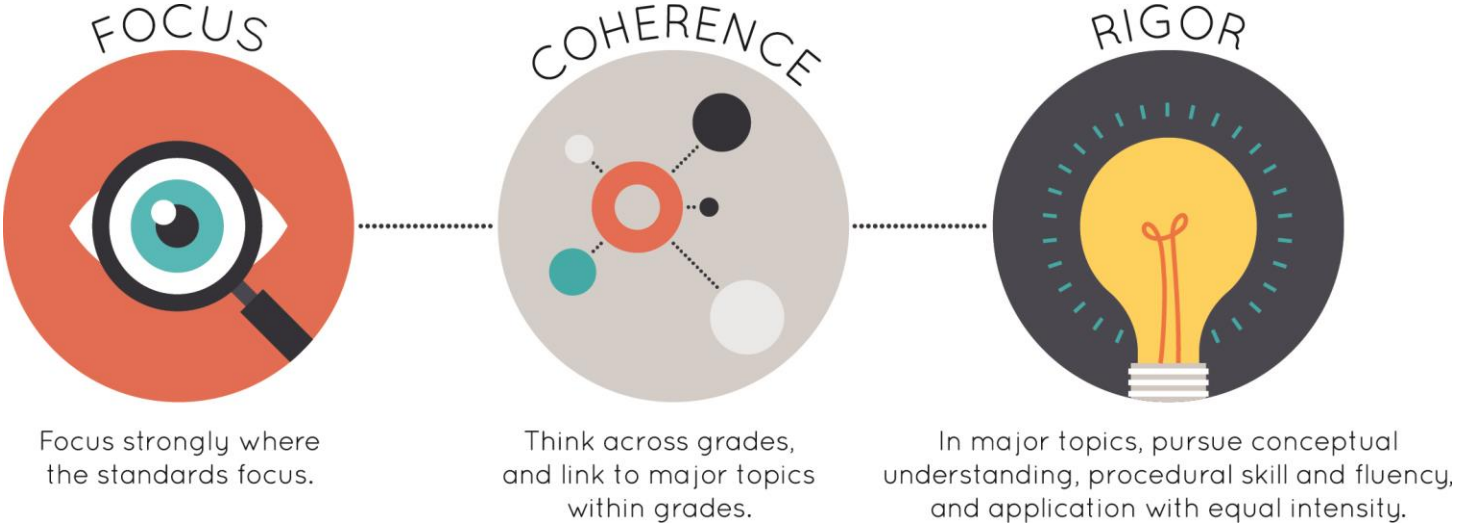
DEPARTMENT of EDUCATION
Louisiana Believes

Instructional Materials Evaluation Tool for Alignment in Mathematics Grades K – 12 (IMET)

FULL CURRICULUM
Instructional Materials

Qualified for Abbreviated Review[1]

Strong mathematics instruction contains the following elements:



Title: **Reveal Math**

Grade/Course: **Algebra I and Geometry**

Publisher: **McGraw Hill LLC**

Copyright: **2020**

Overall Rating: **Tier 1, Exemplifies quality**

Tier 1, Tier 2, Tier 3 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 and Coherence via Practice Standards (Non-negotiable)	
5. Alignment Criteria for Standards for Mathematical Content	
6. Alignment Criteria for Standards for Mathematical Practice	
7. Indicators of Quality	

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

Tier 1 ratings receive a "Yes" in Column 1 for Criteria 1 – 7.
Tier 2 ratings receive a "Yes" in Column 1 for all non-negotiable criteria, 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:

Algebra I (Tier 1) Geometry (Tier 1)

[1] Abbreviated Reviews are conducted in K-12 ELA and K-12 Math for submissions that **Meet Expectations** for Gateways 1 and Gateway 2 through EdReports. Reviewers considered these reports as they reviewed materials for alignment to Louisiana state standards and quality Non-negotiable indicators. See the full EdReports review at https://www.edreports.org/reports/overview/reveal-math-traditional-2020.

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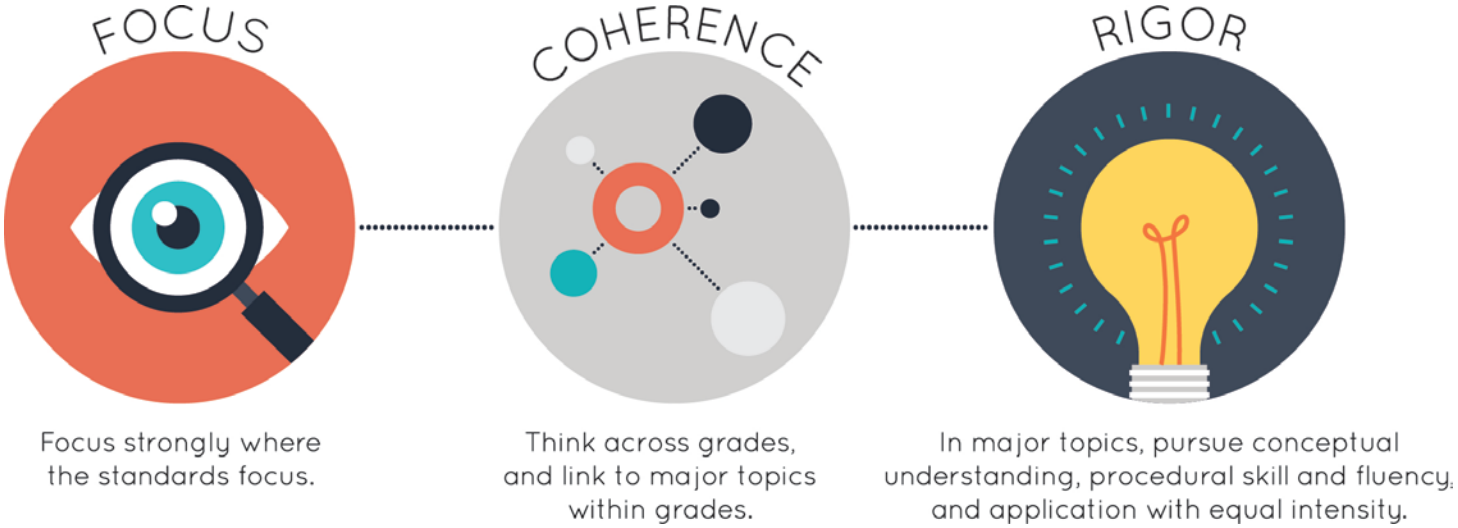

Title: **Reveal Math**

Grade/Course: **Algebra I**

Publisher: **McGraw Hill LLC**

Copyright: **2020**

Overall Rating: **Tier 1, Exemplifies quality**

Tier 1, Tier 2, Tier 3 Elements of this review:

STRONG	WEAK
1. Focus on Major Work (Non-negotiable)	
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To evaluate instructional materials for alignment with the standards and determine tiered rating, begin with **Section I: Non-negotiable Criteria**.

- Review the **required**[2] Indicators of Superior Quality for each **Non-negotiable** criterion.
- If there is a "Yes" for all **required** Indicators of Superior Quality, materials receive a "Yes" for that **Non-negotiable** Criterion.
- If there is a "No" for any of the **required** Indicators of Superior Quality, materials receive a "No" for that **Non-negotiable** Criterion.
- Materials must meet **Non-negotiable** Criterion 1 and 2 for the review to continue to **Non-negotiable** Criteria 3 and 4. Materials must meet all of the **Non-negotiable** Criteria 1-4 in order for the review to continue to Section II.
- If materials receive a "No" for any **Non-negotiable** Criterion, a rating of Tier 3 is assigned, and the review does not continue.

If all Non-negotiable Criteria are met, then continue to **Section II: Additional Criteria of Superior Quality.**

- Review the **required** Indicators of Superior Quality for each criterion.
- If there is a "Yes" for all **required** Indicators of Superior Quality, then the materials receive a "Yes" for the additional criteria.
- If there is a "No" for any **required** Indicator of Superior Quality, then the materials receive a "No" for the additional criteria.

Tier 1 ratings receive a "Yes" for all Non-negotiable Criteria and a "Yes" for each of the Additional Criteria of Superior Quality.
Tier 2 ratings receive a "Yes" for all Non-negotiable Criteria, but at least one "No" for the Additional Criteria of Superior Quality.
Tier 3 ratings receive a "No" for at least one of the Non-negotiable Criteria.

[2] **Required Indicators of Superior Quality** are labeled "**Required**" and shaded yellow. Remaining indicators that are shaded white are included to provide additional information to aid in material selection and do not affect tiered rating.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
Section I: Non-negotiable Criteria of Superior Quality: Materials must meet Non-negotiable Criteria 1 and 2 for the review to continue to Non-negotiable Criteria 3 and 4. Materials must meet all of the Non-negotiable Criteria 1-4 in order for the review to continue to Section II.			
Non-negotiable **1. FOCUS ON MAJOR WORK[3]:** Students and teachers using the materials as designed devote the large majority[4] of time to the major work of the grade/course. ☒ Yes ☐ No	**Required** **1a)** Materials devote the **majority** of class time to the major work of each grade/course.	**Yes**	Materials devote a large majority of time to the major work of the course. Of the 73 course-level lessons, including the Expand Lessons, 82% are spent on major work of the grade. Specifically, 41% of the lessons are spent on major standards, 31% of the lessons are spent on a combination of major standards and supporting/additional standards, and 18% of the lessons are spent on supporting or additional standards. While the materials include a total of 83 lessons, ten of the lessons are marked as optional on the Reveal Algebra 1 Pacing Guidance for Louisiana Educators document.
	Required **1b)** Instructional materials, including assessments, spend minimal time on content outside of the appropriate grade/course **during core math instruction**. Content beyond grade/course-level should be clearly labeled as optional.	**Yes**	Materials spend minimal time on content outside of the appropriate course during core math instruction. In assessment materials, assessment components do not make students/teachers responsible for any topics before the course in which they are introduced. Lessons and module assessment items (including Module Tests and Performance Tasks) that address content outside of Algebra I are labeled as optional on the Reveal Algebra I Pacing Guidance for Louisiana Educators document. For example, in Module 8,

[3] For more on the major work of the grade, see Focus by Grade Level.
[4] 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
			Lesson 4, students simplify radical expressions (LSSM A2: N.RN.2) which is outside of the scope of the Algebra I course but is labeled optional on the Pacing Guidance for Louisiana Educators. Additionally, in Module 9, Lesson 6, students write recursive formulas for arithmetic and geometric sequences (LSSM A2: F-BR.A.2), but is labeled optional. Furthermore, items 16 and 18 on Module 9 Test Form B are labeled as optional as they require students to use recursive formulas. Another lesson marked optional is Module 5, Lesson 6, as students find inverses of functions (LSSM A2: F-BF.B.4a). Subsequently on the pacing guidance document, Part D of the Module 5 Performance Task is labeled optional because it assesses finding the inverse of a linear function. All other lessons focus on course-level work. For example, in Module 2, Lesson 3, students solve multi-step equations (LSSM, A.CED.A.1). In Module 6, Lesson 5, students graph the solutions to linear inequalities (LSSM, A.REI.D.12). Module 10, Lessons 2 - 4 focus on LSSM A-APR.A.1. Module 3, Lesson 1 addresses LSSM N-Q.A.1 and LSSM F.IF.A.1. Module 11, Lesson 2 addresses LSSM F.IF.C.7a and F.BF.B.3.
Non-negotiable **2. CONSISTENT, COHERENT CONTENT** Each course's instructional materials are coherent and	**Required** **2a)** Materials connect **supporting content to major content** in meaningful ways so that focus and coherence are enhanced throughout the year.	**Yes**	Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year. There are multiple lessons that address supporting content

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
consistent with the content in the Standards. ☒ Yes ☐ No			standards and then bridge this knowledge to major content standards. At times, this connection is evidenced across multiple lessons within a module. For example, in Module 5, Lesson 5, Example 1, students use a graphing calculator to input data into a scatter plot and find the line of best fit for the data (supporting LSSM S.ID.B.6). Students also calculate the correlation coefficient using the graphing calculator and explain its meaning (major LSSM S.ID.C.8). In Module 4, Lesson 1, students graph linear functions (major LSSM A.CED.A.2) using a variety of ways including intercepts (supporting LSSM F.IF.C7a). In Module 8, Lesson 2, students use division properties of exponents (supporting LSSM A.SSE.B.3c) to simplify expression by using the structure of the expression (major LSSM A.SSE.A.2).
	Required **2b)** 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.	**Yes**	Materials include problems and activities that connect two or more clusters in a domain and/or two or more domains in the course-level where these connections are natural and important. Materials make natural and meaningful connections between clusters and domains. For example, in Module 2, Lesson 4, Example 2, students write an equation to represent a hot dog eating contest and then solve their equation connecting the Creating Equations (CED) and Reasoning with Equations and Inequalities (REI) domains (LSSM A.CED.A.1, A.REI.B.3). In Module 4, Lesson 1, Exit Ticket, students sketch

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			various lines using x-and y-intercepts and answer the question "Which lines were impossible to sketch? Why?" connecting the Reasoning with Equations and Inequalities (REI), Interpreting Functions (IF), and Linear, Quadratic, and Exponential Models (LE) domains (LSSM A.REI.D.10, F.IF.C.7a, F.LE.B.5). In Module 8, Lesson 1, Example 1, students multiply expressions to simplify them, which involves using the structure of the expression to identify ways to rewrite it (LSSM A.SSE.A.2) and using the properties of exponents to make these transformations (LSSM A.SSE.B.3c) connecting clusters A and B of the same domain, Seeing Structure in Expressions (SSE). In Module 11, Lesson 6, Example 2, students rewrite the quadratic equation in standard form in Step 1 (LSSM A-CED.A.1) and solve the quadratic equation in Step 2 using the quadratic formula (LSSM A.REI.B.4), connecting the Creating Equations (CED) and Reasoning with Equations and Inequalities (REI) domains. In Module 7 Lesson 3, students represent constraints by systems of equations (LSSM A.CED.A.3) and solve systems of linear equations (LSSM A.REI.C.6), again connecting the Creating Equations (CED) and Reasoning with Equations and Inequalities (REI) domains.
Non-negotiable **3. RIGOR AND BALANCE:**	**Required** **3a) *Attention to Conceptual Understanding:*** Materials **develop conceptual understanding of key mathematical**	**Yes**	Materials develop conceptual understanding of key mathematical concepts, especially where called for

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
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. ☒ Yes ☐ No	**concepts,** especially where called for explicitly in specific content standards or cluster headings by featuring high-quality conceptual problems and discussion questions.		explicitly in the standards. Every lesson begins with a Launch which serves to peak the interest of students using real-life context that reflects the mathematics of the lesson. Explore and Develop is the next part of each lesson and guides students through the concepts of the lesson. There are questions embedded throughout labeled, Think About It, that focus on students developing conceptual understanding. The teacher's notes/questions also provide resources in each lesson to help aid in mathematical discourse in the classroom, thus developing conceptual understanding. Throughout the materials, students use various representations, manipulatives (virtual and physical), and visual models as they develop conceptual understanding. For example, students use an online applet to develop conceptual understanding of solving equations (LSSM A-CED.A.1 and A-REI.A.1) using Algebra tiles in the Explore section of the digital course for Module 2, Lesson 2. In Module 5, Lesson 4 Think About It! students respond to the following question: "Why does correlation not prove causation?" Students develop conceptual understanding as they distinguish between situations that represent correlation or causation (LSSM S-ID.C.9). Item 2 of the Practice section provides students with a data table with ages, average minutes of reading per weekday,

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			and average minutes of watching TV per weekday for each age group. In item 2c, students determine if the data illustrates correlation or causation and then identify other factors that may influence the data. In Module 11, Lesson 8, students develop conceptual understanding of nonlinear associations as they distinguish between data that can be modeled by linear, exponential, or quadratic functions (LSSM F-LE.A.1). A suggested Question for Mathematical Discourse in the teacher materials for this lesson includes, "How is the second common difference used to write the function?"
	Required **3b)** ***Attention to Procedural Skill and Fluency:*** The materials are designed so that students **attain the fluencies and procedural skills** required by the content 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.	**Yes**	Materials are designed so that students attain the fluencies and procedural skills required by the standards. Lessons are structured to allow students several opportunities to develop these skills. Every lesson has a practice section at the end that gives students the opportunity to develop procedural skills. For example, in Module 10, Lesson 2, students multiply polynomials by monomials (LSSM A-APR.A.1). Students have frequent opportunities to practice multiplying monomials and polynomials and write and evaluate polynomial expressions. Additionally, in Module 5, Lesson 1, students write equations of lines in slope-intercept form given a variety of characteristics (LSSM A-CED.A.2). In the Practice section, students write the equation of a line given a point and a

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			slope (items 1-6), two points (items 11-22), and a graph (items 27-32). Students have the opportunity to demonstrate procedural skill and fluency in Module 3, Lesson 2, items 16-27 of the Practice section as they practice evaluating functions using function notation (LSSM F-IF.A.2).
	Required **3c)** ***Attention to Applications:*** 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.	**Yes**	Materials are designed so that students spend sufficient time working with engaging applications. The instructional materials provide opportunities for students to independently demonstrate the use of mathematics flexibly in a variety of contexts. Throughout the materials, students engage in application in the Apply Examples section of the materials. For example, in Module 7, Lesson 5, students solve systems of linear inequalities, represent constraints, and interpret solutions as viable or nonviable in context (LSSM A-CED.A.3). In the Practice section, item 21 provides information regarding a baseball team fundraiser and purchasing tins of popcorn and peanuts to sell. Students write a system of inequalities to model the situation and list constraints for the variables. In Module 11, Lesson 6, Practice, item 50a, students write an equation to model the area covered by buildings and facilities of a water treatment plant on a 200 yard by 75 yard piece of land given an aerial diagram of the site and the criteria that the building

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			must be 10,000 square yards and as much room as possible is left between the edge of each building. Then in item 50c, students solve their quadratic equation to find the width of the border around the building and edge of land (LSSM A-CED.A.1). Additionally, in Module 5, Lesson 3 students fit functions to data and use the functions to solve problems (LSSM S-ID.B.6a). Item 11 provides students with data representing the average length of professional baseball games in selected years (2005-2017). Students write the equation of the line of best fit that models the data and use their equation to estimate the approximate length of a baseball game in 2021.
	Required **3d) *Balance:*** The three aspects of **rigor** are not always treated together and are not always treated separately.	**Yes**	The three aspects of rigor are balanced throughout the materials. Each module in the Teacher Manual begins by explaining how the Three Pillars of Rigor are addressed. The three components of rigor are present in the majority of the modules, and each lesson accurately addresses the components of rigor as per the standards. At the beginning of each lesson, a Conceptual Bridge outlines the implementation of the aspects of rigor for that lesson. For example, in Module 2, Lesson 6, items 49-69 of the Practice section, students use procedural skill and fluency to solve linear proportions (LSSM A-REI.B.3). In item 41a of the Practice, students demonstrate conceptual understanding and application by creating

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			a proportional equation to solve for the number of free throws a player would make in five minutes given the number of free throws that they made in three minutes. In item 41b students explain assumptions that they had to make in part 41a (LSSM A-CED.A.1). Additionally, in Module 7, Lesson 2 "students develop understanding of using algebraic methods to solve systems of linear equations" (LSSM A-CED.A.3, A-REI.C.6). In Think About It! of the Learn section, students respond to the following prompt: "How would the substitution process differ if the second equation were 4x - y = - 11?" assisting to develop conceptual understanding of the substitution method. Furthermore, a suggested Question for Mathematical Discourse that also builds conceptual understanding includes, "How does making the substitution allow you to solve the system?" During the Practice, students build fluency as they solve linear systems of equations by substitution in items 1-15 and 18-20. Students also apply their understanding of solving systems of equations by solving real-world problems. Practice section item 17 provides students with details of an experiment performed by a chemistry class which includes acid and distilled water percentages in two beakers and the required mixture must contain 5mL of liquid at a 65% acid and 35% distilled water mixture. In part 17a, students write a system of equations that

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			could be used to determine how many mL to pour from each beaker. In part 17b, students solve the systems that they wrote and interpret their solution.
Non-negotiable **4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS:** Aligned materials make meaningful and purposeful connections that promote focus and coherence by connecting practice standards with content that is emphasized in the Standards. Materials address the practice standards in a way to enrich and strengthen the focus of the content standards instead of detracting from them. ☒ Yes ☐ No	**Required** **4a)** Materials attend to the **full meaning of the practice standards**. Each practice standard is connected to grade/course-level content in a meaningful way and is present throughout the year in assignments, activities, and/or problems.	**Yes**	Materials attend to the full meaning of each practice standard. Each practice standard is connected to grade-level content and is meaningfully present throughout the materials. Both the Teacher Edition and Student Edition identify what mathematical practice(s) students should use in each guided example or practice problem. Students have multiple opportunities throughout each lesson to meet the mathematical standards. The Think About It! and Talk About It! questions are especially designed to address specific practice standards by prompting students to explain their thinking. The questions elicit critical thinking and encourage students to discuss their findings in a way that develops habits described in the Mathematical Practice Standards. The Teacher Edition also suggests specific strategies to cultivate the Mathematical Practices. For example, In Module 9, Lesson 2 students look for and make use of structure (MP.7) as they use the structure of exponential equations to identify horizontal and vertical translations (LSSM F-BF.B.3). Additionally, in Module 7, Lesson 5 students attend to precision (MP.6) as they solve systems of inequalities by graphing (LSSM A-

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			REI.D.12). In Module 2, Lesson 3 Explore Online Activity, students use appropriate tools strategically (MP.5) as they use algebra tiles to model and solve multi-step equations (LSSM A-REI.B.3).
	Required **4b)** Materials provide sufficient opportunities for students to **construct viable arguments and critique the arguments of others** concerning key grade/course-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.	**Yes**	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. The Talk About It! sections of the lesson examples provide students with opportunities to construct viable arguments. The questions are designed to elicit student justification through clarifying questions. The Reflect and Practice section of the lesson includes Higher-Order Thinking Problems. Within this section, problems labeled Find the Error and/or Justify Conclusions specifically address MP.3. For example, in Module 2, Lesson 4, students solve equations with a variable on both sides. Items 57a-c provide equations already solved and students determine if the solution is correct and justify their answer. If incorrect, students find the correct solution. In item 53 of the same lesson, students perform error analysis as they determine if either of two students' work is correct and explain why or why not. In Module 3, Lesson 2, item 48 students determine and justify what conclusions can be made about the missing x-value in

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			a set of ordered pairs that would make the relation a function.
	Required **4c)** Materials explicitly attend to the **specialized language** of mathematics.	**Yes**	Materials explicitly attend to the specialized language of mathematics. The materials use precise and accurate mathematical terminology and definitions, and the materials support students in using them throughout the lessons. Teacher Editions, Student Editions, and supplemental materials explicitly attend to the specialized language of mathematics. Students begin each lesson with a What Vocabulary Will You Learn? section that introduces terms for the lesson. Teachers ask questions to engage students and facilitate a whole group discussion regarding the terms they encounter throughout the lesson. The materials include a Language Development Support Handbook with assignments to support students in building mathematical language in relation to the lessons. The materials also provide sample student responses that reflect the mathematical language of the lessons. For example, the Learn section in the Teacher Edition of Module 9, Lesson 1 contains a Differentiate box that includes a suggested Language Development Activity to assist students in developing the concept of exponential growth in the lesson. Also, in Module 10, Lesson 1, students are introduced to the terms polynomial, monomial, binomial, trinomial, degree of a polynomial, leading coefficient, and

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			standard form of a polynomial. In the examples and exercises, students develop an understanding of the new terms as they decide if an expression is a polynomial, find the degree of the polynomial, determine whether a polynomial is a monomial, binomial, or trinomial, write polynomials in standard form, and identify the leading coefficient.
	4d) There are teacher-directed materials that **explain the role of the practice standards** in the classroom and in students' mathematical development.	**Yes**	Materials include teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development. A Correlation to the Mathematical Practices guide is provided and includes explanations and descriptions of the practice standards. Each lesson includes Launch - Today's Standards: How can I use these Practices? The Teacher's Notes recommend that teachers "Tell students that they will be addressing these content and practice standards in this lesson. You may wish to have a student volunteer read aloud How Can I Meet This Standard? and How Can I Use These Practices? and connect these to the standards." Lastly, teacher notes are included throughout the lessons that relate the practice standards with the specific content of the lesson. For example, in Module 5, Lesson 2, Explore Forms of Linear Equations section, reasoning abstractly and quantitatively (MP.2) is explained in relation to representing situations symbolically. Additional guidance is provided in the

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			Teacher Edition as it suggests the teacher guide students to define variables, identify dependent/independent variables, and find other relationships in the context of the Explore problem. In Module 8, Lesson 3, students simplify expressions by applying the zero exponent rule. The Teacher Edition suggests that teachers introduce students to special cases to assist students in understanding and avoiding misconceptions as they make sense of problems when it comes to an exponent of zero (MP.1). Additionally, the Teaching the Mathematical Standards box for Example 4 of Module 12, Lesson 5 suggests having students explore and deepen their understanding of extreme data points using a graphing calculator to assist students in using appropriate tools strategically (MP.5).
Section II: Additional Alignment Criteria and Indicators of Superior Quality			
5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT: 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. ☐ Yes ☐ No	**Required** **5a)** Materials provide all students **extensive work** with grade/course-level problems.		See EdReports for more information.
	Required **5b)** Materials **relate grade/course-level concepts explicitly to prior knowledge** from earlier grades and courses. The materials are designed so that prior knowledge is extended to accommodate the new knowledge, building to core instruction, on grade/course-level work. Lessons are appropriately **structured and scaffolded** to support student mastery.		
	Required		

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	5c) There is **variety** in what students produce. For example, students are asked to produce answers and solutions, but also, in a grade/course-appropriate way, arguments and explanations, diagrams, mathematical models, etc.		
	5d) Support for **English Language Learners and other special populations** is provided. The language in which problems are posed is not an obstacle to understanding the content, and if it is, additional supports (suggestions for modifications, "vocabulary to preview", etc.,) are included.		
6. QUALITY OF ASSESSMENTS: Materials offer assessment opportunities that genuinely measure progress and elicit direct, observable evidence of the degree to which students can independently demonstrate the assessed grade-specific Louisiana Student Standards for Mathematics. ☐ Yes ☐ No	**Required** **6a)** Multiple **assessment opportunities** are embedded into content materials and measure student mastery of standards that reflect the balance of the standards as presented in materials.		
	Required **6b)** Assessment items include a **combination of tasks** that require students to demonstrate conceptual understanding, demonstrate procedural skill and fluency, and apply mathematical reasoning and modeling in real world context. Assessment items require students to produce answers and solutions, arguments, explanations, and models, in a grade/course-appropriate way.		
	6c) Scoring guidelines and rubrics align to standards, incorporate criteria that are specific, observable, and measurable, and provide sufficient guidance for interpreting student performance, misconceptions, and targeted support to engage in core instruction.		
	6d) Materials provide 2-3 **comprehensive assessments** (interims/benchmarks) that measure student learning up to the point of administration.		

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
7. ADDITIONAL INDICATORS OF QUALITY: Materials are well organized and provide teacher guidance for units and lessons. Materials provide timely supports to target specific skills/concepts to address students' unfinished learning in order to access grade-level work. ☐ Yes ☐ No	**Required** **7a)** The content can be **reasonably completed** within a regular school year and the pacing of content allows for maximum student understanding. The materials provide guidance about the amount of time a task might reasonably take.		
	Required **7b)** The materials are **easy to use and well organized** for students and teachers. Teacher editions are concise and easy to manage with clear connections between teacher resources. Guidance is provided for lesson planning and instructional delivery, lesson flow, questions to help prompt student thinking, and expected student outcomes.		
	Required **7c)** Materials include unit and lesson **study tools for teachers**, including, but not limited to, an explanation of the mathematics of each unit and mathematical point of each lesson as it relates to the organizing concepts of the unit and discussion on student ways of thinking and anticipating a variety of student responses.		
	7d) Materials **identify prerequisite skills and concepts** for the major work of the grade/course, connected to the current on-grade/course-level work.	**Yes**	Materials identify prerequisite skills and concepts for the major work of the grade. At the beginning of each module, the Are You Ready? section includes a Quick Review of prerequisite skills needed to begin the module and access grade-level content. Students then complete two Quick Check problems related to the Quick Review. The Teacher Edition includes a list of prerequisite skills students may need to review in order to be successful in the module. Each module and lesson begins with a Vertical Alignment section that includes the Previous standards, Now

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			standards, and Next standards in relation to the lesson. Each lesson begins with a Warm Up, which also assesses prerequisite skills. For example, in Module 10 students perform operations with and factor polynomials (LSSM A-APR.A.1 and LSSM A-SSE.A.2). The Are You Ready? Quick Review and Quick Check section in the Student Edition reviews the distributive property and simplifying expressions by combining like terms (LSSM 6.EE.A.3). Additionally, in Module 7, Lesson 1 students solve systems of equations by graphing (LSSM A-REI.C.6). The Vertical Alignment section of the Teacher Edition identifies LSSM 8.EE.C.8a as a prerequisite standard to this lesson in which students understand that the solution to a system of equations is the intersection point of their graphs and that the solution point satisfies both equations.
	7e) Materials provide guidance to help teachers **identify students** who need prerequisite work to engage successfully in core instruction, on-grade/course-level work.	**No**	Materials do not provide guidance to help teachers identify students who need prerequisite work to engage successfully in core instruction, on-grade/course-level work. Each module provides a Cheryl Tobey Formative Assessment Math Probe. Students complete the probes which focus on student misconceptions at the beginning, middle, and end of the modules. In addition, each module includes a Module Pretest to diagnose student readiness prior to beginning the module. However, guidance for what to do with the results of the probe and

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			pretest is not evident. While the materials provide an Are You Ready? section that includes a Quick Review and a Quick Check, further guidance on identifying students who need prerequisite work is not provided. The ALEKS® assessment platform is available for purchase to use in conjunction with the materials to analyze results and provide reports which help teachers determine deficiencies but was not available for review.
	7f) Materials provide **targeted, aligned, prerequisite work** for the major work of the grade/course, directly connected to specific lessons and units in the curriculum.	**No**	Materials do not provide targeted, aligned, prerequisite work for the major work of the grade, directly connected to specific lessons and units in the curriculum. Prerequisite standards and skills are given. However, there is no guidance or materials provided to address any deficiencies.
	7g) Materials provide **clear guidance and support** for teachers about the structures that allow students to appropriately address unfinished learning using prerequisite work.		See EdReports for more information.

FINAL EVALUATION

Tier 1 ratings receive a "Yes" for all Non-negotiable Criteria and a "Yes" for each of the Additional Criteria of Superior Quality.
Tier 2 ratings receive a "Yes" for all Non-negotiable Criteria, but at least one "No" for the Additional Criteria of Superior Quality.
Tier 3 ratings receive a "No" for at least one of the Non-negotiable Criteria.

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

Section	Criteria	Yes/No	Final Justification/Comments
I: Non-negotiable Criteria of Superior Quality[5]	1. Focus on Major Work	**Yes**	Materials devote a larger majority of time to the major work of the course. Materials spend minimal time on content outside of the appropriate course level.

[5] Must score a "Yes" for all Non-negotiable Criteria to receive a Tier 1 or Tier 2 rating.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	2. Consistent, Coherent Content	**Yes**	Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year. Materials include problems and activities that connect two or more clusters in a domain and/or two or more domains in the grade level where these connections are natural and important.
	3. Rigor and Balance	**Yes**	Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in the standards. Materials are designed so that students attain the fluencies and procedural skills required by the standards. Materials are designed so that students spend sufficient time working with engaging applications. The three aspects of rigor are balanced throughout the materials.
	4. Focus and Coherence via Practice Standards	**Yes**	Materials attend to the full meaning of each practice standard. 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. Materials explicitly attend to the specialized language of mathematics. Materials include teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
II: Additional Alignment Criteria and Indicators of Superior Quality[6]	5. Alignment Criteria for Standards for Mathematical Content		See EdReports for more information
	6. Quality of Assessments		See EdReports for more information
	7. Additional Indicators of Quality		Materials identify prerequisite skills and concepts for the major work of the course. Materials do not provide guidance to help teachers identify students who need prerequisite work to engage successfully in core instruction, on-grade/course-level work. Materials do not provide targeted, aligned, prerequisite work for the major work of the grade, directly connected to specific lessons and units in the curriculum.
FINAL DECISION FOR THIS MATERIAL: **Tier 1, Exemplifies quality**			

[6] Must score a "Yes" for all Additional Criteria of Superior Quality to receive a Tier 1 rating.

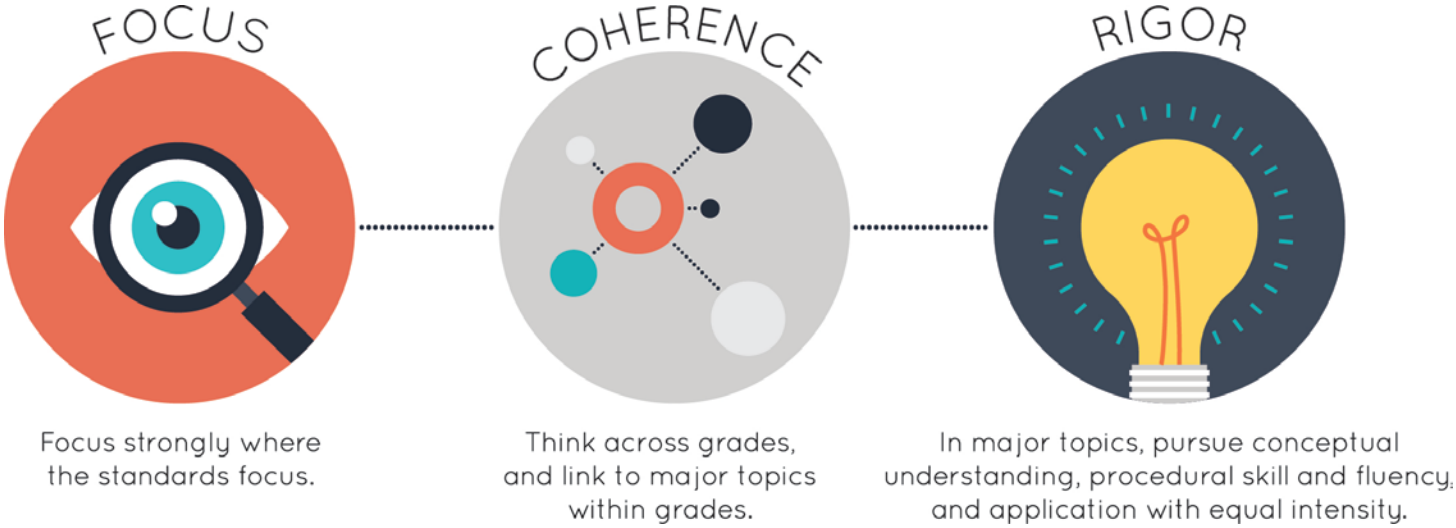
DEPARTMENT of EDUCATION
Louisiana Believes

Instructional Materials Evaluation Tool for Alignment in Mathematics Grades K – 12 (IMET)

FULL CURRICULUM
Instructional Materials

Qualified for Abbreviated Review[1]

Strong mathematics instruction contains the following elements:



Title: **Reveal Math**

Grade/Course: **Geometry**

Publisher: **McGraw Hill LLC**

Copyright: **2020**

Overall Rating: **Tier 1, Exemplifies quality**

Tier 1, Tier 2, Tier 3 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 and Coherence via Practice Standards (Non-negotiable)	
5. Alignment Criteria for Standards for Mathematical Content	
6. Alignment Criteria for Standards for Mathematical Practice	
7. Indicators of Quality	

[1] Abbreviated Reviews are conducted in K-12 ELA and K-12 Math for submissions that **Meet Expectations** for Gateways 1 and Gateway 2 through EdReports. Reviewers considered these reports as they reviewed materials for alignment to Louisiana state standards and quality Non-negotiable indicators. See the full EdReports review at https://www.edreports.org/reports/overview/reveal-math-traditional-2020.

To evaluate instructional materials for alignment with the standards and determine tiered rating, begin with **Section I: Non-negotiable Criteria**.

- Review the **required**[2] Indicators of Superior Quality for each **Non-negotiable** criterion.
- If there is a "Yes" for all **required** Indicators of Superior Quality, materials receive a "Yes" for that **Non-negotiable** Criterion.
- If there is a "No" for any of the **required** Indicators of Superior Quality, materials receive a "No" for that **Non-negotiable** Criterion.
- Materials must meet **Non-negotiable** Criterion 1 and 2 for the review to continue to **Non-negotiable** Criteria 3 and 4. Materials must meet all of the **Non-negotiable** Criteria 1-4 in order for the review to continue to Section II.
- If materials receive a "No" for any **Non-negotiable** Criterion, a rating of Tier 3 is assigned, and the review does not continue.

If all Non-negotiable Criteria are met, then continue to **Section II: Additional Criteria of Superior Quality.**

- Review the **required** Indicators of Superior Quality for each criterion.
- If there is a "Yes" for all **required** Indicators of Superior Quality, then the materials receive a "Yes" for the additional criteria.
- If there is a "No" for any **required** Indicator of Superior Quality, then the materials receive a "No" for the additional criteria.

Tier 1 ratings receive a "Yes" for all Non-negotiable Criteria and a "Yes" for each of the Additional Criteria of Superior Quality.
Tier 2 ratings receive a "Yes" for all Non-negotiable Criteria, but at least one "No" for the Additional Criteria of Superior Quality.
Tier 3 ratings receive a "No" for at least one of the Non-negotiable Criteria.

[2] **Required Indicators of Superior Quality** are labeled "**Required**" and shaded yellow. Remaining indicators that are shaded white are included to provide additional information to aid in material selection and do not affect tiered rating.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
Section I: Non-negotiable Criteria of Superior Quality: Materials must meet Non-negotiable Criteria 1 and 2 for the review to continue to Non-negotiable Criteria 3 and 4. Materials must meet all of the Non-negotiable Criteria 1-4 in order for the review to continue to Section II.			
Non-negotiable **1. FOCUS ON MAJOR WORK[3]:** Students and teachers using the materials as designed devote the large majority[4] of time to the major work of the grade/course. ☒ Yes ☐ No	**Required** **1a)** Materials devote the **majority** of class time to the major work of each grade/course.	**Yes**	Materials devote a larger majority of time to the major work of the course. Of the 74 course-level lessons, including the Expand Lessons, 70% are spent on major work of the grade. Specifically, 39% of lessons are spent on major standards, 31% are spent on a combination of major standards and supporting/additional standards, and 30% on supporting or additional standards. While the materials include a total of 92 lessons, 18 of the lessons are marked as optional on the Reveal Geometry Pacing Guidance for Louisiana Educators document.
	Required **1b)** Instructional materials, including assessments, spend minimal time on content outside of the appropriate grade/course **during core math instruction**. Content beyond grade/course-level should be clearly labeled as optional.	**Yes**	Materials spend minimal time on content outside of the appropriate course. In assessment materials, assessment components do not make students/teachers responsible for any topics before the course in which they are introduced. Lessons and module assessment items (including Module Tests and Performance Tasks) that address content outside of Geometry are labeled as optional on the Reveal Geometry Pacing Guidance for Louisiana Educators document. For example, in Module 2, Lesson 7 students apply definitions of

[3] For more on the major work of the grade, see Focus by Grade Level.
[4] 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
			precision and accuracy on measurements when computing values (LSSM A1: N-Q.A.3) which is outside of the scope of the Geometry course, but is labeled optional on the Pacing Guidance for Louisiana Educators. Items 18-20 of the Module 2 Test, Forms A1, A2, and A3 assess accuracy of calculations by determining approximate error and significant digits which is outside of the course, but the items are labeled as optional. All other lessons focus on course-level work. For example, in Module 1, Lesson 5 students find points that partition directed line segments (LSSM G-GPE.B.6). In Module 3, Lesson 7, students use definitions of angles and parallel lines (LSSM G-CO.A.1) to prove theorems about angles formed by parallel lines and transversals (LSSM G-CO.C.9). Additionally, in Module 12, Lesson 2 students solve probability problems using the rule for complementary events (LSSM S-CP.A.1).
Non-negotiable **2. CONSISTENT, COHERENT CONTENT** Each course's instructional materials are coherent and consistent with the content in the Standards. ☒ Yes ☐ No	**Required** **2a)** Materials connect **supporting content to major content** in meaningful ways so that focus and coherence are enhanced throughout the year.	**Yes**	Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year. For example, in Module 4, Lesson 4 students use two or more geometric descriptions of rigid motions to transform figures in coordinate plane (major LSSM G-CO.B.6) and determine a composition of transformations to map one figure onto another (supporting LSSM G-CO.A.5). In Module 3, Lesson 10, students use

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			perpendicular lines to find distance (major LSSM G-MG.A.3) and use geometry software to construct perpendicular lines to represent the shortest distance between a line and given point (supporting LSSM G-CO.D.12). Additionally, in Module 4, Lesson 1, students transform geometric figures given through reflection (supporting LSSM G-CO.A.5) and describe rigid motions that map geometric figures onto themselves (major LSSM G-CO.B.6).
	Required **2b)** 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.	**Yes**	Materials include problems and activities that connect two or more clusters in a domain and/or two or more domains in the grade level where these connections are natural and important. For example, in Module 5, Lesson 5, students use triangle congruence criteria to solve problems (LSSM G-SRT.B.5) and use them to prove relationships in triangles (LSSM G-CO.C.10) connecting the Similarity, Right Triangles, and Trigonometry (G-SRT) and Congruence (G-C) domains. Additionally, in Module 10, Lesson 1, students use precise vocabulary of circle, radius, and circumference (LSSM G-CO.A.1) to derive the formula for the circumference of a circle (LSSM G-GMD.A.1) which connects the Congruence (G-C) and Geometric Measurements and Dimensions (G-GMD) domains. Module 10, Lesson 2, connects clusters A (Explain volume formulas and use them to solve problems) and B (Visualize relationships between two-dimensional and three-

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			dimensional objects) of the Congruence (G-GMD) domain. In the lesson, students derive that the length of an intercepted arc is proportional to the radius (LSSM G-C.B.5) and identify and describe relationships of central angles and their intercepted arcs (LSSM G-C.A.2).
Non-negotiable **3. RIGOR AND BALANCE:** Each grade's instructional materials reflect the balances in the Standards and help students meet the Standards' rigorous expectations, by helping students develop conceptual understanding, procedural skill and fluency, and application. ☒ Yes ☐ No	**Required** **3a)** ***Attention to Conceptual Understanding:*** Materials **develop conceptual understanding of key mathematical concepts,** especially where called for explicitly in specific content standards or cluster headings by featuring high-quality conceptual problems and discussion questions.	**Yes**	Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in the standards. Every lesson begins with a Launch which serves to peak the interest of students using real-life context that reflects the mathematics of the lesson. Explore and Develop is the next part of each lesson and guides students through the concepts of the lesson. There are questions embedded throughout labeled, *Think About It*, that focus on students developing conceptual understanding. The teacher's notes/questions also provide resources in each lesson to help aid in mathematical discourse in the classroom, thus developing conceptual understanding. Throughout the materials, students use various representations, manipulatives (virtual and physical), and visual models as they develop conceptual understanding. For example, in Module 4, Lesson 3 students explore rotations centered around points on the coordinate plane other than the origin and describe the effects of such rotations (LSSM G-CO.A.5 and G-CO.B.6). In the Think About It!

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			section, students explain why the distances between the image and preimage point have to be equal for the given rotation to occur. Furthermore, Example 1 provides the ordered pairs for a triangle preimage, a degree of rotation of 180 degrees, and a center of rotation (-5,3). A suggested *Question for Mathematical Discourse* in the teacher materials for Example 1 includes, "Does it matter which point you choose to rotate first? Explain." In Module 8, Lesson 2, students develop an understanding of similarity in terms of similarity transformations (LSSM G-SRT.A.2). In the Talk About It! section for Example 1, students determine if two congruent polygons are also similar and justify their argument. Additionally, in the Think About It! section for Example 3, students justify their argument of whether or not two regular polygons with the same number of sides are similar.
	Required **3b) *Attention to Procedural Skill and Fluency:*** The materials are designed so that students **attain the fluencies and procedural skills** required by the content 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.	**Yes**	Materials are designed so that students attain the fluencies and procedural skills required by the standards. Lessons are structured to allow students several opportunities to develop these skills. Every lesson has a practice section at the end that gives students the opportunity to develop procedural skills. For example, in Module 3, Lesson 6, students build fluency by proving theorems about angle relationships (LSSM G-CO.C.9). Example 4 and its Check item both provide students

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			with a partially completed two-column proof involving vertical angles. Students complete the proofs by determining the missing statements and/or reasons. In items 6-10 and 19-26 of the Practice section of this lesson, students write two-column proofs involving various angle relationships. Another example includes Module 7, Lesson 6 in which students use coordinates to prove geometric theorems involving trapezoids and kites (LSSM G-GPE.B.4). Example 2 provides steps to show that a quadrilateral is a trapezoid and to determine if it is an isosceles trapezoid given the coordinates of its vertices. Students also demonstrate fluency of this skill in items 4-5 in the Practice section.
	Required **3c)** ***Attention to Applications:*** 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.	**Yes**	Materials are designed so that students spend sufficient time working with engaging applications. The instructional materials provide opportunities for students to independently demonstrate the use of mathematics flexibly in a variety of contexts. Throughout the materials, students engage in application in the Apply Examples section of the materials. For example, in Module 9, Lesson 6, students use trigonometric ratios to solve real-world problems involving angles of elevation and depression (LSSM G-SRT.C.8). In item 3 of the Practice section, students determine how far a ladder is from the base of a wall given the height the ladder reaches while leaning against

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			the wall and the angle of elevation from the bottom of the ladder to the roof. Additionally, item 7 provides students with the altitude of an airplane and its horizontal distance to the landing strip and students must determine the angle of depression that the pilot should use to land the airplane safely on the landing strip. In Module 11, Lesson 7, students solve real-world problems involving volume (LSSM G-GMD.A.3). In Apply, Example 8, students find the volume of a trash container after determining that its shape can best be described as a composite figure made up of a cylinder and a hemisphere. Furthermore, in item 20 of the Practice section, students determine the volume a sculptor must remove from a cylindrical block with a height of 3 feet and a diameter of 2 feet to create a cone with the same diameter as the cylindrical block.
	Required **3d) *Balance:*** The three aspects of **rigor** are not always treated together and are not always treated separately.	**Yes**	The three aspects of rigor are balanced throughout the materials. Each module in the Teacher Manual begins by explaining how the Three Pillars of Rigor are addressed. The three components of rigor are present in the majority of the modules, and each lesson accurately addresses the components of rigor as per the standards. At the beginning of each lesson, a Conceptual Bridge outlines the implementation of the aspects of rigor for that lesson. For example, in Module 10, Lesson 3 all three aspects of rigor are

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			addressed but treated separately where appropriate. The lesson begins with an Explore activity that develops conceptual understanding of the relationships formed by radii and chords in circles (LSSM G-C.A.2). A suggested question in the teacher materials includes, "Would it make sense for the perpendicular bisector of a chord to cut an arc into different sizes? Why or why not?" The lesson then builds fluency as students make constructions using a variety of methods and through a series of examples that has students calculate the measures of missing arcs and chord lengths (LSSM G-CO.D.12). In the Check item following Example 4, students apply their understanding of relationships formed by a diameter perpendicular to a chord to solve for the length of a steering device given specifications of the steering wheel design. Another example of the balance of the three aspects of rigor is evidenced in Module 5, Lesson 5 in which students investigate triangle congruence criteria in right triangles during the Explore activity. A question suggested in the teacher materials to ask during the activity includes, "Why are you not investigating the SSS criterion?" Fluency is built during Example 1 which walks students through a paragraph proof to prove two right triangles are congruent using the hypotenuse-leg criterion. Following Example 1, students complete the Check

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			item in which they complete a two-column proof to prove two right triangles are congruent using the hypotenuse-angle criterion. Fluency of this skill is further demonstrated in items 4-9 of the Practice section. Additionally, students apply their knowledge of right triangle congruence criteria in item 1 of the Practice section to prove that the support poles of a camping tent are congruent using the right triangles formed by the support poles and sides of the tent (LSSM G-CO.C.10, G-SRT.B.5).
Non-negotiable **4. FOCUS AND COHERENCE VIA PRACTICE STANDARDS:** Aligned materials make meaningful and purposeful connections that promote focus and coherence by connecting practice standards with content that is emphasized in the Standards. Materials address the practice standards in a way to enrich and strengthen the focus of the content standards instead of detracting from them. ☒ Yes ☐ No	**Required** **4a)** Materials attend to the **full meaning of the practice standards**. Each practice standard is connected to grade/course-level content in a meaningful way and is present throughout the year in assignments, activities, and/or problems.	**Yes**	Both the Teacher Edition and Student Edition identify what mathematical practice(s) students should use in each guided example or practice problem. Students have multiple opportunities throughout each lesson to meet the mathematical standards. The Think About It! and Talk About It! questions are especially designed to address specific practice standards by prompting students to explain their thinking. The questions elicit critical thinking and encourage students to discuss their findings in a way that develops habits described in the Mathematical Practice Standards. The Teacher Edition also suggests specific strategies to cultivate the Mathematical Practices. For example, in Module 4, Lesson 5 students construct viable arguments (MP.3) as they make and validate conjectures about tessellations in the Explore activity. Additionally, the Talk

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			About It! Question in the Learn section of the same lesson has students justify their argument of whether or not an isosceles trapezoid can be used to create a tessellation (LSSM G-CO.4, 5). In Module 3, Lesson 10, Explore activity, students use appropriate tools strategically (MP.5) as they discover the shortest distance between a point and a line is a perpendicular segment connecting the two (LSSM G.CO.12).
	Required **4b)** Materials provide sufficient opportunities for students to **construct viable arguments and critique the arguments of others** concerning key grade/course-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.	**Yes**	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. The Talk About It! sections of the lesson examples provide students with opportunities to construct viable arguments. The questions are designed to elicit student justification through clarifying questions. The Reflect and Practice section of the lesson includes Higher-Order Thinking Problems. Within this section, problems labeled Find the Error and/or Justify Conclusions specifically address MP.3. For example, Module 12, Lesson 6, Practice section, item 26 provides the work of two students who are determining the probability that a red marble will be chosen out of a bag of multicolored marbles. Students decide if either student is correct and explain their reasoning. In Module 6, Lesson 1, Talk About It! for Example 3, students

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			determine if a statement about perpendicular bisectors of a triangle intersecting at a point are equidistant from the sides is always, sometimes, or never true and provide a justification for their argument.
	Required **4c)** Materials explicitly attend to the **specialized language** of mathematics.	**Yes**	Materials explicitly attend to the specialized language of mathematics. The materials use precise and accurate mathematical terminology and definitions, and the materials support students in using them throughout the lessons. Teacher Editions, Student Editions, and supplemental materials explicitly attend to the specialized language of mathematics. Students begin each lesson with a What Vocabulary Will You Learn? section that introduces terms for the lesson. Teachers ask questions to engage students and facilitate a whole group discussion regarding the terms they encounter throughout the lesson. The materials include a Language Development Support Handbook with assignments to support students in building mathematical language in relation to the lessons. The materials also provide sample student responses that reflect the mathematical language of the lessons. For example, in Module 2, Lesson 4, the Learn section has a Key Concept - Reflections, Translations, and Rotations box which provides the definition and an example representation of each of these transformations using a triangle preimage and its image. In

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Module 11, Lesson 9, the term density is introduced. The definition is provided in words along with a symbolic representation of the formula for density based on area. Page 82 of the Language Development Handbook is referenced in the teacher materials for students who need additional support with building mathematical language related to density.
	4d) There are teacher-directed materials that **explain the role of the practice standards** in the classroom and in students' mathematical development.	**Yes**	Materials include teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development. A Correlation to the Mathematical Practices guide is provided and includes explanations and descriptions of the practice standards. Each lesson includes Launch - Today's Standards: How can I use these Practices? The Teacher's Notes recommend that teachers "Tell students that they will be addressing these content and practice standards in this lesson. You may wish to have a student volunteer read aloud How Can I Meet This Standard? and How Can I Use These Practices? and connect these to the standards." Lastly, teacher notes are included throughout the lessons that relate the practice standards with the specific content of the lesson. For example, the teacher materials for the Apply item of Module 9, Lesson 4 indicate that MP.1 and MP.4 are utilized during the problem-solving process. Guidance encourages teachers to support students as they understand the task, strategize an

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			approach to the task, and proceed to solve it (MP.1). As students propose and use their mathematical models (MP.4), it is suggested that teachers encourage students to "evaluate their model and/or progress, and change direction, if necessary." Additionally, the Teaching the Mathematical Practices box for Example 1 of Module 6, Lesson 6 identifies MP.3 as being addressed as students make and validate their conjectures about possible side lengths of triangles. Students are also encouraged to construct viable arguments through the Question for Mathematical Discourse suggested for the same Example that asks, "When testing triangle side lengths, how many sums are actually necessary to show that a triangle can be formed? Explain."
Section II: Additional Alignment Criteria and Indicators of Superior Quality			
5. ALIGNMENT CRITERIA FOR STANDARDS FOR MATHEMATICAL CONTENT: 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. ☐ Yes ☐ No	**Required** **5a)** Materials provide all students **extensive work** with grade/course-level problems.		See EdReports for more information.
	Required **5b)** Materials **relate grade/course-level concepts explicitly to prior knowledge** from earlier grades and courses. The materials are designed so that prior knowledge is extended to accommodate the new knowledge, building to core instruction, on grade/course-level work. Lessons are appropriately **structured and scaffolded** to support student mastery.		
	Required **5c)** There is **variety** in what students produce. For example, students are asked to produce answers and		

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	solutions, but also, in a grade/course-appropriate way, arguments and explanations, diagrams, mathematical models, etc.		
	5d) Support for **English Language Learners and other special populations** is provided. The language in which problems are posed is not an obstacle to understanding the content, and if it is, additional supports (suggestions for modifications, "vocabulary to preview", etc.,) are included.		
6. QUALITY OF ASSESSMENTS: Materials offer assessment opportunities that genuinely measure progress and elicit direct, observable evidence of the degree to which students can independently demonstrate the assessed grade-specific Louisiana Student Standards for Mathematics. ☐ Yes ☐ No	**Required** **6a)** Multiple **assessment opportunities** are embedded into content materials and measure student mastery of standards that reflect the balance of the standards as presented in materials.		
	Required **6b)** Assessment items include a **combination of tasks** that require students to demonstrate conceptual understanding, demonstrate procedural skill and fluency, and apply mathematical reasoning and modeling in real world context. Assessment items require students to produce answers and solutions, arguments, explanations, and models, in a grade/course-appropriate way.		
	6c) Scoring guidelines and rubrics align to standards, incorporate criteria that are specific, observable, and measurable, and provide sufficient guidance for interpreting student performance, misconceptions, and targeted support to engage in core instruction.		
	6d) Materials provide 2-3 **comprehensive assessments** (interims/benchmarks) that measure student learning up to the point of administration.		
	Required		

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
7. ADDITIONAL INDICATORS OF QUALITY: Materials are well organized and provide teacher guidance for units and lessons. Materials provide timely supports to target specific skills/concepts to address students' unfinished learning in order to access grade-level work. ☐ Yes ☐ No	**7a)** The content can be **reasonably completed** within a regular school year and the pacing of content allows for maximum student understanding. The materials provide guidance about the amount of time a task might reasonably take.		
	Required **7b)** The materials are **easy to use and well organized** for students and teachers. Teacher editions are concise and easy to manage with clear connections between teacher resources. Guidance is provided for lesson planning and instructional delivery, lesson flow, questions to help prompt student thinking, and expected student outcomes.		
	Required **7c)** Materials include unit and lesson **study tools for teachers**, including, but not limited to, an explanation of the mathematics of each unit and mathematical point of each lesson as it relates to the organizing concepts of the unit and discussion on student ways of thinking and anticipating a variety of student responses.		
	7d) Materials **identify prerequisite skills and concepts** for the major work of the grade/course, connected to the current on-grade/course-level work.	**Yes**	Materials identify prerequisite skills and concepts for the major work of the grade. At the beginning of each module, the Are You Ready? section includes a Quick Review of prerequisite skills needed to begin the module and access grade-level content. Students then complete two Quick Check problems related to the Quick Review. The Teacher Edition includes a list of prerequisite skills students may need to review in order to be successful in the module. Each module and lesson begins with a Vertical Alignment section that includes the Previous standards, Now standards, and Next standards in relation

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			to the lesson. Each lesson begins with a Warm Up, which also assesses prerequisite skills. For example, in Module 8, Lesson 2 students determine whether two figures are similar and solve problems using perimeter of similar polygons (LSSM G-SRT.A.2). The Are You Ready? Quick Review and Quick Check section in the Student Edition reviews using scale drawings and scale factor to find actual side lengths of polygons (LSSM 7.G.A.1). Additionally, in Module 5, Lesson 1 students use triangle sum and exterior angle theorems to solve problems (LSSM G-CO.C.10). The Vertical Alignment section of the Teacher Edition identifies LSSM 8.G.A.5 as a prerequisite standard to this lesson in which students establish facts about the angle sum and exterior angles of triangles through informal arguments. Another example includes Module 4, Lesson 5 in which students identify figures that tessellate and create tessellations using rigid motions (LSSM G-CO.A.4 and G-CO.A.5). The Vertical Alignment section of the Teacher Edition identifies LSSM 8.G.A.3 as a prerequisite standard to this lesson in which students describe the effect of transformations on two-dimensional figures.
	7e) Materials provide guidance to help teachers **identify students** who need prerequisite work to engage successfully in core instruction, on-grade/course-level work.	**No**	Materials do not provide guidance to help teachers identify students who need prerequisite work to engage successfully in core instruction, on-grade/course-level work. Each module provides a Cheryl

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			Tobey Formative Assessment Math Probe. Students complete the probes which focus on student misconceptions at the beginning, middle, and end of the modules. In addition, each module includes a Module Pretest to diagnose student readiness prior to beginning the module. However, guidance for what to do with the results of the probe and pretest is not evident. While the materials provide an Are You Ready? section that includes a Quick Review and a Quick Check, further guidance on identifying students who need prerequisite work is not provided. The ALEKS® assessment platform is available for purchase to use in conjunction with the materials to analyze results and provide reports which help teachers determine deficiencies but was not available for review.
	7f) Materials provide **targeted, aligned, prerequisite work** for the major work of the grade/course, directly connected to specific lessons and units in the curriculum.	**No**	Materials do not provide targeted, aligned, prerequisite work for the major work of the grade, directly connected to specific lessons and units in the curriculum. Prerequisite standards and skills are given. However, there is no guidance or materials provided to address any deficiencies.
	7g) Materials provide **clear guidance and support** for teachers about the structures that allow students to appropriately address unfinished learning using prerequisite work.		See EdReports for more information.

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FINAL EVALUATION ***Tier 1 ratings*** receive a "Yes" for all Non-negotiable Criteria and a "Yes" for each of the Additional Criteria of Superior Quality. ***Tier 2 ratings*** receive a "Yes" for all Non-negotiable Criteria, but at least one "No" for the Additional Criteria of Superior Quality. ***Tier 3 ratings*** receive a "No" for at least one of the Non-negotiable Criteria.			
Compile the results for Sections I and II to make a final decision for the material under review.			
Section	**Criteria**	**Yes/No**	**Final Justification/Comments**
I: Non-negotiable Criteria of Superior Quality[5]	1. Focus on Major Work	**Yes**	Materials devote a larger majority of time to the major work of the course. Materials spend minimal time on content outside of the appropriate course level.
	2. Consistent, Coherent Content	**Yes**	Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year. Materials include problems and activities that connect two or more clusters in a domain and/or two or more domains in the grade level where these connections are natural and important.
	3. Rigor and Balance	**Yes**	Materials develop conceptual understanding of key mathematical concepts, especially where called for explicitly in the standards. Materials are designed so that students attain the fluencies and procedural skills required by the standards. Materials are designed so that students spend sufficient time working with engaging applications. The three aspects of rigor are balanced throughout the materials.
	4. Focus and Coherence via Practice Standards	**Yes**	Materials attend to the full meaning of each practice standard. Materials provide

[5] Must score a "Yes" for all Non-negotiable Criteria to receive a Tier 1 or Tier 2 rating.

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			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. Materials explicitly attend to the specialized language of mathematics. Materials include teacher-directed materials that explain the role of the practice standards in the classroom and in students' mathematical development.
II: Additional Alignment Criteria and Indicators of Superior Quality[6]	5. Alignment Criteria for Standards for Mathematical Content		See EdReports for more information
	6. Quality of Assessments		See EdReports for more information
	7. Additional Indicators of Quality		Materials identify prerequisite skills and concepts for the major work of the course. Materials do not provide guidance to help teachers identify students who need prerequisite work to engage successfully in core instruction, on-grade/course-level work. Materials do not provide targeted, aligned, prerequisite work for the major work of the grade, directly connected to specific lessons and units in the curriculum.
FINAL DECISION FOR THIS MATERIAL: **Tier 1, Exemplifies quality**			

[6] Must score a "Yes" for all Additional Criteria of Superior Quality to receive a Tier 1 rating.

Instructional materials are one of the most important tools educators use in the classroom to enhance student learning. It is critical that they fully align to state standards—what students are expected to learn and be able to do at the end of each grade level or course—and are high quality if they are to provide meaningful instructional support.

The Louisiana Department of Education is committed to ensuring that every student has access to high-quality instructional materials. In Louisiana all districts are able to purchase instructional materials that are best for their local communities since those closest to students are best positioned to decide which instructional materials are appropriate for their district and classrooms. To support local school districts in making their own local, high-quality decisions, the Louisiana Department of Education leads online reviews of instructional materials.

Instructional materials are reviewed by a committee of Louisiana educators. Teacher Leader Advisors (TLAs) are a group of exceptional educators from across Louisiana who play an influential role in raising expectations for students and supporting the success of teachers. Teacher Leader Advisors use their robust knowledge of teaching and learning to review instructional materials.

The 2020-2021 Teacher Leader Advisors are selected from across the state and represent the following parishes and school systems: Acadia, Ascension, Beauregard, Bossier, Caddo, Calcasieu, City of Monroe, Claiborne, Diocese of Alexandria, East Baton Rouge, Evangeline, Firstline Schools, Iberia, Iberville, Jefferson, Jefferson Davis, Jefferson Parish Charter, KIPP, Lafayette, Lafourche, Lincoln, Livingston, Louisiana Tech University, Louisiana Virtual Charter Academy, Lusher Charter School, Natchitoches, Orleans, Ouachita, Plaquemines, Pointe Coupee, Rapides, Richland, Special School District, St. Charles, St. Landry, St. Tammany, Tangipahoa, Tensas, Vermillion, Vernon, West Feliciana, and Zachary Community. This review represents the work of current classroom teachers with experience in grades 9-12.

Appendix I.

Publisher Response

The publisher had no response.

Appendix II.

Public Comments

There were no public comments submitted.