem-solving strategies.
- The materials include problems that provide opportunities for students to think mathematically, persevere through solving problems, and make sense of mathematics. This is evident in the "Constructed Response" printables offered in the "Assessments" tab for each topic. For example, Topic 18 features a "Constructed Response" item where students are tasked with analyzing information to write and solve an algebraic system using matrices and technology. They must also determine the cost each person would incur if choosing a different payment option and explain which method would be best for their day at the amusement park.
- In each topic the materials included introduce a concept through a real-world scenario to provide an opportunity for students to think mathematically, persevere through solving problems, make sense of the mathematics, and connect to the world around them. For example, Topic 7, Block 3 activities include two real-world scenarios to solve simple cube and cube root equations. The first scenario is modeled by an ice sculpture and the second scenario is focused around stolen liquid gold. Both examples require students to engage in mathematical thinking to solve equations both algebraically and graphically, while the real-world scenarios help students understand the mathematics.

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

- The materials support students in understanding, explaining, and justifying that there can be multiple ways to solve problems and complete tasks. Each lesson's "Deliver Instruction" opens with questions for students that prompt them to explore and justify multiple approaches to solving problems. One example is found in Topic 5, Block 1 where students are asked, "What type of function do you think is a reasonable model (linear, quadratic, exponential, etc.). for the data? How could you use a graph, a table, and a verbal description to justify your answer?"
- The materials include the "Deliver Instruction" page which provides guidance to support students when multiple strategies can be used to complete and solve questions and tasks. The guidance offers suggestions and/or question prompts that help students understand, explain, and justify different approaches. For example, in Topic 12, Block 5, students explore curve fitting to a given set of data. Since students are not using regression methods yet, there will be a variety of responses that fit the data. The guidance encourages a classroom discussion comparing different models and suggests teachers "encourage students to justify their model and interpret the parameters in their models." This approach helps students develop a better understanding by explaining and justifying multiple methods for fitting data.
- The materials include a "Constructed Response" task for each topic that elicits students to solve a problem in multiple ways. For example, Topic 16, Constructed Response 1, requires students to set up and solve a system of equations to write a quadratic equation for the St. Louis Gateway Arch. Students are asked to orient a coordinate grid and find the quadratic equation for their choice. They are then asked to explore a different orientation and find that model. By exploring the parabola in different positions on the coordinate grid, students will gain a deeper understanding of modeling with quadratics and appreciate that there can be multiple valid approaches to solving a problem.

Materials are designed to require students to make sense of mathematics through doing, writing about, and discussing math with peers and teachers.

- The materials are designed to require students to make sense of mathematics through writing about it. For example, in "Course Materials," Topic 10, Advice for Instruction, Deliver Instruction, Block 5 students are asked to explain how they found their answers and why they chose one method over another. This is done with partners as well as presenting to the class or other groups.
- The materials include prompts for students to do math and discuss with their peers and teachers. One such example is found in the Topic 3, Block 3, "Deliver Instruction" section, where teachers prompt students to explain a concept and make predictions with a partner. Later, student pairs share their conclusions with the class while the teacher records.
- The materials are designed to require students to make sense of mathematics through doing, writing about, and discussing math with peers and teachers. Each lesson includes an

interactive digital platform with a printable student activity page, encouraging students to engage in mathematical tasks, write about their thoughts, and discuss mathematics with their teacher and peers. The "Deliver Instruction" page provides guidance for the teacher to facilitate classroom conversation through whole and small group activities. The digital platform and student handouts require students to complete mathematical tasks and provide ample opportunities for writing, helping them make sense of the mathematical concepts. For example, the "Deliver Instruction" page for Topic 10, Block 5 suggests that students discuss their work in both whole- and small-group settings. The online materials and student activity sheet offer many opportunities for students to convert between transformation and quotient forms of rational functions, further aiding their understanding of the relationships between these forms.

Productive Struggle

6.2	Facilitating Productive Struggle	10/10
6.2a	Materials support teachers in guiding students to share and reflect on their problem-solving approaches, including explanations, arguments, and justifications.	**6/6**
6.2b	Materials offer prompts and guidance to assist teachers in providing explanatory feedback based on student responses and anticipated misconceptions.	**4/4**

The materials support teachers in guiding students to share and reflect on their problem–solving approaches, including explanations, arguments, and justifications. Materials offer prompts and guidance to assist teachers in providing explanatory feedback based on student responses and anticipated misconceptions.

Evidence includes, but is not limited to:

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

- The materials include support for teachers to guide students to share and reflect on their problem-solving approaches, including explanations, arguments, and justifications. The "Deliver Instruction" pages for each block include suggestions for students to write about their learning in a journal, reflect on their approaches, and justify their reasoning. For example, in Topic 4, Block 5 teachers are guided to "give students time to discuss the question in pairs. Encourage them to try to multiply the two numbers. After students have had sufficient time to try different strategies, play the animation to confirm their approaches or to scaffold their thinking."
- The materials include the "Deliver Instruction" page for each lesson, which provides guidance and prompts for teachers to guide students to share and reflect on their problem-solving approaches, including explanations, arguments, and justifications. For example, Topic 3, Block 1 provides guidance on facilitating classroom conversations by having students come to the class computer and share. The guidance specifically states, "Have a discussion of the process students describe for transforming the first graph of the absolute value parent function into the second skateboarder's graph."
- The materials include a "Constructed Response" task for each topic that requires students to demonstrate a problem-solving process. These tasks are open-ended and often ask for justification alongside the correct response. For example, Topic 9 Constructed Response 1 requires students to explain their process in parts a and c, providing opportunities for them to develop and present their arguments and justifications.

Materials offer prompts and guidance to assist teachers in providing explanatory feedback based on student responses and anticipated misconceptions.

- The materials include prompts and guidance to assist teachers in providing explanatory feedback based on student responses and anticipated misconceptions, along with suggestions on how to approach and resolve expected roadblocks to understanding the material. Each lesson's "Deliver Instruction" section includes guidance and question prompts to address common student misunderstandings. For example, in Topic 5, Block 1, the guidance includes question prompts and classroom strategies to address misconceptions. One specific classroom strategy state, "Students often make sign mistakes when working with horizontal shifts. Have them write the non-simplified version of the function's general form to see more clearly the intended shift." This approach helps teachers offer targeted feedback and support to correct misunderstandings.
- The materials offer prompts and guidance to assist teachers in providing explanatory feedback based on student responses and anticipated misconceptions. This is evident in the "Deliver Instruction, Classroom Strategy" pages for each block. These strategies offer guidance for responding to student responses and anticipated misconceptions. For example, in Topic 2, Block 1, the guidance states, "Students may struggle with questions like the ones above. Encourage them to make a table of data that represents each relationship, and then connect the table to ordered-pair notation. Then, focus students on the uniqueness of outputs to help them determine whether or not each relation is a function."