

# McGraw Hill LLC

Supplemental English Mathematics, Algebra I

ALEKS Algebra 1

MATERIAL TYPE	ISBN	FORMAT	ADAPTIVE/STATIC
<b>Supplemental</b>	<b>9780076867899</b>	<b>Digital</b>	<b>Adaptive</b>

## Rating Overview

TEKS SCORE	TEKS BREAKOUTS ATTEMPTED	ERROR CORRECTIONS (IMRA Reviewers)	SUITABILITY NONCOMPLIANCE	SUITABILITY EXCELLENCE	PUBLIC FEEDBACK (COUNT)
100%	146	0	Flags Not in Report	Flags in Report	0

## Quality Rubric Section

RUBRIC SECTION	RAW SCORE	PERCENTAGE
1. <a href="#">Intentional Instructional Design</a>	17 out of 21	81%
2. <a href="#">Progress Monitoring</a>	19 out of 23	83%
3. <a href="#">Supports for All Learners</a>	26 out of 37	70%
4. <a href="#">Depth and Coherence of Key Concepts</a>	12 out of 16	75%
5. <a href="#">Balance of Conceptual and Procedural Understanding</a>	25 out of 38	66%
6. <a href="#">Productive Struggle</a>	16 out of 21	76%

## Breakdown by Suitability Noncompliance and Excellence Categories

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

SUITABILITY EXCELLENCE FLAGS BY CATEGORY	IMRA REVIEWERS
Category 2: Alignment with Public Education's Constitutional Goal	1
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	The materials do not include an alignment guide outlining the ELPS.	4/5
1.1b	All criteria for guidance met.	3/3
1.1c	All criteria for guidance met.	2/2
1.1d	All criteria for guidance met.	2/2
1.1e	The materials do not include guidance for instructional leaders to support educators with implementing the materials as designed.	1/2
—	TOTAL	12/14

**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 *ALEKS Algebra 1* materials list the Texas Essential Knowledge and Skills (TEKS) in the "Standards" folder. This folder, which allows educators to view how the content aligns with state standards, is located in the *Content Editor* under "Class Customization."

The concepts listed under *Content Editor* are organized by topic and represent the mathematical ideas students are expected to engage with during instruction.

The *ALEKS Reference Guide* includes a section titled "Personalized Modules," which provides rationale for the vertical learning paths. The personalized modules are "front-loaded with pre-requisite skills to help students revisit previous skills for success in the course." The "ALEKS Student Experience" section explains that students are assigned lessons that address prerequisite skills based on diagnostic tests called Knowledge Checks. The "Sequence Check" section discusses the algorithm *ALEKS Algebra 1* uses to "structure different topics in the course based on historical student learning data."

The "Standards Correlation" lists the TEKS for Algebra I that are aligned to the *ALEKS Algebra 1* course topics, and the correlation guide lists the concepts that are covered within each TEKS. For example, TEKS 2.A includes a bulleted list of standards that are met within *ALEKS Algebra 1*, including "Domain and range of a linear function that models a real-world situation" and "Finding domain and range from a linear graph in context."

The materials do not include English Language Proficiency Standards (ELPS).

**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.**

The *Teacher Resources* recommends 45 to 60 minutes of use per week, covering five to nine topics per hour, with a focus on achieving mastery.

The "Recommendations and Implementation" video explains how educators can personalize learning for each student, taking into account student progress and fine-tuning their skills by assigning "Knowledge Spaces" that adapt to the student's needs.

The materials support the use of intervention and enrichment, allowing educators to tailor the resource to two instructional contexts driven by student data and targeted skill development.

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

The materials include a TEKS correlation guide that is accessible through the *Content Editor* under "Class Administration, Class Summary, Content Editor (under Class Customization), Standards." This guide lists the TEKS associated with the course and shows how each topic aligns with the state standards.

The video provided on the Digital Technical Support site, titled "What is a Knowledge Check?" explains how students take an initial assessment (Knowledge Check), which consists of approximately 20–25 adaptive questions, upon first logging into *ALEKS Algebra 1*. The system then uses the results to determine each student's entry point into the learning path. This video also describes ongoing Progress Checks, which are used to track student growth, and recommends skill entry points based on diagnostic data.

The various *ALEKS* reports that can be generated through the resource provide a rationale for learning based on recent performance, highlighting both mastered and missed skills.

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

The materials provide a set of guidelines, along with corresponding guidance, for unit and lesson internalization within the "Topic Internalization Protocol." This protocol guides teachers in understanding what their students will be working on, the mathematical content of the lessons, and how to plan for a rigorous mathematics experience for all students.

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

The document titled "What to Look for in an ALEKS Classroom" outlines expectations for classroom setup and usage across three key implementation phases: Weeks 1–4, Weeks 5–10, and after Week 10 of using *ALEKS Algebra 1*. This document outlines the actions of teachers and students for each phase, providing guidance on grouping strategies and instructional priorities. These supports help instructional leaders monitor implementation over time and ensure fidelity across classrooms.

The materials provide educators with the flexibility to customize learning content that aligns with state standards or specific curriculum requirements. Additionally, the platform enables educators to upload external resources, including videos and handouts. Organizational features are also available to help with structure and delivery.

While plenty of resources are provided to instructional leaders, guidance is lacking.

## 1.2 Lesson-Level Design

GUIDANCE	SCORE SUMMARY	RAW SCORE
1.2a	This guidance is not applicable to the program.	N/A
1.2b	The materials do not include detailed lesson overviews with learning objectives and assessment resources aligned with the ELPS.	3/5
1.2c	All criteria for guidance met.	2/2
—	TOTAL	5/7

### **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.**

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

### **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.**

The materials include TEKS-aligned learning objectives, as shown in the video titled "Pie Report Recommendations." This video demonstrates how educators can identify TEKS-aligned topics that students are ready to learn in real time, based on their performance within the program.

The "What is a Knowledge Check?" video provides insight into the adaptive lesson structure. It outlines suggested timeframes for student engagement with learning topics and describes how students complete progress checks, which are used to assess readiness, performance, and growth. These progress checks are aligned to the TEKS, as demonstrated through the Pie Report interface.

The adaptive resource materials do not include detailed lesson overviews with learning objectives or assessment resources aligned with the ELPS.

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

The *ALEKS Resources for TX* Padlet includes the "Encourage Your Child's Math Learning At Home" letter and the "Parents' Guide to Student Reports," available in both English and Spanish. These resources offer families strategies to reinforce new learning, monitor student progress, and seek support as needed. The "Encourage Your Child's Math Learning At Home" letter provides families with their student's login, summarizes the terminology used within the *ALEKS Algebra 1* program, and outlines the recommended amount of time their student should spend using the *ALEKS Algebra 1* program each week. These resources are available in Spanish and English.

The "Parents' Guide to Student Reports" provides guidance to families on how to track their child's progress and understand what their child has been working on within the *ALEKS* platform. The resource provides families with a thorough explanation of the Pie Report, demonstrating that each Pie Slice corresponds to specific topics in their child's learning pathway. While the darker portion of each slice represents mastered topics, the lighter portion represents topics that are still being learned. The "ALEKS for Parents" video demonstrates how to access the student Pie Chart, understand what has been mastered and what remains to be learned, and monitor daily progress through the platform. The video also shows how students can access learning supports while working through the program. Additionally, the "Parents' Guide to Student Reports" explains how to interpret various reports, including the Learning Sequence Log, Time and Topic Report, and Progress History Report. These resources are available to educators under the "Training and Resources" section of the teacher dashboard.

## 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	The materials do not include text-to-speech, content and language supports, or calculators that educators can enable or disable to support individual students.	1/4
2.1d	All criteria for guidance met.	4/4
2.1e	All criteria for guidance met.	4/4
—	<b>TOTAL</b>	13/16

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

The *Reference Guide* defines the various types of assessments available for progress monitoring and specifies their intended purposes. The Pie Progress, Time, and Topic Goals are explicitly described as tools to measure student participation and content mastery over a set period. Scheduled Knowledge Checks are defined as individualized, mastery-based assessments that automatically adjust each student's learning path.

Additional assignment types, including traditional homework, quizzes, tests, and video assignments, are also defined with distinct purposes, such as pre-lecture practice, test preparation, or exposure to new content. These descriptions help clarify how each tool is intended to be used instructionally.

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

The materials guide and support consistent and accurate administration of instructional assessments. In the *Teacher Resource* video titled "Overview of Initial Knowledge Check," *ALEKS Algebra 1* explains how each assessment is automatically generated based on the student's prior performance, ensuring that the results accurately reflect mastery.

As students progress through the *ALEKS Algebra 1* curriculum, a system of knowledge checks is used to assess student progress and adjust the learning path accordingly, allowing for accurate evaluation of student needs and knowledge gaps.

### **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 printable versions of digital assessments, which can be used for students who require paper-based formats.

Under the Class Options setting, teachers can enable or disable the use of a graphing calculator for the entire class. However, there is no option to adjust calculator access at the individual student level.

*ALEKS Algebra 1* does not include text-to-speech within any of the embedded components. Content and language supports, such as visuals or simplified language, are not provided within *ALEKS Algebra 1* as an option for teachers to enable or disable to support individual students. One support feature is the option for students to switch between English and Spanish while working within the resource.

### **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, the "Initial Knowledge Check," which is TEKS-aligned and designed to determine the appropriate placement for each student based on their readiness. The assessment includes tasks of varying complexity, ranging from basic procedural fluency to conceptual and application-based questions. Because the assessment is adaptive, students will be exposed to a range of topics and difficulty levels. For example, students will be asked to simplify fractions, calculate percentages, solve systems of equations, and solve word problems that require the application of concepts from real numbers, equations, and inequalities.

The diagnostic assessment incorporates multiple interactive item types, such as graphing tools, inline choice, and equation editors. This design ensures that students engage with a range of content and item formats that reflect the depth and rigor of the standards.

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

*ALEKS Algebra 1* includes a variety of formative assessments that are aligned to the Algebra I TEKS and vary in item type and complexity. Teachers can create formative assessments through the Assignments feature, which includes Homework, Quizzes, and Tests.

The assessments assigned to the students contain TEKS-aligned tasks that range in complexity from procedural fluency to conceptual understanding and application. Interactive item types—such as equation input fields, graphing tools, and drag-and-drop formats—are used to engage students and assess understanding in varied ways. This variety allows for ongoing monitoring of student learning and informed instructional decisions.



## 2.2 Data Analysis and Progress Monitoring

GUIDANCE	SCORE SUMMARY	RAW SCORE
2.2a	The materials do not include a rationale for each incorrect response.	2/3
2.2b	All criteria for guidance met.	1/1
2.2c	All criteria for guidance met.	2/2
2.2d	This guidance is not applicable to the program.	N/A
2.2e	All criteria for guidance met.	1/1
—	<b>TOTAL</b>	<b>6/7</b>

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

Teachers can open a student's learning sequence log and view correct and incorrect responses for attempted problems. Clicking on the green checkmark (correct) or the red "x" (incorrect) opens a window that displays the student's answer. An explanation page is available for viewing by students, teachers, and/or families.

A rationale is only provided for the correct response, assuming the student got the question incorrect. There is no explanation of possible misconceptions that may have led the student to arrive at an incorrect answer.

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

*ALEKS Algebra 1* includes a "Custom Reports" feature that provides teachers with advanced tools for identifying and responding to trends in student performance on assessments. Educators can generate class-level reports that combine data from multiple *ALEKS* reports and export them to Excel. These reports support instructional planning by allowing teachers to analyze performance patterns, group students based on needs, and target specific skills.

The "Progress Report" displays overall student progress made in Learning Mode, including content mastered based on the Knowledge Check and the topics learned per hour. This report can be used to track progress and identify students who may require additional support or intervention.

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

*ALEKS Algebra 1* provides teachers with the Pie Report as a comprehensive tool to track student progress and growth. This visual report displays mastery levels across content areas, organized by module or

topic, and helps educators quickly identify which concepts students have mastered, are ready to learn, or have attempted but not yet mastered. Teachers can use this data to monitor trends over time, differentiate instruction, and group students based on readiness levels.

The Pie Report also serves as a progress-tracking tool for students, giving them a clear, visual representation of their learning journey. Students can view their mastery status in each module, see how many topics they have completed, and identify which topics they are ready to learn next. This promotes self-monitoring, goal setting, and greater engagement with their own academic progress. The transparency and accessibility of this report fulfill expectations for student-facing growth tracking.

**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.**

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

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

*ALEKS Algebra 1* automatically administers Progress Knowledge Checks as students work through learning modules. These embedded assessments occur at regular intervals, typically after a student has learned a designated number of new topics.

*ALEKS Algebra 1* allows teachers to schedule Knowledge Checks manually at any point during instruction. This flexibility enables teachers to administer targeted formative assessments in response to classroom needs, pacing changes, or instructional priorities.

### 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	The materials do not include explicit educator guidance for language supports, such as pre-teach supports for developing academic vocabulary and unfamiliar references in the text.	2/4
3.1c	The materials do not include explicit educator guidance for enrichment and extension activities for students who have demonstrated proficiency in grade-level content and skills.	1/2
3.1d	The materials do not include digital components that offer accommodations, such as text-to-speech, content and language supports, and calculators that educators can enable or disable to support individual students.	0/3
3.1e	All criteria for guidance met.	2/2
—	TOTAL	6/12

##### **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.**

Within the *MH Link* resource, there is a section titled "Getting Started with ALEKS," which contains a document titled "Using the Course Placement Check," that recommends to educators which *ALEKS* course students should start with for the best learning experience. This document provides teachers with the steps to enable the course placement check for new and existing classes.

##### **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.**

Within the *ALEKS Algebra 1* student view, a dictionary is provided as an embedded support for developing academic vocabulary and referencing unfamiliar terms within the text. For example, as students work on functions and lines within the *ALEKS Pie*, they can click on the word "function" to view its definition through a diagram (input/output machine), an example (table or graph), or a statement that explains the term.

*ALEKS Algebra 1* does not provide guidance for language supports aimed at pre-teaching academic vocabulary and unfamiliar references.

### **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.**

Through individualized assessment and adaptive learning, students are provided with their own learning path as they demonstrate mastery of the current content, progressing toward enrichment tasks designed to extend their learning beyond grade level.

*ALEKS Algebra 1* selects each question based on the student's responses to all previous questions to identify what they have mastered and what they have not, and determines exactly which topics the student is ready to learn. *ALEKS Algebra 1* continuously monitors the student's successes and failures. Through this, the student is progressing only with topics that they are ready to learn. This, in turn, challenges the student when they have acquired enough foundational knowledge to advance toward higher-level problems.

Materials do not include explicit educator guidance for enrichment and extension activities for students who have demonstrated proficiency in grade-level content and skills.

### **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.**

*ALEKS Algebra 1*'s digital materials do not include text-to-speech within any of the embedded components.

Calculators are an option for some skills practice, depending on whether the type of problem given allows for it. However, the educator cannot enable or disable the calculator feature to support individual students.

Content and language supports, such as visuals or simplified language, are not provided within *ALEKS Algebra 1* as an option for teachers to enable or disable to support individual students. One support feature that is provided is the option for students to switch between English and Spanish while working within the resource.

**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 materials provide educators with support to help students demonstrate understanding through the use of the Class Forum. The forum can be used to facilitate meaningful discussions with students in the class.

The question authoring tool that *ALEKS Algebra 1* provides (found under "My Questions") allows educators to offer students options for demonstrating their understanding of specific math concepts in various ways by creating customizable questions, such as multiple-choice, numeric entry, formula matching, or free-response.

## 3.2 Instructional Methods

GUIDANCE	SCORE SUMMARY	RAW SCORE
3.2a	All criteria for guidance met.	5/5
3.2b	This guidance is not applicable to the program.	N/A
3.2c	All criteria for guidance met.	3/3
3.2d	The materials do not include educator guidance for effective implementation of enrichment and extension methods.	1/2
3.2e	The materials do not include prompts to support educators in providing timely feedback during lesson delivery.	1/2
—	<b>TOTAL</b>	10/12

### **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.**

When using the visual aids in the *ALEKS Notebook* resource, teachers can find guidance and prompts on how to utilize visual aids and anchor charts to activate prior knowledge and reinforce key concepts. For example, the guide includes "a concept map showing steps for solving linear equations," which serves as a way for students to anchor big ideas in the moment by creating a concept map or to activate prior knowledge when reviewing the concept map.

Through the Conversation Starters, Write Out Solutions, and Visual Aids in the *ALEKS Notebook* resource, teachers can find guidance for highlighting and connecting key patterns, features, and relationships. For example, when writing out solutions, materials guide teachers to "encourage students to evaluate their process's efficiency," enabling them to look for patterns and determine the most efficient method. Using conversation starters, such as asking students to "make a prediction about what comes next based on what you have learned so far," enables teachers to highlight key features through the connections students make.

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

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

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

As an adaptive resource, *ALEKS Algebra 1* incorporates multi-tiered intervention methods, including guided, interactive practice that provides instant feedback. Students progress independently through

various levels of practice based on their individual needs and mastery. *ALEKS Algebra 1* adjusts the level of difficulty based on student responses. Since real-time feedback is given, students will be rerouted to prerequisite skills when needed. The online materials enable educators to assign targeted practice sets or interventions by topic.

The adaptive materials include a multi-tiered intervention implementation document, which suggests classroom structures called "What to Look for in an ALEKS Classroom." Depending on the phase of the lesson, the document suggests whole-group instruction, breakout sessions, breakout centers, and independent work time.

*ALEKS Algebra 1* includes educator guidance to support effective implementation through the real-time reports it provides. As students work through the lessons, teachers can provide suggestions based on areas of strength or weakness.

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

The materials include enrichment and extension methods that support various forms of engagement. Assigning content from the "Topics Not Aligned to these Standards" folder, such as "Using the Pythagorean Theorem" and "A Quadratic Equation to Find the Side Lengths of a Right Triangle," will allow students to apply what they have learned about solving quadratic equations to a Geometry concept.

*ALEKS Algebra 1* does not include guidance to support educators in the effective implementation of enrichment and extension methods.

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

The live dashboard that teachers use to monitor student work displays student responses, pace, and accuracy as they work through tasks. This component guides educators toward identifying who is struggling or excelling, allowing them to step in and give immediate feedback to the student during lesson delivery.

Materials do not include prompts to support educators in providing timely feedback 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	This guidance is not applicable to the program.	N/A
3.3b	All criteria for guidance met.	4/4
3.3c	The materials do not include implementation guidance to support educators in effectively using the materials in state-approved bilingual/ESL programs.	0/1
3.3d	The materials do not include embedded guidance to support emergent bilingual students in building background knowledge through oral and written discourse.	6/8
3.3e	This guidance is not applicable to the program.	N/A
—	TOTAL	10/13

**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.**

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

**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.**

*ALEKS Algebra 1* incorporates linguistic accommodations for language proficiency by offering students a built-in dictionary that can be viewed in either English or Spanish. Students can either click on underlined words within problems or search for any word that is unfamiliar to them. In doing so, they are provided with a basic definition, a visual representation (diagram), or examples that support their understanding. This tool helps engage EB students at all levels in understanding the written English used in academic settings.



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

Materials do not include implementation guidance to support educators in effectively using the materials in state-approved bilingual/ESL 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.**

*ALEKS Algebra 1* embeds guidance to support emergent bilingual students in developing academic vocabulary, comprehension, and cross-linguistic connections through oral discourse in the *EB Guidebook*. For example, within the guide, teachers can find speaking strategies such as "Risk-Free Practice" and "Academic Conversation Protocols," which enable students to develop academic language through oral discourse by engaging in practice with their peers. Additionally, when students "rehearse with a buddy" and discover that "errors are learning opportunities," students increase comprehension and make cross-linguistic connections.

When using the reading strategy "Vocabulary Pre-Teaching" located within the *EB Guide*, teachers support emergent bilingual students in developing academic vocabulary and increasing comprehension through written discourse. Students create vocabulary cards and use total physical response activities to learn and remember vocabulary in context, enhancing their comprehension of content vocabulary. By providing writing frames and templates, teachers help students make cross-linguistic connections because students have "templates for different writing styles," enabling them to compare their non-English language structure with that provided to them in an academic context.

Materials do not include embedded guidance to support emergent bilingual students in building background knowledge through oral and written discourse.

### **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
4.1 a	All criteria for guidance met.	2/2
4.1 b	The materials do not include enrichment or extension materials that increase in rigor and complexity.	2/4
—	TOTAL	4/6

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

The materials allow teachers to assign TEKS-aligned practice opportunities, such as homework and topic goals, through the Assignments feature. These tasks require students to demonstrate depth of understanding by applying concepts in new contexts, interpreting mathematical relationships, and engaging with multiple representations, such as equations, tables, and graphs. For example, in *ALEKS Algebra 1*, when students complete the lesson "Writing Linear Equations in Two Variables," they progress from writing the equation of a line passing through two given points to writing a linear equation and graphing it to model a real-world situation.

These practice opportunities (including homework, quizzes, tests, time goals, topic goals, and pie progress goals) support reasoning and conceptual understanding, not just procedural fluency, reflecting the rigor and intent of the Algebra I TEKS.

#### 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 throughout the learning pathway, along with assigned assessments. While creating homework and quizzes through the Assignments feature, teachers can vet and select problems that vary in depth and align to different TEKS standards. For example, students progress from comparing ratios on a table to describing the steepness of a line in terms of its slope (which is recognizable to them as a ratio).

The materials do not include enrichment and extension questions and tasks that expand student learning beyond the curriculum.

## 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	The materials do not demonstrate coherence across lessons or activities, and fail to connect students' prior knowledge of concepts and procedures to be learned in future grade levels.	2/4
—	<b>TOTAL</b>	4/6

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

*ALEKS Algebra 1* demonstrates coherence across concepts horizontally within the grade level using the "Topic Carousel." This feature shows topics that are personally sequenced to reflect the students' current state of knowledge. Within each concept, topics are listed in an order that showcases what students are ready to learn and progresses toward topics that require prerequisite skills. The "Topic Carousel" enables students to view the goal topics they are working toward while mastering all the necessary skills to achieve them.

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

Available for teacher use, *ALEKS Algebra 1* provides a document titled "ALEKS Correlations to the TEKS for grades 6 through Pre-Calculus," which allows teachers to locate where specific standards and concepts appear across multiple grade bands. This correlation document enables educators to identify alignment of content to the TEKS across courses and supports instructional planning with awareness of concept progression.

The materials enable teachers to assess the knowledge that students acquired in the previous grade. For example, the *ALEKS Algebra 1* materials review proportionality, whether in a table, graph, or real-world situation—a skill brought over from middle school to reinforce the concept of a linear function. This helps to support vertical coherence across grade bands.

### 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 allow teachers to assign Arithmetic Readiness topics from the "ALEKS Table of Contents," supporting students in bridging procedural skills to current Algebra I content. For example, assigning the

skill "Greatest Common Factor of 2 Numbers" reinforces foundational number sense and directly supports factoring polynomials, a key concept in Algebra I.

By enabling targeted reinforcement of these procedural skills, *ALEKS Algebra 1* supports coherence between students' prior procedural knowledge and the mathematical concepts they will encounter in the current grade level.

## 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.

*ALEKS Algebra 1* provides spaced retrieval opportunities through its automatically administered Progress Knowledge Checks. These checks are triggered after a student has learned a set number of topics and serve to confirm retention of previously mastered concepts. Based on performance, *ALEKS* may reassign topics the student has not retained, creating ongoing opportunities to revisit and reinforce earlier learning. This cyclical retrieval supports long-term retention and reflects a strong implementation of spaced practice across the learning pathway.

The materials allow teachers to manually schedule Knowledge Checks at any point, offering additional spaced retrieval opportunities on a flexible timeline. This feature enables educators to intentionally reintroduce previously learned skills and concepts. This can also support unit transitions, address gaps in understanding, or reinforce foundational knowledge.

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

Teachers can create custom assignments that integrate a variety of skills across different strands of the curriculum. Within the Assignments feature, teachers can select a variety of topics and include them in a single practice session. This intentional mixing of skill types promotes interleaved practice by requiring students to distinguish between strategies and apply the appropriate method based on the problem's context. These opportunities help strengthen procedural fluency and align with expectations for interleaved skills practice.

*ALEKS Algebra 1* supports interleaved conceptual practice by allowing teachers to assign tasks that target big ideas across multiple units. For example, in *ALEKS Algebra 1*, a single assignment can combine topics involving linear relationships, systems of equations, and linear inequalities, requiring students to apply conceptual understanding across different topics.

## 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	The materials do not include questions and tasks that provide opportunities for students to create concrete models of mathematical situations.	1/2
5.1c	All criteria for guidance met.	1/1
—	<b>TOTAL</b>	<b>5/6</b>

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

Within *ALEKS Algebra 1*, students are provided with opportunities to interpret, analyze, and evaluate mathematical concepts and real-world situations. For example, in *ALEKS Algebra 1*, when working with quadratic functions, students complete the lesson, "Write and Solve a Quadratic Equation for a Real-World Problem Involving Area or Volume." In an example involving area, students begin by interpreting the sides of the garden and its surrounding walkway using expressions in terms of  $x$ . Then, they analyze the situation and determine that they will be multiplying the two dimensions of the diagram, creating a quadratic trinomial. Lastly, students evaluate the original expressions once they have solved for  $x$  to determine the numerical dimensions of the garden.

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

Questions and tasks within the *ALEKS Algebra 1* resource offer students opportunities to create representations of mathematical situations. For example, in *ALEKS Algebra 1*, when students are asked to "Graph a Line Given an Equation in Slope-Intercept Form (whole number or fractional slope given)," they are modeling the linear relationship in a different form, strengthening their understanding of how they would work backwards and write the equation of a line given a graph.

*ALEKS Algebra 1* questions and tasks do not provide students with opportunities to create concrete models of mathematical situations.

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

Students are given the opportunity to apply their conceptual understanding to new problem situations and contexts when working within *ALEKS Algebra 1*. For example, after students practice "Finding the X-

and Y-Intercepts of a Line Given the Equation," they progress on to "Graphing a Line Given its X- and Y-Intercepts." This type of progression promotes deeper learning and long-term retention as students apply the values they have found algebraically, representing those values as ordered pairs (intercepts) and relating them to points on a coordinate plane that the line passes through.

## 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	The materials do not contain guidance to support students in selecting increasingly efficient approaches to solve mathematics problems.	0/1
—	TOTAL	8/9

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

Within *ALEKS Algebra 1*, practicing prerequisite skills, such as "Operations with Rational Numbers," can help build automaticity and fluency to complete grade-level tasks. If a student gets a problem wrong, they can refer to the explanation to work through the problem. Since these explanations are similar when moving from problem to problem and provide the same step-by-step feedback, students begin to gain confidence as they progress through the task without needing to rely on the provided support.

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

In *ALEKS Algebra 1*, teachers can assign a skills-based warm-up at the beginning of each lesson within the resource, designed to revisit and reinforce prerequisite skills throughout the learning pathway. This approach helps to streamline the foundational skills necessary for the lesson, making the practice more efficient. As the students are "preloading" prior-taught skills, they are reinforcing their procedural accuracy of the newly learned concepts.

The online materials allow the teacher to assign practice exercises that incorporate mixed skills, allowing students to solve problems using various methods (e.g., substitution, elimination, and graphing for solving systems). Through the use of the Class Forum, students can explain when and why they would select a specific method/approach to solve a given system of linear equations, allowing for flexibility.

The "Explanation Page" available to students as they work through the practice problems prompts them to check for accurate mathematical procedures throughout the learning pathways.

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

The ALEKS Notebook Guide provides opportunities for students to evaluate mathematical representations, models, strategies, and solutions for efficiency, flexibility, and accuracy that could be



used across lesson topics. The guide includes conversation starters such as "Why did you do that?", "Were there other methods you could have used?", "What would you do differently next time?", and "What's the most efficient way to solve this problem? Why?" that can be used throughout the different instructional strategies presented in the guide to encourage students to share, reflect, and evaluate their mathematical understanding.

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

Materials do not contain guidance to support students in selecting the most efficient approaches when solving mathematics problems.

The materials do not include scaffolding strategies to guide students toward more efficient approaches.

## 5.3 Balance of Conceptual Understanding and Procedural Fluency

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.3a	The materials do not explicitly state how the conceptual and procedural emphases of the TEKS are addressed.	0/2
5.3b	Questions and tasks do not provide students with opportunities to use concrete models, as required by the TEKS.	2/3
5.3c	The materials do not include supports for students in defining and explaining representational models of abstract concepts, and do not include supports for students in connecting, creating, defining, and explaining concrete models to abstract concepts, as required by the TEKS.	2/6
—	<b>TOTAL</b>	4/11

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

Materials do not explicitly state how the conceptual and procedural emphases of the TEKS are addressed.

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

*ALEKS Algebra 1* provides students with the opportunity to use pictorial representations through interactive graphing to solve a system of linear equations (A.5.C). Engaging with visual models helps students construct their own understanding of solving a system algebraically after having seen it graphically as a point where two lines intersect.

*ALEKS Algebra 1* provides students with the opportunity to use abstract models in "Writing and Evaluating a Function that Models a Real-World Situation" (A.2.C). Students create algebraic equations that represent real-world situations. As they are asked to find the unknown quantity by representing it using a variable, they apply inverse operations to solve for that variable. Then, by checking the answer they have arrived at, they can connect the idea that an equation represents a real-world situation.

The materials do not include questions and tasks that provide opportunities for students to use concrete models as required by the TEKS.

### 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.

In *ALEKS Algebra 1*, students organize data in tables and extract information to identify patterns, write equations for proportional relationships, and understand functions. These representational models help students make connections to abstract concepts.

*ALEKS Algebra 1* enables students to explore and interpret linear and quadratic functions, and through this process, they create graphs that fit the narratives of those functions.

Materials do not include supports for students in defining and explaining representational models to abstract concepts, nor do they include supports for students in connecting, creating, defining, and explaining concrete models to abstract concepts, as required by the TEKS.

## 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	The materials do not include embedded guidance to support student application of appropriate mathematical language and academic vocabulary in discourse.	0/1
5.4d	All criteria for guidance met.	2/2
5.4e	The materials do not include embedded guidance to anticipate a variety of student answers, including exemplar responses to questions and tasks.	1/2
—	<b>TOTAL</b>	6/8

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

Within the Learning Page, located in the Student View, for "Integer Addition," the materials provide a video with step-by-step visual explanations that help with the development of academic mathematical language.

In *ALEKS Algebra 1*, opportunities for students to develop their academic mathematical language are provided through the "Explanation" pages. For example, the explanation for "Introduction to Solving an Equation with Variables on the Same Side" includes links associated with specific vocabulary words. Beginning with *solve*, this link leads to a dictionary that includes visual examples, as well as a "See Also" section for further language development.

### 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 *ALEKS Notebook* includes embedded educator guidance to scaffold and support students' use of academic vocabulary in context when communicating with peers and educators through learning logs and extends students' use of academic vocabulary in context when communicating with peers and educators through reflection prompts.

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

Materials do not include embedded guidance to support student application of appropriate mathematical language and academic vocabulary in discourse.

The materials highlight key terms within the lesson and include scaffolded definitions to support students; however, they do not provide opportunities for students to apply these terms in contextual problem-solving or to use vocabulary in real-world scenarios.

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

*ALEKS Algebra 1* includes embedded guidance to facilitate mathematical conversations, allowing students to hear math language with peers when presented with Conversation Starters and refine and use math language with peers when Reflection Prompts are used within the class setting.

**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.**

*ALEKS Algebra 1* includes automated feedback on student responses. If students attempt a particular question and select or enter an incorrect answer, the resource provides the correct method for solving the question. For example, when asking "What is the square root of 25?" the resource provides the options of Check, Hint, Explanation, and More. These features provide step-by-step solutions or suggestions when the student has entered an inaccurate response, allowing students to understand the logic behind the answers and identify areas where they have made mistakes or have misconceptions.

Materials do not include embedded guidance to anticipate a variety of student answers, including exemplar responses to questions and tasks.

## 5.5 Process Standards Connection

GUIDANCE	SCORE SUMMARY	RAW SCORE
5.5a	All criteria for guidance met.	1/1
5.5b	The materials do not include a description of how process standards are incorporated and connected throughout the learning pathways.	0/2
5.5c	All criteria for guidance met.	1/1
—	<b>TOTAL</b>	<b>2/4</b>

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

The materials integrate the TEKS process standards into each lesson. Various exercises and activities within *ALEKS Algebra 1* ask students to solve real-world application tasks. This type of practice allows students to employ a problem-solving model that involves analyzing given information.

*ALEKS Algebra 1* provides a folder of assignments/skills practice for the process standards A.1(A) through A.1(G).

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

Materials do not include a description of how process standards are incorporated and connected throughout the learning pathways.

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

*ALEKS Algebra 1* provides a document titled "Standards Correlation" within the Padlet that shows what process standards are embedded in the various topics that educators can assign to the students as practice.

In addition to focusing on the Algebra I content standards, *ALEKS Algebra 1* addresses the process standards by promoting problem-solving (i.e., solving open-ended problems using input tools) and encouraging reasoning skills (i.e., prompting students to demonstrate a deeper understanding by engaging in deductive and inductive reasoning).

## 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	The materials are not designed to require students to make sense of mathematics through multiple opportunities for students to do, write about, and discuss mathematics with peers and educators.	0/3
—	<b>TOTAL</b>	6/9

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

In *ALEKS Algebra 1*, the materials provide opportunities for students to think mathematically through the student-facing learning pages for the "Interpreting the Graphs of Two Functions" lesson in the "Linear Systems Pie Slice." In this section, materials present students with a graph that contains a visual representation of a rental company offering two pricing options. For each pricing option, the cost (in dollars) depends on the number of miles driven. While students continue with the question, they use the graph to determine "which option costs less" and "how much less?" Because students apply their knowledge of the graphs of linear functions to a situation comparing rental prices, they think mathematically about a situation.

The materials provide opportunities for students to persevere through problem-solving through the student-facing learning pages for the "Solving a System of Linear Equations of the Form  $y = mx + b$ " lesson in the "Linear Systems" Pie Slice. Since students receive multiple opportunities with the question-type presented, an example page detailing a step-by-step process for completing the question, and specific information, such as "x: your answer is incorrect," for a multi-solution question, materials support students in persevering through the problem-solving process.

The materials provide opportunities for students to make sense of mathematics through the student-facing learning pages for the "Cube Root of an Integer" lesson in the "Exponents and Exponential Functions Pie Slice." While students complete the lesson, they have access to a written, step-by-step explanation as well as a video that explains the process. Students may reference either piece while they answer questions throughout the lesson. Since students have multiple references and opportunities to practice with the question type, materials provide them with the chance to make sense of mathematics.

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

*ALEKS Algebra 1* supports students in understanding that there are multiple ways to solve a problem by providing written and video explanations throughout the Algebra I materials. Specifically, on the student-facing learning page, the "Solving a Word Problem Involving a Sum and Another Basic Relationship" lesson of the "Linear Systems" Pie Slice materials provides a written, step-by-step explanation of solving a system of equations using the substitution method. When a student opens the provided video, the materials first present a "Real-World Example: Solve a System by Substitution" and "Use the Substitution Method," so students hear and see the same process as described in the written explanation. For students who need additional help, they can click the "Supplementary Videos" button and explore various methods for solving the given system of equations, including "Solve Systems of Equations by Using a Table," "Solve Systems of Equations by Graphing," and "Solve by Using Elimination."

The *ALEKS Notebook Guide* supports students in understanding, explaining, and justifying that there can be multiple ways to solve problems and complete tasks. The guide includes multiple ways to support students in problem-solving, making connections, and reflecting on various approaches to solving a problem, including the use of sentence starters and error analysis.

## **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.**

Materials are not designed to require students to make sense of mathematics through multiple opportunities for students to do, write about, and discuss mathematics with peers and/or educators.



## 6.2 Facilitating Productive Struggle

GUIDANCE	SCORE SUMMARY	RAW SCORE
6.2a	All criteria for guidance met.	8/8
6.2b	The materials do not include prompts or guidance to support educators in providing feedback based on anticipated misconceptions.	2/4
—	<b>TOTAL</b>	10/12

### **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 materials support students' use of mathematical language and discourse by providing a structured space to record and reference definitions, examples, and explanations. Teachers can leverage the notebook to facilitate mathematical conversations in which students hear, refine, and apply math language with peers. In addition, the notebook allows students to document and revisit solution strategies, supporting teachers in guiding students to share, justify, and reflect on their problem-solving approaches from multiple points of entry.

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

*ALEKS Algebra 1* includes prompts and guidance to support educators in providing explanatory feedback based on student responses within the learning spaces. If a student answers a question incorrectly, the resource provides an "Explanation" page for them to review before answering a similar question. For example, in *ALEKS Algebra 1*, within the "Explanation" page, when "Graphing a Line Given Its Equation in Slope-Intercept Form: Fractional Slope," students are encouraged to create a table to generate points that the line passes through. A lightbulb icon then provides additional information, including vocabulary, diagrams, or other methods of solving the problem.

The materials do not include prompts and guidance to support educators in providing explanatory feedback based on anticipated misconceptions.