

Instructional Materials Evaluation - Student Standards Review

Louisiana educators engaged in a professional review of the state’s academic standards for English language arts (ELA) and mathematics to ensure they continue to maintain strong expectations for teaching and learning aligned with college and workplace demands. The new ELA and math standards will be effective beginning with the 2016-2017 school year. As part of the Louisiana Department of Education’s support for a seamless transition to these new standards, the LDOE identified the major changes of the standards and their potential impact upon criteria used to review instructional materials.

Title: **Bridges to Algebra and Geometry, Algebra 1, Geometry, Algebra 2 (Math)**

Grade: **8-11**

Publisher: **CORD Communications, Inc.**

Copyright: **2014**

Overall Rating: **Tier III, Not representing quality**

This Mathematics review has been examined for the following major shifts in alignment resulting from the Louisiana Student Standards Review:

- Include standards for money in grades K, 1, and 3 to ensure connections that provide smooth transitions from one grade to the next
- Provide developmentally appropriate content for all grades or courses while maintaining high expectations:
 - Additive area is moved to grade 4 from grade 3
 - The Statistics - Conditional Probability and the Rules of Probability (S-CP) domain is moved from Algebra II to Geometry
 - The standards provide extra clarity around the distinction between Algebra I and II

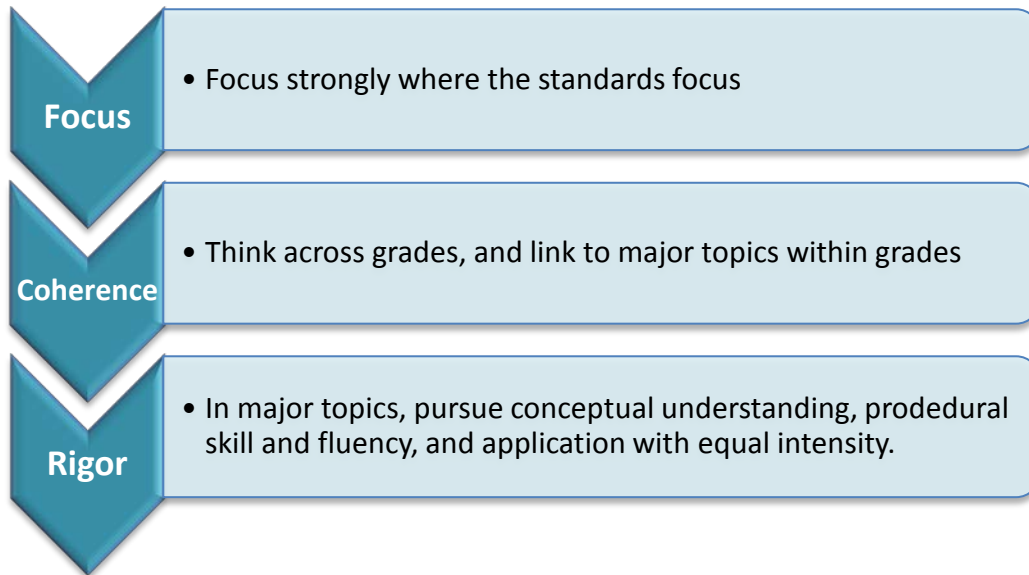
The following two indicators may be impacted:

- Focus on Major Work (Non-Negotiable)
- Consistent, Coherent Content (Non-Negotiable)

This review remains a Tier 3 rating. As a result of these changes, the following chart identifies the potential impact on specific elements in the current review. The LDOE recommends that district curriculum staff, principals, and teachers take these findings into consideration when using these instructional materials.

Criteria	Currently in the Rubric	Next Steps for Educators
Focus on Major Work (Non-Negotiable)	This program currently is reviewed as Yes for this criteria because student work corresponds to standards written for middle school and high school math. Students spend the majority of their time completing work widely applicable as prerequisites for postsecondary education.	Make sure to review all assessment materials to ensure alignment to new clarifications/limitations and the revised, as well as, the placement of standards by grade/course.
Consistent, Coherent Content (Non-Negotiable)	<p>This program currently is reviewed as Yes for this criteria for Grade 8 Bridges to Algebra and Geometry because materials connect supporting content to major content in a meaningful way.</p> <p>This program currently is reviewed as No for this criteria for Algebra 1, Geometry, and Algebra 2 because no connections to prior knowledge from earlier grades or courses are explicitly stated in the text or course materials.</p>	<p>For Grade 8 Bridges to Algebra and Geometry, make sure to review instructional materials focused on new supporting content (e.g., money in Grades K and 1) to ensure it supports the major work of the grade/course.</p> <p>For Algebra 1, Geometry, and Algebra 2, since these materials received a “No” for this indicator, the current weakness will likely remain and should be addressed by adjusting or supplementing with stronger programs.</p>

Strong mathematics instruction contains the following elements:



Title: Bridges to Algebra and Geometry, Algebra 1, Geometry, Algebra 2 (Math)

Grade: 8-11

Publisher: CORD Communications, Inc.

Copyright: 2014

Overall Rating: Tier III, Not representing quality

Tier I, Tier II, Tier III Elements of this grade band:

STRONG	WEAK
<u>Focus on Major Work</u> (Non-Negotiable)	<u>Practice-Content Connections</u> (Non-Negotiable)
<u>Rigor and Balance</u> (Non-Negotiable)	<u>Consistent, Coherent Content</u> (Non-Negotiable)*
*rated strong for Gr 8 <i>Bridges to Algebra and Geometry</i> only	

Each set of submitted materials was evaluated for alignment with the standards beginning with a review of the indicators for the non-negotiable criteria. If those criteria were met, a review of the other criteria ensued.

Tier 1 ratings received a “Yes” for all Criteria 1-7.

Tier 2 ratings received a “Yes” for all non-negotiable criteria (Criteria 1 – 4), but at least one “No” for the remaining criteria.

Tier 3 ratings received a “No” for at least one of the non-negotiable criteria.

Click below for complete grade-level reviews:

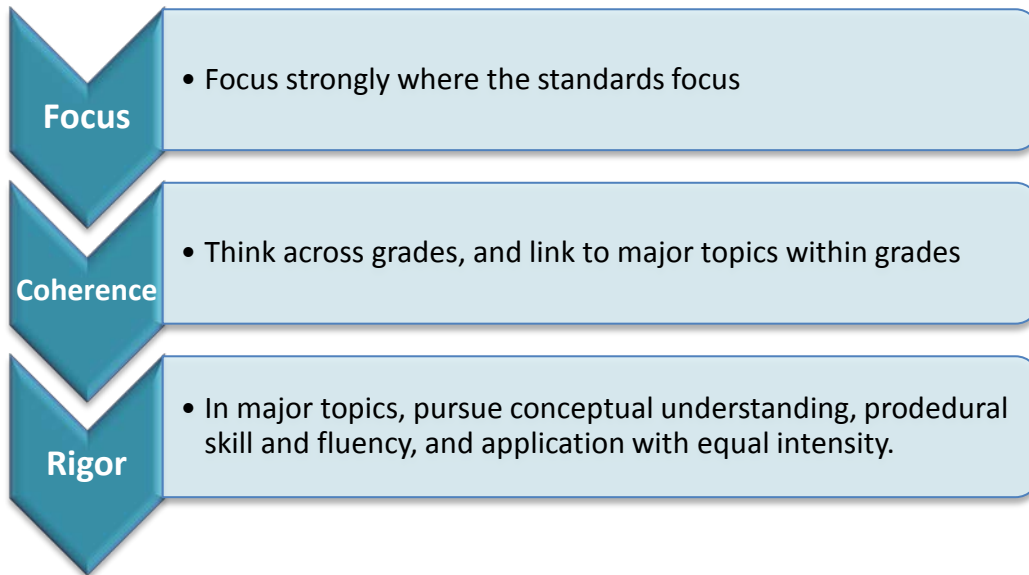
[Grade 8 \(Tier 3\)](#)

[Grade 9 \(Tier 3\)](#)

[Grade 10 \(Tier 3\)](#)

[Grade 11 \(Tier 3\)](#)

Strong mathematics instruction contains the following elements:



Title: Bridges to Geometry and Algebra (Math)

Grade: 8

Publisher: CORD Communications, Inc.

Copyright: 2014

Overall Rating: Tier III, Not representing quality

Tier I, Tier II, Tier III Elements of this review:

STRONG	WEAK
Focus on Major Work (Non-Negotiable)	Practice-Content Connections (Non-Negotiable)
Consistent, Coherent Content (Non-Negotiable)	
Rigor and Balance (Non-Negotiable)	

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria in Section I. If there is a “Yes” for all indicators in Column 2 for Section I, then the materials receive a “Yes” in Column 1. If there is a “No” for any indicator in Column 2 for Section I, then the materials receive a “No” in Column 1.

For Section II, begin by reviewing the required indicators in Column 2 for each criterion. If there is a “Yes” for all required indicators in Column 2, then the materials receive a “Yes” in Column 1. If there is a “No” for any required indicators in Column 2, then the materials receive a “No” in Column 1.

Tier 1 ratings receive a “Yes” in Column 1 for Criteria 1-7.

Tier 2 ratings receive a “Yes” in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one “No” in Column 1 for the remaining criteria.

Tier 3 ratings receive a “No” in Column 1 for at least one of the non-negotiable criteria.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria to move to tier 2.			
Non-Negotiable 1. FOCUS ON MAJOR WORK¹: Students and teachers using the materials as designed devote the large majority ² of time in each grade K–8 to the major work of the grade. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	REQUIRED 1a) Materials should devote at least 65% and up to approximately 85% of class time to the major work of each grade with Grades K–2 nearer the upper end of that range, i.e., 85%. Each grade must meet the criterion; do not average across two or more grades.	Yes	This curriculum spends the majority of its time (i.e., 85%) on major work of 8th grade. This either explicitly taught, or used in the connection with supporting and additional standards throughout each lesson.
	REQUIRED 1b) In any one grade, aligned materials should spend minimal time on content outside of the appropriate grade levels. In aligned materials there are no chapter tests, unit tests, or other such assessment components that make students or teachers responsible for any topics before the grade in which they are introduced in the Standards. ³	Yes	The amount of time spent on work outside of the grade level is used only to make connections and establish background knowledge. No content is assessed before the grade in which they are introduced in the Standards.
Non-Negotiable 2. CONSISTENT, COHERENT CONTENT Each course’s instructional materials are coherent and consistent with the content in the standards. <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	REQUIRED 2a) Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year. ⁴	Yes	All modules and units make connections to previous work both within the grade in the context of the 8 th grade CCSSM.
	REQUIRED 2b) Materials including problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade, in cases where these connections are natural and important. ⁵	Yes	Materials connect supporting content to major content in a meaningful way. Problems and activities serve to establish connections across domains and clusters.

¹ For more on the major work of the grade, see [Focus by Grade Level](#).

² The materials should devote at least 65% and up to approximately 85% of class time to the major work of the grade with Grades K–2 nearer the upper end of that range, i.e., 85%.

³ Refer also to criterion #2 in the K–8 [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

⁴ Refer also to criterion #3 in the K–8 [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

⁵ Refer also to criterion #6 in the K–8 [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION I (continued): NON-NEGOTIABLE CRITERIA			
<p>Non-Negotiable 3. RIGOR AND BALANCE: Each grade’s instructional materials reflect the balances in the standards and help students meet the standards’ rigorous expectations, by helping students develop conceptual understanding, procedural skill and fluency, and application.⁶</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>REQUIRED 3a) Attention to Conceptual Understanding: Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards or cluster headings by amply featuring high-quality conceptual problems and questions.</p>	Yes	Students are asked to explain understanding and reasoning throughout the coursework. Students are asked to reason by explanations. For example, Chapter 2 Lesson 5 asks students to explain how to solve an equation with variables on both sides.
	<p>REQUIRED 3b) Attention to Procedural Skill and Fluency: Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials help students make steady progress throughout the year toward fluent computation. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.</p>	Yes	Practice sets are given for each lesson to develop procedural skill and fluency to mastery of the content.
	<p>REQUIRED 3c) Attention to Applications: Materials are designed so that teachers and students spend sufficient time working with engaging applications, without losing focus on the major work of each grade including ample practice with single-step and multi-step contextual problems that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving.</p>	Yes	Materials attend thoroughly to those places in the content standards where expectations for multi-step and real-world problems are explicit. Almost all lessons contain application problems related to the material of that lesson. In each section, students complete word problems associated with real-world expectations as examples and during practice sets.
	<p>REQUIRED 3d) Balance: The three aspects of rigor are not always treated together, and are not always treated separately.</p>	Yes	Lessons align to the three components of rigor: Conceptual understanding, procedural skills and fluency, and application as needed in each lesson based on the standard’s need for each particular aspect of rigor.
<p>Non-Negotiable 4. PRACTICE-CONTENT CONNECTIONS: Materials meaningfully connect the Standards for Mathematical Content and</p>	<p>REQUIRED 4a) The materials connect the Standards for Mathematical Practice and the Standards for Mathematical Content.</p>	No	Materials do not mention the standards for mathematical practice.

⁶ Refer also to criterion #4 in the K–8 [Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

<p>the Standards for Mathematical Practice.^{7,8}</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>REQUIRED 4b) The developer provides a description or analysis, aimed at evaluators, which shows how materials meaningfully connect the Standards for Mathematical Practice to the Standards for Mathematical Content within each applicable grade.</p>	<p>No</p>	<p>Materials do not mention the standards for mathematical practice.</p>
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CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
<p>Additional Criterion 5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT: Materials foster focus and coherence by linking topics within grades (across domains and clusters) and across grades by staying consistent with the progressions in the standards.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>REQUIRED 5a) Materials base content progressions on the grade-by-grade progressions in the Standards.⁹</p>		<p>Not evaluated. Non-negotiable criteria were not met.</p>
	<p>REQUIRED 5b) Materials provide all students extensive work with course-level problems. Review of material from previous grades and courses is clearly identified as such to the teacher, and teachers and students can see what their specific responsibility is for the current year.¹⁰</p>		<p>Not evaluated. Non-negotiable criteria were not met.</p>
	<p>REQUIRED 5c) Materials relate course-level concepts explicitly to prior knowledge from earlier grades and courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.¹⁰</p>		<p>Not evaluated. Non-negotiable criteria were not met.</p>
	<p>5d) Materials include learning objectives that are visibly shaped by CCSSM cluster headings.¹⁰</p>		<p>Not evaluated. Non-negotiable criteria were not met.</p>
	<p>5e) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.¹¹</p>		<p>Not evaluated. Non-negotiable criteria were not met.</p>

⁷ Refer also to criterion #7 in the K–8 [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

⁸ All items do not need to align to a Mathematical Practice. In addition, there is no requirement to have an equal balance among the Mathematical Practices in any set of materials or grade.

⁹ Refer also to criterion #5 in the K–8 [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

¹⁰ Refer also to criterion #6 in the K–8 [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION II (continued): ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
<p>Additional Criterion 6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE: Aligned materials make meaningful and purposeful connections that enhance the focus and coherence of the standards rather than detract from the focus and include additional content/skills to teach which are not included in the standards.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>REQUIRED 6a) Careful Attention to Each Practice Standard: Materials attend to the full meaning of each practice standard.¹¹ The analysis for evaluators explains how the full meaning of each practice standard has been attended to in the materials.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>REQUIRED 6b) Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of other concerning key grade-level mathematics that is detailed in the content standards (cf. MP.3).¹²</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>REQUIRED 6c) Materials engage students in problem solving as a form of argument, attending thoroughly to places in the standards that explicitly set expectations for multi-step problems.¹²</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>6d) Materials explicitly attend to the specialized language of mathematics.¹²</p>		Not evaluated. Non-negotiable criteria were not met.

¹¹ Refer also to criterion #9 in the K–8 [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

¹² Refer also to criterion #10 in the K–8 [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION II (continued): ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
<p>Additional Criterion 7. INDICATORS OF QUALITY: Quality materials should exhibit the indicators outlined here in order to give teachers and students the tools they need to meet the expectations of the Standards.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>REQUIRED 7a) The underlying design of the materials distinguishes between problems and exercises. In essence the difference is that in solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery. Each problem or exercise has a purpose.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>REQUIRED 7b) Design of assignments is not haphazard: exercises are given in intentional sequences.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>REQUIRED 7c) There is variety in what students produce. For example, students are asked to produce answers and solutions, but also, in a grade-appropriate way, arguments and explanations, diagrams, mathematical models, etc.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>REQUIRED 7d) There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>REQUIRED 7e) Support for English Language Learners and other special populations is thoughtful and helps those students meet the same standards as all other students. The language in which problems are posed is carefully considered.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>7f) There is variety in the pacing and grain size of content coverage.¹³</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>7g) Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>7h) Manipulatives are faithful representations of the mathematical objects they represent and are connected to written methods.</p>		Not evaluated. Non-negotiable criteria were not met.

¹³ Refer also to page 18 in the K – 8 [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

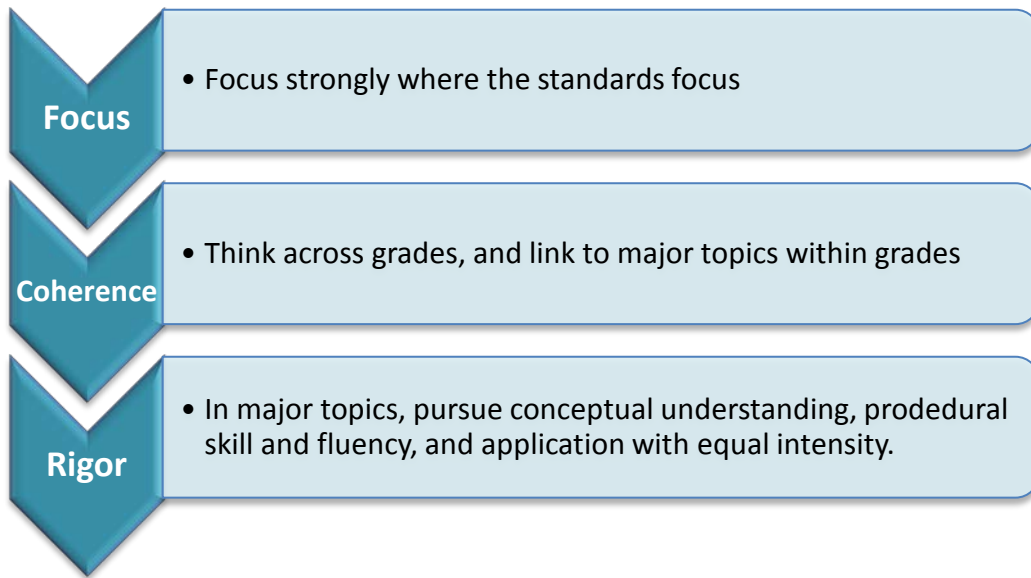
Tier 1 ratings receive a “Yes” in Column 1 for Criteria 1-7.

Tier 2 ratings receive a “Yes” in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one “No” in Column 1 for the remaining criteria.

Tier 3 ratings receive a “No” in Column 1 for at least one of the non-negotiable criteria.

FINAL EVALUATION			
Compile the results for Sections I and II to make a final decision for the material under review.			
Section	Criteria	Y/N	Final Justification/Comments
I: Non-Negotiables	1. Focus on Major Work	Yes	This curriculum does spend the required 65-85% of time on the major work of the grade and does not assess concepts before they are called for in CCSSM.
	2. Consistent, Coherent Content	Yes	Materials show a coherent, logical progression of learning and contain focus on the major work even through supporting concepts being taught. Prior knowledge is utilized and connections are made across domains, clusters, and grades.
	3. Rigor and Balance	Yes	Coursework provides an adequate balance of rigor as determined by each standard.
	4. Practice-Content Connections	No	Materials do not mention the standards for mathematical practice.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content		Not evaluated. Non-negotiable criteria were not met.
	6. Alignment Criteria for Standards for Mathematical Practice		Not evaluated. Non-negotiable criteria were not met.
	7. Indicators of Quality		Not evaluated. Non-negotiable criteria were not met.
FINAL DECISION FOR THIS MATERIAL: <u>Tier III, Not representing quality</u>			

Strong mathematics instruction contains the following elements:



Title: Algebra 1 (Math)

Grade: 9

Publisher: CORD Communications, Inc.

Copyright: 2014

Overall Rating: **Tier III, Not Representing Quality**

[Tier I](#), [Tier II](#), [Tier II](#) Elements of this review:

STRONG	WEAK
Focus on Major Work (Non-Negotiable)	Consistent, Coherent Content (Non-Negotiable)
Rigor and Balance (Non-Negotiable)	Practice-Content Connections (Non-Negotiable)

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria in Section I. If there is a “Yes” for all indicators in Column 2 for Section I, then the materials receive a “Yes” in Column 1. If there is a “No” for any indicator in Column 2 for Section I, then the materials receive a “No” in Column 1.

For Section II, begin by reviewing the required indicators in Column 2 for each criterion. If there is a “Yes” for all required indicators in Column 2, then the materials receive a “Yes” in Column 1. If there is a “No” for any required indicators in Column 2, then the materials receive a “No” in Column 1.

Tier 1 ratings receive a “Yes” in Column 1 for Criteria 1-7.

Tier 2 ratings receive a “Yes” in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one “No” in Column 1 for the remaining criteria.

Tier 3 ratings receive a “No” in Column 1 for at least one of the non-negotiable criteria.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria to move to tier 2.			
<p>Non-Negotiable 1. FOCUS IN HIGH SCHOOL: In any single course, students and teachers using the materials as designed spend the majority of their time developing knowledge and skills that are widely applicable as prerequisites for postsecondary education.^{1, 2} For courses that do not include Geometry standards, metrics 1a and 1b must be met. For courses including Geometry standards, all three of the metrics must be met.</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>REQUIRED 1a) In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites for postsecondary education.³</p>	Yes	Student work corresponds to standards written for high school math. Students spend the majority of their time completing work widely applicable as prerequisites for postsecondary education. In the preface of the teacher’s edition, a table of standards and the lessons addressed by each standard is shown.
	<p>REQUIRED 1b) There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8 including⁴:</p> <ul style="list-style-type: none"> • Applying ratios and proportional relationships. • Applying percentages and unit conversions, e.g., in the context of complicated measurement problems involving quantities with derived or compound units (such as mg/mL, kg/m³, acre-feet, etc.). • Applying basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Applying concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Applying concepts and skills of basic statistics and probability (see 6–8.SP). • Performing rational number arithmetic fluently. 	Yes	The majority of skills used surpass the prerequisites required for 9 th grade. For example Chapter 6 involves Systems of Equations and inequalities, in the 9 th grade students are expected to analyze and solve pairs of simultaneous linear equations (8.EE.8). Chapter 6 uses this knowledge of systems of equations to expand on this knowledge and apply properties of systems of equations to systems of inequalities as required in A-REI-12.
	<p>REQUIRED (as applicable) 1c) For courses that include standards from the Geometry conceptual category, student work in Geometry significantly involves applications/modeling as well as geometry applications that use algebra skills.⁵</p>	N/A	Not Applicable – Only standards related to Algebra are in Algebra 1, Geometry standards are designated with a G, and none are assigned to Algebra1

¹ Refer also to criterion #1 in the High School [Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

² If materials show time in both block and standard 'days,' choose either but remain consistent.

³ For more information on the Widely Applicable Prerequisites, see Table 1 on Page 8 of the High School [Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

⁴ Information excerpted from Table 1 on Page 8 of the High School [Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

⁵ Since the Geometry category itself contains relatively fewer Widely Applicable Prerequisites, this criterion is important to help foster students’ college and career readiness.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION I (continued): NON-NEGOTIABLE CRITERIA			
<p>Non-Negotiable 2. CONSISTENT, COHERENT CONTENT Each course’s instructional materials are coherent and consistent with the content in the standards.⁶</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>REQUIRED 2a) Giving all students extensive work with course-level problems: Review of material from previous grades and courses is clearly identified as such to the teacher, and teachers and students can see what their specific responsibility is for the current year.</p>	No	Previous-grades review and previous-course review is not identified as such to the teacher. Teachers and students cannot see what their specific responsibility is for the current year. Standards are not listed in the chapters or lesson. Some lessons do not have corresponding standards and are not listed as review material.
	<p>REQUIRED 2b) Relating course-level concepts explicitly to prior knowledge from earlier grades and courses: The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.</p>	No	Coursework does not mention prior knowledge learned in middle school and how it is applied to the current coursework. No connections to prior knowledge from earlier grades or courses are explicitly stated in the text or course materials.
<p>Non-Negotiable 3. RIGOR AND BALANCE: Each grade’s instructional materials reflect the balances in the Standards and help students meet the Standards’ rigorous expectations, by helping students develop conceptual understanding, procedural skill and fluency, and application.⁷</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>REQUIRED 3a) Attention to Conceptual Understanding: Materials develop conceptual understanding of key mathematical concepts, especially where called for in specific content standards or cluster headings by amply featuring high-quality conceptual problems and questions.</p>	Yes	Students are asked to explain understanding and reasoning throughout the coursework. Students are asked to reason by explanations. For example, Chapter 2 Lesson 5 asks students to explain how to solve an equation with variables on both sides.
	<p>REQUIRED 3b) Attention to Procedural Skill and Fluency: Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In higher grades, sufficient practice with algebraic operations is provided in order for students to meet all of the expectations set in the Standards as a whole.</p>	Yes	Practice sets are given for each lesson to develop procedural skill and fluency to mastery of the content.
	<p>REQUIRED 3c) Attention to Applications: Materials are designed so that teachers and students spend sufficient time working with engaging applications/modeling. While modeling is a mathematical practice at every grade, it is more prominent and enhanced in high school with more elements of the modeling cycle present.</p>	Yes	Materials attend thoroughly to those places in the content standards where expectations for multi-step and real-world problems are explicit. Almost all lessons contain application problems related to the material of that lesson. In each section, students complete word problems associated with real-world expectations as examples and during practice sets.
<p>REQUIRED 3d) Balance: The three aspects of rigor are not always treated together, and are not always treated separately</p>	Yes	Lessons align to the three components of rigor: Conceptual understanding, procedural skills and fluency, and application as needed in each lesson based on the standard’s need for each particular aspect of rigor.	

⁶ Refer also to criterion #3 in the High School [Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

⁷ Refer also to criterion #2 in the High School [Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION I (continued): NON-NEGOTIABLE CRITERIA			
Non-Negotiable 4. PRACTICE-CONTENT CONNECTIONS: Materials meaningfully connect the Standards for Mathematical Content and the Standards for Mathematical Practice. ⁸ <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	REQUIRED 4a) The materials connect the Standards for Mathematical Practice and the Standards for Mathematical Content.	No	Mathematical practices are not mentioned.
	REQUIRED 4b) The developer provides a description or analysis, aimed at evaluators, which shows how materials meaningfully connect the Standards for Mathematical Practice to the Standards for Mathematical Content within each applicable course.	No	Mathematical practices are not mentioned.

⁸ Refer also to criterion #5 in the High School [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
Additional Criterion 5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT: Materials foster focus and coherence by linking topics within grades (across domains and clusters). Courses are designed based on the content in the standards. <input type="checkbox"/> Yes <input type="checkbox"/> No	REQUIRED 5a) Materials base courses on the content specified in the standards (Algebra I, Geometry, and Algebra II). ⁹		Not evaluated. Non-negotiable criteria were not met.
	REQUIRED 5b) Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important. ^{10, 11}		Not evaluated. Non-negotiable criteria were not met.
	5c) Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings. ¹⁰		Not evaluated. Non-negotiable criteria were not met.
	5d) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives. ¹⁰		Not evaluated. Non-negotiable criteria were not met.
Additional Criterion 6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE: Aligned materials make meaningful and purposeful connections that enhance the focus and coherence of the standards rather than detract from the focus and include additional content/skills to teach which are not included in the standards. <input type="checkbox"/> Yes <input type="checkbox"/> No	REQUIRED 6a) Careful Attention to Each Practice Standard: Materials attend to the full meaning of each practice standard. ¹²		Not evaluated. Non-negotiable criteria were not met.
	REQUIRED 6b) Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of other concerning key course-level mathematics that is detailed in the content standards (cf. MP.3). ¹³		Not evaluated. Non-negotiable criteria were not met.
	REQUIRED 6c) Materials engage students in problem solving as a form of argument, attending thoroughly to places in the standards that explicitly set expectations for multi-step problems. ¹³		Not evaluated. Non-negotiable criteria were not met.
	6d) Materials explicitly attend to the specialized language of mathematics. ¹³		Not evaluated. Non-negotiable criteria were not met.

⁹ Refer also to criterion #3 in the HS [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

¹⁰ Refer also to criterion #4 in the HS [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

¹¹ Refer to the standards for each course found in the [Teacher Support Library](#).

¹² Refer also to criterion #7 in the HS [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

¹³ Refer also to criterion #8 in the HS [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION II (continued): ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
<p>Additional Criterion 7. INDICATORS OF QUALITY: Quality materials should exhibit the indicators outlined here in order to give teachers and students the tools they need to meet the expectations of the standards.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>REQUIRED 7a) Materials support the uses of technology as called for in the standards.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>REQUIRED 7b) The underlying design of the materials distinguishes between problems and exercises. In essence the difference is that in solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery. Each problem or exercise has a purpose.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>REQUIRED 7c) Design of assignments is not haphazard: exercises are given in intentional sequences.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>REQUIRED 7d) There is variety in what students produce. For example, students are asked to produce answers and solutions, but also, in a grade-appropriate way, arguments and explanations, diagrams, mathematical models, etc.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>REQUIRED 7e) There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>REQUIRED 7f) Support for English Language Learners and other special populations is thoughtful and helps those students meet the same standards as all other students. The language in which problems are posed is carefully considered.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>7g) There is variety in the pacing and grain size of content coverage.¹⁴</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>7h) Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>7i) Manipulatives are faithful representations of the mathematical objects they represent and are connected to written methods.</p>		Not evaluated. Non-negotiable criteria were not met.

¹⁴ Refer also to page 16 in the High School [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

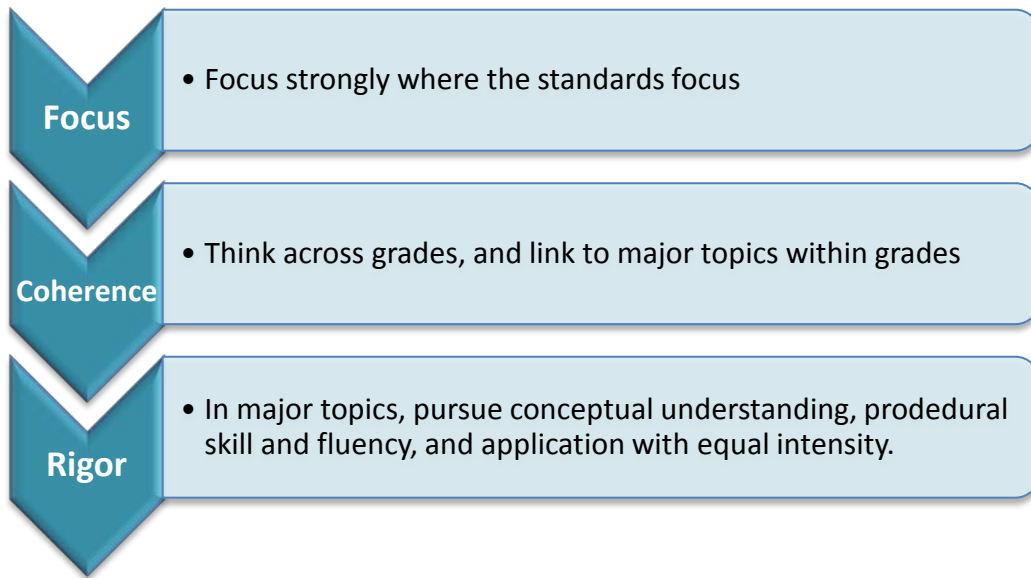
Tier 1 ratings receive a “Yes” in Column 1 for Criteria 1-7.

Tier 2 ratings receive a “Yes” in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one “No” in Column 1 for the remaining criteria.

Tier 3 ratings receive a “No” in Column 1 for at least one of the non-negotiable criteria.

FINAL EVALUATION			
Compile the results for Sections I and II to make a final decision for the material under review.			
Section	Criteria	Y/N	Final Justification/Comments
I: Non-Negotiables	1. Focus on Major Work	Yes	Course materials contain applicable content for the subject matter.
	2. Consistent, Coherent Content	No	Review material or prior knowledge is not mentioned within the text or the material is not identified. It is hard to tell what information a student should already know and what information is required for the current grade level.
	3. Rigor and Balance	Yes	Coursework provides an adequate balance of rigor as determined by each standard.
	4. Practice-Content Connections	No	Mathematical practices are not mentioned.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content		Not evaluated. Non-negotiable criteria were not met.
	6. Alignment Criteria for Standards for Mathematical Practice		Not evaluated. Non-negotiable criteria were not met.
	7. Indicators of Quality		Not evaluated. Non-negotiable criteria were not met.
FINAL DECISION FOR THIS MATERIAL: <u>Tier III, Not representing quality</u>			

Strong mathematics instruction contains the following elements:



Title: Geometry(Math)

Grade: 10

Publisher: CORD Communications, Inc.

Copyright: 2014

Overall Rating: **Tier III, Not Representing Quality**

[Tier I](#), [Tier II](#), [Tier II](#) Elements of this review:

STRONG	WEAK
Focus on Major Work (Non-Negotiable)	Consistent, Coherent Content (Non-Negotiable)
Rigor and Balance (Non-Negotiable)	Practice-Content Connections (Non-Negotiable)

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria in Section I. If there is a “Yes” for all indicators in Column 2 for Section I, then the materials receive a “Yes” in Column 1. If there is a “No” for any indicator in Column 2 for Section I, then the materials receive a “No” in Column 1.

For Section II, begin by reviewing the required indicators in Column 2 for each criterion. If there is a “Yes” for all required indicators in Column 2, then the materials receive a “Yes” in Column 1. If there is a “No” for any required indicators in Column 2, then the materials receive a “No” in Column 1.

Tier 1 ratings receive a “Yes” in Column 1 for Criteria 1-7.

Tier 2 ratings receive a “Yes” in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one “No” in Column 1 for the remaining criteria.

Tier 3 ratings receive a “No” in Column 1 for at least one of the non-negotiable criteria.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria to move to tier 2.			
<p>Non-Negotiable 1. FOCUS IN HIGH SCHOOL: In any single course, students and teachers using the materials as designed spend the majority of their time developing knowledge and skills that are widely applicable as prerequisites for postsecondary education.^{1, 2} For courses that do not include Geometry standards, metrics 1a and 1b must be met. For courses including Geometry standards, all three of the metrics must be met.</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>REQUIRED 1a) In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites for postsecondary education.³</p>	Yes	Student work corresponds to standards written for high school math. Students spend the majority of their time completing work widely applicable as prerequisites for postsecondary education. In the preface of the teacher’s edition, a table of standards and the lessons addressed by each standard is shown.
	<p>REQUIRED 1b) There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8 including⁴:</p> <ul style="list-style-type: none"> • Applying ratios and proportional relationships. • Applying percentages and unit conversions, e.g., in the context of complicated measurement problems involving quantities with derived or compound units (such as mg/mL, kg/m³, acre-feet, etc.). • Applying basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Applying concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Applying concepts and skills of basic statistics and probability (see 6–8.SP). • Performing rational number arithmetic fluently. 	Yes	Most skills used surpass the prerequisites required for high school. For example, although Chapter 6 Lesson 1 is a review of ratios and proportions from 8 th grade CCSS, Chapter 6 makes use of ratios and proportions in solving similar triangle problems in multiple applications, which are part of the high school CCSS and an extension and application of the 8 th grade CCSS.
	<p>REQUIRED (as applicable) 1c) For courses that include standards from the Geometry conceptual category, student work in Geometry significantly involves applications/modeling as well as geometry applications that use algebra skills.⁵</p>	Yes	Student work in Geometry involves applications/modeling as well as applications that use algebra skills. For example, Chapter 7 lesson 5, students are asked to apply sine and cosine functions to create equations to model application problems.

¹ Refer also to criterion #1 in the High School [Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

² If materials show time in both block and standard 'days,' choose either but remain consistent.

³ For more information on the Widely Applicable Prerequisites, see Table 1 on Page 8 of the High School [Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

⁴ Information excerpted from Table 1 on Page 8 of the High School [Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

⁵ Since the Geometry category itself contains relatively fewer Widely Applicable Prerequisites, this criterion is important to help foster students’ college and career readiness.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION I (continued): NON-NEGOTIABLE CRITERIA			
<p>Non-Negotiable 2. CONSISTENT, COHERENT CONTENT Each course’s instructional materials are coherent and consistent with the content in the standards.⁶</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>REQUIRED 2a) Giving all students extensive work with course-level problems: Review of material from previous grades and courses is clearly identified as such to the teacher, and teachers and students can see what their specific responsibility is for the current year.</p>	No	Previous-grades review and previous-course review is not identified as such to the teacher. Teachers and students cannot see what their specific responsibility is for the current year. The electronic teacher’s edition lists standards for each lesson, however prior knowledge or whether material is review is not addressed. For example, Chapter 6 Lesson 1 deals with solving ratio and proportions. However, this is not a high school standard. This section should be labeled and identified as review material with appropriate standards listed. Standards are not listed in the chapters or lesson. Some lessons do not have corresponding standards and are not listed as review material.
	<p>REQUIRED 2b) Relating course-level concepts explicitly to prior knowledge from earlier grades and courses: The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.</p>	No	Coursework does not mention prior knowledge learned in middle school and how it is applied to the current coursework. No connections to prior knowledge from earlier grades or courses are explicitly stated in the text or course materials.
<p>Non-Negotiable 3. RIGOR AND BALANCE: Each grade’s instructional materials reflect the balances in the Standards and help students meet the Standards’ rigorous expectations, by helping students develop conceptual understanding, procedural skill and fluency, and application.⁷</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>REQUIRED 3a) Attention to Conceptual Understanding: Materials develop conceptual understanding of key mathematical concepts, especially where called for in specific content standards or cluster headings by amply featuring high-quality conceptual problems and questions.</p>	Yes	Students are asked to explain understanding and reasoning throughout the coursework. Students are asked to think and discuss. During these discussions students are expected to explain their reasoning.
	<p>REQUIRED 3b) Attention to Procedural Skill and Fluency: Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In higher grades, sufficient practice with algebraic operations is provided in order for students to meet all of the expectations set in the Standards as a whole.</p>	Yes	Practice sets are given for each lesson to develop procedural skill and fluency to mastery of the content.
	<p>REQUIRED 3c) Attention to Applications: Materials are designed so that teachers and students spend sufficient time working with engaging applications/modeling. While modeling is a mathematical practice at every grade, it is more</p>	Yes	Materials attend thoroughly to those places in the content standards where expectations for multi-step and real-world problems are explicit. Almost all lessons contain application problems related to

⁶ Refer also to criterion #3 in the High School [Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

⁷ Refer also to criterion #2 in the High School [Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

	prominent and enhanced in high school with more elements of the modeling cycle present.		the material of that lesson. In each section, students complete word problems associated with real-world expectations as examples and during practice sets.
	REQUIRED 3d) Balance: The three aspects of rigor are not always treated together, and are not always treated separately	Yes	Lessons align to the three components of rigor: Conceptual understanding, procedural skills and fluency, and application as needed in each lesson based on the standard's need for each particular aspect of rigor.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION I (continued): NON-NEGOTIABLE CRITERIA			
Non-Negotiable 4. PRACTICE-CONTENT CONNECTIONS: Materials meaningfully connect the Standards for Mathematical Content and the Standards for Mathematical Practice. ⁸ <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	REQUIRED 4a) The materials connect the Standards for Mathematical Practice and the Standards for Mathematical Content.	No	In the correlation document that links standards to lessons, the star symbol is explained as a link to the mathematical practice for modeling for specific standards. However, the mathematical practices are not connected to the content, explained, or mentioned otherwise.
	REQUIRED 4b) The developer provides a description or analysis, aimed at evaluators, which shows how materials meaningfully connect the Standards for Mathematical Practice to the Standards for Mathematical Content within each applicable course.	No	In the correlation document that links standards to lessons, the star symbol is explained as a link to the mathematical practice for modeling for specific standards. However, the mathematical practices are not connected to the content, explained, or mentioned otherwise.

⁸ Refer also to criterion #5 in the High School [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
<p>Additional Criterion 5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT: Materials foster focus and coherence by linking topics within grades (across domains and clusters). Courses are designed based on the content in the standards.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>REQUIRED 5a) Materials base courses on the content specified in the standards (Algebra I, Geometry, and Algebra II).⁹</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>REQUIRED 5b) Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important.^{10, 11}</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>5c) Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.¹⁰</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>5d) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.¹⁰</p>		Not evaluated. Non-negotiable criteria were not met.
<p>Additional Criterion 6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE: Aligned materials make meaningful and purposeful connections that enhance the focus and coherence of the standards rather than detract from the focus and include additional content/skills to teach which are not included in the standards.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>REQUIRED 6a) Careful Attention to Each Practice Standard: Materials attend to the full meaning of each practice standard.¹²</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>REQUIRED 6b) Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of other concerning key course-level mathematics that is detailed in the content standards (cf. MP.3).¹³</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>REQUIRED 6c) Materials engage students in problem solving as a form of argument, attending thoroughly to places in the standards that explicitly set expectations for multi-step problems.¹³</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>6d) Materials explicitly attend to the specialized language of mathematics.¹³</p>		Not evaluated. Non-negotiable criteria were not met.

⁹ Refer also to criterion #3 in the HS [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

¹⁰ Refer also to criterion #4 in the HS [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

¹¹ Refer to the standards for each course found in the [Teacher Support Library](#).

¹² Refer also to criterion #7 in the HS [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

¹³ Refer also to criterion #8 in the HS [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION II (continued): ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
<p>Additional Criterion 7. INDICATORS OF QUALITY: Quality materials should exhibit the indicators outlined here in order to give teachers and students the tools they need to meet the expectations of the standards.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>REQUIRED 7a) Materials support the uses of technology as called for in the standards.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>REQUIRED 7b) The underlying design of the materials distinguishes between problems and exercises. In essence the difference is that in solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery. Each problem or exercise has a purpose.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>REQUIRED 7c) Design of assignments is not haphazard: exercises are given in intentional sequences.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>REQUIRED 7d) There is variety in what students produce. For example, students are asked to produce answers and solutions, but also, in a grade-appropriate way, arguments and explanations, diagrams, mathematical models, etc.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>REQUIRED 7e) There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>REQUIRED 7f) Support for English Language Learners and other special populations is thoughtful and helps those students meet the same standards as all other students. The language in which problems are posed is carefully considered.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>7g) There is variety in the pacing and grain size of content coverage.¹⁴</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>7h) Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>7i) Manipulatives are faithful representations of the mathematical objects they represent and are connected to written methods.</p>		Not evaluated. Non-negotiable criteria were not met.

¹⁴ Refer also to page 16 in the High School [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

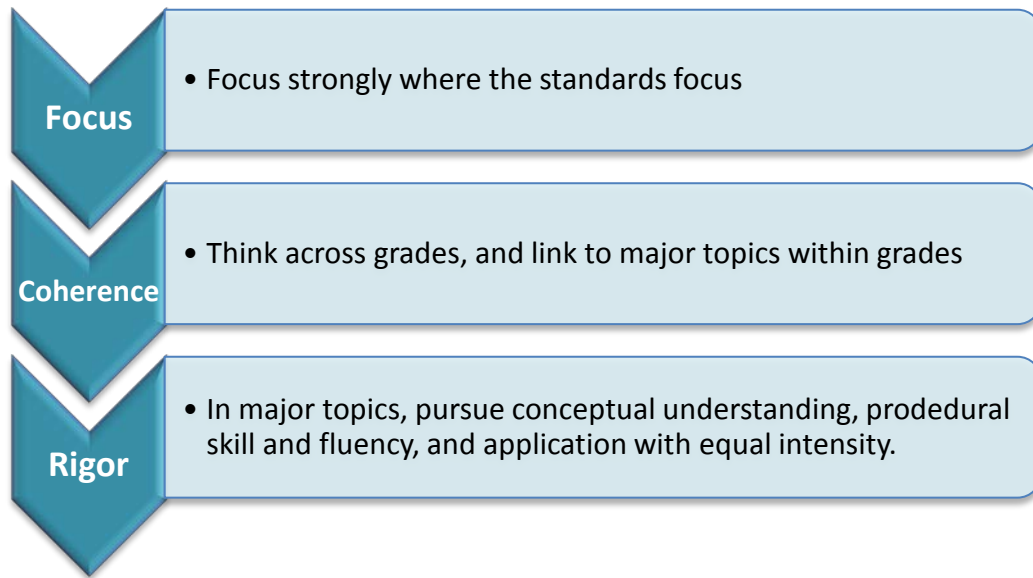
Tier 1 ratings receive a “Yes” in Column 1 for Criteria 1-7.

Tier 2 ratings receive a “Yes” in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one “No” in Column 1 for the remaining criteria.

Tier 3 ratings receive a “No” in Column 1 for at least one of the non-negotiable criteria.

FINAL EVALUATION			
Compile the results for Sections I and II to make a final decision for the material under review.			
Section	Criteria	Y/N	Final Justification/Comments
I: Non-Negotiables	1. Focus on Major Work	Yes	Course materials contain applicable content for the subject matter.
	2. Consistent, Coherent Content	No	Review material or prior knowledge is not mentioned within the text or the material is not identified. It is hard to tell what information a student should already know and what information is required for the current grade level.
	3. Rigor and Balance	Yes	Coursework provides an adequate balance of rigor as determined by each standard.
	4. Practice-Content Connections	No	In the correlation document that links standards to lessons, the star symbol is explained as a link to the mathematical practice for modeling for specific standards. However, the mathematical practices are not connected to the content, explained, or mentioned otherwise.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content		Not evaluated. Non-negotiable criteria were not met.
	6. Alignment Criteria for Standards for Mathematical Practice		Not evaluated. Non-negotiable criteria were not met.
	7. Indicators of Quality		Not evaluated. Non-negotiable criteria were not met.
FINAL DECISION FOR THIS MATERIAL: <u>Tier III, Not representing quality</u>			

Strong mathematics instruction contains the following elements:



Title: Algebra 2 (Math)

Grade: 11

Publisher: CORD Communications, Inc.

Copyright: 2014

Overall Rating: **Tier III, Not Representing Quality**

[Tier I](#), [Tier II](#), [Tier II](#) Elements of this review:

STRONG	WEAK
Focus on Major Work (Non-Negotiable)	Consistent, Coherent Content (Non-Negotiable)
Rigor and Balance (Non-Negotiable)	Practice-Content Connections (Non-Negotiable)

To evaluate each set of submitted materials for alignment with the standards, begin by reviewing the indicators listed in Column 2 for the non-negotiable criteria in Section I. If there is a “Yes” for all indicators in Column 2 for Section I, then the materials receive a “Yes” in Column 1. If there is a “No” for any indicator in Column 2 for Section I, then the materials receive a “No” in Column 1.

For Section II, begin by reviewing the required indicators in Column 2 for each criterion. If there is a “Yes” for all required indicators in Column 2, then the materials receive a “Yes” in Column 1. If there is a “No” for any required indicators in Column 2, then the materials receive a “No” in Column 1.

Tier 1 ratings receive a “Yes” in Column 1 for Criteria 1-7.

Tier 2 ratings receive a “Yes” in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one “No” in Column 1 for the remaining criteria.

Tier 3 ratings receive a “No” in Column 1 for at least one of the non-negotiable criteria.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria to move to tier 2.			
<p>Non-Negotiable 1. FOCUS IN HIGH SCHOOL: In any single course, students and teachers using the materials as designed spend the majority of their time developing knowledge and skills that are widely applicable as prerequisites for postsecondary education.^{1, 2} For courses that do not include Geometry standards, metrics 1a and 1b must be met. For courses including Geometry standards, all three of the metrics must be met.</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>REQUIRED 1a) In any single course, students spend at least 50% of their time on Widely Applicable Prerequisites for postsecondary education.³</p>	Yes	Student work corresponds to standards written for high school math. Students spend the majority of their time completing work widely applicable as prerequisites for postsecondary education. In the preface of the teacher’s edition, a table of standards and the lessons addressed by each standard is shown.
	<p>REQUIRED 1b) There are problems at a level of sophistication appropriate to high school (beyond mere review of middle school topics) that involve the application of knowledge and skills from grades 6-8 including⁴:</p> <ul style="list-style-type: none"> • Applying ratios and proportional relationships. • Applying percentages and unit conversions, e.g., in the context of complicated measurement problems involving quantities with derived or compound units (such as mg/mL, kg/m³, acre-feet, etc.). • Applying basic function concepts, e.g., by interpreting the features of a graph in the context of an applied problem. • Applying concepts and skills of geometric measurement e.g., when analyzing a diagram or schematic. • Applying concepts and skills of basic statistics and probability (see 6–8.SP). • Performing rational number arithmetic fluently. 	Yes	Skills used surpass the prerequisites required for High School. For example Chapter 6 involves Systems of Equations and inequalities, in the 9 th grade students are expected to analyze and solve pairs of simultaneous linear equations (8.EE.8). Chapter 8 lesson 5 uses this knowledge of systems of equations to expand on this knowledge and apply properties of systems of equations in two variables to systems of equations in three variables.
	<p>REQUIRED (as applicable) 1c) For courses that include standards from the Geometry conceptual category, student work in Geometry significantly involves applications/modeling as well as geometry applications that use algebra skills.⁵</p>	N/A	Not Applicable – Only standards related to Algebra are in Algebra 1, Geometry standards are designated with a G, and none are assigned to Algebra1

¹ Refer also to criterion #1 in the High School [Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

² If materials show time in both block and standard 'days,' choose either but remain consistent.

³ For more information on the Widely Applicable Prerequisites, see Table 1 on Page 8 of the High School [Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

⁴ Information excerpted from Table 1 on Page 8 of the High School [Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

⁵ Since the Geometry category itself contains relatively fewer Widely Applicable Prerequisites, this criterion is important to help foster students’ college and career readiness.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION I (continued): NON-NEGOTIABLE CRITERIA			
Non-Negotiable 2. CONSISTENT, COHERENT CONTENT Each course’s instructional materials are coherent and consistent with the content in the standards. ⁶ <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	REQUIRED 2a) Giving all students extensive work with course-level problems: Review of material from previous grades and courses is clearly identified as such to the teacher, and teachers and students can see what their specific responsibility is for the current year.	No	Previous-grades review and previous-course review is not identified as such to the teacher. Teachers and students cannot see what their specific responsibility is for the current year. Standards are not listed in the chapters or lessons. Some lessons do not have corresponding standards and are not listed as review material.
	REQUIRED 2b) Relating course-level concepts explicitly to prior knowledge from earlier grades and courses: The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.	No	Coursework does not mention prior knowledge learned in middle school and how it is applied to the current coursework. No connections to prior knowledge from earlier grades or courses are explicitly stated in the text or course materials.
Non-Negotiable 3. RIGOR AND BALANCE: Each grade’s instructional materials reflect the balances in the Standards and help students meet the Standards’ rigorous expectations, by helping students develop conceptual understanding, procedural skill and fluency, and application. ⁷ <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	REQUIRED 3a) Attention to Conceptual Understanding: Materials develop conceptual understanding of key mathematical concepts, especially where called for in specific content standards or cluster headings by amply featuring high-quality conceptual problems and questions.	Yes	Students are asked to explain understanding and reasoning throughout the coursework. Students are asked to reason by explanations. For example, Chapter 4 Lesson 5 asks students when the value of the discriminant is negative, why are there no real solutions. Students must conceptual understand how the quadric formula relates to solutions in order to answer the question.
	REQUIRED 3b) Attention to Procedural Skill and Fluency: Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In higher grades, sufficient practice with algebraic operations is provided in order for students to meet all of the expectations set in the Standards as a whole.	Yes	Practice sets are given for each lesson to develop procedural skill and fluency to mastery of the content.
	REQUIRED 3c) Attention to Applications: Materials are designed so that teachers and students spend sufficient time working with engaging applications/modeling. While modeling is a mathematical practice at every grade, it is more prominent and enhanced in high school with more elements of the modeling cycle present.	Yes	Materials attend thoroughly to those places in the content standards where expectations for multi-step and real-world problems are explicit. Almost all lessons contain application problems related to the material of that lesson. In each section, students complete word problems associated with real-world expectations as examples and during practice sets.
REQUIRED 3d) Balance: The three aspects of rigor are not always treated together, and are not always treated separately	Yes	Lessons align to the three components of rigor: Conceptual understanding, procedural skills and fluency, and application as needed in each lesson based on the standard’s need for each particular aspect of rigor.	

⁶ Refer also to criterion #3 in the High School [Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

⁷ Refer also to criterion #2 in the High School [Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION I (continued): NON-NEGOTIABLE CRITERIA			
Non-Negotiable 4. PRACTICE-CONTENT CONNECTIONS: Materials meaningfully connect the Standards for Mathematical Content and the Standards for Mathematical Practice. ⁸ <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	REQUIRED 4a) The materials connect the Standards for Mathematical Practice and the Standards for Mathematical Content.	No	Mathematical practices are not mentioned in the Algebra 2 content.
	REQUIRED 4b) The developer provides a description or analysis, aimed at evaluators, which shows how materials meaningfully connect the Standards for Mathematical Practice to the Standards for Mathematical Content within each applicable course.	No	Mathematical practices are not mentioned in the Algebra 2 content.

⁸ Refer also to criterion #5 in the High School [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
Additional Criterion 5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT: Materials foster focus and coherence by linking topics within grades (across domains and clusters). Courses are designed based on the content in the standards. <input type="checkbox"/> Yes <input type="checkbox"/> No	REQUIRED 5a) Materials base courses on the content specified in the standards (Algebra I, Geometry, and Algebra II). ⁹		Not evaluated. Non-negotiable criteria were not met.
	REQUIRED 5b) Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a category, or two or more categories, in cases where these connections are natural and important. ^{10, 11}		Not evaluated. Non-negotiable criteria were not met.
	5c) Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings. ¹⁰		Not evaluated. Non-negotiable criteria were not met.
	5d) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives. ¹⁰		Not evaluated. Non-negotiable criteria were not met.
Additional Criterion 6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE: Aligned materials make meaningful and purposeful connections that enhance the focus and coherence of the standards rather than detract from the focus and include additional content/skills to teach which are not included in the standards. <input type="checkbox"/> Yes <input type="checkbox"/> No	REQUIRED 6a) Careful Attention to Each Practice Standard: Materials attend to the full meaning of each practice standard. ¹²		Not evaluated. Non-negotiable criteria were not met.
	REQUIRED 6b) Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of other concerning key course-level mathematics that is detailed in the content standards (cf. MP.3). ¹³		Not evaluated. Non-negotiable criteria were not met.
	REQUIRED 6c) Materials engage students in problem solving as a form of argument, attending thoroughly to places in the standards that explicitly set expectations for multi-step problems. ¹³		Not evaluated. Non-negotiable criteria were not met.
	6d) Materials explicitly attend to the specialized language of mathematics. ¹³		Not evaluated. Non-negotiable criteria were not met.

⁹ Refer also to criterion #3 in the HS [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

¹⁰ Refer also to criterion #4 in the HS [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

¹¹ Refer to the standards for each course found in the [Teacher Support Library](#).

¹² Refer also to criterion #7 in the HS [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

¹³ Refer also to criterion #8 in the HS [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Y/N)	JUSTIFICATION/ COMMENTS
SECTION II (continued): ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
<p>Additional Criterion 7. INDICATORS OF QUALITY: Quality materials should exhibit the indicators outlined here in order to give teachers and students the tools they need to meet the expectations of the standards.</p> <p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>REQUIRED 7a) Materials support the uses of technology as called for in the standards.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>REQUIRED 7b) The underlying design of the materials distinguishes between problems and exercises. In essence the difference is that in solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery. Each problem or exercise has a purpose.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>REQUIRED 7c) Design of assignments is not haphazard: exercises are given in intentional sequences.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>REQUIRED 7d) There is variety in what students produce. For example, students are asked to produce answers and solutions, but also, in a grade-appropriate way, arguments and explanations, diagrams, mathematical models, etc.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>REQUIRED 7e) There are separate teacher materials that support and reward teacher study including, but not limited to: discussion of the mathematics of the units and the mathematical point of each lesson as it relates to the organizing concepts of the unit, discussion on student ways of thinking and anticipating a variety of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>REQUIRED 7f) Support for English Language Learners and other special populations is thoughtful and helps those students meet the same standards as all other students. The language in which problems are posed is carefully considered.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>7g) There is variety in the pacing and grain size of content coverage.¹⁴</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>7h) Lessons are thoughtfully structured and support the teacher in leading the class through the learning paths at hand, with active participation by all students in their own learning and in the learning of their classmates.</p>		Not evaluated. Non-negotiable criteria were not met.
	<p>7i) Manipulatives are faithful representations of the mathematical objects they represent and are connected to written methods.</p>		Not evaluated. Non-negotiable criteria were not met.

¹⁴ Refer also to page 16 in the High School [Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

Tier 1 ratings receive a “Yes” in Column 1 for Criteria 1-7.

Tier 2 ratings receive a “Yes” in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one “No” in Column 1 for the remaining criteria.

Tier 3 ratings receive a “No” in Column 1 for at least one of the non-negotiable criteria.

FINAL EVALUATION			
Compile the results for Sections I and II to make a final decision for the material under review.			
Section	Criteria	Y/N	Final Justification/Comments
I: Non-Negotiables	1. Focus on Major Work	Yes	Course materials contain applicable content for the subject matter.
	2. Consistent, Coherent Content	No	Review material or prior knowledge is not mentioned within the text or the material is not identified. It is hard to tell what information a student should already know and what information is required for the current grade level.
	3. Rigor and Balance	Yes	Coursework provides an adequate balance of rigor as determined by each standard.
	4. Practice-Content Connections	No	Mathematical practices are not mentioned in the Algebra 2 content.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content		Not evaluated. Non-negotiable criteria were not met.
	6. Alignment Criteria for Standards for Mathematical Practice		Not evaluated. Non-negotiable criteria were not met.
	7. Indicators of Quality		Not evaluated. Non-negotiable criteria were not met.
FINAL DECISION FOR THIS MATERIAL: <u>Tier III, Not representing quality</u>			