Instructional Materials Evaluation - Student Standards Review

Original Posting Date: 5/14/15

Updated on: 7/29/2016

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: **SpringBoard Algebra 1, Geometry, and Algebra 2** Grade: **9-11**

Publisher: **The College Board (SpringBoard)** Copyright: **2014**

Overall Rating: **Tier I, Exemplifies 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 1 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 criterion students and teachers spend the majority of their time developing knowledge and skills that are widely applicable as prerequisites for postsecondary education. There are problems at a level of sophistication appropriate to high school that apply the skills learned in middle school.	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)	This program currently is reviewed as Yes for this criterion because the materials were designed to consistently extend and reorganize content from earlier levels to accommodate the new knowledge. Students are given extensive work with course-level problems. The teacher edition indicates in the teacher wrap methods to activate prior knowledge for each lesson.	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.

Strong mathematics instruction contains the following elements:

Focus strongly where the standards focus

Think across grades, and link to major topics within grades

In major topics, pursue conceptual understanding, procedural skill and fluency, and application with equal intensity.

Title: **SpringBoard Algebra 1, Geometry, and Algebra 2** Grade: **9-11**

Publisher: **The College Board (SpringBoard)** Copyright: **2014**

Overall Rating: **Tier I, Exemplifies quality**

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

STRONG	WEAK
1. Focus in High School (Non-Negotiable)	
2. Consistent, Coherent Content (Non-Negotiable)	
3. Rigor and Balance (Non-Negotiable)	
4. Focus Coh. via Practice Std (Non-Negotiable)	
5. Alignment Criteria for Stnds. for Math Content	
6. Alignment Criteria for Stnds. for Math Practice	
7. Indicators of Quality	

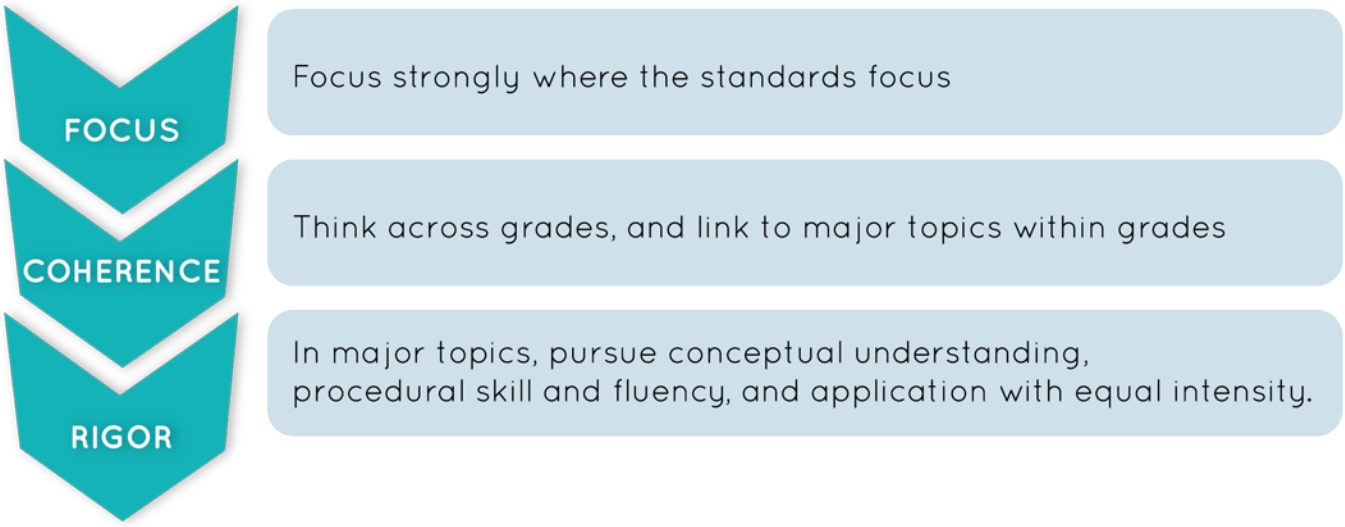
Each set of submitted materials was evaluated for alignment with the standards beginning with a review of the indicators for the non-negotiable criteria. If those criteria were met, a review of the other criteria ensued.

Tier 1 ratings 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.

Click below for complete grade-level reviews:

Grade 9 (Tier 1) Grade 10 (Tier 1) Grade 11 (Tier 1)

Strong mathematics instruction contains the following elements:



Title: **SpringBoard, Algebra 1**

Grade: **9**

Publisher: **The College Board (SpringBoard)**

Copyright: **2014**

Overall Rating: **Tier I, Exemplifies quality**

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

STRONG	WEAK
1. Focus in High School (Non-Negotiable)	
2. Consistent, Coherent Content (Non-Negotiable)	
3. Rigor and Balance (Non-Negotiable)	
4. Focus Coh. via Practice Std (Non-Negotiable)	
5. Alignment Criteria for Stnds. for Math Content	
6. Alignment Criteria for Stnds. for Math Practice	
7. Indicators of Quality	

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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria to move to tier 2.			
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. ☒ Yes ☐ No	**REQUIRED** **1a)** In any single course, students spend at least 50% of their time on **Widely Applicable Prerequisites** for postsecondary education.[3]	**Yes**	Students spend at least 50% of their time on widely applicable prerequisites for postsecondary education. CCSS are noted in the teacher wrap for each lesson and embedded on the side and in the text of the online etext. The standards addressed within each activity are included in the Teacher Wrap and notated throughout the text. A Common Core Correlations document is also provided that shows the alignment of the standards by unit, activity, and lesson.
	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 including[4]: • 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/m^3, 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**	There are problems at a level of sophistication appropriate to high school that apply the skills learned in middle school. For example, students are asked to model and solve quadratics in Unit 5. This is an extension of middle school content where students apply basic functions concepts.
	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]	**N/A**	Not Applicable

[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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
Non-Negotiable 2. CONSISTENT, COHERENT CONTENT Each course's instructional materials are coherent and consistent with the content in the standards.[6] ☒ Yes ☐ 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.	**Yes**	Previous grades review and previous course review are clearly identified as such to the teacher. Within each Unit Overview prerequisite skills are listed and the corresponding embedded review items are labeled by item number. Students work through these problems in a brief Getting Ready assignment. Additional prerequisite materials are provided in the Teacher Resources.
	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.	**Yes**	The materials are designed such that prior knowledge becomes reorganized. Content from middle school is extended and reorganized to accommodate the new knowledge. For example, concepts related to functions are extended in lesson 29 to quadratic functions and their graphs. These items bridge the student's prior knowledge to what will be learned within the unit.
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] ☒ Yes ☐ 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 conceptual discussion questions.	**Yes**	Materials develop conceptual understanding of key mathematical concepts as called for by the standards. The materials develop students' conceptual understanding of key mathematical concepts. High-quality conceptual problems and conceptual discussion questions are amply featured within the lessons. Students are frequently asked to explain, compare, or describe concepts and solutions in their own words. Learning strategies such as Think, Pair, Share and Debriefing are recommended and Discussion Group Tips are included. An example of conceptual understanding can be found in Lesson 19 as students are ask to give the meaning of an exponent. Students are asked to reason that an exponent represents repeated multiplication. Students are asked to explain understanding and reasoning throughout the coursework. Each unit has an overview with essential questions to guide the lesson. Each lesson also has academic vocabulary and math terms to help with conceptual understanding.

[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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	REQUIRED **3b) *Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Progress toward fluency and procedural skill is interwoven with the student's developing conceptual understanding of the skills in question	**Yes**	The materials are designed so that students attain the fluencies and procedural skills required by the standards. An example of this can be found in Unit 2, Lesson 12-1 as students work with slope-intercept form. Students are provided practice in order to build procedural skill and develop proficiency.
	REQUIRED **3c) *Attention to Applications:*** Materials are designed so that teachers and students spend sufficient time working with engaging applications/modeling without losing focus on the Widely Applicable Prerequisites. There are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving. The problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit. Application problems particularly stress applying the Widely Applicable Prerequisites.	**Yes**	Materials are designed so that students spend sufficient time working with applications without losing focus on the widely applicable prerequisites. This includes single- and multi-step contextual problems. For example, most lessons begins with a contextual problem introducing the concepts that will be learned. In Unit 2, Lesson 13-1, students are using graphs to model and compute quadratic regressions using real-world math. This is an application that engages students. Materials attend thoroughly to those places in the content where expectations for multi-step and real world problems are explicit. For example, the unit overviews start with the essential questions which usually relate back to real world applications.
	3d) *Balance:* The three aspects of rigor are not always treated together, and are not always treated separately	**Yes**	The three aspects of rigor are not always treated together, and are not always treated separately
Non-Negotiable 4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS: **Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.[8]** ☒ Yes ☐ No	**REQUIRED** **4a)** Materials address the practice standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.	**Yes**	Materials address the mathematical practice standards in such a way as to enrich the Widely Applicable Prerequisites. Although the practice standards are not addressed in the text by the name (MP.5, etc.) of the practice standard, the practice standards are embedded in the text and described using the language of the practice standard (persevere in problem solving). The practices strengthen the focus of the content. For example, in section 7-1 students are asked to make use of structure by using a graph to determine a function. Within the text, the Mathematical Practices are listed in bold print at the

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
			beginning of corresponding items. At the end of each Activity Practice there are items that focus on at least one of the eight Mathematical Practices. Throughout the coursework, there are things for students to do that have different mathematical practices listed, such as Attend to Precision or Abstract Reasonably.
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. ☒ Yes ☐ No	**REQUIRED** **5a)** Materials base courses on the content specified in the standards (Algebra I, Geometry, and Algebra II).[9]	**Yes**	Materials base courses on the content specified in the standards. CCSS are embedded in the text, teacher wraparound, and in a standards correlation document.
	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]	**Yes**	Multiple standards are addressed in each unit that serve multiple clusters and domains. For Example, Lesson 29-1 includes standards IF.B.4, IF.C.7a, BF.A.1, and BF.A.1a. This is an activity on quadratics but pulls in explicit functions and makes connections that are appropriate for the grade level.
	5c) Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.[10]	**Yes**	Student objectives are listed for each lesson. Lesson objectives are aligned with CCSS. These Learning Targets are visibly shaped by the CCSSM cluster and domain headings. For example, Lesson 29-2 is shaped by F-IF.B.
	5d) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.[10]	**Yes**	Coursework is focused on the standards used to address each lesson. Lessons engage students in understanding material by connecting coherently to pervious material addressed by the standards. Each standards is addressed using the three aspects of rigor: conceptual understanding, procedural fluency, and application.

[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.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
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. ☒ Yes ☐ No	**REQUIRED** **6a)** Careful Attention to Each Practice Standard: Materials attend to the full meaning of each practice standard.[12] Over the course of any given year of instruction, each mathematical practice standard is meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice standard. There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development Alignments to practice standards are accurate.	**Yes**	Materials attend to the full meaning of each practice standard. Mathematical practices are addressed in each lesson in the practice section. The practice standards are also addressed in the teacher wraparound.
	REQUIRED **6b)** Materials Support the Standards' Emphasis on Mathematical Reasoning: 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] Materials explicitly attend to the specialized language of mathematics.[13]	**Yes**	Students are asked to create viable arguments and critique the reasoning of others in numerous lessons throughout the course in the practice portion (e.g. Unit 4, Lesson 19-3, Problem 34).
	6c) Materials explicitly attend to the specialized language of mathematics.[13]	**Yes**	A section entitled "Developing Math Language" is included in each lesson overview in the teacher wraparound. This section details important vocabulary for the lesson and details how the vocabulary could be introduced.
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. [14] ☒ Yes ☐ No	**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.	**Yes**	Although items are not directly referred to as "problems" or "exercises" in the text, the teacher wraparound refers to the practice as problems. The underlying design of the materials note the difference between items used to learn new material and items used to practice material. Each item has a purpose.
	REQUIRED **7b)** Design of assignments is not haphazard: exercises are given in intentional sequences.	**Yes**	Assignments and exercises are provided in a logical sequence.
	REQUIRED **7c)** There is variety in what students produce. For example, students are asked to produce answers and solutions, but also, in	**Yes**	There is a variety in what students produce. For example, Activity 6 practice, students are asked things such as giving a reasonable domain and explain their

[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).
[14] Refer also to pages 16-18 in the High School Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	a grade-appropriate way, arguments and explanations, diagrams, mathematical models, etc.		answer. Students are also asked what the absolute minimum and maximum values are and give what they represent in context of the problem.
	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.	**Yes**	Teacher materials are identified as separate documents in the teacher wraparound and the teacher resources under the home tab of Springboard Online. Learning Strategies are recommended and explained. Teacher to Teacher statements offer guidance for answering students' questions. Universal Access comments point out common mistakes and student thinking. Activity Standards Focus gives a summary of the mathematical concepts that are the focus of the lesson. The Planning the Unit and Unit Overview guides address the mathematics of the unit and the mathematical point of the lessons.
	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.	**Yes**	Support through group collaboration is evident and suggested throughout the coursework. ELL support is included in the Teach Wrap section. An English-Spanish glossary is available. Students can select any term in the text and have it defined. Academic and mathematical vocabulary are defined in the margin and students can have the words pronounced in English or Spanish. The Teach Wrap also includes a Differentiating Instruction section to help teachers meet the need of their students.
	7f) Materials support the uses of technology as called for in the standards.	**Yes**	Materials support the uses of technology as called for in the standards. Students are asked to support answers using various forms of technology as needed. Embedded Technology Tips highlight the usefulness of a graphing calculator. Using the built in tools, students can access a graphing calculator, equation editor, interactive algebra tiles, and more.
	7g) There is variety in the pacing and grain size of content coverage**.**	**Yes**	Content is covered in various lengths. Some standards take days to cover, while some standards may take weeks.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	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.	**Yes**	The lessons are aligned to what the students have learned in prior grade levels and courses, which allows the teacher to present the instruction content where students are able to actively participate in discovery learning. Lessons also provide various strategies to support teacher delivery. Learning strategies are suggested at the top of each lesson. Teachers and students are encouraged to use strategies such as Think, Pair, Share and Group Presentation. Discussion Group Tips are embedded throughout the text.
	7i) Manipulatives are faithful representations of the mathematical objects they represent and are connected to written methods.	**Yes**	The manipulatives suggested in each lesson are relevant to the development of each mathematical object they represent. The manipulatives used are connected to the written methods for each activity. For example, in Unit 2 , Lesson 6-1 students use a model of a roller coster as a graph to represent functions.

FINAL EVALUATION

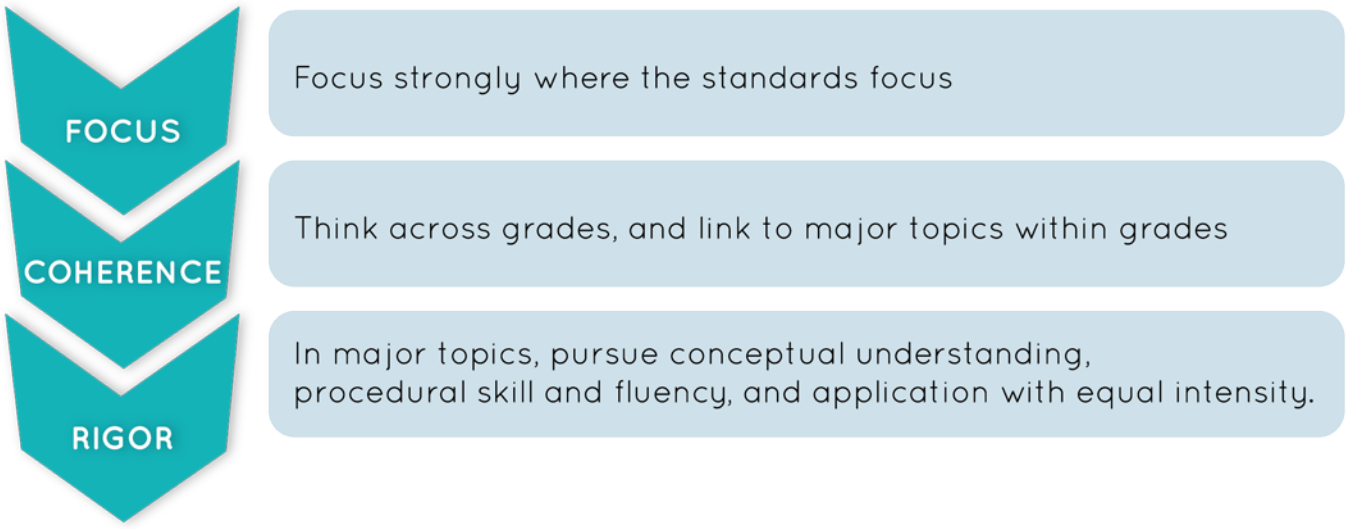
Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 – 7.
Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one "No" in Column 1 for the remaining criteria.
Tier 3 ratings receive a "No" in Column 1 for at least one of the non-negotiable criteria.

Compile the results for Sections I and II to make a final decision for the material under review.

Section	Criteria	Yes/No	Final Justification/Comments
I: Non-Negotiables	1. Focus in High School	**Yes**	Students and teachers spend the majority of their time developing knowledge and skills that are widely applicable as prerequisites for postsecondary education.
	2. Consistent, Coherent Content	**Yes**	Course materials are consistent, coherent, and contain applicable content for the subject matter.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	3. Rigor and Balance	**Yes**	The instructional materials reflect a balance in the standards and help students meet the rigorous expectations of the standards. This is achieved by helping students develop conceptual understanding, procedural skill and fluency, and application.
	4. Focus and Coherence via Practice Standards	**Yes**	The materials promote focus and coherence by connecting practice standards with content that is emphasized in the standards.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**Yes**	Materials address the CCSS listed. Problems and activities connect clusters, domains, and categories when appropriate.
	6. Alignment Criteria for Standards for Mathematical Practice	**Yes**	Mathematical practices are integrated within the coursework and encourage students to create viable arguments and persevere in problem solving.
	7. Indicators of Quality	**Yes**	Materials support student technology use. Standards are taught in various units of time dependent upon standard topic. ELL learners are able to immerse in material by incorporation of student groups. Appropriate manipulatives are utilized when necessary and correspond to content.
FINAL DECISION FOR THIS MATERIAL: **Tier I, Exemplifies quality**			

Strong mathematics instruction contains the following elements:



Title: **SpringBoard, Geometry** Grade: **10**

Publisher: **The College Board (SpringBoard)** Copyright: **2014**

Overall Rating: **Tier I, Exemplifies quality**

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

STRONG	WEAK
1. Focus in High School (Non-Negotiable)	
2. Consistent, Coherent Content (Non-Negotiable)	
3. Rigor and Balance (Non-Negotiable)	
4. Focus Coh. via Practice Std (Non-Negotiable)	
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7. Indicators of Quality	

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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.
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CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria to move to tier 2.			
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.[15, 16] 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. ☒ Yes ☐ No	**REQUIRED** **1a)** In any single course, students spend at least 50% of their time on **Widely Applicable Prerequisites** for postsecondary education.[17]	**Yes**	Students spend at least 50% of their time on widely applicable prerequisites for postsecondary education. CCSS are noted in the teacher wrap for each lesson and embedded on the side and in the text of the online etext. A Common Core Correlations document is also provided that shows the alignment of the standards by unit, activity, and lesson.
	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 including[18]: • 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/m^3, 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**	There are problems at a level of sophistication appropriate to high school that apply the skills learned in middle school. For example, students are asked to use slope to determine if lines are parallel or perpendicular in Lesson 8-1. This is an extension of middle school content where students interpret features of a graph. In another example, in Unit 5, Lesson 32-3, which covers circles and similarity, students are asked to write ratios comparing the area, radius, or circumference of circles. In the same lesson, they are also asked to extend their knowledge of percents to reduce the radius of a circle by 60 percent.
	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.[19]	**Yes**	Student work in Geometry involves applications/modeling as well as geometry applications that use algebra skills. For example, Lesson 35-3 applies concepts of density in modeling situations. Lesson 35-3 approaches density in terms of the applicable modeling standard MG.A.3. Lessons feature geometry application problems that use algebra skills to solve real-world applications. For example, in Unit

[15] Refer also to criterion #1 in the High School Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[16] If materials show time in both block and standard 'days,' choose either but remain consistent.
[17] 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).
[18] Information excerpted from Table 1 on Page 8 of the High School Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[19] 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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
			3, Lesson 18-3 students must solve multi-step equations to find distances for a land plot. Also, in Unit 4 , Lesson 27-2 students must complete the square to find the center and radius of a circle.
Non-Negotiable 2. CONSISTENT, COHERENT CONTENT Each course's instructional materials are coherent and consistent with the content in the standards.[20] ☒ Yes ☐ 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.	**Yes**	Students are given extensive work with course-level problems. The teacher edition indicates in the teacher wrap methods to activate prior knowledge for each lesson. For example, in Lesson 8-1, directions are provided that instruct the teacher to review the slope formula and other methods to determine slope given the situation. Within each Unit Overview prerequisite skills are listed and the corresponding embedded review items are labeled by item number. Students work through these problems in a brief Getting Ready assignment. Additional prerequisite materials are provided in the Teacher Resources.
	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.	**Yes**	The materials are designed such that prior knowledge becomes reorganized. Content from middle school is extended and reorganized to accommodate the new knowledge. For example, although distance is discussed in the 8th grade as an extension of the pythagorean theorem, in geometry the distance formula is derived from the pythagorean theorem using proofs. At the beginning of each unit, all prerequisite skills are listed by standard and practice items are available. These items bridge the student's prior knowledge to what will be learned within the unit. For example, in Unit 6 students spend time reviewing percents, decimals, and fractions in preparation for a unit on probability. Throughout the text there are Connect to Algebra notes that remind students of previously learned Algebra concepts. Another example of this is Activity 32 with circles. It starts with basic area and circumference of circles and moves to area of sectors. Students also have an opportunity to access prior concept knowledge through the teachers resources tab by reviewing the getting ready practice exercises.

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
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.[21] ☒ Yes ☐ 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 conceptual discussion questions.	**Yes**	Materials develop conceptual understanding of key mathematical concepts as called for by the standards. High-quality conceptual problems and conceptual discussion questions are amply featured within the lessons. Students are frequently asked to explain, compare, or describe concepts and solutions in their own words. Learning strategies such as Think, Pair, Share and Debriefing are recommended and Discussion Group Tips are included. One example is Lesson 22-2 where students are developing the trigonometric ratios. Students are using a protractor to measure the angles to understand the trigonometric ratios. In the check your understanding, there are some high-quality conceptual discussion questions to go along with the lesson. Students are also asked to explain understanding and reasoning throughout the coursework. Each unit has an overview with essential questions to guide the lesson. Each lesson also has academic vocabulary and math terms to help with conceptual understanding.
	REQUIRED **3b) *Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Progress toward fluency and procedural skill is interwoven with the student's developing conceptual understanding of the skills in question	**Yes**	The materials are designed so that students attain the fluencies and procedural skills required by the standards. Material in each unit is scaffolded and provides practice problems with additional practice available through the teacher resources tab.
	REQUIRED **3c) *Attention to Applications:*** Materials are designed so that teachers and students spend sufficient time working with engaging applications/modeling without losing focus on the Widely Applicable Prerequisites. There are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for	**Yes**	Materials are designed so that students spend sufficient time working with applications without losing focus on the widely applicable prerequisites. This includes single- and multi-step contextual problems. For example, each lesson begins with a contextual problem introducing the concepts that will be learned. In Unit 3, Lesson 17-1 students are

[21] 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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	practice, and engage students in problem solving. The problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit. Application problems particularly stress applying the Widely Applicable Prerequisites.		learning about dilations, and they are presented with a scenario featuring a graphic artist creating different layouts for a brochure. The unit overviews also start with essential questions which usually relate back to real world applications.
	3d) ***Balance:*** The three aspects of rigor are not always treated together, and are not always treated separately	**Yes**	The three aspects of rigor are not always treated together, and are not always treated separately. Lessons align themselves to the three components of rigor: Conceptual understanding, procedural skills and fluency. This is noted through the examples as well as practice of prerequisite skills and additionally avaliable concept practice.
Non-Negotiable 4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS: **Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.**[22] ☒ Yes ☐ No	**REQUIRED** **4a)** Materials address the practice standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.	**Yes**	Materials address the mathematical practice standards in such a way as to enrich the Widely Applicable Prerequisites. Although the practice standards are not addressed in the text by the name (MP. 5, etc.) of the practice standard, the practice standards are embedded in the text and described using the language of the practice standard (persevere in problem solving). The practices strengthen the focus of the content. For example, Lesson 26-4 says "Make use of structure. Point R lies along the directed line segment from Y(−1, −4) to X(7, 6) and partitions the segment into the ratio 1 to 4. What is the slope of YX, and how does this slope compare to the slope of YR?" In this manner, students are asked to use the structure of the graph to determine the slope for two segments and compare. Within the text, the Mathematical Practices are listed in bold print at the beginning of corresponding items. At the end of each Activity Practice there are items that focus on at least one of the eight Mathematical Practices. On page 314 in activity 22, there is a problem where students will "construct viable arguments" and the problem explicitly states students will be doing this.
SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
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. ☒ Yes ☐ No	**REQUIRED** **5a)** Materials base courses on the content specified in the standards (Algebra I, Geometry, and Algebra II). [23]	**Yes**	Materials base courses on the content specified in the standards. However, Unit 6 is based on probability, which is not included in the PARCC Model Content Framework or LDOE Geometry description
	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. [24, 25]	**Yes**	Multiple standards are addressed in each unit that serves multiple clusters and domains. For example, Lesson 8-2 connects HSG-GPE.B.5 and HSG-MG. A.3.
	5c) Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.[10]	**Yes**	Student objectives are listed for each lesson. Lesson objectives are aligned with CCSS. There is a CCSS tab that can be turned on to make teachers/students aware of the CCSSM cluster and domain headings. For example, Unit 2, Lesson 9-1 is clearly shaped by HSG-CO.
	5d) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.[10]	**Yes**	Coursework is focused on the standards used to address each lesson. Lessons engage students in understanding material by connecting coherently to pervious material addressed by the standards. Each standards is addressed using the three aspects of rigor: conceptual understanding, procedural fluency, and application.
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	**REQUIRED** **6a)** Careful Attention to Each Practice Standard: Materials attend to the full meaning of each practice standard.[26] Over the course of any given year of instruction, each mathematical practice standard is meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice standard. There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development Alignments to practice standards are accurate.	**Yes**	Materials attend to the full meaning of each practice standard. Mathematical practices are addressed in each lesson in the practice section. The practice standards are also addressed in the teacher wraparound.

[23] Refer also to criterion #3 in the HS Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[24] Refer also to criterion #4 in the HS Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[25] Refer to the standards for each course found in the Teacher Support Library.
[26] Refer also to criterion #7 in the HS Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
content/skills to teach which are not included in the standards. ☒ Yes ☐ No	**REQUIRED** **6b)** Materials Support the Standards' Emphasis on Mathematical Reasoning: 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).[27] Materials explicitly attend to the specialized language of mathematics.[13]	**Yes**	Students are asked to create viable arguments and critique the reasoning of others in numerous lessons throughout the course in the practice portion. For example, in Lesson 30-2 students are asked to critique the reasoning of others. Students must read two arguments and determine whose method is correct and provide justification.
	6c) Materials explicitly attend to the specialized language of mathematics.[13]	**Yes**	A section entitled "Developing Math Language" is included in each lesson overview in the teacher wraparound. This section details important vocabulary for the lesson and details how the vocabulary could be introduced.
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.[28] ☒ Yes ☐ No	**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.	**Yes**	Although items are not directly referred to as "problems" or "exercises" in the text, the teacher wraparound refers to the practice as problems. The underlying design of the materials note the difference between items used to learn new material and items used to practice material. Each item has a purpose. Each lesson contains example problems and a Check for Understanding section. Each Activity concludes with a set of practice exercises.
	REQUIRED **7b)** Design of assignments is not haphazard: exercises are given in intentional sequences.	**Yes**	Assignments and exercises are provided in a logical sequence. The exercises are scaffolded in a way that is not haphazard.
	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.	**Yes**	There is a variety in what students produce. For example, in Lesson 8-1 students are expected to complete a chart, draw diagrams, and make conjectures as well as solve typical geometry problems. Unit 4, Lesson 24-1 also asks students to draw and trace geometric figures, define terms, describe relationships, calculate values, and critique the reasoning of others.

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

[28] Refer also to pages 16-18 in the High School Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	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.	**Yes**	Teacher materials are identified as separate documents in the teacher wraparound and teacher resources under the home tab of Springboard Online. The Teacher Wrap guides teachers through each lesson. Learning Strategies are recommended and explained. Teacher to Teacher statements offer guidance for answering students' questions. Universal Access comments point out common mistakes and student thinking. Activity Standards Focus gives a summary of the mathematical concepts that are the focus of the lesson. The Planning the Unit and Unit Overview guides address the mathematics of the unit and the mathematical point of the lessons.
	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.	**Yes**	Support through group collaboration is evident and suggested throughout the coursework. ELL support is included in the Teach Wrap section. An English-Spanish glossary is available. Students can select any term in the text and have it defined. Academic and mathematical vocabulary are defined in the margin and students can have the words pronounced in English or Spanish. The Teach Wrap also includes a Differentiating Instruction section to help teachers meet the need of their students.
	7f) Materials support the uses of technology as called for in the standards.	**Yes**	Materials support the uses of technology as called for in the standards. Teachers are also encouraged throughout various lessons to model geometry concepts using dynamic geometry software to reinforce or develop concepts as determined by the standards. Using the built in tools, students can access a graphing calculator, equation editor, interactive algebra tiles, and more.
	7g) There is variety in the pacing and grain size of content coverage**.**	**Yes**	Content is addressed in various lengths of time. Some standards are addressed for several days while other standards are addressed for weeks.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	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.	**Yes**	The lessons are aligned to what the students have learned in prior grade levels and courses which allows the teacher to present the instructional content in a manner that ensures that students are able to actively participate in discovery learning. Lessons also provide various strategies to support teacher delivery. Learning strategies are suggested at the top of each lesson. Teachers and students are encouraged to use strategies such as Think, Pair, Share and Group Presentation. Discussion Group Tips are embedded throughout the text.
	7i) Manipulatives are faithful representations of the mathematical objects they represent and are connected to written methods.	**Yes**	The manipulatives suggested in each lesson are relevant to the development of each mathematical object they represent. The manipulatives used are connected to the written methods for each activity. The manipulatives used are connected to the written methods for each activity. For example, in Unit 5, Lesson 30-1 students use a rectangle manipulative to show why the area of a parallelogram is the same as the area of a rectangle.

FINAL EVALUATION

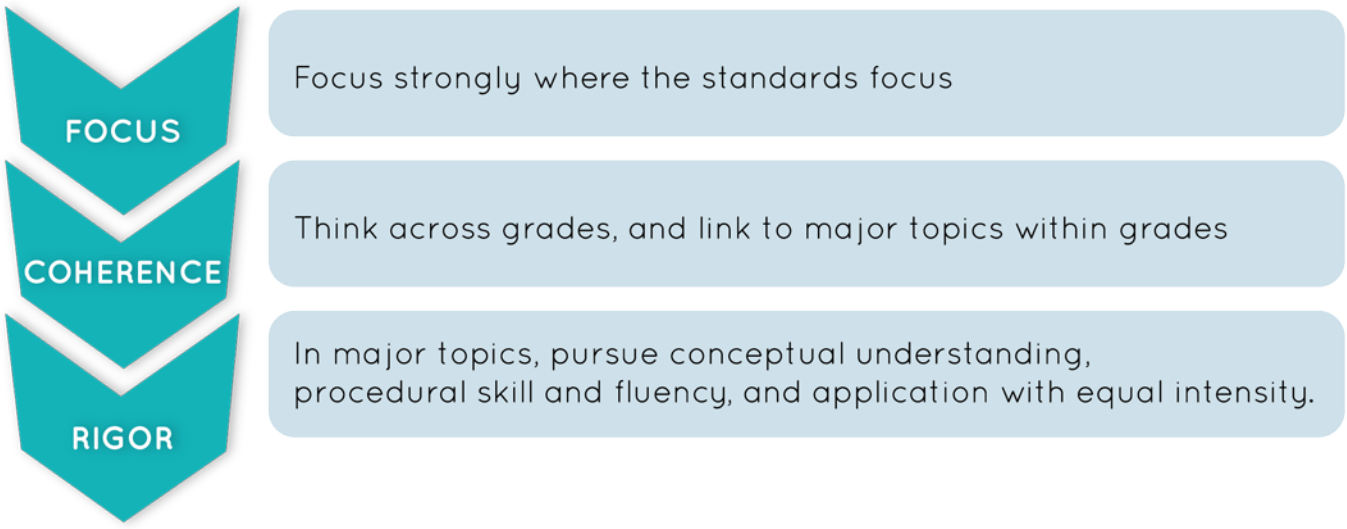
Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 – 7.
Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria (Criteria 1 – 4), but at least one "No" in Column 1 for the remaining criteria.
Tier 3 ratings receive a "No" in Column 1 for at least one of the non-negotiable criteria.

Compile the results for Sections I and II to make a final decision for the material under review.

Section	Criteria	Yes/No	Final Justification/Comments
I: Non-Negotiables	1. Focus in High School	**Yes**	Students and teachers spend the majority of their time developing knowledge and skills that are widely applicable as prerequisites for postsecondary education.
	2. Consistent, Coherent Content	**Yes**	Course materials are consistent, coherent, and contain applicable content for the subject matter.
	3. Rigor and Balance	**Yes**	The instructional materials reflect a balance in the standards and help students meet the rigorous

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
			expectations of the standards. This is achieved by helping students develop conceptual understanding, procedural skill and fluency, and application.
	4. Focus and Coherence via Practice Standards	**Yes**	The materials promote focus and coherence by connecting practice standards with content that is emphasized in the standards.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**Yes**	Materials address the CCSS listed, and the CCSS listed are the content specified for Geometry. Problems and activities connect clusters, domains, and categories when appropriate.
	6. Alignment Criteria for Standards for Mathematical Practice	**Yes**	Mathematical practices are integrated within the coursework and encourage students to create viable arguments and persevere in problem solving.
	7. Indicators of Quality	**Yes**	Materials support student technology use. Standards are taught in various units of time dependent upon standard topic. ELL learners are able to immerse in material by incorporation of student groups. Appropriate manipulatives are utilized when necessary and correspond to content.
FINAL DECISION FOR THIS MATERIAL: **Tier I, Exemplifies quality**			

Strong mathematics instruction contains the following elements:



Title: **SpringBoard, Algebra 2**

Grade: **11**

Publisher: **The College Board (SpringBoard)**

Copyright: **2014**

Overall Rating: **Tier I, Exemplifies quality**

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

STRONG	WEAK
1. Focus in High School (Non-Negotiable)	
2. Consistent, Coherent Content (Non-Negotiable)	
3. Rigor and Balance (Non-Negotiable)	
4. Focus Coh. via Practice Std (Non-Negotiable)	
5. Alignment Criteria for Stnds. for Math Content	
6. Alignment Criteria for Stnds. for Math Practice	
7. Indicators of Quality	

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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria to move to tier 2.			
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.[29, 30] 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. ☒ Yes ☐ No	**REQUIRED** **1a)** In any single course, students spend at least 50% of their time on **Widely Applicable Prerequisites** for postsecondary education.[31]	**Yes**	Students spend at least 50% of their time on widely applicable prerequisites for postsecondary education. CCSS are noted in the teacher wrap for each lesson and embedded on the side and in the text of the online etext. The standards addressed within each activity are included in the Teacher Wrap and notated throughout the text. A Common Core Correlations document is also provided that shows the alignment of the standards by unit, activity, and lesson.
	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 including[32]: • 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/m^3, 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**	There are problems at a level of sophistication appropriate to high school that apply the skills learned in middle school. For example, students are asked to solve equations related to radicals and logarithms in Unit 4. This is an extension of middle school content where students apply basic functions concepts. For example, in Unit 2 Activity 12 Practice, students are asked to examine quadratic functions and interpret coordinates of the vertex. Another example of this is in Lesson 3-1 in Activity 3. The first thing students are asked is to analyze a graph given two functions to begin solving systems in two variables. While this is an Algebra I standard, students move quickly into solving systems of equations in 3 variables in lesson 2. It moves from skills learned in grades 6-8 into content appropriate to Algebra II.
	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.[33]	**N/A**	Not Applicable

[29] Refer also to criterion #1 in the High School Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[30] If materials show time in both block and standard 'days,' choose either but remain consistent.
[31] 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).
[32] Information excerpted from Table 1 on Page 8 of the High School Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[33] 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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
Non-Negotiable 2. CONSISTENT, COHERENT CONTENT Each course's instructional materials are coherent and consistent with the content in the standards.[34] ☒ Yes ☐ 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.	**Yes**	Previous grade reviews and previous course review are clearly identified as such to the teacher. Within each Unit Overview prerequisite skills are listed and the corresponding embedded review items are labeled by item number. For example, the Unit 2 overview directs teachers to review factoring for use with quadratic equations. Students work through these problems in a brief Getting Ready assignment. Additional prerequisite materials are provided in the Teacher Resources.
	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.	**Yes**	The materials are designed such that prior knowledge becomes reorganized. Content from middle school is extended and reorganized to accommodate the new knowledge. For example, concepts related to functions are extended in lesson 18 to polynomial functions and their graphs. These items bridge the student's prior knowledge to what will be learned within the unit. For example, in Unit 3 students spend time reviewing combining like terms, factoring, multiplying polynomials, evaluating functions, x- and y-intercepts, and symmetry in preparation for an indepth study of polynomials. Throughout the text there are Math Tips boxes that remind students of previously learned concepts. Students also have an opportunity to access prior concept knowledge through the teachers resources tab by reviewing the getting ready practice exercises.
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	**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 conceptual discussion questions.	**Yes**	Materials develop conceptual understanding of key mathematical concepts as called for by the standards. The materials develop students' conceptual understanding of key mathematical concepts. High-quality conceptual problems and conceptual discussion questions are amply featured within the lessons. Students are frequently asked to explain, compare, or describe concepts and solutions in their own words.

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
understanding, procedural skill and fluency, and application.[35] ☒ Yes ☐ No			Learning strategies such as Think, Pair, Share and Debriefing are recommended and Discussion Group Tips are included. An example of conceptual understanding can be found in the Unit on Exponential Functions (Activity 21 and lessons 21-1 and 21-2). The lesson starts with having students determine growth and decay factors in order to write exponential equations. Students are able to conceptualize the idea of exponential equations from using the idea of geometric series (recursive) in order to conceptualize exponential growth and decay equations. Students are asked to explain understanding and reasoning throughout the coursework. Each unit has an overview with essential questions to guide the lesson. Each lesson also has academic vocabulary and math terms to help with conceptual understanding
	REQUIRED **3b) *Attention to Procedural Skill and Fluency:*** The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Progress toward fluency and procedural skill is interwoven with the student's developing conceptual understanding of the skills in question	**Yes**	The materials are designed so that students attain the fluencies and procedural skills required by the standards. One example of this is found in solving exponential and logarithmic equations (All of Activity 24). Students need procedural skill practice on solving these type of problems, and the materials provide practice in order for students to become proficient in solving exponential and logarithm problems.
	REQUIRED **3c) *Attention to Applications:*** Materials are designed so that teachers and students spend sufficient time working with engaging applications/modeling without losing focus on the Widely Applicable Prerequisites. There are single- and multi-step contextual problems, including non-routine problems, that develop the mathematics of the course, afford opportunities for practice, and engage students in problem solving. The problems attend thoroughly to those places in the content Standards where expectations for multi-step and real-world problems are explicit. Application problems particularly stress applying the	**Yes**	Materials are designed so that students spend sufficient time working with applications without losing focus on the widely applicable prerequisites. This includes single- and multi-step contextual problems. For example, most lessons begins with a contextual problem introducing the concepts that will be learned. In Unit 6, Lesson 31-1 students are learning about the length of an arc and radian measure,and they are presented with a scenario featuring an architect designing a circular restaurant. Application is also found in lesson 22-1, exponential

[35] 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 (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	Widely Applicable Prerequisites.		data. Students are looking at and analyzing data about the magnitude of earthquakes. This is an application that engages students. Materials attend thoroughly to those places in the content where expectations for multi-step and real world problems are explicit. For example, the unit overviews start with the essential questions which usually relate back to real world applications.
	3d) ***Balance:*** The three aspects of rigor are not always treated together, and are not always treated separately	**Yes**	The three aspects of rigor are not always treated together, and are not always treated separately
Non-Negotiable 4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS: **Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.**[36] ☒ Yes ☐ No	**REQUIRED** **4a)** Materials address the practice standards in such a way as to enrich the Widely Applicable Prerequisites; practices strengthen the focus of the course instead of detracting from it, in both teacher and student materials.	**Yes**	Materials address the mathematical practice standards in such a way as to enrich the Widely Applicable Prerequisites. Although the practice standards are not addressed in the text by the name (MP.5, etc.) of the practice standard, the practice standards are embedded in the text and described using the language of the practice standard (persevere in problem solving). The practices strengthen the focus of the content. For example, in section 26-1 students are asked to make use of structure by using the structure of the square root function to compare to a graph. Within the text, the Mathematical Practices are listed in bold print at the beginning of corresponding items. At the end of each Activity Practice there are items that focus on at least one of the eight Mathematical Practices. Throughout the coursework, there are things for students to do that have different mathematical practices listed, such as Attend to Precision or Abstract Reasonably.
SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY			
Additional Criterion 5. ALIGNMENT CRITERIA FOR STANDARDS FOR	**REQUIRED** **5a)** Materials base courses on the content specified in the standards (Algebra I, Geometry, and Algebra II).[37]	**Yes**	Materials base courses on the content specified in the standards. CCSS are embedded in the text, teacher wraparound, and in a standards correlation document.

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
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. ☒ Yes ☐ No			
	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. [38, 39]	**Yes**	Multiple standards are addressed in each unit that serve multiple clusters and domains. For Example, Unit 5 lesson 25-4 connects HSA-REI.A.2 and HSA-REI.D.11. Another example can be found in Unit 2, Activity 9 which connects standards from HSN-CN, HSA-SSE, HSA-CED, and HSF-IF.
	5c) Materials include learning objectives that are visibly shaped by CCSSM cluster and domain headings.[10]	**Yes**	Student objectives are listed for each lesson. Lesson objectives are aligned with CCSS. These Learning Targets are visibly shaped by the CCSSM cluster and domain headings. For example, Unit 4, Lesson 21-1 is clearly shaped by HSF-IF.B.
	5d) Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.[10]	**Yes**	Coursework is focused on the standards used to address each lesson. Lessons engage students in understanding material by connecting coherently to pervious material addressed by the standards. Each standards is addressed using the three aspects of rigor: conceptual understanding, procedural fluency, and application.
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.	**REQUIRED** **6a)** Careful Attention to Each Practice Standard: Materials attend to the full meaning of each practice standard.[40] Over the course of any given year of instruction, each mathematical practice standard is meaningfully present in the form of assignments, activities, or problems that stimulate students to develop the habits of mind described in the practice standard. There are teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development Alignments to practice standards are accurate.	**Yes**	Materials attend to the full meaning of each practice standard. Mathematical practices are addressed in each lesson in the practice section. The practice standards are also addressed in the teacher wraparound.
	REQUIRED **6b)** Materials Support the Standards' Emphasis on Mathematical	**Yes**	Students are asked to create viable arguments and critique the reasoning of others in numerous lessons

[38] Refer also to criterion #4 in the HS Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).
[39] Refer to the standards for each course found in the Teacher Support Library.
[40] Refer also to criterion #7 in the HS Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
☒ Yes ☐ No	Reasoning: 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).[41] Materials explicitly attend to the specialized language of mathematics.[13]		throughout the course in the practice portion (e.g. Unit 2, Embedded Assessment 1).
	6c) Materials explicitly attend to the specialized language of mathematics.[13]	**Yes**	A section entitled "Developing Math Language" is included in each lesson overview in the teacher wraparound. This section details important vocabulary for the lesson and details how the vocabulary could be introduced.
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.[42] ☒ Yes ☐ No	**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.	**Yes**	Although items are not directly referred to as "problems" or "exercises" in the text, the teacher wraparound refers to the practice as problems. The underlying design of the materials note the difference between items used to learn new material and items used to practice material. Each item has a purpose.
	REQUIRED **7b)** Design of assignments is not haphazard: exercises are given in intentional sequences.	**Yes**	Assignments and exercises are provided in a logical sequence.
	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.	**Yes**	There is a variety in what students produce. For example, in Lesson 14-1, question 3 students are asked to justify by explaining what each part of the equation represents, using precise mathematical language to describe reasoning and conclusions. Unit 4, Activity 21 asks students to complete a table, explain a process, select the best response from a list, graph, explain/justify an answer, and compare functions.
	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	**Yes**	Teacher materials are identified as separate documents in the teacher wraparound and the teacher resources under the home tab of Springboard Online. Learning Strategies are recommended and explained. Teacher to Teacher statements offer guidance for answering students' questions. Universal Access

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

[42] Refer also to pages 16-18 in the High School Publishers' Criteria for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	of students responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.		comments point out common mistakes and student thinking. Activity Standards Focus gives a summary of the mathematical concepts that are the focus of the lesson. The Planning the Unit and Unit Overview guides address the mathematics of the unit and the mathematical point of the lessons.
	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.	**Yes**	Support through group collaboration is evident and suggested throughout the coursework. ELL support is included in the Teach Wrap section. An English-Spanish glossary is available. Students can select any term in the text and have it defined. Academic and mathematical vocabulary are defined in the margin and students can have the words pronounced in English or Spanish. The Teach Wrap also includes a Differentiating Instruction section to help teachers meet the need of their students.
	7f) Materials support the uses of technology as called for in the standards.	**Yes**	Materials support the uses of technology as called for in the standards. Students are asked to support answers using various forms of technology as needed. Embedded Technology Tips highlight the usefulness of a graphing calculator. Using the built in tools, students can access a graphing calculator, equation editor, interactive algebra tiles, and more.
	7g) There is variety in the pacing and grain size of content coverage**.**	**Yes**	Content is addressed in various lengths of time. Some standards are addressed for several days while other standards are addressed for weeks.
	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.	**Yes**	The lessons are aligned to what the students have learned in prior grade levels and courses which allows the teacher to present the instructional content in a manner that ensures that students are able to actively participate in discovery learning. Lessons also provide various strategies to support teacher delivery. Learning strategies are suggested at the top of each lesson. Teachers and students are encouraged to use strategies such as Think, Pair, Share and Group Presentation. Discussion Group Tips are embedded

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
			throughout the text.
	7i) Manipulatives are faithful representations of the mathematical objects they represent and are connected to written methods.	**Yes**	The manipulatives suggested in each lesson are relevant to the development of each mathematical object they represent. The manipulatives used are connected to the written methods for each activity. For example, in Unit4 , Lesson 20-2 students use paper cutting to study geometric series.

FINAL EVALUATION

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.

Compile the results for Sections I and II to make a final decision for the material under review.

Section	Criteria	Yes/No	Final Justification/Comments
I: Non-Negotiables	1. Focus in High School	**Yes**	Students and teachers spend the majority of their time developing knowledge and skills that are widely applicable as prerequisites for postsecondary education.
	2. Consistent, Coherent Content	**Yes**	Course materials are consistent, coherent, and contain applicable content for the subject matter.
	3. Rigor and Balance	**Yes**	The instructional materials reflect a balance in the standards and help students meet the rigorous expectations of the standards. This is achieved by helping students develop conceptual understanding, procedural skill and fluency, and application.
	4. Focus and Coherence via Practice Standards	**Yes**	The materials promote focus and coherence by connecting practice standards with content that is emphasized in the standards.
II: Additional Alignment Criteria and Indicators of Quality	5. Alignment Criteria for Standards for Mathematical Content	**Yes**	Materials address the CCSS listed. Problems and activities connect clusters, domains, and categories when appropriate.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/ COMMENTS WITH EXAMPLES
	6. Alignment Criteria for Standards for Mathematical Practice	**Yes**	Mathematical practices are integrated within the coursework and encourage students to create viable arguments and persevere in problem solving.
	7. Indicators of Quality	**Yes**	Materials support student technology use. Standards are taught in various units of time dependent upon standard topic. ELL learners are able to immerse in material by incorporation of student groups. Appropriate manipulatives are utilized when necessary and correspond to content.
FINAL DECISION FOR THIS MATERIAL: **Tier I, Exemplifies quality**			

Appendix I.

Publisher Response

The publisher had no response.

Appendix II.

Public Comments

There were no public comments submitted.