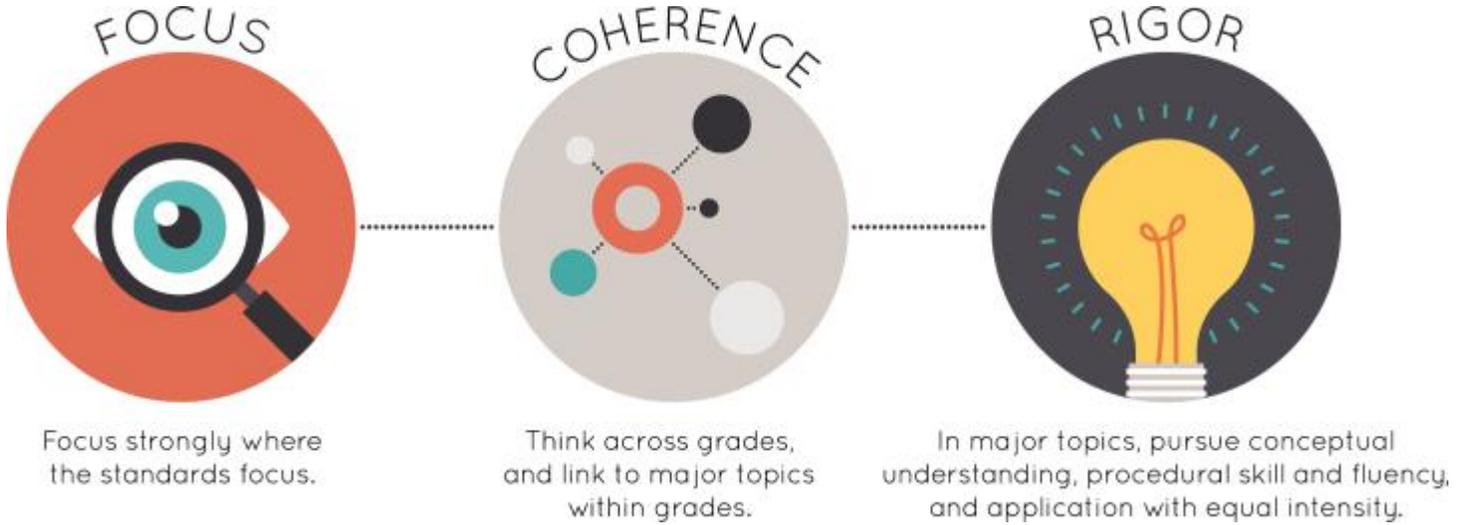




Strong mathematics instruction contains the following elements:



Title: Agile Mind Louisiana Mathematics, Algebra I, Geometry, and Algebra II

Grade/Course: 9-11

Publisher: Agile Mind Educational Holdings, Inc.

Copyright: 2017

Overall Rating: Tier I, Exemplifies quality

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

STRONG	WEAK

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, but at least one “No” for the remaining criteria.

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

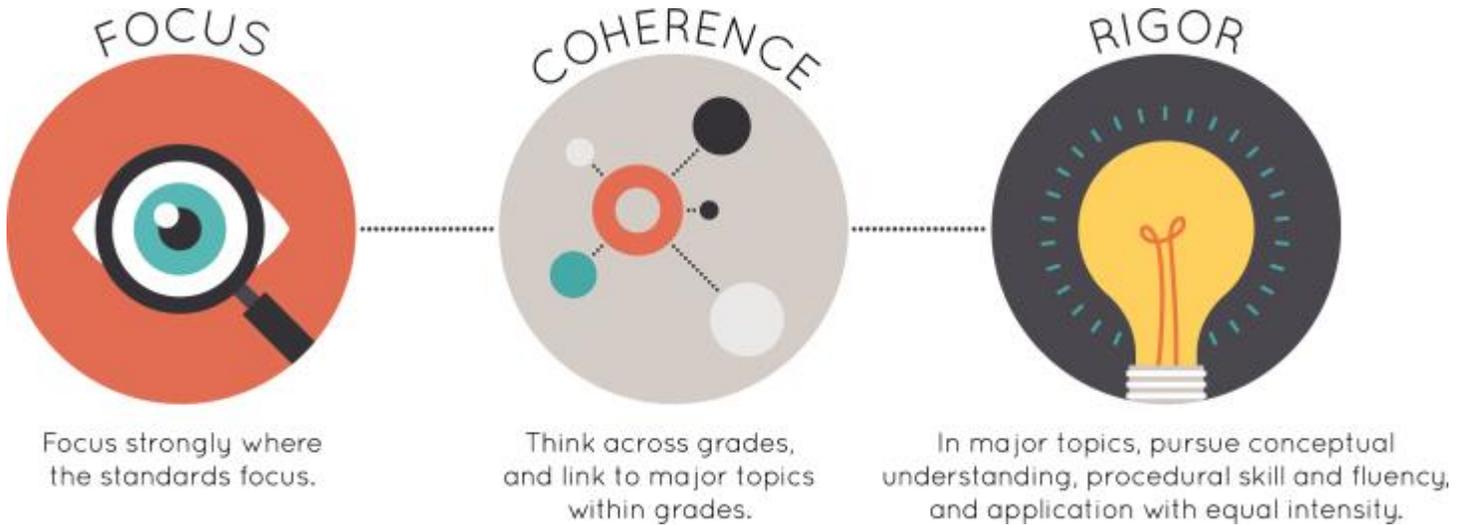
Click below for complete grade-level reviews:

[Grade 9 \(Tier 1\)](#)

[Grade 10 \(Tier 1\)](#)

[Grade 11 \(Tier 1\)](#)

Strong mathematics instruction contains the following elements:



Title: Agile Mind Louisiana Mathematics, Algebra I

Grade/Course: Algebra I

Publisher: Agile Mind Educational Holdings, Inc.

Copyright: 2017

Overall Rating: Tier I, Exemplifies quality

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

STRONG	WEAK
1. Focus on Major Work (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
<b>SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.</b>			
<p><b>Non-Negotiable</b>  <b>1. FOCUS ON MAJOR WORK<sup>1</sup>:</b>  Students and teachers using the materials as designed devote the large majority<sup>2</sup> of time to the major work of the grade/course.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>1a)</b> Materials should devote the large majority of class time to the major work of each grade/course. Each grade/course must meet the criterion; do not average across two or more grades.</p> <p><b>REQUIRED</b>  <b>1b)</b> In any one grade/course, instructional materials should spend minimal time on content outside of the appropriate grade/course. Previous grade/course content should be used only for scaffolding instruction. In assessment materials there are no chapter tests, unit tests, or other such assessment components that make students or teachers responsible for any topics before the grade/course in which they are introduced in the Standards.</p>	<p><b>Yes</b></p> <p><b>Yes</b></p>	<p>According to the documentation provided by the publisher, 87 blocks out of 128 total blocks (68%) address major content, as defined by the LSSM for Algebra I. It is also stated that in Topics 2, 3, 8, 14, 16 and 18, all required blocks address major work of Algebra I.</p> <p>Materials spend minimal time on content outside of the Algebra I curriculum, and, when included, assessment items that are beyond the scope of Algebra I are clearly noted in the Advice for Instruction. On the Topic 19: The Quadratic Formula Automatically Scored portion of the assessment, Questions 2-5 require students to rewrite expressions involving radical expressions. Such a skill is found in the Algebra II curriculum (A2: N-RN.A.2), but it is noted to the teacher to note include these items if they did not teach the corresponding Blocks. In addition, on the Topic 8: Solving Linear Equations and Inequalities Automatically Scored portion of the assessment, Questions 10 - 12 require students to have an understanding of compound inequalities. This is a skill not found in the Algebra I curriculum. Again, this is noted as optional for the teacher and left to his/her choice.</p>
<p><b>Non-Negotiable</b>  <b>2. CONSISTENT, COHERENT CONTENT</b>  Each course’s instructional materials are coherent and consistent with the content in the Standards.</p>	<p><b>REQUIRED</b>  <b>2a)</b> Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.</p>	<p><b>Yes</b></p>	<p>Materials enhance focus and coherence throughout the year by connecting supporting content to major content in meaningful ways. Supporting standard (A1: N-Q.A.1) is connected with major content standard (A1: F-IF.B.05) in Topic 1: Constructing Graphs as students choose an appropriate scale when constructing a graph in order to relate the domain of the graph to the relationship it describes. In Topic 5: Moving Beyond Slope-Intercept, supporting standard (A1: F-IF.C.07a) is connected to major standard (A1: F-IF.B.06) as students are</p>

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

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<p><b>REQUIRED</b>  <b>2b)</b> Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade/course, in cases where these connections are natural and important.</p>	<p><b>Yes</b></p>	<p>required to create graphs to show the x and y-intercepts and determine the rate of change from the graphs. Topic 16: Operations on Polynomials connects supporting standard A1: A.SSE.B.3 to major content standards A1: A.SSE.A.2 and A1: A-APR.A.1 by providing students opportunity to explore and understand that polynomials are closed under mathematical operations (A1: A-APR.A.1), through using the structure of expressions (A1: A-SSE.A.2) to factor quadratic expressions to produce equivalent forms of the given expressions (A1: A.SSE.B.3).</p> <p>Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in the Algebra I curriculum. Topic 3: Functions focuses on providing students instructional opportunities to understand the concept of a function through creating equations in two or more variables to represent relationships between quantities (A1: A-CED.A.2), introduces function notation (A1: A-IF.A.3), and requires students to represent and interpret functional relationships through graphing (A1: A-REI.D.10). Additionally, Topic 10: Systems of Linear Equations and Inequalities emphasizes Algebra domain standards as students must represent constraints (A1: A-CED.A.3) and graph a system of linear inequalities (A1: A-REI.D.12) on the constructed response portion of the assessment. Topic 19: The Quadratic Formula connects rational and irrational numbers (A1: N-RN.B.3) as students will need to simplify radicals when solving quadratic equations using the quadratic formula (A1: A-REI.B.4b).</p>
<p><b>Non-Negotiable</b>  <b>3. RIGOR AND BALANCE:</b>  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,</p>	<p><b>REQUIRED</b>  <b>3a) Attention to Conceptual Understanding:</b> Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards or cluster headings by amply featuring high-quality conceptual problems and discussion questions.</p>	<p><b>Yes</b></p>	<p>Materials enhance development of conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards, as evidenced in Topic 1: Constructing Graphs. The lesson activities provided in the “Advice for Instruction” materials found in Professional Support, facilitate discussion between teacher and students through language strategies that focus on mathematical vocabulary, classroom strategies that focus on delivery of content and</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
procedural skill and fluency, and application.  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			framing questions, and guidance for use of technology in the lesson. Block 4 of Topic 1: Constructing Graphs, aligned to LSSM A1: N-Q.A.2, F-IF.A.1, and F-IF.B.5, provides two constructed response questions allowing students the opportunity to demonstrate conceptual understanding of the use of appropriate quantities for the purpose of descriptive modeling (A1: N-Q.A.2), relating the domain of a quantitative relationship to its graph (A1: F-IF.B.5), and demonstrate understanding of domain as it relates to the range of a function (A1: F-IF.A.1). Question 5 on the automatically scored portion of the assessment in Topic 5: Moving Beyond Slope-Intercept asks students to determine what the slope means in the context of the particular situation (A1: S-ID.C.7). In Topic 10: Systems of Linear Equations and Inequalities, students must choose the two equations that will correctly form the system based on the information provided in Question 1 of the Guided Practice.
	<b>REQUIRED</b> <b>3b) Attention to Procedural Skill and Fluency:</b> The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.	<b>Yes</b>	Materials enhance development of procedural skill and fluency of key mathematical concepts, especially where called for in the LSSM for Algebra I. Topic 8: Solving Linear Equations and Inequalities aligns to Standard A1: A-REI.B.3, with a primary focus on procedural skill and fluency. This instructional unit provides ample opportunity for students to become fluent in solving linear equations and inequalities in one variable (A-REI.B.3) through the student activity sheets provided to supplement each block of instruction, the examples provided during instruction, computer based “Guided Practice” and “More Practice” questions and assessment items, such as, Question 4 of the Automatically Scored items. Additionally, Topic 4: Rate of Change Guided Practice Question 5 requires students to compute, then compare the average rate of change between the same set of data in two different intervals of time (A1: F-IF.B.6).
	<b>REQUIRED</b> <b>3c) Attention to Applications:</b> Materials are designed so	<b>Yes</b>	Materials enhance development of application of key mathematical concepts, especially where called

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	<p>that teachers and students spend sufficient time working with engaging applications, including ample practice with single-step and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade/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.</p>		<p>for in the Louisiana Student Standards for Mathematics. The first Constructed Response question, “Making Stuffed Animals” for Topic 3: Functions requires students to identify the variables in the situation, complete a table in order to create and describe a function rule, and use that function rule to make predictions (A1: F-IF.A.1, A1: F-IF.A.1, A1: F-IF.B.5). In Topic 18: Solving Quadratic Equations, Question 4 in the More Practice section students are asked to determine when a soccer ball will hit the ground given a specific quadratic equation (A1: A-REI.B.4). Instructional lessons in Topic 17: Modeling with Quadratic Functions, build skills necessary to write quadratic functions to describe a relationship between quantities in a real and relevant way (LSSM F.BF.A.1). Students are provided opportunity to solve multi step problems through writing, graphing, identifying key values, and describing quadratic functions that represent real world situations through multiple examples found in the student activity sheets(SAS), specifically SAS 5 aligned to Topic 17.</p>
	<p><b>REQUIRED</b>  <b>3d) Balance:</b> The three aspects of rigor are not always treated together and are not always treated separately.</p>	<p><b>Yes</b></p>	<p>The three aspects of rigor are not always treated together and are not always treated separately within the Agile Minds Algebra I course materials. Questions 1, 2, and 3 Topic 7: Descriptive Statistics indicates a balance of the three aspects of rigor. The problem set is based on the real-world scenario of high-school diploma annual salary compared to a bachelor’s degree annual salary. Question 1 requires students to compute the median and mean of each set of data (procedural skill and fluency). Question 2 asks students to discuss the distribution of the data, while Question 3 to match the data to the proper box plot (conceptual understanding). Major content standards aligned to all components of rigor, such as LSSM A1: A-CED.A.1, are addressed in multiple topics of study. Topic 3: Functions allows students the opportunity to conceptualize visual and descriptive representations of functions to build linear equations. This is further expanded in Topic 8: Solving Linear Equations and Inequalities, Topic 9:</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Absolute Value Functions, Equations, and Inequalities, Topic 13: Exponential Functions and Equations, and Topic 18: Solving Quadratic Equations, where conceptual understanding, procedural skill and fluency, and application are enhanced through creating and solving equations to represent tables, graphs, and real world situations.
<p><b>Non-Negotiable</b>  <b>4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS:</b>  Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>4a)</b> Materials address the practice standards in such a way as to enrich the content standards of the grade/course; practices strengthen the focus on the content standards instead of detracting from them, in both teacher and student materials.</p>	<p><b>Yes</b></p>	<p>The practice standards are addressed in such a way to enrich the content standards of the grade throughout the provided Algebra I course contents. Lesson instruction is enhanced through specified MARS tasks, and students are provided the opportunity to apply the practice standards through multiple lesson components as defined in the Practice Standards connections document found in the Professional Support section of Course Materials. For example, Topic 1: Constructing Graphs students attend to precision (MP.6) in the creation and analysis of graphs. In Topic 2: Multiple Representations in the Real World, students construct viable arguments and critique the reasoning of others (MP.3) in the instructional exploration materials to interpret expressions that represent a quantity in terms of methods and models used to tile a pool (aligned to LSSM A1: A-SSE.A.1).</p>
<b>SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY</b>			
<p><b>Additional Criterion</b>  <b>5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT:</b>  Materials foster focus and coherence by linking topics (across domains and clusters) and across grades/courses by staying consistent with the progressions in the Standards.</p>	<p><b>REQUIRED</b>  <b>5a)</b> Materials provide all students extensive work with course-level problems. Review of material from previous grades and courses is clearly identified as such to the teacher, and teachers and students can see what their specific responsibility is for the current year.</p>	<p><b>Yes</b></p>	<p>Extensive work with course level material is present throughout the curriculum. Each topic includes an Overview, Exploring, Summary, Practice, Assessment, and Activity Sheets to build and reinforce student learning. Pre-requisite material is clearly identified to the teacher through the Advice for Instruction portion of the Professional Support section. Specific responsibilities for teacher and students in regards to the current year expectations are clearly identified.</p>
	<p><b>REQUIRED</b>  <b>5b)</b> Materials relate course-level concepts explicitly to prior knowledge from earlier grades and courses. The materials are designed so that prior knowledge becomes</p>	<p><b>Yes</b></p>	<p>Reorganization of prior knowledge from previous grades is explicitly related to course-level concepts in a manner that extends and accommodates new knowledge throughout the materials. For example, the overview of Topic 3 focuses on the definition of</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	reorganized and extended to accommodate the new knowledge.		a function as illustrated with a vending machine. This concept is found in the 8th grade math curriculum (8.F.A.1). The exploring section extends this knowledge as students begin their studies of function notation (A1: F-IF.A.2). Additionally, teachers are provided concepts from previous grades in the Advice for Instruction portion of the teacher preparatory materials. Topic 4 states that for students to be successful with the material in this topic, they should be able to read and construct graphs, understand domain and range, and be able to understand exponential and quadratic patterns in data.
	<b>5c)</b> Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards.	<b>Yes</b>	Learning objectives align directly to LSSM cluster headings. A full list of these objectives can be found within each topic under the Prepare Instruction section of the Professional Support materials provided for teachers. The third objective for Topic 3 states that “students should be able to recognize that sequences are functions whose domains are subsets of the integers”. This aligns directly to LSSM A1: F-IF.A.3. Additionally, the fifth objective for Topic 3 requires students to “use function notation to represent functions and to determine specific values of either the domain or range”. This aligns to LSSM A1: F-IF.A.2. The third and fourth objectives of Topic 4 state that “students should be able to find rates for data in tables, and find rates from graphs”. This aligns to LSSM A1: F-IF.B.6.
	<b>5d)</b> Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.	<b>Yes</b>	Materials preserve the focus, coherence, and rigor of the LSSM, even when targeting specific objectives. This is evident through the coherence of lesson objectives throughout the Overview, Exploring, Summary, Practice, Assessment, and Activity Sheets provided in each topic.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<p><b>Additional Criterion</b>  <b>6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE:</b>            Aligned materials make meaningful and purposeful connections that enhance the focus and coherence of the Standards rather than detract from the focus and include additional content/skills to teach which are not included in the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>6a)</b> Materials attend to the full meaning of each practice standard. 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. Alignments to practice standards are accurate.</p>	<p><b>Yes</b></p>	<p>Materials attend to the full meaning of each practice standard. On the Practice Standards Connections page in the Professional Support section, some examples of the alignment of each the eight Mathematical Practice Standards are found for each Topic. For the first constructed response question of the Topic 8 assessment, students must sketch a graph on a calculator in order to determine the solution set (MP.4 and MP.5). Questions 1-5 of the guided practice for Topic 10 continuously build on knowledge from the previous question until the solution is discovered (MP.1).</p>
	<p><b>REQUIRED</b>  <b>6b)</b> Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key grade-level mathematics that is detailed in the content standards (cf. MP.3). Materials engage students in problem solving as a form of argument, attending thoroughly to places in the Standards that explicitly set expectations for multi-step problems.</p>	<p><b>Yes</b></p>	<p>Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key grade-level mathematics, especially in the problem-solving of multi-step problems. Topic 2 addresses this in the Exploring “What’s in a Rule?” portion of the lesson materials where students analyze the reasoning and determine if statements are true about creating expressions to represent area of a swimming pool. On the constructed response question for Topic 10, students must solve an initial system of linear inequalities problem, critique the solution set, solve an amended system of linear inequalities problem, and analyze the significance of the changes. In portion e of the constructed response question for Topic 17, students must determine the length that maximizes the area of the dog pen using a mathematical argument.</p>
	<p><b>6c)</b> There are teacher-directed materials that explain the role of the practice standards in the classroom and in students’ mathematical development.</p>	<p><b>Yes</b></p>	<p>The role of the math practice standards is explained in the “Practice Standards Connections” document offered in the teacher materials. Within this guide, the publisher states, “The Standards for Mathematical Practice represent the natural ways in which students come to understand and do mathematics”. This guide also cites that the provided “interactive animations, simulations, extended explorations, and next-generation assessments deepen student understanding of central concepts”. Explicit advice for facilitation of student development related to a specific</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			mathematical practice standard can be found in Topic 8: Solving Linear Equations and Inequalities, where in the teacher materials for Block 3, page 2, it is stated that students should use a graphing utility (MP. 5) to construct a graph and compare the constructions with and without technology.
	<b>6d)</b> Materials explicitly attend to the specialized language of mathematics.	<b>Yes</b>	Materials explicitly attend to the specialized language of mathematics. On the Advice for Instruction Page in the Professional Support Section, there is a Language Support section that provides the teacher with guidance on the keywords as applicable to the mathematics coursework. Such evidence of language support can be found in the preparatory instructional materials of Topic 5. This portion of preparation provides teachers with core and collateral terms from earlier topics, connection of these terms to formalize understanding, and new core and collateral vocabulary within this topic.
<p><b>Additional Criterion</b>  <b>7. INDICATORS OF QUALITY:</b>  Quality materials should exhibit the indicators outlined here in order to give teachers and students the tools they need to meet the expectations of the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>7a)</b> There is variety in what students produce. For example, students are asked to produce answers and solutions, but also, in a grade-appropriate way, arguments and explanations, diagrams, mathematical models, etc.</p>	<b>Yes</b>	There is variety in what students produce. Throughout the materials, there are opportunities for students to solve mathematical problems, critique arguments of others and defend their own reasoning, create models, etc. Topic 2 guides students through the process of creating multiple representations of real world situations. These include explanations of solutions and solution methods, creating concrete models, sketches, numerical and symbolic representations, graphing, and completing tables throughout these Student Activity Sheets provided to supplement instruction. Additionally, Topic 4 addresses this through requiring students to write and explain function rules, create equations of lines, create and graph function rules, as well as, describing and justifying relationships between quantities.
	<p><b>REQUIRED</b>  <b>7b)</b> 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</p>	<b>Yes</b>	There are separate teacher materials that support and reward teacher study. In the Advice for Instruction pages provided for each topic within the Professional Support section, teachers receive guidance on how to prepare for instruction (objectives, an organization of the concepts in the topic, etc.) and how to deliver instruction (opening

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	ways of thinking and anticipating a variety of student responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.		the lesson, framing questions, questions to prompt student thinking throughout each block of information, etc.)
	<b>7c)</b> 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.	<b>Yes</b>	Support for English Language Learners and other special populations is thoughtful and helps those students meet the same standards as all other students. On the Advice for Instruction Page in the Professional Support Section, there is a Language Support section that features Support for ELL/other special populations. Here, teachers receive guidance on how to close the grammatical gaps.
	<b>7d)</b> 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.	<b>Yes</b>	The underlying design of the materials distinguishes between problems and exercises. Each topic provides direct instruction through the Exploring section of the instructional materials, where students are exposed to new material through animations and guided instruction via student activity sheets. Each topic also provides a Practice section, where students apply the knowledge gained to complete given exercises to identify misconceptions and demonstrate mastery of the learning objectives.
	<b>7e)</b> Lessons are appropriately structured and scaffolded to support student mastery.	<b>Yes</b>	Lessons are appropriately structured and scaffolded to support student mastery. Each topic includes an Overview, Exploring, Summary, Practice, Assessment, and Activity Sheets. In the Overview section, previous learning is often reinforced to ensure students have the foundational knowledge that is needed for the upcoming topic. In the Exploring section, there are problems (application at times) that bridge previous knowledge to new information through conceptual and procedural skill building. The Summary section serves as a closing to ensure objective goals were met. The Practice section and Activity Sheets provides students with a plethora of conceptual, procedural, and application problems to master the objective. The Assessment is a summative closure to test student mastery.
	<b>7f)</b> Materials support the uses of technology as called for	<b>Yes</b>	Materials address and support the use of technology

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	in the Standards.		as called for in the Standards. LSSM A1: F-BF.B.3 states the following: “Experiment with cases and illustrate an explanation of the effects on the graph using technology.” The Exploring section of Topic 9 features a slider feature that is similar to the illustration of a graph on a graphing calculator to show the transformation of absolute value functions. Topic 10 aligns to LSSM A1: A-REI.D.11 “Explain why the x-coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$ ; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear”. Teacher materials state that the teacher will need to “guide students through the process of using their graphing calculators to enter each equation, building an appropriate table for each equation, graphing each equation, and using the intersection function to determine the solution to the system” during Block 1 of instruction.

**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.

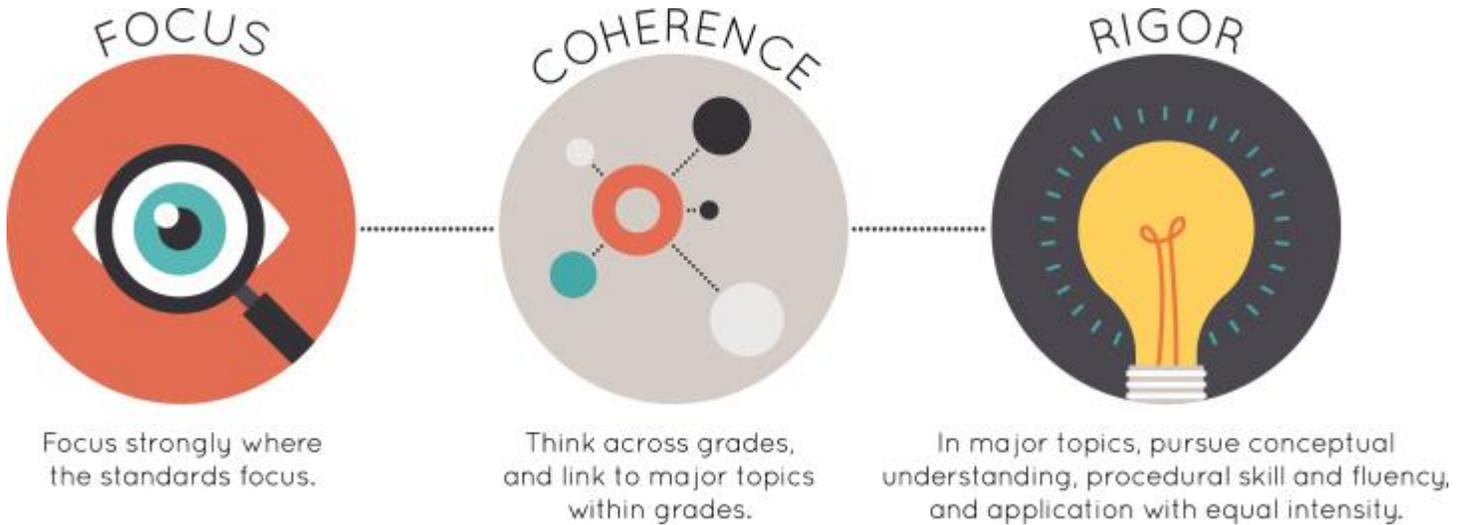
*Tier 3 ratings* receive a “No” in Column 1 for at least one of the non-negotiable criteria.

**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
<b>I: Non-Negotiables</b>	1. Focus on Major Work	<b>Yes</b>	Major content is covered in 68% of the curriculum. Materials spend minimal time on content outside of the curriculum, and, when included, assessment items that are beyond the scope are clearly noted in the Advice for Instruction.
	2. Consistent, Coherent Content	<b>Yes</b>	Focus and coherence are enhanced throughout the curriculum through connections between supporting and major LSSM, as well as, the connection made between different domains and sub-claims.
	3. Rigor and Balance	<b>Yes</b>	The three aspects of rigor are not always treated together or separately within the Algebra I instructional materials provided.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	4. Focus and Coherence via Practice Standards	<b>Yes</b>	Materials use the practice standards to strengthen and enrich the focus of content standards for Algebra I.
<b>II: Additional Alignment Criteria and Indicators of Quality</b>	5. Alignment Criteria for Standards for Mathematical Content	<b>Yes</b>	Materials foster focus and coherence by staying consistent with the progression within the Standards throughout the curriculum.
	6. Alignment Criteria for Standards for Mathematical Practice	<b>Yes</b>	Aligned materials make meaningful and purposeful connections to enhance focus and coherence of the Standards.
	7. Indicators of Quality	<b>Yes</b>	Materials provide teachers and students with the tools necessary to meet the expectations of the LSSM.
FINAL DECISION FOR THIS MATERIAL: <b>Tier I, Exemplifies quality</b>			

Strong mathematics instruction contains the following elements:



Title: Agile Mind Louisiana Mathematics, Geometry

Grade/Course: Geometry

Publisher: Agile Mind Educational Holdings, Inc.

Copyright: 2017

Overall Rating: Tier I, Exemplifies quality

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

STRONG	WEAK
1. Focus on Major Work (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
<b>SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.</b>			
<p><b>Non-Negotiable</b>  <b>1. FOCUS ON MAJOR WORK<sup>3</sup>:</b>  Students and teachers using the materials as designed devote the large majority<sup>4</sup> of time to the major work of the grade/course.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>1a)</b> Materials should devote the large majority of class time to the major work of each grade/course. Each grade/course must meet the criterion; do not average across two or more grades.</p> <p><b>REQUIRED</b>  <b>1b)</b> In any one grade/course, instructional materials should spend minimal time on content outside of the appropriate grade/course. Previous grade/course content should be used only for scaffolding instruction. In assessment materials there are no chapter tests, unit tests, or other such assessment components that make students or teachers responsible for any topics before the grade/course in which they are introduced in the Standards.</p>	<p><b>Yes</b></p> <p><b>Yes</b></p>	<p>As outlined in the Agile Minds Scope and Sequence document aligned to the Louisiana State Standards for Geometry, 101 out of 156 blocks (65%) are devoted to the Major Work of the grade.</p> <p>Materials spend minimal time on content outside of the Geometry curriculum, and, when included, assessment items that are beyond the scope of Geometry are clearly noted in the Advice for Instruction. In the publisher’s scope and sequence regarding Topic 17: Algebraic Representations of Circles, it is stated that “Block 5 is an optional block that can be used as a project or extension activity dealing with Reuleaux triangles.” Assessment materials provided for Topic 27: Revisiting Probability include components that make students responsible for topics outside of the content area but are clearly identified for the teacher as optional. Automatically scored assessment items 8, 9, and 10 require students to calculate combinations and permutations, which is aligned to the optional blocks listed as going beyond the scope of the LSSM for Geometry.</p>
<p><b>Non-Negotiable</b>  <b>2. CONSISTENT, COHERENT CONTENT</b>  Each course’s instructional materials are coherent and consistent with the content in the Standards.</p>	<p><b>REQUIRED</b>  <b>2a)</b> Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.</p>	<p><b>Yes</b></p>	<p>Materials are structured in such a way to enhance focus and coherence throughout the year by connecting supporting content to major content in meaningful ways. Topic 12: Dilations and Similarity addresses supporting, major, and additional LSSM, where students identify transformations that preserve distance (G-CO.A.2), verify properties of dilations and similarity transformations (G-SRT.A.1-3), use theorems about triangles to prove relationships in geometric figures (G.SRT.B.4-5), and prove that given any two circles, there is a dilation</p>

<sup>3</sup> For more on the major work of the grade, see [Focus by Grade Level](#).

<sup>4</sup> The materials should devote at least 65% and up to approximately 85% of class time to the major work of the grade with Grades K–2 nearer the upper end of that range, i.e., 85%.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>REQUIRED</b> <b>2b)</b> Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade/course, in cases where these connections are natural and important.	<b>Yes</b>	mapping one circle onto another (G-C.A.1).  Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in the Geometry curriculum. Topic 6: Lines and Transversals connects major content standards within different domains. The Exploring lessons found in this topic provide direct instruction to “prove and apply theorems about lines and angles” (GM: G-CO.C.9), lessons aligned to using the slope criteria for parallel and perpendicular lines to solve geometric problems (GM: G-GPE.B.5), and summative lessons connecting these concepts to solving design problems in context (GM: G-MG.A.3). Topic 15: Right Triangle and Trig Relationships connects two clusters within the GM: G-SRT domain. In this topic, students must use the similarity criteria for triangles (GM: G-SRT.B.5) as they prove that right triangles share a common trigonometric ratio (GM: G-SRT.C.6).
<b>Non-Negotiable</b> <b>3. RIGOR AND BALANCE:</b> 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.  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>REQUIRED</b> <b>3a) Attention to Conceptual Understanding:</b> Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards or cluster headings by amply featuring high-quality conceptual problems and discussion questions.	<b>Yes</b>	Materials enhance development of conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards. Question 1 of the More Practice section of Topic 2: Rigid Transformations requires students to label four trapezoids as one of the transformations given an original trapezoid (GM: G-CO.A.2). Question 9 of the Guided Practice section of Topic 9: Using Congruent Triangles requires students to connect understanding of criteria for triangle congruence (ASA, SAS, and SSS) to justify a given conjecture (GM: G-CO.B.8). Question 9 on the Automatically Scored portion of the assessment in Topic 18: Chords, Arcs, and Inscribed Angles asks students to determine which mathematical statement is true based off a circle with six chords and a given angle (GM: G-C.A.2).
	<b>REQUIRED</b> <b>3b) Attention to Procedural Skill and Fluency:</b> The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the year	<b>Yes</b>	Materials provide students with problem types that call for procedural skills and fluency as it relates to the specific content standards. Question 8 on the More Practice section, as well as, Questions 1-12 in SAS 3 of Topic 14: Pythagorean Theorem and the Distance Formula requires students to apply the

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.		distance formula to find the length between coordinate points in order to determine the perimeter of the graphed quadrilateral (GM: G-GPE.B.7). Topic 20: Modeling with Area provides ample practice through Questions 9-10 in SAS 2, Questions 5-8 and 15 in SAS 3, and all questions in SAS 4 (GM: GPE.B.7). Question 5 on the automatically scored portion of the assessment in Topic 21: Prisms and Cylinders requires students to calculate the volume of a right cylinder given the height and base radius (GM: G-GMD.A.3)
	<b>REQUIRED</b> <b>3c) Attention to Applications:</b> Materials are designed so that teachers and students spend sufficient time working with engaging applications, including ample practice with single-step and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade/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.	<b>Yes</b>	Materials enhance development of application of key mathematical concepts, especially where called for in the Louisiana Student Standards for Mathematics. Question 6 on the automatically scored portion of the assessment in Topic 6: Lines and Transversals requires students to analyze a periscope in order to determine the relationship between specific angles (GM: G-CO.C.9). Questions 1-10 on the guided practice in Topic 15: Right Triangle and Trig Relationships focuses on using trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems (GM: G-SRT.C.8). Questions 1 and 2 on the constructed response portion of the assessment in Topic 25: Spheres, focus on applying concepts of density based on area and volume in modeling situations (GM: G-MG.A.2). Question 2 on the automatically scored portion of the assessment in Topic 28: Conditional Probability and Independence requires students to determine the specific percentages of “Dream Perspectives of Psychology Students” (GM: S-CP.A.4).
	<b>REQUIRED</b> <b>3d) Balance:</b> The three aspects of rigor are not always treated together and are not always treated separately.	<b>Yes</b>	The three aspects of rigor are not always treated together and are not always treated separately within the Agile Minds Geometry course materials. Questions 1, 2, 3, and 4 on the Guided Practice section of Topic 27: Revisiting Probability indicates a balance of the three aspects of rigor. The problem set is based off of flipping a coin. Question 1 asks students to determine the probability of landing on heads or tails based on the given information (GM:

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			<p>S-CP.A.1). Question 2 requires students to complete a tree diagram based on the probability of flipping heads or tails in two coin flips (GM: S-CP.A.1). Question 3 asks students to compute the probability of flipping heads twice using the intersection of probabilities (GM: S-CP.A.1). Question 4 requires students to compute the probability of flipping coins using the addition rule (GM: S-CP.B.7). Topic 9: Congruent Triangle Postulates addresses conceptual understanding through the interactive lesson in Minimal Conditions section of Exploring (GM: G-SRT.B.5). Conceptual understanding is further developed by introducing the Isosceles Triangle and Hinge Theorem in Topic 10: Using Congruent Triangles, where procedural skill and fluency is developed and enhanced throughout, as evidenced through Question 2 in Guided Practice (GM: G-SRT.B.5). Application through real and relevant scenarios is addressed in Topic 13: Applications of Similarity in Guided Practice, Questions 1-10 (GM: G-SRT.B.5).</p>
<p><b>Non-Negotiable</b>  <b>4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS:</b>  Materials promote focus and coherence by connecting practice standards with content that is emphasized in the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>4a)</b> Materials address the practice standards in such a way as to enrich the content standards of the grade/course; practices strengthen the focus on the content standards instead of detracting from them, in both teacher and student materials.</p>	<p><b>Yes</b></p>	<p>Materials address the Standards for Mathematical Practice in a manner that enriches the content standards for the course. Lesson instruction is enhanced through specified MARS tasks, and students are provided the opportunity to apply the practice standards through multiple lesson components as defined in the Practice Standards connections document found in the Professional Support section of Course Materials. Evidence of this connection can be found in Topic 25: Spheres, where students use geometric modeling (MP4) to estimate the number of hairs on a person’s head. Additionally, the Guided Practice found in Topic 10: Using Congruent Triangles requires students to reason abstractly and quantitatively (MP.2). Topic 19: Lines and Segments on Circles provides a MARS task that focuses on looking for and making use of structure (MP.7).</p>
<p><b>SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY</b></p>			

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<p><b>Additional Criterion</b>  <b>5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT:</b>  Materials foster focus and coherence by linking topics (across domains and clusters) and across grades/courses by staying consistent with the progressions in the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>5a)</b> Materials provide all students extensive work with course-level problems. Review of material from previous grades and courses is clearly identified as such to the teacher, and teachers and students can see what their specific responsibility is for the current year.</p>	<p><b>Yes</b></p>	<p>Extensive work with course level material is present throughout the curriculum. Each topic includes an Overview, Exploring, Summary, Practice, Assessment, and Activity Sheets to build and reinforce student learning. Pre-requisite material is clearly identified to the teacher through the Advice for Instruction portion of the Professional Support section. Specific responsibilities for teacher and students in regards to the current year expectations are clearly identified.</p>
	<p><b>REQUIRED</b>  <b>5b)</b> Materials relate course-level concepts explicitly to prior knowledge from earlier grades and courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.</p>	<p><b>Yes</b></p>	<p>Prior knowledge necessary for success within each topic is addressed in the Advice for Instruction portion of the teacher preparatory materials. Topic 1 states that in order for students to be successful with the material, they should already be able to “be able to measure segments with a ruler and angles with a protractor and have an elementary knowledge of basic geometric objects and terminology, including classifications of triangles by sides and angles, circle, and segment”. This is addressed in the instructional materials via the Language of Geometry found in the Exploring section, where prior knowledge of geometry terminology is extended to “precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, and distance along a line” (GM: G-CO.A.1). Additionally, the Overview of Topic 2 begins with the discussion of the three rigid transformations. This concept is found in the 8th grade math curriculum (8.G.A.2). The Exploring section extends this knowledge as students deduce the relationship between the rigid transformations and perpendicular lines, intersecting lines, and angles (GM: G-CO.A.4).</p>
	<p><b>5c)</b> Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards.</p>	<p><b>Yes</b></p>	<p>Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards. For example, one objective found in Topic 6 is “prove the slope criteria for parallel and perpendicular lines”, which aligns to LSSM GM: G-GPE.B.5, where students are required to “prove the slope criteria for parallel and perpendicular lines and</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			use them to solve geometric problems”. The first objective for Topic 10 states that “students learn to apply the fact that corresponding parts of congruent triangles are congruent.” This aligns with LSSM GM: G-CO.B.7. The first objective for Topic 18 states that students “examine[s] special relationships among chords, arcs, and angles in a circle.” This aligns with LSSM GM:G-C.A.2.
<p><b>Additional Criterion</b>  <b>6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE:</b>          Aligned materials make meaningful and purposeful connections that enhance the focus and coherence of the Standards rather than detract from the focus and include additional content/skills to teach which are not included in the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>5d)</b> Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.</p>	<p><b>Yes</b></p>	<p>Materials preserve the focus, coherence, and rigor of the LSSM, even when targeting specific objectives. This is evident through the coherence of lesson objectives throughout the Overview, Exploring, Summary, Practice, Assessment, and Activity Sheets provided in each topic.</p>
	<p><b>REQUIRED</b>  <b>6a)</b> Materials attend to the full meaning of each practice standard. 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. Alignments to practice standards are accurate.</p> <p><b>REQUIRED</b>  <b>6b)</b> Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key grade-level mathematics that is detailed in the content standards (cf. MP.3). Materials engage students in problem solving as a form of argument, attending thoroughly to places in the Standards that explicitly set expectations for multi-step problems.</p>	<p><b>Yes</b></p>	<p>Materials attend to the full meaning of each practice standard. On the Practice Standards Connections page in the Professional Support section, some examples of the alignment of each the eight Mathematical Practice Standards is found for each topic. In the Exploring section of Topic 4, students must construct a proof based on the reasoning that is already given (MP.3). In Topic 23, students must use a model of a swimming pool to solve mathematical problems (MP.4).</p> <p>Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key grade-level mathematics, especially in the problem-solving of multi-step problems. The “Practice Standards Connections” guide cites these opportunities within Topics 4, 9, 10, 13, 15, 19, and 20. In addition to the cited examples, the 8th question of the Guided Practice section of Topic 6, students must use the information provided to determine the proper order of the next five steps provided. On portion C, the second constructed response question for Topic 24, students must mathematically argue the dimensions of the smallest rectangular box that will hold the given bottle of perfume.</p>
	<p><b>6c)</b> There are teacher-directed materials that explain the role of the practice standards in the classroom and in</p>	<p><b>Yes</b></p>	<p>Teacher-directed materials that explain the role of the practice standards in the classroom and in students’ mathematical development are present.</p>

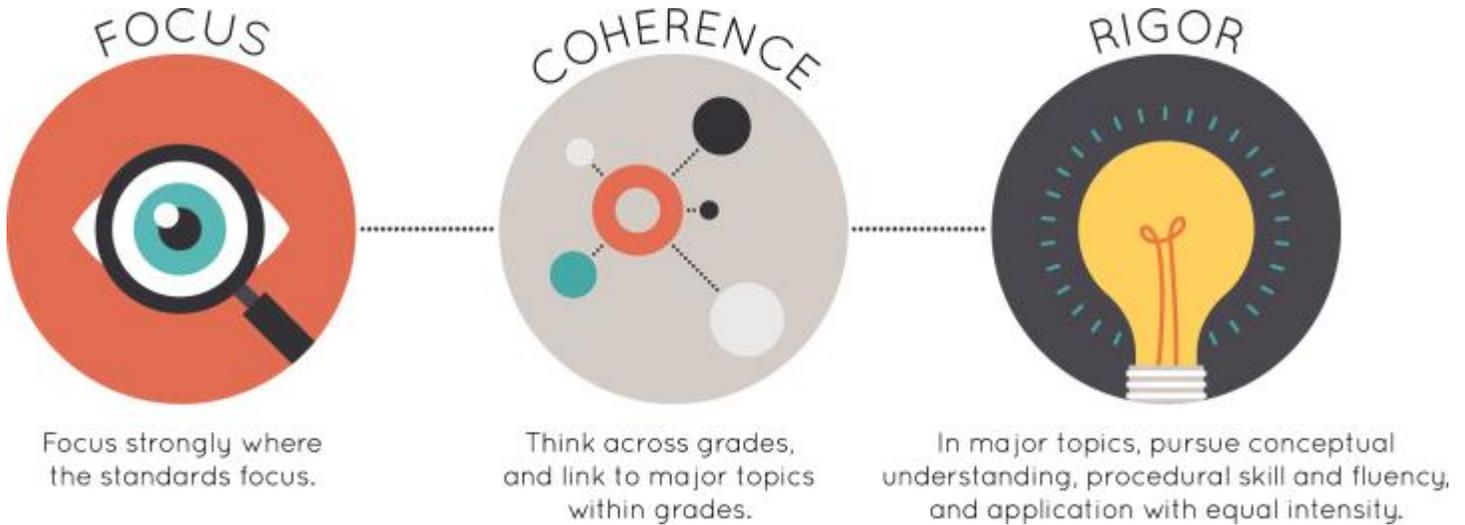
CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	students' mathematical development.		On the Practice Standards Connections page in the Professional Support section, some examples of the alignment of each the eight Mathematical Practice Standards is found for each Topic. This guide also cites that the provided "interactive animations, simulations, extended explorations, and next-generation assessments deepen student understanding of central concepts".
	<b>6d)</b> Materials explicitly attend to the specialized language of mathematics.	<b>Yes</b>	Materials explicitly attend to the specialized language of mathematics. On the Advice for Instruction Page in the Professional Support Section, there is a Language Support section that provides the teacher with guidance on the keywords as applicable to the mathematics coursework.
<p><b>Additional Criterion</b>  <b>7. INDICATORS OF QUALITY:</b>  Quality materials should exhibit the indicators outlined here in order to give teachers and students the tools they need to meet the expectations of the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>7a)</b> There is variety in what students produce. For example, students are asked to produce answers and solutions, but also, in a grade-appropriate way, arguments and explanations, diagrams, mathematical models, etc.</p>	<b>Yes</b>	There is variety in what students produce. Throughout the materials, there are opportunities for students to solve mathematical problems, critique arguments of others and defend their own reasoning, create models, etc. Topic 10 requires students to calculate lengths of missing sides of a triangle, justify and explain solutions, draw geometric figures, and identify congruent triangle postulates in Student Activity Sheet 1. In addition, Topic 22 requires students to sketch 2D nets of 3D figures, graph lines, create visual models, predict outcomes with different criteria, create equations to represent specific parts of 3D figures, and match shaded regions of graphs with their solid description.
	<p><b>REQUIRED</b>  <b>7b)</b> 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 student responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.</p>	<b>Yes</b>	There are separate teacher materials that support and reward teacher study. In the Advice for Instruction pages provided for each topic within the Professional Support section, teachers receive guidance on how to prepare for instruction (objectives, an organization of the concepts in the topic, etc.) and how to deliver instruction (opening the lesson, framing questions, questions to prompt student thinking throughout each block of information, etc.)

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	<p><b>7c)</b> Support for English Language Learners and other special populations is thoughtful and helps those students meet the same standards as all other students. The language in which problems are posed is carefully considered.</p>	<p><b>Yes</b></p>	<p>Support for English Language Learners and other special populations is thoughtful and helps those students meet the same standards as all other students. On the Advice for Instruction Page in the Professional Support Section, there is a Language Support section that features Support for ELL/other special populations. Here, teachers receive guidance on how to close the grammatical gaps.</p>
	<p><b>7d)</b> The underlying design of the materials distinguishes between problems and exercises. In essence the difference is that in solving problems, students learn new mathematics, whereas in working exercises, students apply what they have already learned to build mastery. Each problem or exercise has a purpose.</p>	<p><b>Yes</b></p>	<p>The underlying design of the materials distinguishes between problems and exercises. Each topic provides direct instruction through the Exploring section of the instructional materials, where students are exposed to new material through animations and guided instruction via student activity sheets. Each topic also provides a Practice section, where students apply the knowledge gained to complete given exercises to identify misconceptions and demonstrate mastery of the learning objectives.</p>
	<p><b>7e)</b> Lessons are appropriately structured and scaffolded to support student mastery.</p>	<p><b>Yes</b></p>	<p>Lessons are appropriately structured and scaffolded to support student mastery. Each topic includes an Overview, Exploring, Summary, Practice, Assessment, and Activity Sheets. In the Overview section, previous learning is often reinforced to ensure students have the foundational knowledge that is needed for the upcoming topic. In the Exploring section, there are problems (application at times) that bridge previous knowledge to new information through conceptual and procedural skill building. The Summary section serves as a closing to ensure objective goals were met. The Practice section and Activity Sheets provides students with a plethora of conceptual, procedural, and application problems to master the objective. The Assessment is a summative closure to test student mastery.</p>
	<p><b>7f)</b> Materials support the uses of technology as called for in the Standards.</p>	<p><b>Yes</b></p>	<p>Materials address and support the use of technology as called for in the LSSM. For example, LSSM GM-G-CO.A.5 states the following: “Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software.” In the Exploring section of Topic 3, students use digital</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			drawing tools to create a reflection. The use of technology also aligns to LSSM GM: G-CO.D.12, where students should be able to “make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.)”. Topic 11 addresses this standard, in regards to technology, by providing students the opportunity to utilize an interactive construction tool to draw line segments, arcs, angles, angle bisectors, and radii in Questions 4, 7, and 8 of the Exploring portion of the instructional materials.
<b>FINAL EVALUATION</b> <i>Tier 1 ratings</i> receive a “Yes” in Column 1 for Criteria 1 – 7. <i>Tier 2 ratings</i> 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. <i>Tier 3 ratings</i> receive a “No” in Column 1 for at least one of the non-negotiable criteria.			
<b>Compile the results for Sections I and II to make a final decision for the material under review.</b>			
Section	Criteria	Yes/No	Final Justification/Comments
<b>I: Non-Negotiables</b>	1. Focus on Major Work	<b>Yes</b>	Major content is covered in 65% of the curriculum. Materials spend minimal time on content outside of the curriculum, and, when included, assessment items that are beyond the scope are clearly noted in the Advice for Instruction.
	2. Consistent, Coherent Content	<b>Yes</b>	Focus and coherence are enhanced throughout the curriculum through connections between supporting and major LSSM, as well as, the connection made between different domains and sub-claims.
	3. Rigor and Balance	<b>Yes</b>	The three aspects of rigor are not always treated together or separately within the Geometry instructional materials provided.
	4. Focus and Coherence via Practice Standards	<b>Yes</b>	Materials use the practice standards to strengthen and enrich the focus of content standards for Geometry.
<b>II: Additional Alignment Criteria and Indicators of Quality</b>	5. Alignment Criteria for Standards for Mathematical Content	<b>Yes</b>	Materials foster focus and coherence by staying consistent with the progression within the Standards throughout the curriculum.
	6. Alignment Criteria for Standards for Mathematical Practice	<b>Yes</b>	Aligned materials make meaningful and purposeful connections to enhance focus and coherence of the Standards.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	7. Indicators of Quality	<b>Yes</b>	Materials provide teachers and students with the tools necessary to meet the expectations of the LSSM.
FINAL DECISION FOR THIS MATERIAL: <b><u>Tier I, Exemplifies quality</u></b>			

Strong mathematics instruction contains the following elements:



Title: Agile Mind Louisiana Mathematics, Algebra II

Grade/Course: Algebra II

Publisher: Agile Mind Educational Holdings, Inc.

Copyright: 2017

Overall Rating: Tier I, Exemplifies quality

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

STRONG	WEAK
1. Focus on Major Work (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
<b>SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all of the non-negotiable criteria in order for the review to continue.</b>			
<p><b>Non-Negotiable</b>  <b>1. FOCUS ON MAJOR WORK<sup>5</sup>:</b>            Students and teachers using the materials as designed devote the large majority<sup>6</sup> of time to the major work of the grade/course.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>1a)</b> Materials should devote the large majority of class time to the major work of each grade/course. Each grade/course must meet the criterion; do not average across two or more grades.</p> <p><b>REQUIRED</b>  <b>1b)</b> In any one grade/course, instructional materials should spend minimal time on content outside of the appropriate grade/course. Previous grade/course content should be used only for scaffolding instruction. In assessment materials there are no chapter tests, unit tests, or other such assessment components that make students or teachers responsible for any topics before the grade/course in which they are introduced in the Standards.</p>	<p><b>Yes</b></p> <p><b>Yes</b></p>	<p>As outlined in the Agile Minds Scope and Sequence document aligned to the Louisiana State Standards for Algebra II, 90 out of 133 blocks (67.67%) are devoted to the Major Work of the grade. It is also stated that in “Topics 1, 6, 8, 9, 10, 14, and 20 all required blocks address major work of Algebra II.”</p> <p>Materials spend minimal time on content outside of the Algebra II curriculum, and, when included, assessment items that are beyond the scope of Algebra II are clearly noted in the Advice for Instruction. For example, question 11 on the Topic 3: Understanding Inverse Relations automatically scored portion of the assessment requires students to use the composition of functions to verify that one function is the inverse of the other. This is the additional standard A2: F-BF.B.4b, which should not be tested at this grade level, and as such is clearly noted to the teacher. On the Topic 11: Polynomial Equations automatically scored portion of the assessment, Question 13 requires students to choose all the correct statements regarding the given quadratic equation.</p>
<p><b>Non-Negotiable</b>  <b>2. CONSISTENT, COHERENT CONTENT</b>            Each course’s instructional materials are coherent and consistent with the content in the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>2a)</b> Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year.</p>	<p><b>Yes</b></p>	<p>Materials enhance focus and coherence throughout the year by connecting supporting content to major content in meaningful ways. Supporting standard (A2: F-IF.A.2) is connected with major standard (A2: A-REI.A.2) in Topic 6: Square Roots Functions and Equations as students solve and graph radical equations. In Topic 13: Rational Expressions and Functions, supporting standard (A2: A-APR.D.6) connects to major standard (A2: F-IF.B.4) where students rewrite simple rational expressions in different forms in order to sketch/interpret key features of the graphs that represent the relationship modeled by these expressions. In Topic</p>

<sup>5</sup> For more on the major work of the grade, see [Focus by Grade Level](#).

<sup>6</sup> The materials should devote at least 65% and up to approximately 85% of class time to the major work of the grade with Grades K–2 nearer the upper end of that range, i.e., 85%.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	<p><b>REQUIRED</b>  <b>2b)</b> Materials include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in a grade/course, in cases where these connections are natural and important.</p>	<p><b>Yes</b></p>	<p>17: Using Logarithms to Solve Equations and Inequalities, supporting standard (A2: F-LE.A.4) is connected to major standard (A2: A-REI.D.11) as students evaluate logarithmic graphs on the calculator, including the point of intersection.</p> <p>Agile Minds materials for Algebra II include problems and activities that serve to connect two or more clusters in a domain, or two or more domains in the Algebra II curriculum, in cases where these connections are natural and important. Topic 1: Arithmetic and Geometric Sequences and Series connects clusters within the Algebra II function domain as students are to use a table to construct an arithmetic sequence (A2: F-LE.A.2) and write the sequence recursively and explicitly (A2: F-BF.A.2) in the “Exploring” section “Arithmetic Sequences and Series.” Topic 7: Quadratic and Square Root Inequalities connects clusters within the Algebra domain of Algebra II where students create equations and inequalities to solve problems (A2: A-CED.A.1) and determine solutions of intersecting functions (A2: A-REI.D.11) in Questions 1-10 of the Guided Practice items. Topic 11: Polynomial Equations connects domains in the Algebra II curriculum. Here, students define and perform mathematical operations with complex numbers (A2: N-CN.A.1, A2: N-CN.A.2). Then, students are recognizing that a quadratic equation that does not have an x-intercept (not a real number) has a complex solution (A2: A-REI.B.4b).</p>
<p><b>Non-Negotiable</b>  <b>3. RIGOR AND BALANCE:</b>  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</p>	<p><b>REQUIRED</b>  <b>3a) Attention to Conceptual Understanding:</b> Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards or cluster headings by amply featuring high-quality conceptual problems and discussion questions.</p>	<p><b>Yes</b></p>	<p>Materials enhance development of conceptual understanding of key mathematical concepts, especially where called for explicitly in specific content standards, as evidenced in Topic 5: Laws of Exponents, where Question 8 asks students to determine if the manner in which an expression is evaluated is true or false given a specific value for x (A2: N-RN.A.2). Question 2 on the automatically scored portion on the Topic 10: Analyzing Polynomial Functions assessment requires students to choose a function that could represent the given graph (A2: F-IF.C.7). In addition, part D of the</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
application.  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			Constructed Response portion of the assessment items for Topic 17: Using Logarithms to Solve Equations and Inequalities requires students to analytically determine a solution and explain what the solution represents (A2: A-REI.A.1).
	<b>REQUIRED</b> <b>3b) Attention to Procedural Skill and Fluency:</b> The materials are designed so that students attain the fluencies and procedural skills required by the Standards. Materials give attention throughout the year to individual standards that set an expectation of procedural skill and fluency. In grades K-6, materials provide repeated practice toward attainment of fluency standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.	<b>Yes</b>	Materials enhance development of procedural skill and fluency of key mathematical concepts, especially where called for in the LSSM for Algebra II. The constructed response question on the Topic 2: Absolute Value Equations and Piecewise Functions requires students to graph the two given functions in part a (A2: F-IF.C.7b) in order to determine where the two functions are equal in part b (A2: A-REI.D.11). Topic 5: Laws of Exponents requires students to determine equivalent expressions involving radicals and rational exponents (A2: N-RN.A.2), as evidenced in Questions 1 and 5 of the Guided Practice items. Topic 6: Square Root Functions and Equations addresses procedural skill and fluency through More Practice Questions 12 and 13 where students solve radical equations in one variable (A2: A-REI.A.2). Topic 18: Equations with More than Two Unknowns More Practice Question 7 asks students to use substitution or linear combination to solve the systems of equations (A2: A-REI.C.6).
	<b>REQUIRED</b> <b>3c) Attention to Applications:</b> Materials are designed so that teachers and students spend sufficient time working with engaging applications, including ample practice with single-step and multi-step contextual problems, including non-routine problems, that develop the mathematics of the grade/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.	<b>Yes</b>	Materials enhance development of application of key mathematical concepts, especially where called for in the LSSM for Algebra II. This is evident in Topic 1: Arithmetic and Geometric Sequences and Series in both Constructed Response assessment items where students apply conceptual understanding and procedural skills to write, model, and translate between the two forms to solve real-world problems (A2: F-BF.A.2). The first constructed response question on the Topic 19: Probability Concepts and the Normal Distribution asks students to analyze a situation in which a student claims to have guessed 46 out of 50 multiple choice questions correctly (A2: S-IC.A.1, A2: S-IC.A.2, A2: S-IC.B.6). Question 5 of the Guided Practice in Topic 21: Trigonometric Functions has students use a Ferris

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	<p><b>REQUIRED</b>  <b>3d) Balance:</b> The three aspects of rigor are not always treated together and are not always treated separately.</p>	<p><b>Yes</b></p>	<p>wheel's relationship between the height of the car and the angle of rotation to determine the period and amplitude of the model (A2: F-TF.B.5).</p> <p>The three aspects of rigor are not always treated together and are not always treated separately within the Agile Minds Algebra II course materials. For example, major content standards aligned to all components of rigor, such as LSSM A2: S-IC.B.5, addressed in Topic 20: Design and Data Collection in Statistical Studies, provides opportunity for students to demonstrate conceptual understanding through interpreting and identifying necessary information statements in a given study via Questions 1-10 of Guided Practice. Procedural skill and fluency is addressed through Student Activity Sheet (SAS) 4, where students determine different proportions based on separate trials of an experiment. Constructed Response Questions 1-3 of the assessment items in Topic 20 require students to identify sampling designs, explain features of a real and relevant study that may make generalizations problematic, and design studies relative to the given scenario (application). Questions 5 and 6 of the automatically scored portion of the assessment for Topic 16: Logarithmic Functions indicates a balance of the three aspects of rigor with respect to LSSM A2: A-CED.A.1. The problem set is based on the real-world scenario of the amount of energy that is required to transport a substance from the outside to the inside of the cell. Question 5 requires students to choose a logarithmic equation that is similar to the one given (conceptual understanding). Question 6 asks students to mathematically determine the amount of energy using the given or previously created logarithmic equation (procedural understanding and fluency).</p>
<p><b>Non-Negotiable</b>  <b>4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS:</b>  Materials promote focus and coherence by connecting practice</p>	<p><b>REQUIRED</b>  <b>4a)</b> Materials address the practice standards in such a way as to enrich the content standards of the grade/course; practices strengthen the focus on the content standards instead of detracting from them, in</p>	<p><b>Yes</b></p>	<p>The practice standards are addressed in such a way to enrich the content standards of the grade throughout the provided Algebra II course contents. Lesson instruction is enhanced through specified MARS tasks, and students are provided the opportunity to apply the practice standards through</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<p>standards with content that is emphasized in the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p>both teacher and student materials.</p>		<p>multiple lesson components as defined in the Practice Standards connections document found in the Professional Support section of Course Materials. Topic 1: Arithmetic and Geometric Sequences and Series allows opportunity to look for and make use of structure (MP.7) through multiple visual representations used to identify sequences and form recursive formulas. In part C of the first constructed response question for Topic 20: Design and Data Collection in Statistical Studies, students must use the information given to determine if a random sample was done properly. This emphasizes MP.3: Construct viable arguments and critique the reasoning of others. In the "Regression" lesson for Topic 22: Fitting Functions to Data, students must properly use the appropriate tool, in this case, a calculator, to find the linear regression of a scatterplot (MP.5). Additionally, in Topic 22, students model exponential growth and decay with mathematics (MP.4).</p>
<b>SECTION II: ADDITIONAL ALIGNMENT CRITERIA AND INDICATORS OF QUALITY</b>			
<p><b>Additional Criterion</b>  <b>5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT:</b>  Materials foster focus and coherence by linking topics (across domains and clusters) and across grades/courses by staying consistent with the progressions in the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>5a)</b> Materials provide all students extensive work with course-level problems. Review of material from previous grades and courses is clearly identified as such to the teacher, and teachers and students can see what their specific responsibility is for the current year.</p> <p><b>REQUIRED</b>  <b>5b)</b> Materials relate course-level concepts explicitly to prior knowledge from earlier grades and courses. The materials are designed so that prior knowledge becomes reorganized and extended to accommodate the new knowledge.</p>	<p><b>Yes</b></p> <p><b>Yes</b></p>	<p>Extensive work with course level material is present throughout the curriculum. Each topic includes an Overview, Exploring, Summary, Practice, Assessment, and Activity Sheets to build and reinforce student learning. Pre-requisite material is clearly identified to the teacher through the Advice for Instruction portion of the Professional Support section. Specific responsibilities for teacher and students in regards to the current year expectations are clearly identified.</p> <p>Throughout the materials, the reorganization of prior knowledge from previous grades is explicitly related to course-level concepts in a manner that extends and accommodates new knowledge. Prior knowledge necessary for success within each topic is addressed in the Advice for Instruction portion of the teacher preparatory materials, as well as, the overview found in student materials. For example, the overview of Topic 1 focuses on the relationship between arithmetic sequences with linear functions and the relationship between geometric sequences</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			and exponential sequences. This concept is found in the Algebra I curriculum (A1: F-IF.A.3). The exploring section extends this knowledge as students model real-world situations recursively and explicitly (A2: F-BF.A.2). Prerequisite skills necessary for success in Topic 4 include understanding the general shape of the graph of a quadratic function and reflections, vertical stretches and shrinks, and vertical shifts of quadratic functions. These skills are addressed in the Algebra I curriculum (A1: F-IF.C.7a). Topic 4 connects and extends this knowledge by addressing graphs of parent functions in the overview, followed by student exploration of transformations of parent functions in the Transformations to Fit Data portion of the Exploring section (A2: F-BF.B.3).
	<b>5c)</b> Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards.	<b>Yes</b>	Materials include learning objectives that are visibly shaped by LSSM cluster headings and/or standards. The objectives for Topic 10 are as follows: “Students learn how polynomials model some behaviors with varying rates of change, and they deepen their understanding of how the degree of the polynomial relates to the number of real zeros and the number of local extreme values of the polynomial function. They also explore end behavior of polynomial functions.” These concepts are aligned with LSSM A2: A-APR.B.3, A2: F-IF.B.4, A2: F-IF.B.6, and F-IF.C.7c. Topic 14 states that by the end of the topic, students will be able to “write rational equations to model problem situations, solve rational equations using graphs, tables, and analytic strategies, and identify extraneous solutions”. These concepts align directly to LSSM A2: A-REI.A.2.
	<b>5d)</b> Materials preserve the focus, coherence, and rigor of the Standards even when targeting specific objectives.	<b>Yes</b>	Materials preserve the focus, coherence, and rigor of the LSSM, even when targeting specific objectives. This is evident through the coherence of lesson objectives throughout the Overview, Exploring, Summary, Practice, Assessment, and Activity Sheets provided in each topic.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<p><b>Additional Criterion</b>  <b>6. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL PRACTICE:</b>            Aligned materials make meaningful and purposeful connections that enhance the focus and coherence of the Standards rather than detract from the focus and include additional content/skills to teach which are not included in the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>6a)</b> Materials attend to the full meaning of each practice standard. 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. Alignments to practice standards are accurate.</p>	<p><b>Yes</b></p>	<p>There is a meaningful presence and assignments, activities, and problems attend to the full meaning of the Practice Standards throughout the materials. On the Practice Standards Connections page in the Professional Support section, some examples of the alignment of each the eight Mathematical Practice Standards is found for each Topic. The Guided Practice section of Topic 13 requires students to continuously build on knowledge from the previous question until the final result is produced (MP.1). The constructed response question for Topic 14 requires students to attend to precision as they must sketch a graph, write an equation, determine the solution, and interpret the meaning of solutions (MP.6).</p>
	<p><b>REQUIRED</b>  <b>6b)</b> Materials provide sufficient opportunities for students to construct viable arguments and critique the arguments of others concerning key grade-level mathematics that is detailed in the content standards (cf. MP.3). Materials engage students in problem solving as a form of argument, attending thoroughly to places in the Standards that explicitly set expectations for multi-step problems.</p>	<p><b>Yes</b></p>	<p>Students are presented with sufficient opportunity to construct viable arguments and critique the reasoning of others throughout the curriculum. The “Practice Standards Connections” guide cites these opportunities within Topics 6, 7, 16, and 20. In addition to these cited connections, many others exist in the instructional materials. In portion e of the constructed response question for Topic 18, students must determine the largest wingspan of an aircraft to fly through the arch using a mathematical argument. On portion d the first constructed response question for Topic 19, students must mathematically argue whether the randomly guessing test items would yield the provided results.</p>
	<p><b>6c)</b> There are teacher-directed materials that explain the role of the practice standards in the classroom and in students’ mathematical development.</p>	<p><b>Yes</b></p>	<p>Teacher-directed materials that explain the role of the practice standards in the classroom and in students’ mathematical development are present. On the Practice Standards Connections page in the Professional Support section, some examples of the alignment of each the eight Mathematical Practice Standards is found for each Topic. This guide also cites that the provided “interactive animations, simulations, extended explorations, and next-generation assessments deepen student understanding of central concepts”.</p>
	<p><b>6d)</b> Materials explicitly attend to the specialized language of mathematics.</p>	<p><b>Yes</b></p>	<p>Materials explicitly attend to the specialized language of mathematics. On the Advice for</p>

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Instruction Page in the Professional Support Section, there is a Language Support section that provides the teacher with guidance on the keywords as applicable to the mathematics coursework.
<p><b>Additional Criterion</b>  <b>7. INDICATORS OF QUALITY:</b>  Quality materials should exhibit the indicators outlined here in order to give teachers and students the tools they need to meet the expectations of the Standards.</p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>REQUIRED</b>  <b>7a)</b> There is variety in what students produce. For example, students are asked to produce answers and solutions, but also, in a grade-appropriate way, arguments and explanations, diagrams, mathematical models, etc.</p>	Yes	There is variety in what students produce. Throughout the materials, there are opportunities for students to solve mathematical problems, critique arguments of others and defend their own reasoning, create models, etc. In Student Activity Sheet 5 of Topic 12, students are asked to sketch graphs of function, identify key features of graphs, use calculators to complete tables, describe the meaning of calculated values, explain answers, connect methods of computation, describe in words and represent domain and range in specified notations, and write functions.
	<p><b>REQUIRED</b>  <b>7b)</b> 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 student responses, guidance on lesson flow, guidance on questions that prompt students thinking, and discussion of desired mathematical behaviors being elicited among students.</p>	Yes	There are separate teacher materials that support and reward teacher study. In the Advice for Instruction pages provided for each topic within the Professional Support section, teachers receive guidance on how to prepare for instruction (objectives, an organization of the concepts in the topic, etc.) and how to deliver instruction (opening the lesson, framing questions, questions to prompt student thinking throughout each block of information, etc.)
	<p><b>7c)</b> Support for English Language Learners and other special populations is thoughtful and helps those students meet the same standards as all other students. The language in which problems are posed is carefully considered.</p>	Yes	Support for English Language Learners and other special populations is thoughtful and helps those students meet the same standards as all other students. On the Advice for Instruction Page in the Professional Support Section, there is a Language Support section that features Support for ELL/other special populations. Here, teachers receive guidance on how to close the grammatical gaps.
	<p><b>7d)</b> 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,</p>	Yes	The underlying design of the materials distinguishes between problems and exercises. Each topic provides direct instruction through the Exploring section of the instructional materials, where students are exposed to new material through

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	students apply what they have already learned to build mastery. Each problem or exercise has a purpose.		animations and guided instruction via student activity sheets. Each topic also provides a Practice section, where students apply the knowledge gained to complete given exercises to identify misconceptions and demonstrate mastery of the learning objectives.
	<b>7e)</b> Lessons are appropriately structured and scaffolded to support student mastery.	<b>Yes</b>	Lessons are appropriately structured and scaffolded to support student mastery. Each topic includes an Overview, Exploring, Summary, Practice, Assessment, and Activity Sheets. In the Overview section, previous learning is often reinforced to ensure students have the foundational knowledge that is needed for the upcoming topic. In the Exploring section, there are problems (application at times) that bridge previous knowledge to new information through conceptual and procedural skill building. The Summary section serves as a closing to ensure objective goals were met. The Practice section and Activity Sheets provides students with a plethora of conceptual, procedural, and application problems to master the objective. The Assessment is a summative closure to test student mastery.
	<b>7f)</b> Materials support the uses of technology as called for in the Standards.	<b>Yes</b>	Materials address and support the use of technology as called for in the LSSM. For example, LSSM A2: F-BF.B.3 states the following: “Experiment with cases and illustrate an explanation of the effects on the graph using technology.” The Exploring section of Topic 15 features a slider feature that is similar to the illustration of a graph on a graphing calculator to show the transformation of exponential functions. Additionally, LSSM A2: F-LE.A.4 states that students should be able to evaluate logarithms using technology. Topic 17 addresses this through the Exploring section of instructional materials. The first example/animation provided states the following: “With linear equations, you may often be able to fill in the table with quick mental computations. With exponential or logarithmic equations, that might work for the first row or two, but eventually you will want to use a scientific or graphing calculator or computer software”. The materials then develop the concept through the use of graphing calculator

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			capabilities.
<b>FINAL EVALUATION</b>			
<i>Tier 1 ratings</i> receive a “Yes” in Column 1 for Criteria 1 – 7.			
<i>Tier 2 ratings</i> 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.			
<i>Tier 3 ratings</i> receive a “No” in Column 1 for at least one of the non-negotiable criteria.			
<b>Compile the results for Sections I and II to make a final decision for the material under review.</b>			
Section	Criteria	Yes/No	Final Justification/Comments
<b>I: Non-Negotiables</b>	1. Focus on Major Work	<b>Yes</b>	Major content is covered in 67.67% of the curriculum. Materials spend minimal time on content outside of the curriculum, and, when included, assessment items that are beyond the scope are clearly noted in the Advice for Instruction.
	2. Consistent, Coherent Content	<b>Yes</b>	Focus and coherence are enhanced throughout the curriculum through connections between supporting and major LSSM, as well as, the connection made between different domains and sub-claims
	3. Rigor and Balance	<b>Yes</b>	The three aspects of rigor are not always treated together or separately within the Algebra II instructional materials provided.
	4. Focus and Coherence via Practice Standards	<b>Yes</b>	Materials use the practice standards to strengthen and enrich the focus of content standards for Algebra II.
<b>II: Additional Alignment Criteria and Indicators of Quality</b>	5. Alignment Criteria for Standards for Mathematical Content	<b>Yes</b>	Materials foster focus and coherence by staying consistent with the progression within the Standards throughout the curriculum.
	6. Alignment Criteria for Standards for Mathematical Practice	<b>Yes</b>	Aligned materials make meaningful and purposeful connections to enhance focus and coherence of the Standards.
	7. Indicators of Quality	<b>Yes</b>	Materials provide teachers and students with the tools necessary to meet the expectations of the LSSM.
FINAL DECISION FOR THIS MATERIAL: <b><u>Tier I, Exemplifies quality</u></b>			

Appendix I.

Publisher Response

The publisher had no response.

Appendix II.

Public Comments

There were no public comments submitted.