

Math Textbook Reviews:

Section 1, August 2014

Publisher: College Board

Textbook Title: Springboard Series (Alg. 1,
Geometry, and Algebra 2)
Grade band: High school CCSS

Focus Metrics	
A. In any single course, materials are designed so teachers and students spend at least 50% of their time on the Widely Applicable Prerequisites (see Appendix B).	Yes
B. Topics from future courses are clearly identified as such in the materials and do not detract from focus.	Yes
C. Topics from earlier grades/courses are used to support grade-level work. Content from prior grades/courses is clearly indicated as such.	Yes
Does this textbook meet the requirements for focus?	Yes
Justification/Notes:	

Rigor Metrics	
A. For the widely applicable prerequisites, the three aspects of rigor are given full attention: conceptual understanding, procedural fluency, and application.	Yes
B. High quality problems and questions designed to invite exploration and support conceptual understanding are included for content standards and clusters that explicitly call for it. A variety of conceptual problems enable students to connect mathematical ideas and representations, and transfer understandings to new situations.	Yes
C. Materials support the development of fluency, including opportunities to practice algebraic manipulation and computation, appropriately apply tools, and use technology. Sometimes problems are purely procedural, none are based on non-mathematical tricks or mnemonics.	Yes
D. Students are given opportunity to apply mathematical knowledge and skills for standards that set a clear expectation modeling. A variety of grade-level appropriate problems provide students the opportunity to apply mathematical models in a variety of contextual situations using knowledge and skills articulated in the standards prior to or during the current course.	Yes
Does this textbook meet the requirements for rigor?	Yes
Justification/Notes: A. All three texts have a balanced focus on conceptual understanding, procedural fluency, and application. B. Every lesson in the texts asks guided questions to lead students to understand the math being taught. C. Every Activity has a practice section for procedural fluency. For example, in the Geometry book, lesson 9-3, students practice drawing reflections both on and off the coordinate plane. D. Application is a major focus in each lesson. All lessons have one or more scenarios showing how the	

math being learned is used in a real-world context. One example can be found in the Algebra II text in lesson 31-1. In that lesson, an architect uses trigonometry in designing a circular restaurant on top of a tall building that rotates as people dine.

Were both non-negotiables in Section I met? Yes

Optional Additional Comments from Reviewers: n/a

Math Textbook Reviews: Section 2

Publisher: College Board

Textbook Title: Springboard Series (Alg. 1, Geometry, and Algebra 2)

Grade band: High School CCSS

Alignment Metrics	
A. Materials connect the math practices to the content standards in meaningful and intentional ways, preferentially for Widely Applicable Prerequisites. The development of the practice is well-grounded in content and not in isolation.	2
B. Materials include teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development. Problems and activities present opportunities for students to make use of and exhibit the practices as they work on content.	1
C. Particular attention is given to: MP3 - Construct viable arguments and critique the reasoning of others: Students are encouraged to create and test mathematical arguments, make generalizations and provide justifications, particularly in standards that explicitly call for it, in a manner reasoning appropriate to the grade level.	2
D. Particular attention is given to: MP4 - Model with mathematics: Students should be given opportunities to apply mathematics learned in novel situations, with an appropriate tradeoff between the complexity and novelty of the problem and the newness of the content they are asked to use. Modeling problems should draw heavily from major work of the grade level or securely-held content, integrated across multiple domains/clusters where appropriate. Standards with explicit expectations for modeling are indicated with a star (*).	2

Coherence Metrics	
A. Connections are made within a course between clusters and domains, where these connections are appropriate and natural, as set forth by the Standards.	2
B. For materials in a series, content progressions reflect the progressions as seen in the Standards*, including the development of the practices. These progression connections are clearly indicated in the materials. Any	2

discrepancies in content progressions enhance the required learning in each course and are clearly aimed at helping students meet the Standards as written.	
---	--

Usability Metrics	
A. Materials support teachers In ways such as the following: planning (including ideas for pacing), introducing lessons, assessment types, vocabulary.	1
B. Materials are clear and easy to read for students, teachers, parents. The design and graphics do not distract from the mathematics.	2
C. Materials include supports for all learners, e.g., EL, students who are below grade level, advances students.	0

Sensitivity	
Please use the space below to note any concerns about sensitivity with this material.	There were no concerns about sensitivity.

Other Comments

Alignment Metrics

A. Score 2: The mathematical practices are embedded within the problems and grounded within the standards. Words such as “compare the graphs”, “reason quantitatively”, “attend to precision”, “create”, and “use repeated reasoning” are used throughout the lessons.

B. Score 1: Little attention is given to teacher-directed material explaining the use of the mathematical practice standards. Teachers could use more direction and guidance in incorporating the mathematical practices within the classroom. Another help would be for the teacher resources to include assessing and advancing questions which would guide students in developing the depth of knowledge required for proficiency in mathematics.

C. Score 2: Particular attention is given to MP3: All through the teacher and student texts, students are asked to justify and explain their answers, make generalizations through extending patterns and using compare and contrast. Students are also collaborating with other students through pair share and group discussion.

D. Score 2: Particular attention is given to MP4: Students are given an opportunity to apply mathematics in real-world scenarios throughout the activities and embedded assessments.

Coherence Metrics

A. Score 2: Connections are made within the course between clusters and domains as set forth by the Standards.

B. Score 2: Materials in a series reflect the learning progressions as in the standards as well as the development of the mathematical practices.

Usability Metrics

A. Score 1: Not all materials are available for viewing at this time. The Resources section is incomplete. For example, the message, “more results are coming soon”, is viewed when trying to examine Additional Unit Practice and Quizzes. In Algebra 1, the Unit Practice Exercises are only completed through Lesson 4-2 and there are no Unit Practice Exercises for Geometry and Algebra 2. Some positive aspects found in the Resources section are a section for the teacher on learning strategies, a description of vocabulary development, AP and College readiness, embedded assessments, and pacing guides. Also, within each unit overview, there are essential questions and “Getting Ready” prerequisites.

B. Score 2: Most materials are easy to read and graphics do not distract from the mathematics.

C. Score 0: For students below grade level, there are a few “Getting Ready Practice” sections for Algebra 1, but none for Geometry and Algebra 2. No specific references are present to meet the needs of advanced students. The only resource for ELL seems to be an English-Spanish Glossary.

