Accelerate Learning Inc.

Supplemental English Mathematics, Algebra I
Math Nation+ Texas–Algebra 1

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
Supplemental	**9798330805020**	**Both Print and Digital**	**Static**

Rating Overview

TEKS SCORE	TEKS BREAKOUTS ATTEMPTED	ERROR CORRECTIONS (IMRA Reviewers)	SUITABILITY NONCOMPLIANCE	SUITABILITY EXCELLENCE	PUBLIC FEEDBACK (COUNT)
100%	89	7	Flags Addressed	Not Applicable	0

Quality Rubric Section

RUBRIC SECTION	RAW SCORE	PERCENTAGE
1. Intentional Instructional Design	16 out of 23	70%
2. Progress Monitoring	13 out of 24	54%
3. Supports for All Learners	30 out of 39	77%
4. Depth and Coherence of Key Concepts	16 out of 16	100%
5. Balance of Conceptual and Procedural Understanding	38 out of 38	100%
6. Productive Struggle	21 out of 21	100%

Breakdown by Suitability Noncompliance and Excellence Categories

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

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

IMRA Quality Report

1. Intentional Instructional Design

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

1.1 Course-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.1a	All criteria for guidance met.	5/5
1.1b	All criteria for guidance met.	3/3
1.1c	Materials do not contain a TEKS correlation guide based on diagnostic assessments.	1/2
1.1d	All criteria for guidance met.	2/2
1.1e	Materials do not contain resources and guidance for instructional leaders to support educators with implementing the materials as designed.	0/2
—	**TOTAL**	11/14

1.1a – Materials include an alignment guide outlining the TEKS, ELPS, and concepts covered, with a rationale for learning paths across grade levels (vertical alignment) and within the same grade level (horizontal alignment) as designed in the materials.

The MathNation+ (MN+) Algebra I materials include an alignment guide outlining the Texas Essential Knowledge and Skills (TEKS) and English Language Proficiency Standards (ELPS) addressed in each lesson. *Coursework Teacher Edition*, Unit 0, "State-Specific Resources" includes the "TEKS and ELPS by Lesson" document, which provides a detailed mapping of Algebra I TEKS and ELPS to individual lessons, making the alignment transparent and accessible. Complementing this, the "Lesson Alignment by Standard" document organizes the TEKS codes and lists all lessons in which each standard is addressed, reinforcing the consistency of standards coverage across the course.

The alignment guide includes a rationale for learning paths across grade levels (vertical alignment), illustrating how content builds over time to support long-term conceptual development. The *TEKS Correlation Guide with Breakouts* references prerequisite standards from grade 8 and identifies extensions into Algebra II, such as the progression from solving systems of equations in grade 8, Unit 10, to Algebra I, Unit 6, and Algebra II, Unit 5. These cross-grade references demonstrate intentional design in the sequencing of mathematical concepts.

The materials also include a rationale for learning paths within the same grade level (horizontal alignment), demonstrating how concepts are sequenced and reinforced to ensure coherence within the grade. For example, TEKS A.1.2A is addressed in Units 1, 3, and 6, and TEKS A.1.3A appears in multiple lessons across Units 2, 3, and 5, as shown in both the "Lesson Alignment by Standard" and "TEKS and

ELPS by Lesson" documents. This repeated attention to key standards supports conceptual reinforcement and instructional coherence throughout the course.

1.1b – Materials include an implementation guide with usage recommendations and strategies for effective educator use, such as just-in-time supports, advanced learning, or as a course.

Materials include an implementation guide that provides educators with a comprehensive overview of program components and instructional routines. *Coursework Teacher Edition,* Unit 0, contains a comprehensive implementation guide embedded within the "Course Overview" and "State-Specific Resources." These resources provide usage recommendations and instructional strategies to support effective educator use. Suggested instructional routines include a warm-up, guided activity, collaborative activity, practice, and wrap-up, followed by digital practice opportunities such as Check Your Understanding and Test Yourself! activities.

To support diverse learning needs, the materials offer guidance for adapting instruction across a range of classroom contexts. Just-in-time supports are embedded in "Teacher Prep Videos," which offer lesson-specific guidance and instructional tips. Furthermore, the "Support for All Learners" section provides strategies for adapting instruction to meet diverse student needs, including advanced learners.

Educator-facing resources also promote effective instructional practices by embedding strategies that foster discourse, model thinking, and deepen content knowledge. The "Instructional Routines & Strategies" document provides additional support, featuring techniques like Algebra Talk, Notice and Wonder, and Number Talks, to enhance student engagement and mathematical discourse.

1.1c – Materials include a TEKS correlation guide with recommended skill entry points based on diagnostic assessment results.

Materials include a TEKS correlation guide that provides educators with a clear mapping of standards to instructional content. The *Coursework Teacher Edition,* Unit 0, provides a *TEKS Correlation Guide with Breakouts* within the "State-Specific Resources" section. This guide maps lessons to the corresponding TEKS and ELPS standards and includes a breakdown of standards by lesson. Additionally, the materials feature a diagnostic assessment within the On-Ramp component, designed to identify students' readiness levels and assign personalized learning pathways based on their performance. "Progress Monitoring" tools are available through the *Coursework Teacher Edition*, allowing educators to track student growth and adjust instruction accordingly.

The On-Ramp diagnostic provides differentiated pathways for student learning, but the materials do not identify recommended skill entry points aligned to specific TEKS based on diagnostic results. The *TEKS Correlation Guide with Breakouts* supports general alignment but does not include explicit connections between diagnostic outcomes and targeted instructional starting points.

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

Materials include protocols and corresponding guidance to support unit and lesson internalization. Within the "Course Overview" section of the *Coursework Teacher Edition*, each unit begins with an overview that outlines the instructional focus of each lesson, categorized by "conceptual understanding (C), procedural fluency (F), and real-world application (A)." This structure helps educators understand the progression and intent of the unit.

For lesson internalization, each lesson includes a "Teacher Prep Video" that provides a general overview of the lesson objectives, instructional strategies, and expected learning outcomes. These videos support just-in-time planning and deepen teachers' understanding of the content. Additional support includes access to a "Study Expert Video," digital practice tools for students, and a "Support for All Learners" section that offers differentiated strategies.

The "Instructional Routines & Strategies" document in the "Teacher Resources" section further supports internalization by outlining consistent instructional practices and routines across lessons. Collectively, these resources ensure teachers have the tools and guidance to internalize and effectively deliver each unit and lesson.

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

The *MN+ Review Guide* outlines a variety of resources designed to support classroom educators, such as full-color student workbooks, WCAG-compliant digital workbooks, and lesson preparation videos. Teachers are provided with tools like formative assessments, customizable digital assessments (EdgeXL), and interactive instructional videos featuring multiple "Study Experts." However, the materials do not include any resources that are explicitly tailored for instructional leaders. While it mentions that reports are available to "school administrators" and "district administrators," these are general usage and progress reports rather than dedicated leadership tools.

1.2 Lesson-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.2a	Materials do not contain detailed lesson plans aligned to the TEKS and ELPS; materials do not contain assessment resources aligned to the TEKS and ELPS.	3/7
1.2b	This guidance is not applicable to the program.	N/A
1.2c	All criteria for guidance met.	2/2
—	**TOTAL**	5/9

1.2a – If designed to be static, materials include detailed lesson plans with learning objectives, teacher and student materials, lesson components with suggested timeframes, and assessment resources aligned with the TEKS and ELPS.

The MN+ Algebra I materials include teacher and student resources that support lesson implementation and are aligned with the TEKS and ELPS. For example, in *Coursework Student Edition,* Unit 5, Lesson 5, "Comparing Linear Functions," the materials provide a student edition, an answer key, a warm-up slide, and a teacher video. The *Coursework Teacher Edition* includes a "Course Overview" that outlines lesson components and pacing guidance. According to the "TEKS and ELPS by Lesson" resource, Unit 5, Lesson 5 addresses TEKS A.1.3C and ELPS 2.I, 3.H, and 5.G.

Lesson components are present and organized with suggested timeframes that guide pacing. Each lesson is structured to include a warm-up, guided activity, collaborative activity, independent practice, and a wrap-up. These components are designed to support instructional flow within a 40- to 50-minute class period. The "TEKS and ELPS by Lesson" document confirms that lessons throughout the course consistently reference both the TEKS and ELPS, supporting accessibility and instructional consistency.

The materials do not include detailed lesson plans with learning objectives aligned to the TEKS and ELPS, nor do they provide assessment resources aligned to these standards. While the materials offer lesson-level formative assessments such as Check Your Understanding and unit-level spiral reviews titled Test Yourself!, these tools are not explicitly aligned to the TEKS and ELPS. The digital platform also includes EdgeXL, a customizable digital assessment generator, but individual assessment alignment is not provided.

1.2b – If designed to be adaptive, materials include detailed lesson overviews with learning objectives, lesson components with suggested timeframes, and assessment resources aligned with the TEKS and ELPS.

This guidance is not applicable because the program is not designed to be adaptive.

1.2c – Materials contain support for families in Spanish and English for each unit, with suggestions on supporting the progress of their student(s).

Materials include family support resources in Spanish and English for each unit. For example, at the beginning of Unit 5, Linear Equations, a "Family Support Video" is available in both languages, offering guidance on how families can support their students' learning.

The materials include recommendations for family engagement through "Family Support Letters and Videos," which explain how to use the materials at home. These resources are accessible in the *Coursework Student Edition* under the "Getting Started" section, and teachers can print them for distribution to students.

Teachers can access these supports in the *Coursework Teacher Edition*, "Course Overview." The platform also includes a family letter in Spanish and English. Additionally, it offers family communication tools in over 100 languages, enhancing accessibility for diverse student populations.

2. Progress Monitoring

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

2.1 Instructional Assessments

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.1a	All criteria for guidance met.	2/2
2.1b	All criteria for guidance met.	2/2
2.1c	Materials do not contain educator-controlled text-to-speech or content and language supports for individual students.	2/4
2.1d	Materials do not contain diagnostic assessments that vary in complexity or interactive item type.	0/4
2.1e	All criteria for guidance met.	4/4
—	**TOTAL**	10/16

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

The MN+ Algebra I materials include clearly defined instructional assessments and their intended purposes, as outlined in the *Coursework Teacher Edition,* "Course Overview Progress Monitoring." Materials guide educators in using formative tools, such as Warm-Ups, Wrap-Ups, and Check Your Understanding, to monitor student learning during instruction. Additionally, teachers can utilize summative tools, such as Test Yourself! and EdgeXL, to evaluate mastery at the end of a unit.

For example, in Unit 8, Rewriting Polynomials, each lesson concludes with a Check Your Understanding activity, and the unit ends with a Test Yourself! assessment. These tools provide teachers with actionable data to identify trends and adjust instruction. The materials state, "Check Your Understanding is designed to see how students are answering CYU questions at the end of a lesson to identify overall and individual trends."

Students can access these assessments directly in the *Coursework Student Edition*, where assessments are embedded into the instructional sequence. In Unit 3, Lesson 4, for instance, students complete a Check Your Understanding task that reinforces the lesson's objectives.

"Progress Monitoring" tools enable the seamless integration of both formative and summative assessments into instruction. This structure supports the rubric expectation that "materials include the definition and intended purpose for the types of instructional assessments." The consistent design across units ensures that assessment is used purposefully to support both teaching and learning.

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

The materials guide educators in administering instructional assessments through clearly defined tools and timelines that are consistently applied. The *Coursework Teacher Edition* "Course Overview" introduces EdgeXL, a platform for creating and delivering assessments in a standardized manner. Teachers are directed to use Check Your Understanding questions at the end of each lesson and Test Yourself! assessments at the end of each unit. A suggested timeline for administering these assessments is provided in the "Flexible Implementation Options" section, supporting consistent pacing and instructional planning across classrooms.

To ensure accurate administration, the materials include detailed descriptions of assessment types and formats in the "Progress Monitoring" section. These tools are designed to align with the intended learning outcomes, ensuring that each assessment measures what it is intended to. The On-Ramp diagnostic exam further supports accuracy by generating individualized learning pathways based on student performance, allowing for targeted instruction and assessment.

Additional guidance is provided in the "Product Review Guide," which outlines standardized procedures to ensure all students receive consistent instructions and testing environments. Teachers can also access comprehensive assessment reports to monitor student usage, progress, and performance, supporting data-driven decision-making.

2.1c – Digital assessments include printable versions and accommodations, including text-to-speech, content and language supports, and calculators, that educators can enable or disable to support individual students.

The materials include both printable and digital versions of assessments, as outlined in the *Coursework Teacher Edition,* Unit 0, "Course Overview." Teachers can create assessments in either format using EdgeXL, providing flexibility in how assessments are administered.

The materials currently offer a basic and a graphing calculator, both available to all users at any time. A scientific calculator is in development, along with an opt-out feature that will allow educators to choose which calculators students may access or to disable calculator access entirely. This functionality supports differentiated assessment accommodations and aligns with guidance indicating that digital assessments should include calculators that educators can enable or disable to support individual students.

Materials do not include educator-controlled accommodations for text-to-speech or content and language supports within the digital platform. While these features are available to students, educators cannot enable or disable them to support individual student needs.

2.1d – Materials include diagnostic assessments with TEKS-aligned tasks or questions, including interactive item types with varying complexity levels.

The materials include a diagnostic assessment in the On-Ramp component of the *Coursework Student Edition,* which consists of multiple-choice items. Materials provide TEKS correlation documents aligned to each unit, but individual diagnostic assessment items do not indicate the specific TEKS.

The materials present students with questions exclusively in a multiple-choice format in "My Pathway." No other question types, such as open-ended or constructed-response questions, are available. Teachers guide students to this diagnostic by directing them to choose a topic and access "My Pathway." Students then complete the assessment by selecting answers from predefined options.

There is no evidence in the materials that questions vary in type or complexity.

2.1e – Materials include a variety of formative assessments with TEKS-aligned tasks or questions, including interactive item types with varying complexity levels.

The materials include a variety of formative assessments that are TEKS-aligned and incorporate multiple item types with varying levels of complexity. For example, Unit 3, Lesson 2, assesses students on their understanding of identifying key features of linear equations using graphs (TEKS A.1.2A, A.1.3B, A.1.3C).

In Unit 3, Linear Equations, Test Yourself!, students engage with tasks that assess their understanding through various interactive formats, such as drag-and-drop, fill-in-the-blank, and select-all-that-apply exercises.

The materials reflect multiple levels of complexity and cognitive demand, supporting diverse learning styles and providing opportunities for students to demonstrate understanding in various ways. For example, formative assessments in Unit 5, Lesson 10, and Unit 6, Lesson 2 require students to create and solve equations based on real-world contexts, using slope and y-intercept, and to interpret their results.

2.2 Data Analysis and Progress Monitoring

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.2a	Materials do not contain guidance for interpreting student performance or rationales for each response.	0/3
2.2b	Materials do not contain guidance for the use of included tasks and activities to respond to student trends in performance on assessments.	0/1
2.2c	All criteria for guidance met.	2/2
2.2d	Materials do not contain prompts to support educators in conducting frequent checks for understanding.	1/2
2.2e	This guidance is not applicable to the program.	N/A
—	**TOTAL**	3/8

2.2a – Instructional assessments include scoring information and guidance for interpreting student performance, including rationale for each correct and incorrect response.

The MN+ Algebra I materials provide basic scoring information. Student responses on assessments are marked as correct or incorrect, with visual indicators such as green or red squares to denote performance. Teachers can access individual and class-level reports through the platform's "Progress Monitoring" feature. For example, in the *Coursework Teacher Edition,* teachers track student performance on items like Check Your Understanding and Test Yourself! questions.

The materials do not offer guidance for interpreting student performance. There are no rationales for each correct and incorrect response.

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

The instructional materials provide teachers with access to performance reports that show students' responses to assessments. These include individual, group, and whole-class data for tasks such as Check Your Understanding and Test Yourself! questions and EdgeXL assessments. Reports are accessible through the platform's "Progress Monitoring" tools and are referenced in the "Product Review Guide."

The materials do not include guidance on how to use tasks or activities in response to student performance trends. There is no evidence of instructional strategies, decision-making supports, or activity recommendations based on assessment results.

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

The materials include tools for teachers to track student progress and growth. Through the testing platform, teachers can access reports from beginning, middle, and end-of-year assessments and monitor performance on tasks such as Check Your Understanding and EdgeXL assessments. These tools are referenced in the "Product Review Guide" and are accessible through the *Coursework Teacher Edition,* the "Course Overview," and the "State-Specific Resources."

The materials include tools for students to track their progress and growth. Students receive immediate feedback on both Check Your Understanding tasks at the end of each lesson and Test Yourself! tasks at the end of each unit. In EdgeXL, teachers can configure assignments to allow students to review incorrect answers, supporting reflection and learning. Additionally, a structured template is provided in *Coursework Teacher Edition*, Unit 0, to accompany Test Yourself! tasks. This template guides students to show their work, reflect on mistakes, and engage with solution videos, promoting goal-setting and self-monitoring as they prepare for unit and state assessments.

2.2d – If designed to be static, materials provide prompts and guidance to support educators in conducting frequent checks for understanding at key points throughout each lesson or activity.

The materials include guidance for educators to check for understanding. For example, the *Coursework Student Edition,* Unit 2, Lesson 1 includes a Check Your Understanding feature in each lesson. The *Coursework Teacher Edition* references these checks in the "Course Overview" and "Product Review Guide." Teachers can also view how students answered individual assessment questions, and pre-, mid-, and end-of-unit assessments are available to monitor understanding over time.

The materials do not consistently provide frequent prompts or structured guidance to support educators in checking for understanding throughout each lesson or activity. While end-of-lesson checks and unit-level assessments are present, there is limited support for conducting ongoing, in-the-moment formative checks. Additionally, the materials do not include guidance on how to interpret or respond to student responses during these checks.

2.2e – If designed to be adaptive, materials provide frequent checks for understanding at key points throughout each lesson or activity.

This guidance is not applicable because the program is not designed to be adaptive.

3. Supports for All Learners

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

3.1 Differentiation and Scaffolds

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.1a	All criteria for guidance met.	1/1
3.1b	All criteria for guidance met.	4/4
3.1c	All criteria for guidance met.	2/2
3.1d	Materials do not contain educator-controlled text-to-speech or content and language supports for individual students.	1/3
3.1e	All criteria for guidance met.	2/2
—	**TOTAL**	10/12

3.1a – Materials include explicit educator guidance for lessons or activities scaffolded for students who have not yet reached proficiency in prerequisite or grade-level concepts and skills.

The MN+ Algebra I materials provide explicit educator guidance for scaffolded lessons and activities to support students who have not yet reached proficiency in prerequisite or grade-level concepts and skills. Teacher preparation videos are available for each lesson and unit. For example, in *Coursework Teacher Edition,* Unit 1, Lesson 1, the narrator connects prerequisite skills from earlier grades (relations and functions) to Algebra I. She says, "these lessons are designed to activate and build on prior knowledge" to support students who have not yet reached proficiency.

The teacher videos also address common student misconceptions and provide strategies for assessing and preparing students for learning. The materials incorporate embedded reteaching opportunities that reinforce key mathematical concepts. For example, in Unit 2, Lesson 3, students begin with area models using integers and progress to algebra tiles to model the multiplication of binomials. This sequence supports conceptual understanding through multiple representations.

Additionally, the unit list outlines a structured progression of lessons, with each lesson building on the previous one to support skill development over time. These components collectively ensure that educators are equipped with the necessary tools to support students who require additional scaffolding.

3.1b – Materials include explicit educator guidance for language supports, including pre-teaching and embedded supports for developing academic vocabulary and unfamiliar references in text.

The materials include explicit educator guidance for language supports related to academic vocabulary development. *Coursework Student Edition*, Unit 1, Lesson 1, presents vocabulary terms in light blue rectangular boxes, each accompanied by a video link where the term is defined and applied in context. In Unit 2, Lesson 1, the guided activity introduces new academic terms, such as *leading coefficient*. Additionally, in Unit 2, Lesson 1, students identify features of polynomials and discuss their definitions with a partner. In Unit 12, Lesson 2, visual supports and symbols support vocabulary understanding.

The materials also support understanding of unfamiliar references in text through embedded tools and resources. The *Coursework Student Edition,* Unit 0, "Course Overview," includes an interactive glossary that defines new terms and provides multimedia supports to clarify unfamiliar concepts. The *Independent Skills Practice Book* offers guiding tips and video tutorials to help students navigate and comprehend unfamiliar references. These supports are designed to ensure that students can access and engage with the content, even when encountering new or complex ideas.

3.1c – Materials include explicit educator guidance for enrichment and extension activities for students who have demonstrated proficiency in grade-level and above grade-level content and skills.

The materials described in the "Product Review Guide" and *Coursework Teacher Edition,* Unit 0, provide explicit educator guidance for enrichment and extension activities. Teacher preparation videos include recommendations for lesson implementation and differentiation strategies. The On-Ramp personalized diagnostic learning tool generates individualized learning pathways based on student performance, enabling students who demonstrate proficiency to accelerate to more advanced content. The EdgeXL assessment generator allows teachers to customize and assign assessments to individual students, supporting targeted enrichment.

The *Coursework Student Edition* "Study Expert Videos" offer flexible, asynchronous instructional support in multiple languages and formats, allowing students to engage with content at their own pace and revisit or advance through material independently. The *Coursework Teacher Edition* outlines opportunities to extend learning within and across courses, guiding educators in supporting students who are ready for content that is above their grade level. For example, the Learning Pathway graphic provides guidance for enrichment by directing students who have mastered Algebra 1 content, such as A1.15 Transformations (TEKS A.1.7C), toward more advanced Geometry topics. These include G.5 Rigid Motions (TEKS G.5A), which explores congruence through transformations, and G.7 Non-Rigid Motions (TEKS G.7A), which introduces dilations and similarity. This structured progression supports differentiated instruction by offering clear extension opportunities beyond grade-level expectations.

3.1d – Digital materials include accommodations, including text-to-speech, content and language supports, and calculators that educators can enable or disable to support individual students.

The materials currently offer a basic and a graphing calculator, both available to all users at any time. A scientific calculator is in development, along with an opt-out feature that will allow educators to choose which calculators students may access or to disable calculator access entirely. This functionality supports differentiated assessment accommodations and aligns with guidance indicating that digital assessments should include calculators that educators can enable or disable to support individual students.

Materials do not include educator-controlled accommodations for text-to-speech or content and language supports within the digital platform. While these features are available to students, educators cannot enable or disable them to support individual student needs.

3.1e – Materials include educator guidance on offering options and supports for students to demonstrate understanding of mathematical concepts in various ways, such as perform, express, and represent.

The instructional materials provide opportunities for students to demonstrate their understanding of mathematical concepts through hands-on activities and guided practice. For instance, the *Coursework Student Edition,* Unit 2, Expressions and Equations, *Independent Skills Practice Book* focuses on writing, modeling, and solving equations. In addition, Unit 6, Lesson 6 provides step-by-step guidance with accompanying videos for graphing systems of equations.

To support students in expressing their mathematical understanding, the materials include sentence stems and structured guidance that help articulate reasoning. Unit 1, Lesson 1 incorporates various response formats, including multiple-choice, fill-in-the-blank, and student completion, to support diverse demonstration methods. Additionally, in the *Coursework Student Edition,* Unit 6, Lesson 1, students complete reasoning statements and work with partners to find and verify multiple solutions algebraically.

3.2 Instructional Methods

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.2a	All criteria for guidance met.	5/5
3.2b	All criteria for guidance met.	2/2
3.2c	All criteria for guidance met.	3/3
3.2d	All criteria for guidance met.	2/2
3.2e	All criteria for guidance met.	2/2
—	**TOTAL**	14/14

3.2a – Materials include explicit (direct) prompts and guidance for educators to build knowledge by activating prior knowledge, anchoring big ideas, and highlighting and connecting key patterns, features, and relationships through multiple means of representation.

The MN+ Algebra I materials include explicit prompts and guidance for educators to build knowledge by activating prior knowledge and anchoring big ideas. The *Coursework Teacher Edition,* Unit 1, Lesson 1, "Teacher Prep Video" references students' previous exposure to relations and functions to support the introduction of new content. The Unit 2, Lesson 1, "Teacher Prep Video" activates prior knowledge by reviewing terms, degrees, and coefficients before introducing polynomials. The Unit 6, Lesson 6, "Teacher Prep Video" anchors the big idea of solving systems of equations by connecting the current lesson to previous instruction and extending it to real-world contexts. The Unit 10, Lesson 10, "Teacher Prep Video" activates prior knowledge by reviewing multiple methods for solving quadratics, including factoring, the quadratic formula, and the square root property.

Materials also provide guidance for highlighting and connecting key patterns, features, and relationships through multiple means of representation. In the *Coursework Teacher Edition,* Unit 2, Lesson 1, educators revisit the definitions and properties of polynomials through collaborative, guided, and independent activities that utilize both algebraic expressions and visual models. The "Unit 2 Overview" organizes lessons and prompts in a way that supports the identification and connection of mathematical structures. The Unit 10, Lesson 10, "Teacher Prep Video" presents quadratics both algebraically and graphically, allowing educators to highlight and connect relationships across different representations. These supports enable educators to guide students in developing conceptual understanding through diverse and interconnected instructional approaches.

3.2b – If designed to be static, materials include educator guidance for effective lesson delivery and facilitation using various instructional approaches.

The instructional materials include educator guidance for effective lesson delivery and facilitation, utilizing various instructional approaches. In the *Coursework Teacher Edition,* Unit 5, Lesson 2, "Teacher

Prep Video" outlines strategies, including collaborative activities, independent work, pair-share discussions, and matching exercises, to support lesson facilitation. Similarly, in Unit 6, Lesson 2, the "Teacher Prep Video" guides educators through a sequence of instructional methods, including collaborative learning and structured individual tasks. These approaches are reinforced in Unit 13, Lesson 1, where instruction begins with a guided activity, transitions to collaboration, and concludes with real-world application to strengthen conceptual understanding.

The *Coursework Student Edition* also reflects the use of multiple instructional approaches to support lesson delivery. Unit 2, Lesson 1, incorporates a variety of instructional methods to support the development of concepts. In Unit 7, Lesson 2, and Unit 10, Lesson 6, lessons begin with guided activities, followed by collaborative tasks, and conclude with independent practice and self-check opportunities. In Unit 10, Lesson 6, students engage in completing the square, both algebraically and using algebra tiles, offering visual and symbolic representations.

3.2c – Materials include multi-tiered intervention methods for various types of practice and structures and educator guidance to support effective implementation.

The instructional materials include multi-tiered intervention methods and educator guidance for effective implementation across various instructional structures. In the *Coursework Teacher Edition,* Unit 3, Lesson 1, the lesson begins with a collaborative activity, followed by a guided session, and independent practice, concluding with a reflection. This structure supports differentiated instruction by allowing students to engage with content in multiple formats. The *Coursework Teacher Edition* also suggests using collaborative activities in pairs or small groups, with the option to pause for whole-group discussion if many students struggle at the same point, as outlined in the "Course Overview." These strategies reflect a tiered approach to intervention, enabling educators to adjust instruction according to student needs.

The materials also provide consistent guidance for structuring lessons using a variety of instructional phases. For example, in Unit 2, Lesson 1, students begin with a collaborative activity, transition to guided instruction on polynomials, and then move into independent practice with a Check Your Understanding wrap-up. Unit 8, Lesson 1, uses a similar structure, where students explore factoring through collaborative discussion, guided practice, and independent application. These lesson formats are reinforced across multiple units and lessons, supporting effective implementation by offering educators a clear framework for delivering instruction and monitoring student progress through structured practice opportunities.

3.2d – Materials include enrichment and extension methods that support various forms of engagement, and guidance to support educators in effective implementation.

The instructional materials include enrichment and extension methods that support various forms of engagement through the use of Learning Pathways. These pathways outline opportunities for students to extend their learning either within the current course or by previewing content from future courses. This

structure enables differentiated learning and supports students who are ready to exceed grade-level expectations. Additional enrichment opportunities are embedded throughout the lesson design. For instance, student-led Collaborative Activities promote the exploration and application of concepts and Wrap-Up tasks, such as Error Analysis, which encourage reflection and deeper reasoning. The On-Ramp diagnostic tool further supports extension by adapting to individual student readiness, allowing students to accelerate to new topics independently.

Multiple teacher-facing resources and platform features provide guidance to support educators in effective implementation. Each lesson includes "Teacher Prep Videos" that provide instructional recommendations, highlight potential challenges, and suggest differentiation strategies. The platform also offers robust reporting tools that allow educators to monitor student progress across assessments, practice tools, and instructional videos, enabling data-informed instructional decisions. These supports collectively ensure that educators are equipped to implement enrichment and extension opportunities.

3.2e – Materials include prompts and guidance to support educators in providing timely feedback during lesson delivery.

The instructional materials include prompts and guidance to support educators in providing timely feedback during lesson delivery. In *Coursework Teacher Edition,* Unit 3, Lesson 1, the "Teacher Prep Video" directs educators to reinforce key concepts during a collaborative activity by reminding students that arrows on the ends of lines indicate the graph continues indefinitely. The Unit 5, Lesson 1, "Teacher Prep Video" explains how different representations can be used to identify key features of linear functions. The student pages include a warm-up with an answer key to support immediate feedback. These components provide structured opportunities for educators to monitor student understanding and respond during instruction.

Additional guidance is provided in Unit 6, Lessons 1 and 2, where educators are prompted to use Desmos to graph systems of equations and ask students, "What would happen if we were to add these two equations together to get a new equation?" This question is designed to elicit student reasoning and allow for real-time assessment. The "Course Overview" also includes implementation guidance suggesting that educators pause for whole-group discussion when multiple students encounter difficulty during collaborative activities. These strategies support the use of feedback to address student needs during lesson delivery.

3.3 Support for Emergent Bilingual Students

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

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.3a	Materials do not contain guidance on providing or incorporating more than two levels of academic language.	2/4
3.3b	This guidance is not applicable to the program.	N/A
3.3c	Materials do not contain implementation guidance to support educators in effectively using the materials in state-approved bilingual/ESL programs.	0/1
3.3d	Materials do not contain embedded guidance to support emergent bilinguals in building background or making cross-linguistic connections through oral and written discourse.	4/8
3.3e	This guidance is not applicable to the program.	N/A
—	**TOTAL**	6/13

3.3a – If designed to be static, materials include educator guidance on providing and incorporating linguistic accommodations for all 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 MN+ Algebra I materials provide educators with specific strategies for incorporating linguistic accommodations, such as multilingual instructional videos, scaffolded sentence stems, and translation tools. In the *Coursework Teacher Edition,* Unit 1, Lesson 1, students begin by defining inputs and outputs using diagrams and tables, supported by sentence stems and dropdown menus. In Unit 1, Lesson 2, the scaffolds evolve as students transition from structured prompts to writing complete sentences independently. Vocabulary videos are available in multiple languages, allowing students to access content in their preferred language. In *Coursework Student Edition,* Unit 6, Lesson 1, students explore systems of equations through collaborative graphing activities, supported by multilingual videos and a translation tool that offers over 100 languages. These features help students engage with content while building academic language.

These accommodations are intentionally designed to help students develop and use academic language by gradually increasing linguistic complexity and offering multimodal supports. For example, in *Coursework Teacher Edition,* Unit 1, Lesson 1, students engage in a collaborative activity where sentence stems are paired with fill-in-the-blank prompts and dropdown menus containing answer choices. This structured format helps students begin constructing academic responses with guided support. As lessons

progress, these scaffolds are reduced. By Unit 1, Lesson 2, students are expected to complete fill-in-the-blank prompts without dropdowns and eventually write full sentences independently. Multilingual videos and glossaries allow students to build content knowledge in their native language while transitioning to English. Collaborative activities further promote academic discourse, aligning with the ELPS goals across listening, speaking, reading, and writing domains.

The guidance addresses the needs of English learners at two proficiency levels, as outlined in the ELPS. Beginning-level students benefit from translation tools and multilingual glossary videos in English, Spanish, Haitian Creole, Portuguese, and ASL. Intermediate learners are supported through scaffolded questioning that progresses from dropdowns to open-ended responses. However, the materials do not include explicit guidance for more than two proficiency levels. There are no tiered sentence stems or differentiated tasks aligned with the ELPS descriptors, which limits the materials' ability to fully support all proficiency levels.

3.3b – If designed to be adaptive, materials include embedded linguistic accommodations for all 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.

This guidance is not applicable to the program because it is not designed to be adaptive.

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

The materials do not include implementation guidance that supports educators in planning and delivering instruction aligned with bilingual/ESL program goals. While the "TEKS and ELPS by Lesson" document identifies which ELPS are addressed in each lesson, it does not provide educators with instructional strategies or planning tools. The *Coursework Teacher Edition* "Course Overview" mentions language supports such as multilingual videos and glossaries, but these are student-facing features and not educator-facing guidance.

Materials do not align with state-approved bilingual/ESL program requirements, failing to incorporate educator guidance tailored to specific program models. Although the materials offer general accessibility features, such as translation tools, glossary videos in multiple languages, and a digital *Coursework Student Edition* that can be translated into over 100 languages, these supports are not accompanied by implementation strategies for dual language, transitional bilingual, or ESL pull-out programs.

3.3d – Materials include embedded guidance 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 materials support emergent bilingual (EB) students in developing academic vocabulary by embedding strategies such as vocabulary videos and opportunities for oral and written discourse. In the C*oursework Student Edition,* Unit 1, Lesson 1, students watch videos that reinforce vocabulary development and introduce terms like *input* and *output*. In Unit 2, Lesson 1, students encounter new terms related to polynomials, which are supported by both visual and verbal explanations. In the *Coursework Teacher Edition,* Unit 2, Lesson 9, students are expected to use academic terms such as *slope* and *distributive property* in written responses.

To increase comprehension, the materials include embedded guidance that helps students access content through structured writing tasks and collaborative discussions. Unit 5, Lesson 2, and Unit 6, Lesson 6, provide opportunities for students to explain their reasoning in writing and engage in academic conversations. These tasks support comprehension by encouraging students to process and express mathematical ideas. However, the materials lack explicit teacher guidance on how to scaffold these tasks for different language proficiency levels, and materials do not include embedded strategies such as visual aids, prereading supports, or guided questioning to deepen comprehension.

The materials do not help build background knowledge for EB students. While some lessons include familiar terms that may connect to students' prior knowledge, teachers do not receive explicit strategies to build background knowledge. The materials do not include culturally relevant examples or teacher guidance to introduce unfamiliar concepts before instruction begins.

The materials do not promote cross-linguistic connections by encouraging students to engage in oral and written discourse that draws on their home language or compares linguistic structures. While translation tools and multilingual videos are available, tools are not integrated into instructional routines in a way that fosters metalinguistic awareness. There are no embedded activities or teacher guidance that prompt students to identify cognates, explore similarities and differences between languages, or reflect on how their language knowledge supports learning in English.

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

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

4. Depth and Coherence of Key Concepts

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

4.1 Depth of Key Concepts

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.1a	All criteria for guidance met.	2/2
4.1b	All criteria for guidance met.	4/4
—	**TOTAL**	6/6

4.1a – Practice opportunities throughout learning pathways (including instructional assessments) require students to demonstrate depth of understanding aligned to the TEKS.

The MN+ Algebra I materials provide structured practice opportunities throughout learning pathways that require students to demonstrate a depth of understanding aligned with the TEKS. These opportunities are embedded in various instructional formats, including student-driven collaborative activities, guided instruction, real-world applications, and independent practice. Instructional assessments are embedded throughout the materials as Check Your Understanding and Test Yourself!

In Unit 9, Lesson 8, the materials incorporate student-driven collaborative activities, guided instruction, and independent practice. Students work with real-world scenarios and use interactive tools such as algebra tiles and graphing utilities to construct and analyze quadratic equations in vertex form. Check Your Understanding exercises assess student learning and reinforce key concepts.

Instructional assessments at the end of each lesson require students to demonstrate depth of understanding aligned to the TEKS. For example, in Unit 9, Test Yourself!, students are required to demonstrate understanding of quadratic functions using graphs, tables, and algebraic characteristics, aligning to the TEKS A.1.7A and A.1.6B. In the *Independent Skills Practice Book*, students "sketch a graph of each function on the provided axes, labeling any x-intercepts with an X," reinforcing their ability to connect factored form to graphical representations and apply the zero-product property to identify function zeros.

4.1b – Questions and tasks, including enrichment and extension materials, increase in rigor and complexity, leading to grade-level and above grade-level proficiency in the mathematics TEKS.

The materials include questions and tasks that increase in rigor and complexity across lessons, supporting students in developing a deep understanding of the mathematics TEKS. Practice formats include guided practice, collaborative activities, independent tasks, wrap-ups, and checks for

understanding. For example, in Unit 5, Lessons 10 and 11, students engage in writing and solving real-world linear equations. Lesson 10 begins with defining variables, progresses to constructing equations, and concludes with solving them. Lesson 11 includes a guided activity that increases in complexity, requiring students to apply their understanding in extended tasks aligned to grade-level and above-grade-level expectations.

Enrichment and extension materials are strategically embedded to challenge students beyond grade-level expectations. The *Independent Skills Practice Book* asks students to "create and interpret exponential models of data in context," such as writing a function to represent compound interest or modeling population growth using a table of values. These tasks require students to synthesize multiple representations and apply exponential reasoning in real-world contexts, reinforcing conceptual depth and extending beyond grade-level expectations.

The progression of tasks within and across units reflects a deliberate increase in cognitive demand, aligned with the expectations of the Algebra I TEKS.

In Unit 11, students explore exponential functions using multiple representations. The unit begins with foundational concepts of exponential growth and decay and progresses to identifying key features and writing equations for exponential relationships. This sequence of questions and tasks supports increasing rigor and prepares students for proficiency at or above grade level.

4.2 Coherence of Key Concepts

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.2a	All criteria for guidance met.	1/1
4.2b	All criteria for guidance met.	1/1
4.2c	All criteria for guidance met.	4/4
—	**TOTAL**	6/6

4.2a – Materials demonstrate coherence across concepts horizontally within the grade level by connecting patterns, big ideas, and relationships.

The MN+ Algebra I materials demonstrate coherence across concepts horizontally within the grade level by consistently connecting patterns, big ideas, and relationships. For example, Unit 3, Linear Functions, introduces students to the key features of linear functions. This foundational understanding is extended in Unit 4, where students apply their knowledge by fitting functions to scatter plots to model bivariate numerical data. In Unit 5, Linear Equations, students deepen their understanding of linear functions by graphing them, solving multi-step equations, and applying them to real-world scenarios. The progression continues in Unit 6, Systems of Linear Equations, where students explore systems of equations, reinforcing the connection between linear functions and their graphical representations.

Additionally, Unit 2, Expressions and Equations, introduces polynomials and builds on students' understanding of exponent laws, which are then applied to operations with polynomials and writing equations of lines in various forms. These conceptual connections are outlined in the "Course Overview" and "Course Sequence" and are reflected in the *Coursework Student Edition* lesson introductions and sequencing. The materials demonstrate the development of concepts that build upon one another, supporting a coherent learning experience within the grade level.

4.2b – Materials demonstrate coherence vertically across concepts and grade bands, including connections from grades 3–12, by connecting patterns, big ideas, and relationships.

The materials demonstrate vertical coherence across concepts and grade bands by building on mathematical foundations introduced in earlier grades and extending them into more complex applications appropriate for Algebra 1. The curriculum begins with Unit 1, Foundations in Algebra, where students revisit and deepen their understanding of relations, functions, function notation, and the classification of rational and irrational numbers. These topics are rooted in middle school standards and serve as a conceptual bridge into high school algebra. The structure of the course reflects a progression of ideas, ensuring that students encounter concepts not in isolation, but rather as part of a broader mathematical narrative that spans grades 3–12. This coherence is supported by the "Course Overview" and "Course Sequence," which outline how each unit builds upon prior knowledge and prepares students for future learning.

Later units continue this vertical alignment by reinforcing and expanding on earlier concepts. For example, Unit 12, Univariate Numerical Data, revisits students' prior work with univariate numerical data, a topic introduced in upper elementary and middle school, and extends it to more sophisticated data analysis techniques. The materials also include correlation documents and *Independent Skills Practice Book* resources accessible through the *Coursework Teacher Edition,* which link current content to prior grade-level standards and skills. The *Independent Skills Practice Book* asks students to "recognize patterns to factor, such as difference of squares, perfect square trinomials, and factoring trinomials when a is 1." These pattern-based strategies build directly on students' prior exposure to numerical and algebraic patterns in grades 3–8 and support the development of algebraic fluency through vertically aligned instruction.

4.2c – Materials demonstrate coherence across lessons or activities by connecting students' prior knowledge of concepts and procedures to the mathematical concepts to be learned in the current grade level and future grade levels.

The materials demonstrate coherence across lessons and activities by connecting students' prior knowledge of both mathematical concepts and procedures to the content taught in the current grade level. According to the *Coursework Teacher Edition,* "Lesson Alignment by Standard," Unit 11, Exponential Functions, develops conceptual understanding of exponential functions through lessons focused on interpreting parameters (TEKS A.1.9B), exploring domain and range (TEKS A.1.9A), and modeling growth and decay (TEKS A.1.9C). Procedural knowledge is addressed through writing exponential equations (TEKS A.1.9C), graphing functions and identifying key features (TEKS A.1.9D), and representing domain and range using inequalities (TEKS A.1.9A). Additionally, Unit 6, Systems of Linear Equations, addresses solving systems of linear equations (TEKS A.1.5C), building on conceptual and procedural foundations established in grade 8, Unit 10.

The materials also connect both conceptual and procedural knowledge to future grade-level learning. As outlined in the *Coursework Teacher Edition,* "Lesson Alignment by Standard," Algebra 2 revisits and extends conceptual understanding of exponential functions in more complex contexts (TEKS A.1.9B, A.1.9D) and incorporates procedural applications such as graphing and using technology to model data and make predictions (TEKS A.1.9D, A.1.9E). These vertical connections support a coherent instructional sequence across grade levels.

The *Coursework Teacher Edition's* "MN+ Algebra I Learning Pathways" graphic demonstrates coherence by connecting students' prior knowledge of concepts and procedures to current and future mathematical learning. One example of a current grade-level concept is the TEKS A.1.3 Linear Functions, which helps students build their understanding of relationships between variables. A corresponding current grade-level procedure is the TEKS A.1.5 Solving Linear Equations, which supports students in manipulating expressions and solving for unknowns. For future learning, the concept of the TEKS G.7 Non-Rigid Motions in Geometry extends students' understanding of transformations beyond rigid motions. The future grade-level procedure TEKS A.2.12 Transformations in Algebra 2 requires students to apply

transformation rules in more complex contexts. These examples illustrate how the curriculum is intentionally sequenced to support conceptual and procedural continuity across grade levels.

4.3 Coherence and Variety of Practice

GUIDANCE	SCORE SUMMARY	RAW SCORE
4.3a	All criteria for guidance met.	2/2
4.3b	All criteria for guidance met.	2/2
—	**TOTAL**	4/4

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

The MN+ Algebra I materials provide consistent opportunities for spaced retrieval of previously learned skills and concepts across the learning pathways. Throughout the curriculum, students are encouraged to revisit and apply prior knowledge in new contexts, thereby reinforcing retention and deepening their understanding. For example, Unit 1, Foundations in Algebra, introduces students to the concepts of domain and range, which are revisited in Unit 3, Linear Functions, as students explore these ideas further in the context of linear functions. Similarly, in Unit 2, Expressions and Equations, students learn to write equations of lines, and this foundational skill is extended in Unit 6, Systems of Linear Equations, where students apply it to writing equations of systems of equations. These recurring opportunities help students strengthen their grasp of core concepts over time.

Additional examples of spaced retrieval are embedded throughout the course. In Unit 8, a warm-up activity prompts students to recall how to multiply binomials—a skill introduced earlier—before students move on to factoring trinomials using algebra tiles. This type of spaced retrieval is strategically placed to activate prior knowledge just before students encounter more complex applications. In Unit 14, Sequences, Test Yourself!, the assessment includes integrated questions that require students to retrieve and apply earlier concepts, such as domain and functions, in the context of sequences. These retrieval opportunities are supported by resources such as the *Independent Skills Practice Book* and correlation documents, which reinforce connections across lessons and units. In the *Independent Skills Practice Book*, each "I can..." skill includes six related questions, with the first question designed to activate prior knowledge and the remaining five reinforcing the concept through varied applications. This structure supports spaced retrieval by revisiting key ideas across multiple contexts and formats.

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

The materials provide interleaved practice opportunities that allow students to revisit and apply previously learned skills and concepts across different learning pathways. Throughout the MN+ Algebra 1 curriculum, students engage in guided activities, practice sets, wrap-ups, and checks for understanding that integrate earlier content with new learning. For example, in Unit 2, Expressions and Equations, students work with operations involving rational numbers, a concept that was introduced earlier in the year. At the same time, students learn to rewrite equations of lines in various forms. This integration of

concepts promotes deeper understanding and strengthens retention by encouraging students to draw on multiple strands of knowledge within a single lesson.

Additional examples of interleaved practice appear in Units 3, 5, and 6. In Unit 3, Linear Functions, students continue to engage with domain and range while exploring linear functions, building on earlier work from Unit 1, Foundations in Algebra. Unit 5, Linear Equations, lessons incorporate warm-ups and practice problems that revisit foundational algebraic skills as students apply them to new contexts. Students solve systems of equations algebraically in Unit 6, Systems of Linear Equations. They find solutions to real-world problems, drawing on prior knowledge of solving linear equations from both earlier units and middle grades. These opportunities are embedded throughout the *Coursework Student Edition* and *Coursework Teacher Edition* and are supported by the "Course Overview" and unit-level planning tools.

5. Balance of Conceptual and Procedural Understanding

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

5.1 Development of Conceptual Understanding

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.1a	All criteria for guidance met.	3/3
5.1b	All criteria for guidance met.	2/2
5.1c	All criteria for guidance met.	1/1
—	**TOTAL**	6/6

5.1a – Questions and tasks provide opportunities for students to interpret, analyze, and evaluate mathematical concepts and complex, real-world situations.

The MN+ Algebra I materials provide students with opportunities to interpret mathematical concepts through real-world contexts and visual representations. For example, in Unit 6, Lesson 6, students interpret solutions in real-world scenarios. Additionally, in Unit 7, Lesson 1, students interpret the meaning of solutions to systems of equations within the context of constraints, determining whether solutions are viable or nonviable in real-world applications.

Students are also given multiple opportunities to analyze mathematical relationships and structures. In Unit 3, Lesson 7, students analyze patterns in data and algebraic representations to draw conclusions about mathematical models. In Unit 7, Lesson 1, students write systems of equations from real-world contexts and analyze the relationships between variables to determine appropriate solution methods. These tasks encourage students to dissect problems, identify relevant components, and understand how different elements interact within a mathematical system.

The materials further support students in evaluating mathematical concepts and solutions within authentic scenarios. In *Coursework Student Edition,* Unit 3, Lesson 7, students assess the validity of mathematical models by applying them to real-world contexts and determining whether the results are reasonable. In Unit 4, Bivariate Numerical Data, students engage with the *Independent Skills Practice Book* that requires them to evaluate the appropriateness of mathematical strategies and justify their conclusions. In Unit 7, Lesson 1, students write systems of equations from real-world contexts and evaluate the reasonableness of their solutions by considering constraints and interpreting their viability. These tasks support students in making informed judgments about the effectiveness of mathematical approaches and the accuracy of their results.

5.1b – Questions and tasks provide opportunities for students to create concrete models and representations of mathematical situations.

The materials provide students with opportunities to create concrete models of mathematical situations. In the *Coursework Student Edition,* Unit 1, Foundations in Algebra, students construct mapping diagrams

and graphs from ordered pairs, evaluating whether these representations define functions. In Unit 3, Linear Functions, collaborative activities support model creation by engaging students in hands-on exploration of mathematical concepts. In Unit 10, Lesson 4 of the *Independent Skills Practice Book*, students use algebra tiles to factor trinomials by arranging tiles into rectangles, visualizing the area model, and identifying factor pairs. This hands-on modeling supports conceptual understanding of polynomial structure and connects symbolic manipulation to spatial reasoning.

Students are also given multiple opportunities to create and interpret concrete representations of mathematical ideas. In the *Coursework Student Edition*, Unit 7, Linear Inequalities and Systems, students graph quadratic functions and discuss the constraints of their models, deepening their understanding of functional relationships. In Unit 14, Sequences, students graph quadratic functions from transformed equations and describe the transformations from the parent function, using coordinate planes to sketch and analyze the resulting parabolas. In Unit 14, Lesson 5, a collaborative matching activity connects points with different graphs, strengthening students' ability to interpret and represent functions visually and concretely.

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

The materials provide opportunities for students to apply conceptual understanding to new mathematical problems and contexts. In the *Coursework Student Edition,* Unit 1, Lesson 1 provides a variety of collaborative workbook activities that allow students to explore relations through multiple representations. For example, students work with input-output tables to determine rules, complete mapping diagrams, and analyze graphs corresponding to relations. Students interpret ordered pairs, identify dependent and independent variables, and compare different representations of the same relation. These varied scenarios promote active engagement and support the transfer of knowledge by encouraging students to connect mathematical concepts across different forms and contexts.

Students are also given multiple opportunities to transfer their understanding to unfamiliar or real-world situations. Students apply prior knowledge to real-world contexts, such as modeling heart rate based on age (Unit 3, Lesson 7), comparing costs for fishing trips using linear equations (Unit 5, Lesson 11), and extending graphing skills to solve systems of equations (Unit 6, Lesson 6). In the *Independent Skills Practice Book*, students write linear inequalities to model real-world financial scenarios, such as determining how many months Janessa must save reward points to earn a gift card, and how many hours Molly must work to meet a savings goal. These tasks require students to apply their understanding of inequalities, variables, and operations in unfamiliar, practical contexts, reinforcing conceptual understanding through meaningful application.

5.2 Development of Fluency

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

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

The MN+ Algebra I materials provide tasks designed to build student automaticity and fluency necessary to complete grade-level mathematical tasks. In the *Coursework Student Edition,* Unit 3, Lesson 1, students identify domain and range from both graphs and algebraic representations, reinforcing repeated exposure to foundational concepts. In Unit 7, Lesson 1, students solve linear inequalities and systems of inequalities, building on prior work with linear equations and systems of equations. These tasks are structured to reinforce procedural fluency through repeated application of previously learned skills.

Additional support for fluency development is evident in the *Coursework Teacher Edition*. In Unit 7, Lesson 1, students revisit solving equations as a prerequisite to solving inequalities. In Unit 8, students apply distributive and multiplication skills to rewrite polynomial expressions. The "Course Overview" includes a "Lesson Alignment by Standard" resource, which maps standards to lessons across units, showing repeated opportunities for students to engage with specific skills. For example, TEKS A.1.2A appears in multiple lessons across Unit 1, Foundations in Algebra, and Unit 3, Linear Functions, supporting fluency through repetition. In Unit 5, Linear Equations, the unit overview table categorizes each lesson by conceptual understanding, procedural fluency, and real-world application, helping educators identify where fluency is explicitly targeted.

5.2b – Materials provide opportunities for students to practice the application of efficient, flexible, and accurate mathematical procedures throughout learning pathways.

The materials provide consistent opportunities for students to apply efficient mathematical procedures across multiple units and contexts. In *Coursework Student Edition,* Unit 3, Linear Functions, students solve linear functions and identify slopes and intercepts using tables, equations, and graphs. Lessons 2, 3, and 5 guide students to choose efficient representations, such as reading slope from a graph or calculating it from a table. In Unit 6, Systems of Linear Equations, students solve systems of equations using graphing, substitution, or elimination, selecting the most efficient method based on context. The *Independent Skills Practice Book* reinforces this by prompting students to determine slope and rate of change from graphs, equations, and tables.

Students are encouraged to apply flexible mathematical procedures by exploring and justifying multiple strategies. In *Coursework Student Edition,* Unit 3, Lessons 2, 3, and 7, students interpret linear functions across different formats, while Lessons 4 and 6 extend this understanding to real-world applications. These tasks support flexibility by prompting students to shift between representations. The *Independent Skills Practice Book* complements this by offering problems that require students to solve systems using graphing, substitution, and elimination, encouraging strategic thinking.

To support procedural accuracy, the materials emphasize precision in both reasoning and execution. Students identify and apply key concepts such as domain, range, and intercepts, with opportunities to verify results across representations. Additional practice in Unit 5, Linear Equations, and Unit 10, Writing and Solving Quadratic Equations, reinforces accuracy through tasks involving linear and quadratic equations. The *Independent Skills Practice Book* supports this focus through graphing tasks that require students to identify slopes and intercepts, ensuring accurate interpretation of mathematical relationships. Together, these experiences help students build reliable habits for solving problems with precision.

5.2c – Materials provide opportunities for students to evaluate mathematical representations, models, strategies, and solutions for efficiency, flexibility, and accuracy throughout learning pathways.

The instructional materials provide opportunities for students to evaluate mathematical representations, models, strategies, and solutions for efficiency, flexibility, and accuracy throughout the learning pathways. In the *Coursework Student Edition,* Unit 9, Quadratic Functions, students identify key features of quadratic functions using tables, graphs, and equations. Students also rewrite quadratic equations in standard, factored, and vertex forms and apply completing the square to analyze the structure and features. These tasks enable students to assess which representations and strategies are most effective for identifying specific characteristics of quadratic functions.

In Unit 10, Writing and Solving Quadratic Equations, students solve quadratic equations using factoring, completing the square, and the quadratic formula. Lessons guide students in selecting appropriate methods based on the structure of the equation and the context of the problem, thereby supporting flexibility in problem-solving. The *Coursework Teacher Edition* for Unit 10 further emphasizes efficiency in Lesson 10, where students compare solving methods to determine the most streamlined approach. Accuracy is reinforced through multi-step procedures, such as deriving the quadratic formula and completing the square, with a focus on precision and validation of solutions. Additional opportunities to evaluate strategies and representations can be found in Unit 1, Lesson 2, and Unit 5, Lesson 6, where students model relations and justify their steps using the properties of operations.

5.2d – Materials contain guidance to support students in selecting the most efficient approaches when solving mathematics problems.

The instructional materials contain guidance to support students in selecting the most efficient approaches when solving mathematical problems. In *Coursework Teacher Edition*, Unit 5, Lesson 1, the "Teacher Prep Video" highlights that the x-intercept is more efficiently identified using a table rather than a graph, as the table provides an exact value. Similarly, in Unit 5, Lesson 3, Guiding Activity, students are directed to evaluate and apply efficient strategies when solving problems. In Unit 11, Lesson 6, students are taught to write exponential functions from graphs or tables by identifying the initial value and growth or decay factor using a consistent process. This structure supports efficiency by helping students recognize patterns and apply streamlined procedures across different problems.

Additional examples appear in Units 5, 6, and 16. In Unit 5, Lessons 9 and 10, students define and interpret parameters in real-world contexts, encouraging them to select appropriate strategies based on the problem's structure. Unit 6, Lesson 6, presents students with a table of values and an equation and asks them to graph and interpret key features, allowing them to choose the most effective representation for analysis. In Unit 16, Lesson 4, students evaluate relative frequency tables by identifying joint, marginal, and conditional frequencies, learning when percentages provide more meaningful insights than raw counts. These tasks and supports guide students in evaluating and selecting efficient approaches based on context, representation, and the type of problem.

5.3 Balance of Conceptual Understanding and Procedural Fluency

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

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

The MN+ Algebra I materials explicitly address the conceptual emphasis of the TEKS by guiding students to understand mathematical relationships through real-world contexts and collaborative exploration. In *Coursework Student Edition*, Unit 8, Lesson 1, students apply the distributive property to multiply and identify factors, with an emphasis on equivalent expressions. This activity supports TEKS A.1.10D by helping students conceptually understand factoring as the reverse of multiplication. In Unit 6, Lesson 1, students explore graphs of linear functions by identifying solutions to single equations and then to systems of equations. This progression builds understanding of what it means for a point to satisfy both equations in a system, aligning with TEKS A.1.5C and A.1.3F.

The TEKS' procedural emphasis is supported through structured practice in solving systems using graphing, substitution, and elimination. In *Coursework Student Edition,* Unit 6, Lesson 6, students apply these methods to real-world problems, reinforcing both procedural fluency and conceptual understanding. In Unit 7, Lessons 8 and 9, students deepen their understanding of systems of linear inequalities by interpreting inequality symbols, analyzing overlapping shaded regions, and engaging in error analysis. These activities support TEKS A.1.3H by encouraging students to reason and correct misconceptions.

Procedural fluency is developed through repeated graphing practice, including manipulating inequalities, plotting boundary lines, and shading regions appropriately. Students use both algebraic and graphical methods to solve and analyze systems of equations. In *Coursework Student Edition,* Unit 9, Quadratic Functions, students examine quadratic equations by identifying key features and using algebra tiles to rewrite equations, leading to completing the square. This hands-on approach supports both conceptual understanding and procedural skill development, aligned with TEKS A.1.3C.

5.3b – Questions and tasks provide opportunities for students to use concrete models, pictorial representations, and abstract models as required by the TEKS.

The materials include questions and tasks that prompt students to use concrete models, such as algebra tiles and real-world scenarios. For example, in *Coursework Student Edition,* Unit 9, Lesson 5, students use algebra tiles to rewrite quadratic equations, which leads to completing the square. In Unit 13, Lesson 7,

students engage with real-world contexts, such as electricity access and algae growth, defining variables and interpreting real data to ground mathematical concepts in tangible experiences. These tasks support TEKS A.1.3C and A.1.12D.

Opportunities are provided to support the use of pictorial representations by including tasks that require students to draw or interpret visuals, such as graphs, tables, and diagrams. In *Coursework Student Edition,* Unit 3, Linear Functions, students identify domain and range using graphs and algebraic representations. Lessons include interpreting slope and intercepts from graphs and tables, and in Unit 9, Quadratic Functions, students graph parabolas using given features. In *Coursework Teacher Edition,* Unit 13, Digging Deeper Into Functions, students match functions to visual representations, helping students understand the behavior of functions over time. These activities align with TEKS A.1.2A, A.1.3C, and A.1.7A.

Students are provided opportunities to engage with abstract models by solving problems using symbolic expressions, equations, and function rules. In *Coursework Student Edition,* Unit 3, Linear Functions, and Unit 9, Quadratic Functions, students analyze equations and tables to determine the key features of linear and quadratic functions. In Unit 13, Lessons 6 and 7, students interpret and compare symbolic expressions, such as exponential and quadratic equations, in real-world contexts, thereby deepening their abstract reasoning. These tasks support TEKS A.1.3C and A.1.12.D.

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

The materials support students in connecting concrete or visual models to abstract concepts by guiding them through a progression of representations. In *Coursework Student Edition,* Unit 8, Lesson 2, students use algebra tiles on a tile mat to factor polynomials. Students justify the unknown factor using the visual model, which helps them connect the distributive property to the abstract process of factoring. The lesson then transitions students from using tiles to factoring without them, supporting TEKS A.1.10E.

Materials provide opportunities for students to create models that represent mathematical ideas, such as exponential growth and decay. In *Coursework Student Edition,* Unit 11, Lesson 1, students begin with a domino activity that visually demonstrates exponential change. Students then explore additional visual examples before writing exponential equations, helping them build a bridge from real-world representations to symbolic expressions supporting TEKS A.1.9B.

Guidance is embedded to help students define the purpose and structure of the models they use by prompting them to describe transformations and relationships between functions. In *Coursework Student Edition,* Unit 15, Lesson 7, students analyze how multiplying or dividing the input or output of a quadratic function affects its graph by comparing transformations of g(x)=x2 and recording the changes in a structured table, supporting TEKS A.1.3E.

Tasks prompt students to explain how models represent mathematical thinking by requiring them to interpret and justify their reasoning. In *Coursework Student Edition,* Unit 10, Lesson 5, students explore quadratic functions and their transformations using multiple representations, including graphs and symbolic forms. Students describe how linear factors relate to the zeros of a quadratic function, reinforcing connections between visual and abstract models in alignment with TEKS A.1.7B.

5.4 Development of Academic Mathematical Language

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.4a	All criteria for guidance met.	1/1
5.4b	All criteria for guidance met.	2/2
5.4c	All criteria for guidance met.	1/1
5.4d	All criteria for guidance met.	2/2
5.4e	All criteria for guidance met.	2/2
—	**TOTAL**	8/8

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

The MN+ Algebra I materials support the development of academic mathematical language through the use of visuals, such as input-output diagrams, tables, mappings, and graphs. In *Coursework Student Edition,* Unit 1, Lessons 1–2, students explore domain and range by working through input-rule-output diagrams, creating tables of values, and translating these into mappings and graphs. These visual representations help students connect vocabulary to mathematical relationships. In Unit 6, Lessons 1–2, students use graphs to define and interpret solutions to systems of equations, reinforcing academic language through visual models. In the *Independent Skills Practice Book*, students graph savings functions and interpret slope and intercepts in context, reinforcing terms like *rate of change* and *initial value* through real-world modeling.

The materials give students opportunities to build academic mathematical language using manipulatives. For example, materials include card sort activities in *Coursework Teacher Edition,* Unit 15, Lesson 4, where students match equations, graphs, tables, and written descriptions of parent functions. This hands-on approach reinforces vocabulary like quadratic, cubic, absolute value, exponential, and square root. Similarly, in the *Independent Skills Practice Book*, students use algebra tiles in Unit 10, Lesson 4, to model factoring trinomials, supporting vocabulary development around expressions, factors, and area models.

The materials incorporate language development strategies, such as structured collaborative activities, guided discussions, and error analysis, to promote academic mathematical language. For example, in *Coursework Teacher Edition,* Unit 13, Lesson 3, students engage in mathematical discourse by justifying their reasoning and using precise vocabulary to explain misconceptions. These strategies, along with consistent vocabulary integration and real-world contexts, help students internalize and apply academic language with clarity and confidence.

5.4b – Materials include embedded educator guidance to scaffold, support, and extend students' use of academic mathematical vocabulary in context when communicating with peers and educators.

The materials include embedded educator guidance to scaffold students' use of academic mathematical vocabulary in context, such as in *Coursework Teacher Edition,* Unit 3, Lesson 1. In this lesson, students revisit the definitions of domain and range in the context of linear functions. The lesson prompts students to describe the domain and range of given graphs to a partner, encouraging the use of precise mathematical language in peer discussions. In the *Independent Skills Practice Book,* vocabulary tips in guided practice support students in applying terminology while solving equations.

Educator supports are embedded within the materials to help students use academic mathematical vocabulary when interacting with peers and teachers, such as in *Coursework Teacher Edition,* Unit 6, Lesson 6. Structured partner tasks prompt students to define constraints and interpret solutions using academic terms, while teacher prompts model how to guide students in articulating their reasoning.

The materials provide embedded guidance for educators to extend students' use of academic mathematical vocabulary in meaningful contexts, such as in *Coursework Teacher Edition,* Unit 5, Lesson 10. Students define terms, construct equations, and interpret solutions in real-world scenarios, with teacher prompts that support vocabulary use in justifying models and communicating reasoning.

5.4c – Materials include embedded guidance to support student application of appropriate mathematical language and academic vocabulary in discourse.

Materials include embedded guidance to support student application of appropriate mathematical language, such as structured partner discussions that support vocabulary development through real-world applications. In *Coursework Teacher Edition,* Unit 3, Lesson 1, students describe the domain and range of graphs using academic language, first reviewing definitions and then applying them to real-world contexts. Educators are guided to prompt students to consider constraints and whether graphs represent finite or infinite domains and ranges, encouraging the use of precise vocabulary in peer conversations. In the *Independent Skills Practice Book*, guided practice sections include vocabulary-focused tips to support students in using accurate terminology while solving problems.

To support the use of academic vocabulary in discourse, the materials provide embedded guidance that helps students communicate mathematical ideas clearly, such as sequenced questioning and structured collaborative tasks. In *Coursework Teacher Edition,* Unit 5, Lessons 10–11, the Writing and Solving Real-World Equations lessons provide repeated opportunities for students to define variables, identify constants and parameters, and interpret solutions using terms like *variable, constraint,* and *equation*. Educators are supported with clear question sequences that scaffold student responses and promote vocabulary-rich dialogue.

5.4d – Materials include embedded guidance to facilitate mathematical conversations allowing students to hear, refine, and use math language with peers.

Materials include embedded guidance to facilitate mathematical conversations that allow students to hear math language used by their peers. For example, collaborative tasks in *Coursework Student Edition,* Unit 3, Lesson 4, require students to match graphs with tables and equations. The tasks involve discussing with a partner which key features—such as slope, intercepts, and domain/range—they used to make their matches. These conversations encourage students to use precise mathematical language and strengthen their communication skills through peer interaction.

To help students refine their mathematical language, the materials provide embedded guidance that supports peer-to-peer dialogue and feedback, such as in *Coursework Teacher Edition,* Unit 6, Lesson 5, where students compare two equivalent systems of equations solved using elimination. The lesson prompts students to justify their reasoning, identify constraints, and interpret solutions in real-world contexts like basketball statistics and CO_2 emissions. These structured discussions help students clarify their thinking and refine their use of academic vocabulary.

Embedded guidance in the materials supports students in using mathematical language during conversations with peers. For example, the guided activity in *Coursework Student Edition*, Unit 3, Lesson 4, has students analyze a real-world scenario involving a gift card balance. Working with a partner, they determine and explain the domain, range, slope, and intercepts of a linear function in context. These tasks promote effective discourse, deepen engagement, and build confidence in using mathematical language to solve complex problems.

5.4e – Materials include embedded guidance to anticipate a variety of student answers including exemplar responses to questions and tasks, including guidance to support and/or redirect inaccurate student responses.

Materials include embedded guidance to facilitate mathematical conversations that allow students to hear math language used by their peers, such as collaborative tasks in *Coursework Student Edition,* Unit 3, Lesson 4, where students match graphs with tables and equations. During this activity, students discuss with a partner which key features, such as slope, intercepts, and domain/range, they used to make their matches. These conversations encourage students to use precise mathematical language and strengthen their communication skills through peer interaction. The *Independent Skills Practice Book* prompts students to explain their reasoning when writing equations from verbal descriptions, such as modeling smartphone sales over time, supporting peer dialogue around slope and intercepts.

The materials provide embedded guidance that supports peer-to-peer dialogue and feedback to help students refine their mathematical language, such as in *Coursework Teacher Edition,* Unit 6, Lesson 5. In the lesson, students compare two equivalent systems of equations solved using elimination. The lesson prompts students to justify their reasoning, identify constraints, and interpret solutions in real-world

contexts like basketball statistics and CO_2 emissions. These structured discussions help students clarify their thinking and refine their use of academic vocabulary.

Students are supported in using mathematical language during conversations with peers through embedded guidance in the materials, such as the guided activity in *Coursework Student Edition*, Unit 3, Lesson 4, where students analyze a real-world scenario involving a gift card balance. Working with a partner, they determine and explain the domain, range, slope, and intercepts of a linear function in context. These tasks promote effective discourse, deepen engagement, and build confidence in using mathematical language to solve complex problems.

5.5 Process Standards Connection

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.5a	All criteria for guidance met.	1/1
5.5b	All criteria for guidance met.	2/2
5.5c	All criteria for guidance met.	1/1
—	**TOTAL**	4/4

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

The MN+ Algebra I materials demonstrate appropriate integration of TEKS process standards by embedding them within tasks and instructional routines across all units. In *Coursework Teacher Edition*, Unit 5, Lesson 10, students formulate equations from verbal contexts, define variables, and solve real-world problems using multiple representations (TEKS A.1.1A, A.1.1F). In Unit 11, Lessons 5 and 7, students analyze exponential functions in real-world contexts, such as interpreting the half-life of a medicine by graphing, identifying key features, and describing the domain, range, and constraints (TEKS A.1.1A, A.1.1C, A.1.1D). These tasks require students to communicate mathematical reasoning, apply mathematics to everyday situations, and reflect on their solutions, demonstrating that the process standards are authentically embedded throughout instruction (TEKS A.1.1A, A.1.1D, A.1.1G).

Lessons throughout the course consistently identify the TEKS process standards addressed, making their integration visible and intentional. For example, in *Coursework Teacher Edition,* Unit 3, Lesson 4, students relate key features of linear functions to real-world contexts while selecting appropriate strategies and tools (TEKS A.1.1C, A.1.1G). In Unit 6, Lesson 6, students write and solve systems of equations for real-world contexts, applying mathematics and engaging in strategic problem-solving (TEKS A.1.1A, A.1.1C). The "TEKS and ELPS by Lesson" document provides consistent, lesson-level documentation of these standards, ensuring that the process standards are not only embedded in instruction but also traceable for educators and reviewers (TEKS A.1.1A, A.1.1B, A.1.1D, A.1.1F, A.1.1G).

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

Materials include a description of how process standards are incorporated into instruction, showing how they are embedded within tasks and learning experiences. In *Coursework Teacher Edition,* Unit 3, Lesson 4, students match equations, tables, and graphs to identify key features of linear functions and explain their reasoning using precise mathematical language. Educators are prompted to guide students in exploring alternative strategies and using multiple representations (TEKS A.1.2A). In Unit 3, Lesson 7, students apply mathematics to real-world problems by graphing linear functions and interpreting solution points in context (TEKS A.1.3C). The *Independent Skills Practice Book* reinforces these standards by prompting students to describe transformations of quadratic functions using equations and graphs, supporting reasoning and representation.

A description of how process standards are connected throughout the learning pathways is provided in the materials, illustrating their alignment across lessons and units, such as in *Coursework Teacher Edition,* Unit 7, Linear Inequalities and Systems, where students progress from solving one-variable inequalities to modeling and graphing two-variable inequalities in real-world contexts. Lessons build on prior knowledge and emphasize analyzing problem structures, justifying solutions, and evaluating the reasonableness of results (TEKS A.1.1A through A.1.1G). For example, in Lesson 7, students interpret shaded regions and boundaries to determine viable solutions, reinforcing the use of multiple representations and mathematical justification across the unit.

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

Materials include an overview of the TEKS process standards incorporated into each lesson, providing educators with clear insight into how these standards are addressed throughout instruction, such as in the *Coursework Teacher Edition's* "TEKS and ELPS by Lesson" and the *TEKS Correlation Guide with Breakouts.* These resources list the specific TEKS process standards aligned to each unit and lesson, enabling educators to see how skills such as problem-solving, representation, communication, and application to real-world contexts are embedded throughout the curriculum. For example, TEKS A.1.1E is linked to lessons that involve collaborative activities requiring students to create and use representations; in contrast, TEKS A.1.1A is connected to lessons focused on solving systems of equations in real-world contexts. This structured mapping supports planning and ensures that process standards are not only present but meaningfully integrated throughout instruction.

6. Productive Struggle

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

6.1 Student Self-Efficacy

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.1a	All criteria for guidance met.	3/3
6.1b	All criteria for guidance met.	3/3
6.1c	All criteria for guidance met.	3/3
—	**TOTAL**	9/9

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

The MN+ Algebra I materials provide opportunities for students to think mathematically by engaging them in real-world tasks that require analysis, error identification, and reasoning. In *Coursework Student Edition,* Unit 7, Lesson 4, students examine a table of values and a slope, identify an error, and write a corrected equation. This activity promotes mathematical thinking through modeling and validation. In the *Independent Skills Practice Book,* students graph quadratic functions and identify key features, such as vertex, intercepts, and symmetry, encouraging reasoning through structure and representation.

Students are supported in persevering through problem-solving via scaffolded, multi-step tasks. For example, in *Coursework Student Edition,* Unit 7, Lessons 5–9, students graph and interpret linear inequalities and systems, requiring them to engage in sustained reasoning. Unit 7, Lesson 4, includes independent practice with tips and video tutorials to guide students through the challenges. In Unit 10, Lessons 5–10, students apply multiple methods to solve quadratic equations, promoting resilience and strategic thinking.

The materials emphasize conceptual understanding and real-world relevance to help students understand mathematics. For example, in *Coursework Student Edition,* Unit 7, Lessons 6–9, students interpret graphs of inequalities and systems of inequalities. In Unit 10, Lessons 4, 9, and 10, students solve and contextualize quadratic equations, connecting solutions to meaningful scenarios. These tasks foster sense-making by encouraging students to explain reasoning and evaluate the reasonableness of results.

6.1b – 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 that there are multiple valid ways to solve problems and complete tasks by introducing and developing various strategies across lessons. In *Coursework Student Edition,* Unit 6, Lessons 4–5, students explore solving systems of equations using the graphing,

substitution, and elimination methods. Each method is presented as equally valid, and students are encouraged to choose based on context, promoting flexibility and strategic thinking.

Students are encouraged to explain and justify their thinking as they explore different methods through structured activities. For example, in *Coursework Student Edition,* Unit 8, Lesson 5, students factor trinomials using algebra tiles, area models, and expanded forms. They compare strategies, analyze reasoning errors, and justify their approaches during collaborative tasks. In the *Independent Skills Practice Book*, students solve polynomial expressions using different combinations of the distributive property and combining like terms, with guiding tips that encourage them to explain their reasoning and verify their solutions.

To help students recognize the value of diverse approaches, the materials provide structured opportunities to compare and reflect on multiple strategies. For example, in *Coursework Student Edition,* Unit 3, Lesson 3, students participate in a collaborative activity where they solve linear equations using various methods and justify their reasoning to their peers. In Unit 8, Lesson 5, students factor trinomials using multiple representations and discuss how different strategies lead to the same result. These tasks promote flexibility and help students understand that various methods can lead to valid solutions.

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

The materials provide students with frequent opportunities to actively engage in doing mathematics by solving real-world problems collaboratively. *Coursework Student Edition,* Unit 6, Lesson 6, gives students one equation in a system, and they must determine the second equation, solve the system, and interpret the solution in context. Working with a partner, they explain whether the solution is valid, promoting mathematical reasoning and conceptual understanding through active problem solving. In the *Independent Skills Practice Book*, students solve quadratic equations using square roots. They are prompted to explain whether their solutions make sense in the context of the problem, reinforcing the importance of reasoning and validation.

To support students in making sense of their learning, the materials include structured opportunities for students to write about mathematics by prompting them to reflect on their strategies. For example, in *Coursework Student Edition,* Unit 5, Lesson 2, students complete sentence frames such as "The reason I wrote the equation in ___ form is __" and explain how they calculated slope. These writing tasks encourage metacognition and help students justify their mathematical decisions.

Students are encouraged to deepen their understanding through peer and teacher discussions that are facilitated by materials that embed collaborative tasks and reflection prompts. For example, in *Coursework Student Edition,* Unit 8, Lesson 5, students factor trinomials using algebra tiles and area

models, compare different strategies, and discuss reasoning with peers. These activities promote mathematical discourse and help students make sense of multiple representations and solution paths.

6.2 Facilitating Productive Struggle

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.2a	All criteria for guidance met.	8/8
6.2b	All criteria for guidance met.	4/4
—	**TOTAL**	12/12

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

The MN+ Algebra I materials support educators in guiding students to share their problem-solving approaches, including explanations and arguments, by providing opportunities and guidance that promote collaborative analysis and reflection. *Coursework Teacher Edition*, Unit 10, Lesson 10, supports educators with prompts that encourage students to solve quadratic equations using multiple methods, including factoring, the quadratic formula, and square roots, and then justify their chosen strategy with a partner. Teachers facilitate comparisons between methods, helping students articulate their reasoning and evaluate the effectiveness of different approaches.

The materials offer guidance that supports structured peer discussion and teacher-led analysis to help students reflect on and justify their thinking, including the explanations and arguments behind their chosen strategies. For example, *Coursework Teacher Edition,* Unit 5, Lesson 10, provides educators with a Find the Error activity in which students evaluate multiple solution paths, identify mistakes, and explain their reasoning. The teacher edition includes facilitation notes to help guide students in articulating their thinking and analyzing the logic of different approaches.

Educators are supported with guidance that emphasizes multiple points of entry into problem-solving. The guidance encourages students to articulate their reasoning through explanations, arguments, and justifications by offering tasks that allow for both symbolic and numeric strategies. For example, in *Coursework Teacher Edition,* Unit 7, Lesson 2, collaborative activities prompt students to solve problems using different representations and discuss their methods. Teacher guidance helps facilitate these conversations, ensuring students access the mathematics in ways that align with their understanding while developing the ability to communicate their reasoning clearly.

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

The materials include guidance to help educators provide explanatory feedback that responds directly to student thinking and promotes deeper understanding. For example, *Coursework Teacher Edition,* Unit 10, Lesson 10, prompts educators to facilitate discussions in which students solve quadratic equations using different methods and justify their choices. The teacher's guidance supports identifying when a student's

process may be inefficient or incorrect and includes suggestions for redirecting misconceptions through peer comparison and teacher questioning.

To support meaningful feedback, the materials offer prompts and guidance that help educators interpret and respond to a range of student responses by embedding structured activities like Find the Error. In *Coursework Teacher Edition,* Unit 5, Lesson 10, students analyze multiple solution paths, identify errors, and explain their reasoning. Follow-up questions such as, "What makes this step incorrect?" and "How could you verify your answer?" help educators provide targeted, explanatory feedback.

Materials support educators in identifying and addressing anticipated misconceptions through guidance and feedback strategies, such as highlighting common student errors and offering tips for redirection. For example, in *Coursework Teacher Edition,* Unit 6, Lesson 2, collaborative activities are designed to reveal misunderstandings. The *Coursework Teacher Edition* includes notes on typical mistakes, such as sign errors or misapplying inverse operations, along with strategies to guide students toward accurate reasoning.