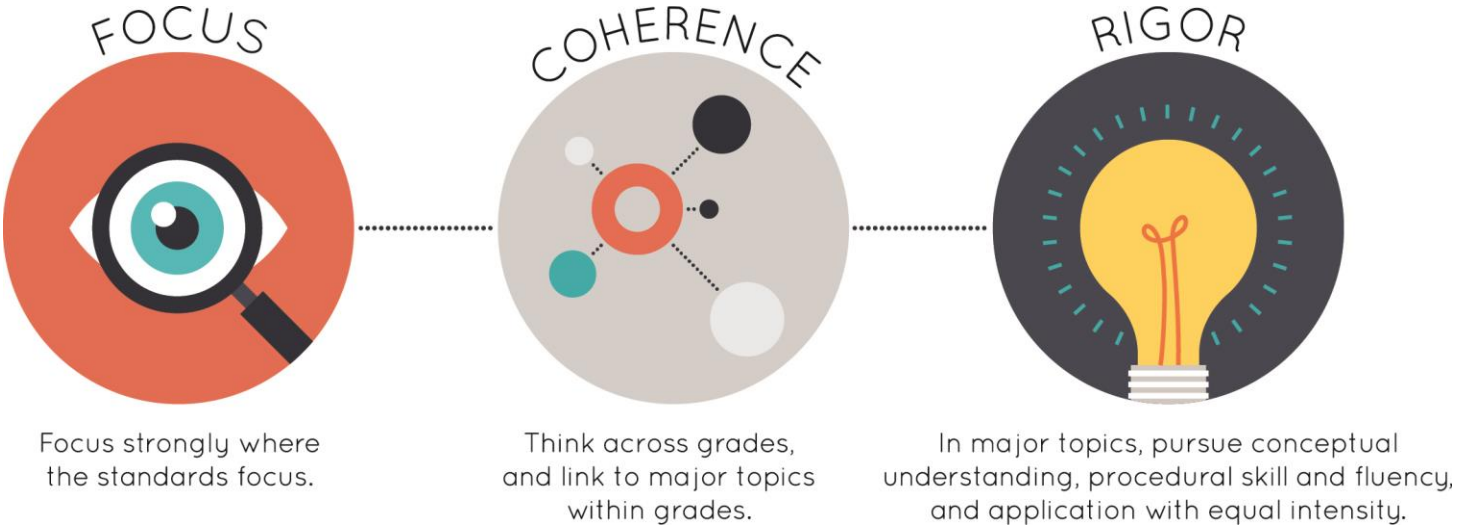
Instructional Materials Evaluation Tool for Alignment in Mathematics Grades K – 12 (IMET)

FULL CURRICULUM
Instructional Materials

Strong mathematics instruction contains the following elements:



Title: **Zearn Math**

Grade/Course: **6-8**

Publisher: **Zearn**

Copyright: **2023**

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	

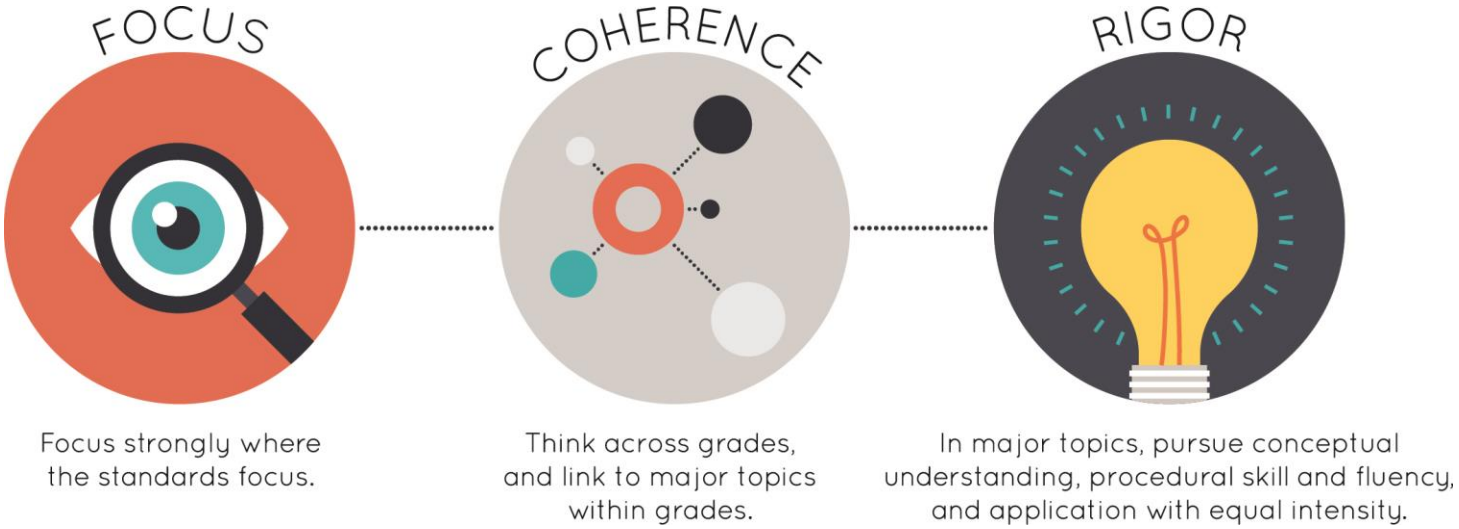
Each set of submitted materials was evaluated for alignment with the standards beginning with a review of the indicators for the non-negotiable criteria. If those criteria were met, a review of the other criteria ensued.

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:

Grade 6 (Tier 1) Grade 7 (Tier 1) Grade 8 (Tier 1)

Strong mathematics instruction contains the following elements:



Title: **Zearn Math**

Grade/Course: **6**

Publisher: **Zearn**

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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	

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

- Review the **required**[1] 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.

[1] **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[2]:** Students and teachers using the materials as designed devote the large majority[3] 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**	The materials devote the majority of class time to major work of the grade as defined by the Louisiana Student Standards for Mathematics (LSSM). Of the 145 total instructional lessons, 65% are devoted to the major work of the grade. Specifically, 54% of lessons are spent on major standards alone, 10% are spent on a combination of major and supporting/additional standards, 35% are spent on supporting/additional standards, and 6% are spent on optional lessons that go beyond the scope of the Grade 6 LSSM.
	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 grade level during core math instruction. In assessment materials, assessment components do not make students/teachers responsible for any topics before the grade in which they are introduced. The materials are divided into missions. Each mission consists of topics broken down into lessons aligned to the LSSM for Grade 6. Appropriate models and mathematical representations for Grade 6 are present, such as in the Mission 2 Assessment, where students make tables of equivalent ratios relating quantities

[2] For more on the major work of the grade, see Focus by Grade Level.
[3] 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%.

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			with whole-number measurements and find missing values in the tables. Additionally, students analyze and draw double-number lines (LSSM 6.RP.A.3). In addition, the Mission 7 Assessment includes real-world and mathematical problems in which students graph points in all four quadrants of the coordinate plane. Students use coordinates to find distances between points with the same first coordinate or the same second coordinate (LSSM 6.NS.C.8). The Teacher Materials list the grade level standards and standards from previous grade levels for each lesson which are used in the Warm Up, Activities, and Exit tickets. Occasionally, the Warm Ups rely on prior knowledge, but are utilized to connect prior knowledge to grade-level content. For example, in Mission 1, Lesson 17, the lesson addresses LSSM 6.EE.A.1. The Warm Up builds on LSSM 4.MD.A.3, and Activity 1 builds on LSSM 5.MD.C.5a. Assessments focus only on grade-level standards. The Exit Ticket in Mission 1, Lesson 17 assesses LSSM 6.EE.A.1. In Mission 4, Lessons 4, 7, and 11 address LSSM 6.NS.A.1 while building on LSSM 5.NF.B.4. The Exit tickets assess only LSSM 6.NS.A.1. The lessons that go beyond the scope of the Grade 6 LSSM are clearly marked as optional. All lessons in Mission 9 are labeled as optional and are intended as extension activities. In Mission 9, students use concepts and skills from

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			previous Missions, such as measurement conversions, their knowledge of volumes or surface areas of right rectangular prisms, or the relationship of distance, rate, and time (LSSM 6.RP.A.3, LSSM 6.NS.B.3, LSSM 6.NS.B.2, LSSM 6.RP.A.1, and LSSM 6.RP.A.2). In addition, Mission 8, Lessons 11-12 address 6.SP.B.5c and include finding the mean absolute deviation which is beyond the expectation of LSSM 6.SP.5c. Mission 8, End-of-Mission Assessment, item 3c assesses finding the mean absolute deviation. The lessons and assessment items are clearly marked as optional in the Louisiana implementation guidance.
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. Culminating lessons are provided to connect supporting content to major content. Major work is often first developed and then reinforced in lessons addressing supporting standards. For example, in Mission 4, LSSM 6.NS.A.1 is developed across Lessons 3-13. Then, in Lesson 14, students evaluate the volume of a rectangular prism using cubes that have a unit fraction as their edge length. Using division and multiplication to solve problems involving areas of triangles with fractional bases and heights connects the supporting LSSM 6.G.A.1 and 6.G.A.2 to major LSSM 6.NS.A.1. In Mission 7, LSSM 6.NS.6 and

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			6.NS.C.8 is developed across Lessons 1-14. Then, in Lesson 15, students construct polygons using rational coordinates and distances on the coordinate plane (supporting LSSM 6.G.A.3) by applying their understanding of rational numbers (major LSSM 6.NS.6c and LSSM 6.NS.C.8). Additionally, Mission 1, Lesson 10 focuses on supporting standard LSSM 6.G.A.4, where students use different base-height pairs to find the area of a triangle. This lesson connects to and supports major standard LSSM 6.EE.A.2c, in which students evaluate expressions at specific values of their variables, including expressions that arise from formulas used in real-world problems. Students perform arithmetic operations in the conventional order when there are no parentheses to specify a particular order. Students first engaged with LSSM 6.EE.A.2c in Lessons 5, 6, and 9 of the same Mission.
	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, or two or more domains in a grade, in cases where these connections are natural and important. For example, Mission 6, Lesson 6 connects clusters A (Apply and extend previous understandings of arithmetic to algebraic expressions) and B (Reason about and solve one-variable equations and inequalities) within the Expressions and Equations (EE) domain. During the lesson, students apply prior knowledge and skills

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			gained from LSSM 6.EE.A.2a and LSSM 6.EE.A.2c, writing and evaluating expressions that record operations with numbers and with letters in replacement for numbers. In Activity 1, students write a math expression followed by substituting a value into the math expression to represent any situation (LSSM 6.EE.B.6, LSSM 6.EE.A.2a, and LSSM 6.EE.A.2c). Mission 1, Lesson 5 connects the Geometry (G) and Expressions and Equations (EE) domains by extending the use of variables and formulas in solving real-life mathematical problems (LSSM 6.G.A.1, LSSM 6.EE.2a, and LSSM 6.EE.2c). As students work towards understanding LSSM 6.G.A.1, students apply prior knowledge and skills obtained from LSSM 6.EE.2a and 6.EE.2c, such as evaluating expressions at specific values of their variables through the use of formulas and writing expressions that record operations with numbers and letters standing for numbers, in order to identify base and height pairs of a parallelogram. Throughout the lesson, students develop a process for finding the area of a parallelogram using the length of a base and the corresponding height. By the end of the lesson, students use their understanding of parallelograms to generalize the process, using a formula, for determining the area for any parallelogram.

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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. The instructional materials develop conceptual understanding of grade-level content through scaffolds, conceptual problems, and discussion questions throughout each lesson. Throughout the materials, students build conceptual understanding through the use of concrete and digital manipulatives, multiple means of representation, multiple strategies, sentence frames, tools, and templates. In addition, students build conceptual understanding with their teacher and their peers in Collaborative Concept Exploration through mathematical discourse, as well as in the self-paced Independent Digital Lessons. Students express their understanding in multiple ways, such as through creating models, critiquing the arguments of others, and interpreting solutions to problems. For example, in Mission 2, Lesson 1, students use collections of objects to make sense of and use ratio language (LSSM 6.RP.A.1). Students see different ways to describe a situation using ratio language. Concept Exploration Activity 1 introduces students to ratio language and notation through examples based on a collection of everyday objects. Students create diagrams and write ratios to describe the quantities for another way of categorizing

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			objects in the collection. In Concept Exploration Activity 2, students write ratios to describe objects in their own collection. Students create a display of objects and circulate to look at their classmates' work. Students see several ways to write ratios to describe the same situation. Teacher materials also guide a discussion about ways to write ratios. For example, guidance for teachers states, "Invite students to share what types of items are in their personal collections." This type of questioning allows students to explain that there are ways to associate two quantities using the phrase "for every *a* of these, there are *b* of those." In Mission 7, Lesson 1, students use temperature and elevation to make sense of positive and negative numbers (LSSM 6.NS.C.5). In Concept Exploration Activity 1, students encounter how temperature increases and/or decreases based on positive and negative numbers. Students demonstrate the change in temperature by creating a drawing on a vertical number line (represents a thermometer) to display conceptual understanding of the temperature rising and dropping.
	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	**Yes**	Materials are designed so that students attain the fluencies and procedural skills required by the standards. The materials are designed in a way that allows students to acquire procedural skill and fluency through a progression of learning over time. Students begin every lesson with a

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	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.		Warm-Up that provides students the opportunity to strengthen number sense or procedural fluency. During the Warm Up, students practice previously learned skills and prepare to practice and extend those skills in the current lesson. In addition, each Independent Digital Lesson also includes a fluency-aligned activity, such as Mix and Math, Totally Times, Pair Compare, and Sprints. The fluency practices flow with the lessons and connect with the appropriate standards. The materials also provide several opportunities to build procedural skills through optional problem sets and homework problems. In addition, the materials include lessons that focus solely on procedural skill and fluency as called for by the standards. By the end of Grade 6, students are expected to fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation (LSSM 6.NS.B.3). Students build towards this fluency across Mission 5 and continue to practice this fluency across the materials during Warm Up and Fluency activities. In Lesson 1, decimal fluency is introduced through students' previous experiences such as shopping for groceries. Next, in Lesson 2-4, students use their previous experience with decimals to develop two methods to formally add and subtract decimals. In Lesson 14, students complete two rounds of a Sprint during the Independent Digital

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			Lesson, attempting to beat their original score in round 2 by answering as many decimal multiplication problems as they can within sixty seconds. When time is up, students check their work to see which problems they answered correctly and incorrectly and retry the problems that they answered incorrectly. In addition to Lessons 2-4, 7-8, and 12-15 in Mission 5, this fluency standard is addressed later in Mission 6, Lesson 4, as students solve an equation that represents a situation with an unknown amount by adding and subtracting decimals. In Mission 3, Lesson 9, students gain fluency with unit rates in Activity 1, Task 1. Working with partners, students utilize a set of cards to determine which offer is the better deal. Students gain fluency through calculating multiple unit rates simultaneously (LSSM 6.RP.A.3).
	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 teachers and students spend sufficient time working with engaging applications, including single- and multi-step contextual problems, and non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving. Each Mission includes Concept Exploration activities where students study the same content with their teacher and peers in Collaborative Concept Exploration and in the self-paced Independent Digital Lessons. Missions also contain activities that allow students to apply key concepts

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			to solve real-world problems. For example, in Mission 3, Lesson 17, students apply rates and percentages for a home improvement project. During Activity 1, students determine the area of the walls of a bedroom, estimate the amount of paint needed to paint them, and then determine the cost of the project. Students use an image of the bedroom labeled with dimensions as they complete the following prompts: “Here is the floor plan of a bedroom. If you paint all the walls in the room, how many square feet do you need to cover?” in Task 1; “An advertisement about the pain you want to use reads ‘Just 2 quarts covers 175 square feet!” If you need to apply two coats of paint on the walls, how much paint to you need to buy?” in Task 2; “Paint can only be purchased in 1-quart, 1-gallon, and 5-gallon containers. How much will all supplies for the project cost if the cans of paint cost $10.90 for a quart, $34.90 for a gallon, and $165 for 5 gallons?” in Task 3; and “You have a coupon for 20% off all quart-sized paint cans. How does that affect the cost of the project?” in Task 4 (LSSM 6.G.A.1, 6.RP.A.3). In Mission 6, Lesson 7, students create equations and explicitly state what the variable represents, use equations to solve percentages problems, and write equations in the form of px=q to represent situations where the amount that corresponds to 100% is unknown. In

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			Activity 1, students solve the following problem: “60% of x is equal to 87. Write an equation that expresses the relationship between 60%, x, and 87. Solve your equation. In Activity 2, students solve the following problem: “Puppy A weighs 8 pounds, which is about 25% of its adult weight. What will be the adult weight of Puppy A?” and then write an equation for the situation (LSSM 6.EE.B.6, 6.EE.B 7, 6.RP.3c). In Mission 7, Lesson 13, Concept Exploration, Activity 1, students apply their understanding about a coordinate plane in order to provide reasoning about the context of the graph. For example, in Task 1, students use a graph that shows the balance in a bank account over a period of 14 days to estimate the greatest account balance and least account balance, determine what the point (6,-50) tells them about the balance, and interpret |-50| in the context (LSSM 6.NS.C.8).
	Required **3d) *Balance:*** The three aspects of **rigor** are not always treated together and are not always treated separately.	**Yes**	It is evident in the materials that the three aspects of rigor are not always treated together and are not always treated separately. The materials reflect the balance of rigor in the standards. For example, in Mission 2, Topic A, students develop the understanding that a ratio is an association between two quantities, such as “1 teaspoon of drink mix to 2 cups of water” (LSSM 6.RP.A.1). In Topics B and C, students analyze contexts often expressed in ratios, such as recipes,

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			mixtures of different paint colors, constant speed, and uniform pricing. In Topic D, students apply this understanding as they use tables to solve various ratio problems using discrete diagrams, equivalent ratios, and double-number line diagrams to support students' thinking (LSSM 6.R.P.A.3). Finally, students complete the End of Mission Assessment that requires an understanding of how to use ratio and rate reasoning to solve real-world problems. In Mission 4, Lessons 1-2, students develop a conceptual understanding of division. Then in Lesson 3, students apply conceptual understanding and practice multiplication fluency as they solve real-world problems involving unknown quantities in multiplication and division situations with fractions and interpret a verbal description of a multiplication situation (LSSM 6.NS.A.1). Mission 4, Lesson 16, integrates all components of rigor as called for by LSSM 6.NS.A.1. During the lesson, students make sense of given situations, and write and solve equations to represent the situations involving fractions and all four operations. Students estimate answers in order to attend to the meaning of the operation and the reasonableness of their answer in the context of the problem. Students solve problems, such as, “Lin’s bottle holds 3 1/4 cups of water. She drank 1 cup of water. What fraction of the water in the

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			bottle did she drink?" and "Plant A is 16/3 feet tall. Plant C is ⅘ as tall as Plant A. How tall is Plant C?" In Mission 7, Lesson 8, Activities 1 and 2, students utilize conceptual understanding and fluency as they write and graph inequalities (LSSM.6.EE.B.8). On the Exit Ticket in Mission 7, Lesson 8, students apply their conceptual understanding and fluency to interpret phrases to solve a real-world application problem (LSSM 6.EE.B.6).
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. Practice standards are connected to grade content and are meaningfully present throughout the materials. Examples of the mathematical practices implemented within the units are described in the unit and lesson overviews. The materials provide students with an opportunity to engage with the practice standards in each lesson and support students in the development of mathematical practices, contributing to students' habits of mind as students develop procedural skills and fluency, and conceptual understanding. For example, in Mission 1, Lesson 1, students use appropriate tools strategically (MP.5) as they utilize their geometry toolkit to "compare the amounts of the plane covered by two tiling patterns" (LSSM 6.G.A.1). In Mission 7, Lesson 3, Warm Up, students look for and make use of structure (MP.7) to compare rational numbers to determine which expression

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			doesn't belong (LSSM 6.NS.C.7a). Mission 2, Lesson 3 look for patterns (MP.7) as they develop the idea of equivalent ratios (LSSM 6.RP.A.1). As students look for the patterns/structure, they identify that the recipe has to be increased by multiplying the same factor. In Mission 7, Lesson 13, students reason abstractly and quantitatively (MP.2) as they analyze graphs in order to develop reasoning about temperature over time (LSSM 6.NS.C.8). In Mission 8, Lesson 17, students make sense of data (MP.2) in a real-world context to answer statistical questions (LSSM 6.SP.A.1). In Mission 7, Lesson 5, students develop conceptual understanding of negative numbers through modeling financial situations (MP.4; LSSM 6.NS.C.5).
	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. Opportunities are provided that allow students to explain their thinking while working with partners. The materials provide opportunities for students to discuss their thinking and reasoning for the strategies they used to solve problems throughout the materials. For example, in Mission 2, Lesson 2, students work in pairs to discuss different ways to use ratio language to describe discrete diagrams. Students first determine which statements

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			describe a given diagram, and then create a diagram and corresponding statement to represent a new situation involving ratios. Students then work in pairs to match ratios of sauce ingredients to discrete diagrams and to explain their reasoning. Students discuss what each of the cards represent. Students then select one of each style of card and explain to each other whether the cards do or do not match and provide reasoning. Throughout the materials, students engage in problem solving as a form of argument, attending thoroughly to places in the standards that explicitly set expectations for multi-step problems. In Mission 3, students justify reasoning about equivalent ratios and unit rates (Lesson 7), finding percentages (Lessons 15 and 16), and costs and time (Lesson 17). In Mission 6, Lesson 6, students construct arguments to determine which container of honey is the better deal. Students explain their reasoning and critique each other's reasoning.
	Required **4c)** Materials explicitly attend to the **specialized language** of mathematics.	**Yes**	Materials explicitly attend to the specialized language of mathematics. The Course Guide describes Mathematical Language Routines (MLR) that are used throughout the materials to support students' mathematical language development while they learn mathematical practices and content. The guide states that the feedback generated by the routines helps "students revise and

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			refine not only the way they organize and communicate their own ideas, but also ask questions to clarify their understanding of others ideas." For example, the purpose of the MLR3: Clarify, Critique, and Correct is for students to analyze incorrect, incomplete, or ambiguous written mathematical statements and improve the work by correcting errors or clarifying meaning. The purpose of MLR5: Co-craft Questions is for students to "use conversation skills to generate, choose (argue for the best one), and improve questions and situations, as well as develop meta-awareness of the language used in mathematical questions and problems." In addition, each Mission Overview includes a Progression of Disciplinary Language section that teachers use to "anticipate students using language for mathematical purposes such as interpreting, explaining, and comparing" to support sense-making and building shared understanding with peers. A chart of New Terminology is also provided that shows lessons where the new terminology is first introduced, when students are expected to understand the word or phrase, and when students are expected to use the terminology. Teacher guidance for supporting students in developing and using mathematical language is evident across the materials. For example, in Mission 2, Lesson 1, the topic of ratios is introduced along with

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			how to describe situations using ratios, or ratio language. The lesson provides examples of ratio language such as "the ratio of circles to squares" for students to ensure precise language. Students discuss and use the ratio language in writing ratios by using the sentence stems and writing what the ratio numbers mean. Some sample student responses include: "The ratio of one category to another category is ___ to ____." and "For every ____ purple dinosaur, there is ____orange dinosaur." In Mission 6 Lesson 2, the terms "coefficient" and "variable" are introduced before Activity 1, Task 1 to ensure that students understand the term as it is seen throughout the lesson. If students struggle with distinguishing coefficient and variable, it is suggested that teachers use guiding questions to help, such as: "What does it mean when an equation contains a letter?" (with the sample student response, "The letter is called a variable; it stands in for a number"); and "What makes an equation true? What makes an equation false?" (with the sample student response "If the expressions on each side have the same value, the equation is true. If the expressions on each side have different values, the equation is false").
	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. The

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			Teacher Lesson Materials and Course Guide provide teachers with insight into which practice standards are utilized in the lessons. Teacher-directed materials, such as Anticipated Misconceptions, provide teachers with strategies to develop the practice standards. For example, the introduction in Mission 2, Lesson 1 discusses how students "use ratio language with care (MP.6)" and that "making groups of physical objects that correspond with 'for every' language is a concrete way for students to make sense of the problem (MP.1)." In addition, guidance for MP.7 states, "If we have 12 squares and 4 circles, we can say the ratio of squares to circles is 12:4 and the ratio of circles to squares is 4 to 12. We may also see a structure that prompts us to regroup them and say that there are 6 squares for every 2 circles, or 3 squares for every one circle (MP.7)." Mission 7, Lesson 10 provides teachers with discussion guidance to encourage peers to explain their reasoning about creating an inequality for an unbalanced hanger as well as critique their peers' reasoning (MP.3). In addition, the lessons provide teachers with Discussion Guidance to support the development of the practice standards. Mission 2, Lesson 1 provides teacher guidance for supporting students in looking for and making use of the structures. The teacher invites students to share responses on the first two questions

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			and to "record all the ways students answered the third question for all to see" and "ask a student to explain how they sorted the figures." This strategy allows students to see various forms of the structure (MP.7). In Mission 7, Lesson 10, strategies such as sentence stems and inviting selected students to justify their answers are provided to critique other students' reasoning. In addition, in Activity 1 Task 1, the Anticipated Misconceptions suggest that teachers "encourage students to reason about the possible values of n that would make this inequality true" which focuses on students reasoning abstractly and quantitatively (MP.2).
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.	**Yes**	Materials provide all students extensive work with grade-level problems. Each lesson includes a Warm-Up, a Concept Exploration, and a Wrap Up. The Warm-Up helps students prepare for the lesson. It aids in strengthening number sense and procedural fluency. During the Concept Exploration, students first engage in a Collaborative Concept Exploration with their teacher and peers, which is followed by a self-paced Independent Digital Lesson to study the same skills and/or concepts. During the Concept Exploration, the teacher facilitates mathematical discourse among students as they move through a series of scaffolded math problems that progress towards the overall objective of

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			the lesson which includes three phases, Launch, Student Work Time, and Activity Synthesis. The materials provide suggestions for grouping students during Student Work Time that may include individual, partner, or small group work. In the Independent Digital Lesson, students first engage in a fluency activity and then continue to explore and develop concepts and skills during Guided Practice and apply what they learn in the Independent Practice section of the digital lesson. Students can also complete a Bonus section that addresses the focus standard of the lesson. The lesson ends with a Wrap-Up as the teacher guides students through discussion to process their learning and to "surface any misconceptions or misunderstandings." This activity is followed by an Exit Ticket in which students demonstrate their understanding of the lesson. The materials also include Optional Practice for additional practice with lesson content. For example, in Mission 2, Lesson 10, students use ratios to compare situations. After the Concept Exploration in both the collaborative and digital lesson, students complete the Tower of Power activity in the Independent Practice section of the Independent Digital Lesson. Students complete several problems to demonstrate their understanding of the content of the lesson, which is adaptive and based on their ability to complete the

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			problems correctly. Students have the option to complete the Bonus section of the Independent Digital Lesson, as well. Students then complete an Exit Ticket. The Optional Practice includes a Problem Set with seven questions, most of which include multiple parts, for additional practices for students to apply their learning.
	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.	**Yes**	Materials relate grade-level concepts explicitly to prior knowledge from earlier grades and are designed so that prior knowledge is extended to accommodate new knowledge. Lessons are appropriately structured and scaffolded to support student mastery. Each Mission consistently relates lesson content to previous grade-level material and standards in a way that helps the student progress to meet the current grade-level standard(s). In the Warm-Up portion of each lesson, students access prior knowledge before beginning grade-level work in order to prepare for practicing and extending their knowledge during the lesson. The Concept Exploration supports student proficiency of grade-level standards by connecting and extending prior knowledge to support students in accessing grade-level content. At the beginning of each mission, the Foundation Guidance Document highlights foundational content developed from previous lessons or grades. The Mission Overview explains the progression of

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			learning from previous grades and/or lessons to connect learning. Some of the lessons include a "Building On" section that indicates which standard the lesson is extending or building on. For example, the Warm-Up in Mission 6, Lesson 1 recalls students' prior knowledge on tape diagrams to represent operations. Students use the tape diagram to write expressions and introduce the relationship between equations and tape diagrams. In Mission 7, Lesson 2, students begin to develop an understanding of opposites through the distance that a number is from zero on the number line. The Warm-Up addresses LSSM 3.NF.A.2 to scaffold integers on the number line. Students identify which decimal and/or fraction could represent the letter B on the number line. In Mission 4, Lesson 1, students work towards LSSM 6.NS.A as they develop an understanding about how the size of a divisor affects the quotients. This lesson builds upon LSSM 5.NBT.B.6 which is addressed in the Warm-Up activity and Activity 1.
	Required **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.	**Yes**	In the materials, students produce answers in a variety of ways. Throughout the lessons, students use concrete and digital manipulatives, various models, and pictorial representations. Students create models such as tape diagrams, number lines, equations, tables, and graphs to represent solutions in a variety of ways. Students answer questions and provide

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			explanations and/or justifications to support their answers. Lessons encourage students to produce solutions, but also encourage students to utilize multiple strategies as they find solutions. For example, in Mission 3, Lesson 5, Activity 1, Task 1, students compare the speeds of three runners. This lesson includes models of tables that students can produce, but also suggests various strategies that can be used such as creating double number lines or calculating b/a to compare their speeds. In Mission 6, Lesson 4, students solve equations using a variety of strategies. Students can draw a diagram, look at the structure of the equations, or try to balance the equation. In Mission 1, Lesson 8, students write and use a formula to find the area of a triangle. During the warm-up, students think about the meaning of base and height in a triangle by studying examples and non-examples. In discussions with their partners, students use examples and non-examples to determine what is true about bases and heights in a triangle. Students indicate whether it is true for each statement. For each vote, the teacher asks one or two students to explain how they know. The Teacher Lesson Materials suggest that teachers encourage students to use examples and counterexamples to support their argument. In the Concept Exploration, students write a formula for the area of triangles. Students label a side

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			of a triangle that can be used as the base and a segment showing its corresponding height. Students record measurements for the base and height in a table and find the area of the triangle. Students write expressions for the area of any triangle using b and h and show reasoning.
	5d) Support for **English 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.	**Yes**	Materials include support for English Learners (EL) and other special populations. The materials are designed to be accessible for all students, using the Universal Design for Learning (UDL) principles to maximize access and engagement for all students. Each Mission provides a link to materials in Spanish for the Mission Overview, Assessments, Answer Keys, Teacher and Student Lesson Materials, Optional Practice, and Family Materials. The lessons include audio support for students during the Independent Digital Lessons, in addition to the closed captioning feature and visual supports. The assessments available in Spanish allow the teacher to assess the students' understanding of the standards without language barriers. The Course Guide describes Design Features That Support All Learners, such as consistent lesson structures, concepts developing over time from concrete to abstract, opportunities to apply mathematics to real-world context, access strategies, and physical math manipulatives. Accessible design features are included for students with disabilities, such as visual clarity

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			through use of color, color contrast, font readability, volume consistency, assistive technology including text-to-speech, screen reader and Braille Translation Software, keyboard accessibility, and instructional accommodations including translation materials, guided notes and graphic organizers, read aloud, scribe, separate location or quiet place, breaks, checklists and other self-monitoring activities, and physical math manipulatives. Multiple Means of Representation, Engagement, and Action and Expression sections are provided throughout the lessons to support all learners. For example, in Mission 5, Lesson 3 (LSSM 6.NS.A.3), the support for ELs is the Co-Craft Questions. This routine helps students build mathematical questioning skills and begin to think about the possible context of the problem. The support for students with disabilities suggests that students use manipulatives, such as base-ten blocks. In Mission 7, Lesson 8 (LSSM 6.EE.B.6, LSSM 6.EE.B.8, LSSM 6.NS.C.7b), support for students with disabilities suggests Peer Tutors, where the teacher pair students with previously identified peer tutors to aid in comprehension and expression of understanding. The support for ELs is Compare and Connect to foster students' “meta-awareness of language to compare different mathematical situations.” Mission 8, Lesson 7 suggests that teachers pair students that struggle

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			with fine motor skills work with a peer tutor to verbally explain how to create box plots. Also, Mission 8, Lesson 7, Activity 1, Task 1 consists of students working with a partner and being provided with a Problem Card or a Data card. To support ELs, this lesson gives students "a purpose for discussing information necessary to solve problems involving analyzing box plots." In Mission 6, Lesson 4, Activity 1 Task 1, students work with a partner to solve a column of equations. The activity Launch suggests students try to balance the equations, as previously completed in an earlier component of the lesson. Mission 6, Lesson 4 encourages teachers to provide support to ELs by making a visual display of vocabulary, phrases, and representations based on students' work. Materials are also available in Spanish.
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.	**Yes**	Multiple assessment opportunities are embedded into content materials that measure student mastery of standards that reflect the balance of the standards as presented in materials. The materials offer formative assessments that are designed to provide teachers with detailed data to inform instruction and respond to the needs of each student. The materials provide teachers real-time data and insights into student and class-level reports. Daily lesson-level assessments such as The Tower of Power (digital) and Exit Tickets (paper) are embedded into the materials and occur as part of

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			recommended daily core instructional time. The Tower of Power is a scaffolded assessment that focuses on the content of a single lesson and is administered automatically at the end of each Independent Digital Lesson. The Mission-Level Assessments consist of open-response items that require students to show their work or explain their reasoning. In some cases, students draw models and write explanations as a part of showing work. For example, in Mission 4 Lesson 2 (LSSM 6.EE.B.5), students identify or generate a multiplication equation that represents the same relationship as a division expression, and explain their reasoning. Additionally, students interpret and create tape diagrams that represent situations involving equal-sized groups. Lastly, students recognize that there are two different ways to interpret a division expression by answering “How many groups?” or “How many in each group?” during Small Group Instruction, the Independent Digital Lesson, Exit Ticket, and Mission Assessments. Also, the Mid-Mission Assessment in Mission 8 assesses LSSM 6.SP.A.1, 6.SP.A.2, 6.SP.A.4, 6.SP.A.5a, and 6.SP.A.5b which is addressed in Lessons 1-8. The End of Mission 8 Assessment assesses LSSM 6.SP.A.3, 6.SP.A.4, 6.SP.A.5c, and 6.SP.B.5d to measure student proficiency from Lessons 9 to 18. Both assessments assess the standards to measure student

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			proficiency throughout each mission. Furthermore, the Mid-Mission Assessment in Mission 4 assesses major content standards which are addressed in Lessons 3-13. The End of Mission 4 Assessment assesses LSSM 6.NS.A.1, LSSM 6.G.A.1, and LSSM 6.NS.G.A.2 which is covered in Lessons 14-17.
	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.	**Yes**	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 a real-world context. Assessment items require students to produce answers and solutions, arguments, explanations, and models, in a grade-appropriate way. For example, in the Mission 2 Mid-Mission Assessment problems 1, 2, and 5 assess the conceptual understanding, aligning with the expectation of LSSM 6.RP.A.1. In Problems 1, 2, and 5, students understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities by using pictures. Problem 3 assesses the conceptual understanding expectation of LSSM 6.RP.A.2. In problem 3, students understand the concept of a unit rate a/b associated with a ratio a:b with $b \neq 0$ and use rate language in the context of a ratio relationship with double number lines as they find the unit price of marbles. Problems 4-5 assess the application expectation of LSSM 6.RP.A.3

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			as they identify the rate of solving real-world and mathematical problems by reasoning about the double number line, ratios, and equations using miles and making smoothies. Mid- and End-of-Mission assessments require that students explain their reasoning or show work. Also, on the Mid-Mission assessment in Mission 1 (problems 1-4, and 6), students decompose the shape to calculate the area of the shaded region. Task 5 requires that students circle the base and height on the triangle, then calculate the area. In the Mid-Mission assessment, Task 4, students correctly label a tape diagram, produce an equation using the tape diagram, followed by solving the equation. In addition, the Mission 2 Mid-Mission assessment contains 7 questions. Of the 7 questions, approximately 57% or 4 questions require application in a real-world context, and approximately 29% or 2 questions require both conceptual understanding and procedural skill and fluency. Furthermore, approximately 14% or 1 question requires both conceptual understanding and application. In addition, in the Mission 4 Mid-Mission and End-of-Mission assessments, students demonstrate proficiency of LSSM 6.NS.A.1, which assesses all three components of rigor. For example, in problem 1 on the Mission 4 End-of-Mission assessment, students interpret the quotient of a fraction using a tape diagram. In problems 2 - 3, students

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			compute the quotient of a fraction. In Problem 5, students solve a word problem involving the division of fractions by fractions by using equations to represent the problem.
	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.	**Yes**	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. For each Mid-Mission and End-of-Mission assessment, a standards alignment document and rubric are used to grade exemplar student responses and answer keys. For example, rubrics provide guidance on how to score students based on how they answered the question, ranging from initiating understanding, developing understanding, nearing understanding, to full understanding. In addition, the rubrics provide an example of each category within the various domains of understanding. For example, the Mission 6 End-of-Mission Assessment provides guidance for scoring Task 1 (LSSM 6.EE.A.1). Students receive 6 points (maximum) for correctly rewriting all three expressions as exponential expressions. Students receive 5 points for correctly rewriting two expressions, 4 points for rewriting one expression, and 3 points for not rewriting any expressions but showing some form of initial understanding within

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			their work. Furthermore, in Problem 3 on the Mission 2 End-of-Mission Assessment, the initiating understanding label states, "the student is unable to correctly determine the number of each creature but produces work that serves as evidence that the student is initiating understanding of how to use ratio and rate reasoning to solve real-world problems."
	6d) Materials provide 2-3 **comprehensive assessments** (interims/benchmarks) that measure student learning up to the point of administration.	**No**	Materials do not provide comprehensive assessments (interims/benchmarks) that measure student learning up to the point of administration. Mid-Mission and End-of-Mission Assessments assess students on the content addressed in that particular Mission, but do not include content from other Missions.
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.	**Yes**	The content can be reasonably completed within a regular school year, and the pacing of content allows for maximum student understanding. The materials include nine Missions addressed over a 36-week period. Guidance suggests that teachers address four lessons per week and reserve a fifth Flex Day for differentiated instruction or assessment days. Lessons contain a Warm Up, Concept Explorations (includes Activity 1, Activity 2, and an Independent Digital Lesson), and a Wrap Up (includes the Lesson Synthesis and Exit Ticket). Lessons provide students with independent practice in the Concept Exploration section. Teachers can also assign an Independent Digital Lesson for additional support. For example, the

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			pacing for Mission 1, Area and Surface Area, is five weeks with eighteen lessons. The pacing for Mission 3, Unit Rates and Percentages, is four weeks with sixteen lessons.
	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.	**Yes**	The materials are easy to use and well organized for students and teachers. Guidance is provided for lesson planning and instructional delivery, lesson flow, questions to help prompt student thinking, and expected student outcomes. Teacher materials contain student responses, anticipated misconceptions, and discussion guidance. The Course Guide provides a scope and sequence, pacing guidance, explicit instructions for implementing the materials, guidance for supporting diverse learners, and guidance for using assessments and reports. In addition, the Course Guide details instructional routines throughout the lessons, as well as strategies for multilingual learners. Guidance suggests that teachers familiarize themselves with the math of the Mission, work through a selection of the Independent Digital Lessons, and check the class reports to review student progress. Guidance for Core Days and Flex Days is provided so the teacher can meet all student needs. As students complete the Digital Lesson, the organization is easy to follow and understand, as each lesson follows the same structure. Each Mission begins with a Mission Overview. This overview

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			includes an Introduction, an Overview of topics and lesson objectives, Foundational Missions Pacing, Progression of Disciplinary Language, new terminology, and required materials. Lessons follow an intentional sequence that flows through Warm-Up, Concept Exploration: Collaborative Concept Exploration with teacher and peers, Independent Digital Lessons to explore concepts further on their own, and Wrap-Up Lesson Synthesis led by the teacher and the completion of an individual Exit Ticket. The Lesson Overviews provide teachers with the learning goals, learning targets, required materials, and required preparation. The materials offer an optional classroom presentation for every lesson. The classroom presentation contains Warm Up, Collaborative Concept Exploration, and Wrap Up activities. It also includes cues that support the teacher's transitions. For example, in Mission 2, Lesson 13, teacher materials provide instruction on arranging students in groups of 2 and allotting quiet time prior to sharing with a partner. The end of the activity identifies that student responses may vary but also indicates a sample response. In Mission 1 Lesson 8, the lesson is introduced as building on students' earlier work decomposing and rearranging regions to find area. In Mission 1, Lesson 8, Activity 1, Task 1, guidance provides different strategies that the student may

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			utilize depending on how students rearranged the shapes.
	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.	**Yes**	Materials include unit and lesson study tools for teachers. The lesson summary provided at the start of each lesson describes the math and provides examples as well as the guidance provided throughout the lesson, such as discussion guidance and activity descriptions, etc. Additionally, the Teacher Guide explains how to plan for a lesson titled "Planning for a Mission." It suggests that teachers become familiar with the materials and understand how students progress throughout a lesson. Furthermore, each mission contains a Mission Overview that provides teachers with work that students learned in previous grades and an explanation of the key concepts in the lessons. Materials include study tools with recommendations such as, “teachers assign foundational missions during Flex Day or during additional non-core instruction time” to benefit students that may be struggling.” For example, the Mission 2 Overview identifies that students can utilize previous work with ratios from Grades 3-5 to connect key concepts in Grade 6. The Mission Overview also states the key concept of Mission 2 is to learn that a ratio is an association between two quantities and to analyze contexts expressed in terms of ratios. Furthermore, the Mission 2 Overview provides the teachers with the

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Progression of Disciplinary Language, new terminology, and required materials throughout the Mission. In addition, the Teacher Materials provide teachers with the purpose of each lesson, discussion questions, and anticipated student responses. In Mission 6, Lesson 6, teacher guidance describes the shift between prior lessons (Lessons 1-5) and Lesson 6. Lessons 1-5 in Mission 6 focus on writing and solving equations; whereas, Lesson 6 focuses on writing expressions to represent situations. The lesson includes discussion guidance such as asking students "Did anyone have the same strategy but would explain it differently?" Also, the lesson provides student responses along with possible explanations.
	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. Each mission contains a Foundational Lesson Guidance where lesson objectives align with prerequisite skills from previous grades. For example, Mission 6 (Lessons 1-6) focuses on LSSM 6.NS.B.3, 6.EE.B.5, 6.EE.B.6, 6.EE.B.7 and requires prerequisite skills from Grade 5, Mission 4, Lesson 25 (LSSM 5.NBT.B.7). Also, Mission 2 (Lessons 3-5) focuses on LSSM 6.RP.A.1 and requires prerequisite skills from Grade 4 Mission 7 Lesson 2 (LSSM 4.MD.A.1). In addition, the Mission Overview shows the links between lessons within that grade and specific Mission and the prior and

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			next grade level. Standards for the associated lessons are listed with each lesson, identifying prerequisite skills. For example, Mission 2 Overview states that "Work with ratios in Grade 6 draws on earlier work with numbers and operations. In elementary school, students worked to understand, represent, and solve arithmetic problems involving quantities with the same units." In Grade 4, students use two-column tables to record conversions between measurements. In Grade 5, students plot points on the coordinate plane to build on work with length and area. These early experiences prepare students for understanding two critical representations used to study relationships between quantities.
	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-level work. There are no diagnostic tests, pre-assessments, or any other materials that help teachers identify students who need prerequisite work. Although student reports are provided, they are provided after lesson and Mission completion instead of before the learning takes place. For example, the materials include a Tower of Power activity during Independent Practice which provides a Boost when a student makes a mistake. The Boost breaks down the problem to help students understand what they did

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			incorrectly. If a student continues to make mistakes after multiple attempts, the teacher receives an alert suggesting differentiated support for that student. However, the activity occurs after the lesson has been taught. Tools to identify students that need prerequisite work to access current, grade-level instruction prior to engaging in the on grade-level content are not provided.
	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.	**Yes**	Materials provide targeted, aligned, prerequisite work for the major work of the grade, directly connected to specific lessons and units in the materials. Each mission contains a Foundational Lesson Guidance to identify prerequisite standards and supporting grade-level content utilized for scaffolding. For example, Mission 3, Lesson 1 focuses on LSSM 6.RP.A.2 and identifies that students requiring additional support can get assistance from Grade 6, Mission 2, Lesson 12 and Grade 3, Mission 1, Lessons 15-17. Mission 2, Lesson 2 provides support on drawing a table of equivalent ratios along with finding a “1” row. Grade 3, Mission 1 Lessons 15-17 reviews modeling the relationship between multiplication and division using number bonds and tape diagrams, which is essential for calculating ratios. In addition, prerequisite work for major standards are identified in the Topic Overview. In Mission 7, additional support can be located in Grade 5, Mission 6,

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Topics A-D and Grade 4, Mission 3, Topic F.
	7g) Materials provide **clear guidance and support** for teachers about the structures that allow students to appropriately address unfinished learning using prerequisite work.	**Yes**	Materials provide clear guidance and support for teachers about the structures that allow students to appropriately address unfinished learning using prerequisite work. The Course Overview provides clear guidance and support for teachers to address unfinished learning using prerequisite work. For example, daily lessons address which prerequisite standards students are "building on" for that lesson. Within the daily lessons, there are Digital Lessons for independent practice. Through the Digital Lessons teachers receive a Tower Alert to identify which lessons students are struggling with. Furthermore, teachers can review the Student Report for a specific student to examine unfinished learning. As teachers identify where unfinished learning occurs, the teacher can use the "building on" standards throughout the lessons to provide intervention to students. The materials provide built-in Tier 1 intervention through the Tower of Power. Students are required to complete grade-level work until the Tower Alert or Tower of Power identifies that a student has unfinished learning. Students continue to access grade-level content once students understand the content. If students need additional support, the materials give teachers individualized intervention

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			recommendations that can be assigned to students.
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[4]	1. Focus on Major Work	**Yes**	Materials devote a large majority of time to the major work of the grade. Materials focus on major content standards throughout the year. Materials spend minimal time on content outside of the appropriate grade level. In assessment materials, assessment components do not make students responsible for any topics before the grade in which they are introduced.
	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, or two or more domains in a grade, in cases 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

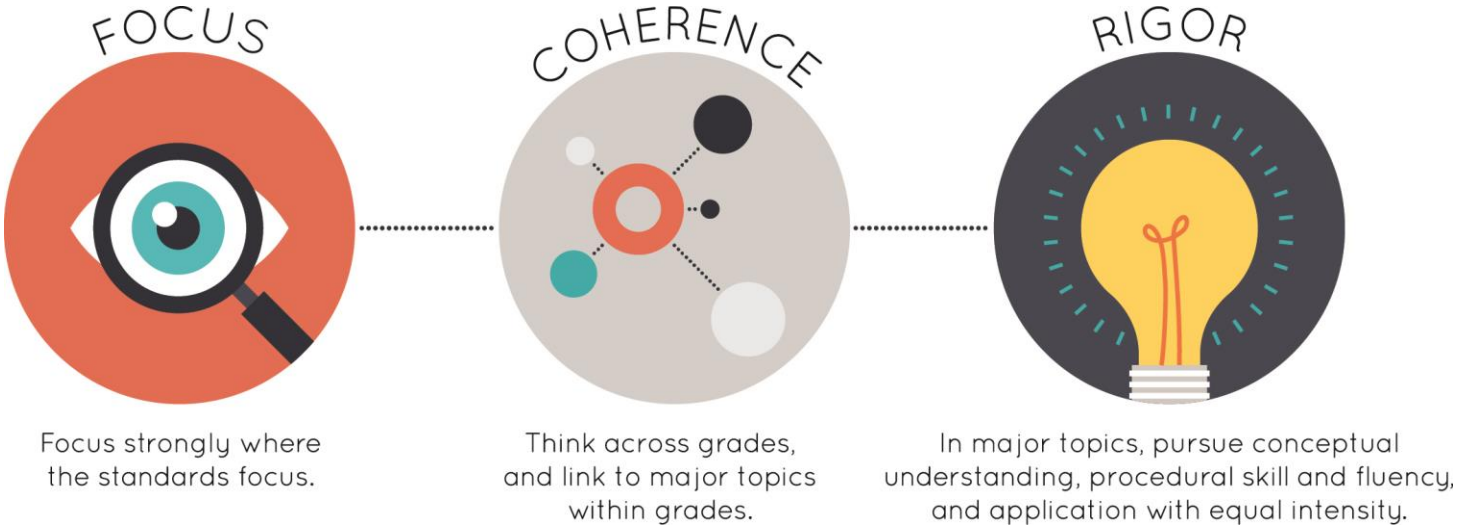
[4] Must score a "Yes" for all Non-negotiable Criteria to receive a Tier 1 or Tier 2 rating.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			fluencies and procedural skills required by the standards. Materials are designed so that students spend sufficient time working with engaging applications. It is evident in the materials that the three aspects of rigor are not always treated together and are not always treated separately.
	4. Focus and Coherence via Practice Standards	**Yes**	Materials attend to the full meaning of each practice standard. Each practice standard is connected to grade-level content in a meaningful way and is present throughout the year in assignments, activities, and/or problems. 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. Mathematical language is emphasized throughout the lessons within each mission. 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[5]	5. Alignment Criteria for Standards for Mathematical Content	**Yes**	Materials provide all students extensive work with grade-level problems. Materials relate grade-level concepts explicitly to prior knowledge from earlier grades. The materials are designed so that prior

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			knowledge is extended to accommodate the new knowledge, building to core instruction, on grade-level work. Lessons are appropriately structured and scaffolded to support student mastery. Students produce answers and solutions in a variety of ways. Support for English Learners and other special populations is provided.
	6. Quality of Assessments	**Yes**	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. 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-appropriate way.
	7. Additional Indicators of Quality	**Yes**	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.
FINAL DECISION FOR THIS MATERIAL: **Tier I, Exemplifies quality**			

Strong mathematics instruction contains the following elements:



Title: **Zearn Math**

Grade/Course: **7**

Publisher: **Zearn**

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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	

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

- Review the **required**[1] 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.

[1] **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[2]:** Students and teachers using the materials as designed devote the large majority[3] 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**	The materials devote the majority of class time to major work of the grade as defined by the Louisiana Student Standards for Mathematics (LSSM). Of the 144 total instructional lessons, 65% are devoted to the major work of the grade. Specifically, 52% of lessons are spent on major standards alone, 13% are spent on a combination of major and supporting/additional standards, and 36% are spent on supporting/additional standards.
	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 grade level during core math instruction. In assessment materials, assessment components do not make students/teachers responsible for any topics before the grade in which they are introduced. The materials are divided into missions. Each mission consists of topics broken down into lessons aligned to the LSSM for Grade 7. The lessons that go beyond the scope of the Grade 7 LSSM are clearly marked as optional in the Louisiana implementation guidance. For example, all lessons in Mission 9 are labeled as optional and are intended for extension

[2] For more on the major work of the grade, see Focus by Grade Level.
[3] 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
			activities. In Mission 9, students use concepts and skills from previous Missions as they calculate and/or estimate quantities, identify proportional relationships, interpret survey findings, and create scale drawings (LSSM 7.RP.A.3, LSSM 7.G.A.1, LSSM 7.EE.B.4, LSSM 7.NS.A.3, LSSM 7.SP.B.4, LSSM 7.NS.A.2d, LSSM 7.G.B.4, LSSM 7.G.B.6). There are no digital lessons for Mission 9. Warm Ups spend minimal time on content outside of the appropriate grade level to recall prior knowledge or for fluency practice. For example, in Mission 4, Lesson 2 students determine ratios of fractions (LSSM 7.RP.A.1), but, in the Warm Up, students use prior knowledge of divide fractions (LSSM 6.NS.A.1). In the Warm Up of Mission 6, Lesson 3, students represent and match tape diagrams with equations (LSSM 7.EE.B.4) which includes determining equivalent expressions (LSSM 6.EE.A.4). Assessments focus only on grade-level standards. For example, in the End-of-Mission Assessment of Mission 2, only Grade 7 LSSM standards are assessed (LSSM 7.RP.A.2, LSSM 7.RP.A.2a, LSSM 7.RP.A.2b, LSSM 7.RP.A.2c). This assessment includes recognizing and representing proportional relationships between quantities, deciding whether two quantities are in a proportional relationship, identifying the constant of proportionality, and representing proportional relationships by equations.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			The End-of-Mission Assessment of Mission 6 addresses LSSM 7.EE.B.4 and LSSM 7.EE.A.1. This assessment includes creating and solving equations and inequalities from real-world situations to determine the solution or what makes the inequality true.
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. Culminating lessons are provided to connect supporting content to major content. Major work is often first developed and then reinforced in lessons addressing supporting standards. For example, students develop an understanding of LSSM 7.NS.A.2d in Mission 5 and LSSM 7.RP.A.1 in Mission 4. This major work is reinforced later in lessons in Mission 8 which connects supporting content to major work through proportional reasoning. For example, in Mission 8, Lesson 16, which focuses on supporting LSSM 7.SP.A.2, students use data from a random sample to draw inferences and generate multiple samples of the same size to gauge the variation in estimates or predictions. Using division to collect a sample and compute the fraction of responses in the sample in a given range connects the supporting LSSM 7.SP.A.2 to major LSSM 7.NS.A.2d and LSSM 7.RP.A.1. Additionally, in Mission 8, Lesson 7, which focuses on LSSM 7.SP.C.8c, students design and use a

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			simulation to generate frequencies for compound events. This lesson connects to and supports major standard LSSM 7.RP.A, in which students analyze proportional relationships and use the relationships to solve real-world and mathematical problems.
	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, Mission 2, Lesson 8 connects the Geometry (G) and Ratios and Proportion (RP) domains. During the lesson, students compare proportional and non-proportional equations as they complete unit conversion, involving temperature, and evaluating volume/surface area of a cube (LSSM 7.G.B.6, 7.RP.A.2). Mission 3 connects the Geometry (G), Expressions and Equations (EE), and the Ratios and Proportion (RP) domains as students extend the use of variables and formulas in solving real-life mathematical problems using proportional relationships. Throughout the Mission, students extend their knowledge of circles and geometric measurement, applying their knowledge of proportional relationships to the study of circles. During the lessons, students solve problems involving scale drawings of geometric figures and using the formulas for area and circumference (LSSM 7.G.A.1, 7.G.A.2, 7.G.B.4) by applying prior

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			knowledge of solving multi-step real-life and mathematical problems while recognizing and representing proportional relationships between quantities while applying the properties of operations to calculate numbers in any form (LSSM 7.RP.A.2, 7.EE.B.3). Mission 6, Lesson 12 connects clusters A (Use properties of operations to generate equivalent expressions) and B (Solve real-life and mathematical problems using numerical and algebraic expressions and equations) within the Expressions and Equations (EE) domain. During the lesson, students solve problems about percent increase or decrease by drawing and reasoning about a tape diagram or by writing and solving an equation (LSSM 7.EE.B.3, 7.EE.B.4a, 7.EE.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. The instructional materials develop conceptual understanding of grade-level content through scaffolds, conceptual problems, and discussion questions throughout each lesson. Throughout the materials, students build conceptual understanding through the use of concrete and digital manipulatives, multiple means of representation, multiple strategies, sentence frames, tools, and templates. In addition, students build conceptual understanding with their teacher and their

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			peers in Collaborative Concept Exploration through mathematical discourse, as well in the self-paced Independent Digital Lessons. Students express their understanding in multiple ways, such as through creating models, critiquing the arguments of others, and interpreting solutions to problems. For example, in Mission 2, Lesson 1, Activity 1, students choose and create representations to compare ratios in the context of recipes or scaled copies and coordinate different representations of situations involving equivalent ratios with discrete diagrams, tables, and double number lines (LSSM 7.RP.A.2). The lesson builds towards key ideas in proportional relationships. During the lesson, students articulate that the mixture's taste depends on the amount of water and the amount of drink mix used to make the mixture. Students work through several questions to determine that, in the same quantity of each mixture, the more flavored drink mixture has more drink mix for the same amount of water. Also, Mission 6, Lessons 2-8 develop conceptual understanding for future lessons in Mission 6. In Mission 6, Lesson 2, students represent the relationship of two quantities using tape diagrams (LSSM 7.EE.B.3). During the lesson, students use tape diagrams to represent a situation and to reason about the value of an unknown quantity. For example, students analyze a tape diagram that represents the

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			following story, “Mai made 50 flyers for five volunteers in her club to hang up around school. She gave five flyers to the first volunteer, 18 flyers to the second volunteer, and divided the remaining flyers equally among the three remaining volunteers.” In groups, students explain why the diagram represents the story and then work together to find any unknown quantities in the story. Students then draw tape diagrams to represent stories. This lesson prepares students for the next several lessons as they represent situations using equations in the form px + q = r and p(x + q) = r (LSSM 7.EE.B.4a). This same approach is used in Lesson 7 as students develop an understanding about how a balanced hanger and equation can represent the same situation. As students progress to Lesson 9, students apply this understanding as they solve equations involving negative numbers (LSSM 7.EE.B.4a). Students’ conceptual understanding of the diagrams enable them to have multiple strategies to solve various equations as they move from concrete to abstract concepts.
	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	**Yes**	Materials are designed so that students attain the fluencies and procedural skills required by the standards. The materials are designed in a way that allows students to acquire procedural skill and fluency through a progression of learning over time. Students begin every lesson with a Warm-Up that provides students the

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	standards. In higher grades, sufficient practice with algebraic operations is provided in order for students to have the foundation for later work in algebra.		opportunity to strengthen number sense or procedural fluency. During the Warm Up, students practice previously learned skills and prepare to practice and extend those skills in the current lesson. In addition, each Independent Digital Lesson also includes a fluency-aligned activity, such as Mix and Math, Totally Times, Pair Compare, and Sprints. The fluency practices flow with the lessons and connect with the appropriate standards. The materials also provide several opportunities to build procedural skills through optional problem sets and homework problems. In addition, the materials include lessons that focus solely on procedural skill and fluency as called for by the standards. For example, in Mission 5, Topic B, students build towards the procedural skill and fluency expectation of LSSM 7.NS.A.1). After building an understanding of positive and negative numbers, students solve subtraction and expressions in Lesson 6 and add and subtract signed numbers to represent gains and losses in Lesson 7. In Mission 5, Lesson 10, students develop precision on multiplying signed numbers through matching equivalent expressions (LSSM 7.NS.A.2d). LSSM 7.NS.A.1 is also addressed later in Mission 6, Lesson 18, as students use the distributive property to rewrite subtraction as adding the opposite and then rearranging terms in an expression (LSSM 7.EE.A.1 and LSSM

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			7.NS.A.1). In Mission 2, Lesson 8, and Mission 4, Lesson 2, students compute unit rates associated with ratios of fractions, including ratios of lengths, areas, and other quantities measured in like or different units (LSSM 7.RP.A.1). For example, in Mission 4, Lesson 1, students solve a unit rate problem involving a train traveling at a constant speed and goes 7.5 kilometers in 6 minutes. Students determine how far the train goes in 1 minute and in 100 minutes. The optional Problem Set includes additional problems for students to practice this skill such as "A cyclist rode 3.75 miles in 0.3 hours. a) How fast was she going in miles per hour? b) At that rate, how long will it take her to go 4.5 miles?"
	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 teachers and students spend sufficient time working with engaging applications, including single- and multi-step contextual problems, and non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving. Each Mission includes Concept Exploration activities where students study the same content with their teacher and peers in Collaborative Concept Exploration and in the self-paced Independent Digital Lessons. Missions also contain activities that allow students to apply key concepts to solve real-world problems. For example, in Mission 4, Lesson 10, students

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			solve several real-world problems about sales tax and tips. In Activity 1, students use incomplete tables that show the sales tax charges on the same items in two different cities to find the sales tax and cost of items such as paper towels, soap, and a lamp. In Activity 2, Task 1, students use a meal receipt as they engage in the following real-world problem: "Jada has a meal in a restaurant. She adds up the prices listed on the menu for everything they ordered and gets a subtotal of $42.00. a) When the check comes, it says they also need to pay $3.99 in sales tax. What percentage of the subtotal is the sales tax? b) After tax, the total is $45.99. What percentage of the subtotal is the total? c) They actually pay $52.99. The additional $7 is a tip for the server. What percentage of the subtotal is the tip?" (LSSM 7.RP.A.3). In Mission 3, Lesson 3, students explore the circumference of a circle through real-world situations. In Activity 1, students use several circular objects to solve the following prompts: "Measure the diameter and the circumference of the circle in each object to the nearest tenth of a centimeter. Record your measurements in the table." "Plot the diameter and circumference values from the table on the coordinate plane. What do you notice?" and "Plot the points from two other groups on the same coordinate plane. Do you see the same pattern that you noticed earlier?"

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Students conclude that the definition of pi is the constant of proportionality which develops understanding of the derivation of the formula for circumference of a circle. In Activity 2, students complete the following task: "Here are five circles. One measurement for each circle is given in the table. Use the constant of proportionality estimated in the previous activity to complete the table." (LSSM 7.G.B.4).
	Required **3d)** ***Balance:*** The three aspects of **rigor** are not always treated together and are not always treated separately.	**Yes**	It is evident in the materials that the three aspects of rigor are not always treated together and are not always treated separately. The materials reflect the balance of rigor in the standards. For example, in Mission 2, students apply proportional relationships to solve problems with fractional ratios, rates, percentages, and proportionality constant. The Mission integrates all of the components of rigor. In Lessons 1 - 2, students estimate or calculate the percentage of a rectangular area covered by another region, generate the dimensions for a scaled copy of an original figure with fractional side lengths, and find and use a unit rate to solve a problem involving fractional quantities (LSSM 7.G.A.1, 7.RP.A.1). During the rest of the Mission 2, students use proportional relationships to solve multi-step, real-world problems that involve fractions and percentages. Students use terms and representations in reasoning about

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			situations involving sales taxes, tips, markdowns, markups, sales commissions, interest, depreciation, and scaling a picture. Students eventually use equations to represent proportional relationships in which the constant of proportionality arises from a percentage, such as the relationship between the price paid and the amount of sales tax paid (LSSM 7.RP.A.1, LSSM 7.RP.A.2, LSSM 7.RP.A.3). In Mission 6, Lesson 11, the three aspects of rigor are treated separately but also treated together. During the Warm Up, students create a real-life problem, or story, to represent the tape diagram. From the tape diagram, students write an equation to represent the tape diagram. Activities 1 and 2 focus on conceptual understanding and procedural and fluency skills. For example, Activity 1, Task 1, states “Tyler is making invitations to the state fair. He has already made some of the invitations, and he wants to finish the rest of them within a week. He is trying to spread out the remaining work, to make the same number of invitations each day. Tyler draws a diagram to represent the situation. Answer the questions below.” Students use a tape diagram to answer questions such as: “Explain how each part of the situation is represented in Tyler’s tape diagram” and Use Tyler’s diagram to write an equation that represents the situation. Explain how each part of the situation is represented in your equation.”

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			and "Show how to solve your equation." (LSSM 7.EE.B.3, LSSM 7.EE.B.4, LSSM 7.EE.B.4a). In Mission 6, Lesson 12, students engage in activities that address each level of rigor individually and together. In the lesson, students develop a conceptual understanding of matching equations and tape diagrams that represent the same situation. Students practice writing equations to represent situations in context. Then, students solve story problems about percent increase or decrease by drawing and reasoning about a tape diagram or by writing and solving an equation, followed by applying it to real-world application of the concept (LSSM 7.EE.A.2, 7.EE.B.3, 7.EE.B.4, 7.EE.B.4a).
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. Practice standards are connected to grade content and are meaningfully present throughout the materials. Examples of the mathematical practices implemented within the units are described in the unit and lesson overviews. The materials provide students with an opportunity to engage with the practice standards in each lesson and support students in the development of mathematical practices, contributing to students' habits of mind as students develop procedural skills and fluency, and conceptual understanding. For example, in Mission 1, students study the relationship between regions and lengths in scale

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			drawings. Throughout the mission, students discuss mathematical ideas and respond to the ideas of their peers (MP.3, MP.6). Additionally, students make a floor plan for their classroom or other room or space at their school (MP.4). Mission 1, Lesson 7 students reason abstractly and quantitatively (MP.2) as they measure the length of a scale drawing of a basketball court to determine actual measurements on a basketball court. Students contextualize the meaning of a scale drawing in relation to an actual drawing (LSSM 7.G.A.1). In Mission 6, Lesson 2, students use a tape diagram to represent a relationship between values and reason about a problem, using appropriate tools strategically (MP.5). In Mission 3, Lesson 3, students explore circumference by using appropriate tools strategically (MP.5). Students use household circular or cylindrical objects to discover the value of pi in relation to circumference, which is also the constant of proportionality (LSSM 7.G.B.4).
	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. Opportunities are provided that allow students to engage in mathematical reasoning through viable arguments and critiquing student work. The materials provide opportunities for students to

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			discuss their thinking and reasoning for the strategies they used to solve problems throughout the materials. For example, in Mission 6, students interpret solutions to equations, critique reasoning about solving equations, critique reasoning about equivalent expressions, and generalize about solving equations and when expressions are equivalent. Students justify reasoning about writing and solving inequalities in Lessons 13 - 17, and explain reasoning about the distributive property in Lesson 19. In Mission 3, Lesson 10, Activity 2, students analyze and critique two students' responses about the diameter and radius of a merry-go-round and a cookie. In Mission 4, students justify why specific information is needed to solve percent change problems. Students compare measurements, scale factors, and decimal and fraction representations to make generalizations about using constants of proportionality to solve problems. In Mission 5, Lesson 12 Activity 2, students apply previous knowledge of proportional relationship equations to model ascending and descending situations. Students engage with various problems and explain their reasoning.
	Required **4c)** Materials explicitly attend to the **specialized language** of mathematics.	**Yes**	Materials explicitly attend to the specialized language of mathematics. The Course Guide describes Mathematical Language Routines (MLR) that are used throughout the materials to support students' mathematical language

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			development while they learn mathematical practices and content. The guide states that the feedback generated by the routines helps "students revise and refine not only the way they organize and communicate their own ideas, but also ask questions to clarify their understanding of others ideas." For example, the purpose of the MLR3: Clarify, Critique, and Correct is for students to analyze incorrect, incomplete, or ambiguous written mathematical statements and improve the work by correcting errors or clarifying meaning. The purpose of MLR5: Co-craft Questions is for students to "use conversation skills to generate, choose (argue for the best one), and improve questions and situations, as well as develop meta-awareness of the language used in mathematical questions and problems." In addition, each Mission Overview includes a Progression of Disciplinary Language section that teachers use to "anticipate students using language for mathematical purposes such as interpreting, explaining, and comparing" to support sense-making and building shared understanding with peers. A chart of New Terminology is also provided that shows lessons where the new terminology is first introduced, when students are expected to understand the word or phrase, and when students are expected to use the terminology. Teacher guidance for supporting students in

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			developing and using mathematical language is evident across the materials. For example, in Mission 1, Lesson 1, lists corresponding, scale, scale drawing, scale factor, and scaled copy as new terms. This terminology corresponds with the precise language of the LSSM 7.G.A.1. In Mission 6, Lesson 6, Activity 1, students use equation cards to sort to analyze the structure of equations. Students sort the cards however they choose. Once cards are sorted, students describe their equation categories with precise language and mathematical terms, such as coefficient, variable, and constant. As students describe the equations, they develop understanding of the difference between forms similar to p(x + q) and px + q and describe categories and equations using precise language. In Mission 2, Lesson 9, Activity 1, students use information gap cards as they work with partners. Partner A has the Problem Card and Partner B has the Data Card. Partner A asks Partner B for specific information on the Data Card to answer questions on the Problem Card. Partner B uses specific terminology and precise language to obtain information from the Data Card. Partner A's Card states, "Mai and Noah each leave their houses at the same time and ride their bikes to the park. For each person, write an equation that relates the distance they travel and the time. Who will arrive at the park first?" Partner B's

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			card contains information to write an equation and determine who will arrive first. The card contains information such as "Noah lives 1 kilometer farther away from the park than Mai does. Mai lives 8,000 meters from the park. Noah lives 9,000 meters from the park. Mai and Noah each bike at a constant speed. Mai bikes 250 meters per minute. Noah bikes 300 meters per minute."
	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. The Teacher Lesson Materials and Course Guide provide teachers with insight into which practice standards are utilized in the lessons. Teacher-directed materials, such as Anticipated Misconceptions, provide teachers with strategies to develop the practice standards. For example, in Mission 2, Lesson 2, students describe relationships between rows or columns in a table that represent proportional relationships and explain how to calculate missing values in the table. Discussion Guidance is included in the teacher materials to support students in sharing their solution approaches in addition to guidance for MP.6 which states, "Ensure that these are highlighted as part of the discussion and that students describe their methods using mathematical language (MP.6)" which is followed by questions that prompt

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			students to use precise language. In Mission 5, Lesson 1, students interpret negative numbers. Teacher guidance for student use of MP.2 states, “In this lesson, students review what they learned about negative numbers in grade 6, including placing them on the number line, comparing and ordering them, and interpreting them in the contexts of temperature and elevation (MP2).” In Lesson 2, Activity 2, teacher guidance for student use of MP.5 states, “In this activity, students use what they learned in the previous activity to find temperature differences and connect them to addition equations. Students who use number line diagrams are using tools strategically (MP5). Students may draw number line diagrams in a variety of ways; what matters is that they can explain how their diagrams represent the situation.” In Mission 8, Lesson 8, students list the sample space for a compound event. Guidance states that students “make use of the structure (MP.7) of tree diagrams, tables, and organized lists as methods of organizing this information” and that they “notice that the total number of outcomes in the sample space for an experiment that can be thought of as being performed as a sequence of steps can be found by multiplying the number of possible outcomes for each step in the experiment (MP8).”

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
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.	**Yes**	Materials provide all students extensive work with grade-level problems. Each lesson includes a Warm-Up, a Concept Exploration, and a Wrap Up. The Warm-Up helps students prepare for the lesson. It aids in strengthening number sense and procedural fluency. During the Concept Exploration, students first engage in a Collaborative Concept Exploration with their teacher and peers, which is followed by a self-paced Independent Digital Lesson to study the same skills and/or concepts. During the Concept Exploration, the teacher facilitates mathematical discourse among students as they move through a series of scaffolded math problems that progress towards the overall objective of the lesson which includes three phases, Launch, Student Work Time, and Activity Synthesis. The materials provide suggestions for grouping students during Student Work Time that may include individual, partner, or small group work. In the Independent Digital Lesson, students first engage in a fluency activity and then continue to explore and develop concepts and skills during Guided Practice and apply what they learn in the Independent Practice section of the digital lesson. Students can also complete a Bonus section that addresses the focus standard of the lesson. The lesson ends with a Wrap-Up as the teacher guides students

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			through discussion to process their learning and to "surface any misconceptions or misunderstandings." This activity is followed by an Exit Ticket in which students demonstrate their understanding of the lesson. The materials also include Optional Practice for additional practice with lesson content. For example, in Mission 7, Lesson 1, students create and describe graphs showing squares' measurements. After the Concept Exploration in both the collaborative and digital lesson, students complete the Tower of Power activity in the Independent Practice section of the Independent Digital Lesson. Students complete several problems to demonstrate their understanding of the content of the lesson, which is adaptive and based on their ability to complete the problems correctly. Students have the option to complete the Bonus section of the Independent Digital Lesson, as well. Students then complete an Exit Ticket. The Optional Practice includes a Problem Set with six questions, most of which include multiple parts, for additional practices for students to apply their learning.
	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	**Yes**	Materials relate grade-level concepts explicitly to prior knowledge from earlier grades and are designed so that prior knowledge is extended to accommodate new knowledge. Lessons are appropriately structured and scaffolded to support student mastery. Each Mission

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	grade/course-level work. Lessons are appropriately **structured and scaffolded** to support student mastery.		consistently relates lesson content to previous grade-level material and standards in a way that helps the student progress to meet the current grade-level standard(s). In the Warm-Up portion of each lesson, students access prior knowledge before beginning grade-level work in order to prepare for practicing and extending their knowledge during the lesson. The Concept Exploration supports student proficiency of grade-level standards by connecting and extending prior knowledge to support students in accessing grade-level content. At the beginning of each mission, the Foundation Guidance Document highlights foundational content developed from previous lessons or grades. The Mission Overview explains the progression of learning from previous grades and/or lessons to connect learning. Some of the lessons include a "Building On" section that indicates which standard the lesson is extending or building on. Mission 2, Lesson 1 connects ratio concepts from Grade 6 to scaffold grade-level content. The lesson builds towards student understanding of LSSM 7.RP.A and scaffolds learning across the lesson. In the Warm-Up, students recall the double number line to name equivalent ratios. In Activity 1, students use drink mixtures and discuss how equivalent ratios provide a flavorful combination of drink mix and water. Students also use Activity 1 to

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			introduce how much drink mix is required for one cup of water, or the unit rate (LSSM 7.RP.A.1). In Mission 6, Lesson 19, students apply distributive property from Grade 6 to include rational coefficients (LSSM 7.EE.A.1). In Activity 1, students recall the distributive property through factoring and expanding expressions.
	Required **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.	**Yes**	In the materials, students produce answers in a variety of ways. Throughout the lessons, students use concrete and digital manipulatives, various models, and pictorial representations. Students create models such as tape diagrams, number lines, equations, tables, and graphs to represent solutions in a variety of ways. Students answer questions and provide explanations and/or justifications to support their answers. Lessons encourage students to produce solutions, but also encourage students to utilize multiple strategies as they find solutions. For example, in Mission 2, Lesson 3, Activity 1, students continue to develop conceptual understanding of a proportional relationship using centimeters and millimeters. Students use a ruler to understand that “there is a proportional relationship between any length measured in centimeters and the same length measured in millimeters” and that “there are two ways of thinking about this proportional relationship.” To convert centimeters to millimeters and vice versa, students complete the table to determine

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			the constant of proportionality or analyze the ruler (as they would a double number line) to determine the constant of proportionality. The purpose of this activity is for students to analyze when the constant of proportionality is a number or its reciprocal. In Mission 6, Lesson 16, Activity 2 students interpret parts of an inequality in context. Each student is assigned a situation and the students make a visual display with the following information: "Explain what the variable and each part of the inequality represent, write a question that can be answered by the solution to the inequality, show how they solved the inequality, and explain what the solution means in terms of the situation." This lesson provides students the opportunity to create a visual display to interpret inequalities. Students also ask questions about their peers' mathematical thinking and provide various forms of feedback. Also, in Mission 6, students explain strategies for using hanger diagrams to solve equations, strategies for solving equations and inequalities, reasoning about situations, tape diagrams, and equations.
	5d) Support for **English 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.	**Yes**	Materials include support for English Learners (EL) and other special populations. The materials are designed to be accessible for all students, using the Universal Design for Learning (UDL) principles to maximize access and engagement for all students. Each Mission

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			provides a link to materials in Spanish for the Mission Overview, Assessments, Answer Keys, Teacher and Student Lesson Materials, Optional Practice, and Family Materials. The lessons include audio support for students during the Independent Digital Lessons, in addition to the closed captioning feature and visual supports. The assessments available in Spanish allow the teacher to assess the students' understanding of the standards without language barriers. The Course Guide describes Design Features That Support All Learners, such as consistent lesson structures, concepts developing over time from concrete to abstract, opportunities to apply mathematics to real-world context, access strategies, and physical math manipulatives. Accessible design features are included for students with disabilities, such as visual clarity through use of color, color contrast, font readability, volume consistency, assistive technology including text-to-speech, screen reader and Braille Translation Software, keyboard accessibility, and instructional accommodations including translation materials, guided notes and graphic organizers, read aloud, scribe, separate location or quiet place, breaks, checklists and other self-monitoring activities, and physical math manipulatives. Multiple Means of Representation, Engagement, and Action and Expression sections are provided

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			throughout the lessons to support all learners. For example, in Mission 4, Lesson 1, Activity 1, students utilize previous knowledge about scaled copies, ratios, and proportional relationships to introduce ratios with fractions (LSSM 7.RP.A). Students view information about various sizes of the United States flag. The teacher records groups' measurements in a table to illustrate a constant of proportionality. Materials suggest the teacher utilize MLR 5 (Co-Craft Questions) for ELs. The teacher displays the task statement without questions, and the student writes possible math-related questions about the task statement. While doing this, the teacher highlights any mathematical language students use related to ratios and proportions. In Mission 2, Lesson 1, the support for EL is included within the Conversing and Writing. The teacher guide recommends that teachers invite students to discuss with a partner before they begin writing a response to the first question and invite students to discuss their thinking with a partner. Guidance also suggests that teachers listen for vocabulary and phrases. For students with disabilities, a hands-on approach to learning is suggested. In Mission 5, Lesson 6 (LSSM, 7.NS.A.1, 7.NS.A.1c), EL supports suggests that the teacher provides students with sentence frames such as: "I agree/disagree." For students with disabilities, the teachers are

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			encouraged to Peer Tutor in pairs for students who struggle with fine motor skills to dictate drawing number lines as needed.
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.	**Yes**	Multiple assessment opportunities are embedded into content materials that measure student mastery of standards that reflect the balance of the standards as presented in materials. The materials offer formative assessments that are designed to provide teachers with detailed data to inform instruction and respond to the needs of each student. The materials provide teachers real-time data and insights into student and class-level reports. Daily lesson-level assessments such as The Tower of Power (digital) and Exit Tickets (paper) are embedded into the materials and occur as part of recommended daily core instructional time. The Tower of Power is a scaffolded assessment that focuses on the content of a single lesson and is administered automatically at the end of each Independent Digital Lesson. The Mission-Level Assessments consist of open-response items that require students to show their work or explain their reasoning. In some cases, students draw models and write explanations as a part of showing work. For example, In Mission 5, Lesson 2 (LSSM 7.NS.A.1a, 7.NS.A.1b), students use a number line to add positive and negative numbers. Additionally, students determine the final temperature,

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			given the starting temperature and the temperature change, and explain how to create a number line diagram that represents adding signed numbers during Small Group Instruction, Digital Lesson, Exit Ticket, and Mission Assessments. Mission-level assessments in Mission 2 contain a Mid-Mission Assessment and an End of Mission Assessment. The Mid-Mission measures student proficiency of standards for Topics A-C (LSSM 7.RP.A.2a, 7.RP.A.2b, 7.RP.A.2c), and the End of Mission Assessment measures student proficiency for Topics D-E. As a result, students are assessed on all standards addressing proportional relationships in Mission 2. Mission 7 contains a Mid-Mission Assessment to assess Topics A-B (LSSM 7.EE.B.4, 7.G.A.2, 7.G.B.5) and the End of Mission Assessment assesses Topics C-D (LSSM 7.G.A.3, 7.G.B.6). Students are assessed on triangle measurements, angle relationships, and volume/area/surface area of three-dimensional figures.
	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.	**Yes**	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 a real-world context. Assessment items require students to produce answers and solutions, arguments, explanations, and models, in a grade-appropriate way. Mission-level

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			assessments assess a combination of rigor while producing drawings and/or tables. For example, the Mission 1 End-of-Mission Assessment assesses LSSM 7.G.A.1 and aligns to procedural fluency and skill and application. Students determine corresponding angles and segments in scaled copy. Students apply procedural and fluency skills as they calculate scale factor and apply the scale factor to create scale drawings. Students solve a problem in a real-world context on Task 4 as they use a scale drawing of a football field with a scale and determine "the actual dimensions of the football field in feet." Students produce a table or ratios to determine the actual dimensions. Mission 2 Mid-Mission Assessment, Tasks 1a, 1b, 2a, 3, 4b, and 4c assess the conceptual understanding expectation of LSSM 7.RP.A.2b. Students identify the relationship as a proportional relationship and provide sufficient reasoning to support the answer. On the End-of-Mission 2 Assessment, students produce answers and solutions, arguments, explanations, and models. On Task 3, students show their work and/or explain the reasoning for a relationship problem (LSSM 7.RP.A.2, 7.RP.A.2a). In Task 4, students complete and graph a relationship based on an equation (LSSM 7.RP.A.2, 7.RP.A.2b, 7.RP.A.2d). The Mission 3 End-of-Mission Assessment focuses on LSSM 7.G.B.4 and aligns to all

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			components of rigor. Conceptual understanding is assessed through recalling vocabulary, determining the length of various segments within a circle which require an understanding of the vocabulary. Procedural skills and fluency are assessed as students determine the diameter, area, or circumference when provided with the radius or diameter. Students also demonstrate procedural skills and fluency as they find the total area of the figure with given dimensions of a rectangle and two half circles. Application is assessed as students find the area and circumference of a cone-shaped logo to be painted on the wall. Students determine whether to use area or circumference, followed by decomposing the cone-shaped figure into a half circle and triangle to identify the base, height, radius, and area. Students provide explanations and apply and model concepts in a real-world context.
	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.	**Yes**	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. For each Mid-Mission and End-of-Mission assessment, a standards alignment document and rubric are used to grade exemplar student responses and answer keys. For example, rubrics provide guidance on how to score

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			students based on how they answered the question, ranging from initiating understanding, developing understanding, nearing understanding, to full understanding. In addition, the rubrics provide an example of each category within the various domains of understanding. For example, the Mission 5 Mid-Mission Assessment provides guidance for scoring Task 1 (LSSM 7.NS.A.1c, 7.NS.A.3). In Task 1, the prompt states "The temperature at sunset one day was -10 degrees Celsius. By sunrise the next day, the temperature had decreased by 15 degrees. What was the temperature at sunrise the next day?" Students exhibit full understanding and receive 10 points (maximum) for providing "the correct answer of -25 Celsius, sufficient work on the number line to support the answer, and can create an addition equation that accurately models the problem." Students show nearing understanding and receive 9 points for providing the correct answer and create an addition equation that accurately models the problem but provides insufficient work or if they provide sufficient work but make a simple calculation error. Students show developing understanding and earn 8 points if they are "unable to determine the temperature and unable to create an equation" but produce evidence that indicates that they are "developing understanding of how to use operations

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			with rational numbers to solve real-world problems". Similarly, students show initiating understanding and earn 7 points if they are "unable to determine the temperature and unable to create an equation" but produce evidence that indicates that they are "initiating understanding of how to use operations with rational numbers to solve real-world problems."
	6d) Materials provide 2-3 **comprehensive assessments** (interims/benchmarks) that measure student learning up to the point of administration.	**No**	Materials do not provide comprehensive assessments (interims/benchmarks) that measure student learning up to the point of administration. Mid-Mission and End-of-Mission Assessments assess students on the content addressed in that particular Mission, but do not include content from other Missions.
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.	**Yes**	The content can be reasonably completed within a regular school year, and the pacing of content allows for maximum student understanding. The materials include nine Missions addressed over a 36-week period. Guidance suggests that teachers address four lessons per week and reserve a fifth Flex Day for differentiated instruction or assessment days. Lessons contain a Warm Up, Concept Explorations (includes Activity 1, Activity 2, and an Independent Digital Lesson), and a Wrap Up (includes the Lesson Synthesis and Exit Ticket). Lessons provide students with independent practice in the Concept Exploration section. Teachers can also assign an Independent Digital Lesson for

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			additional support. For example, the pacing for Mission 1, Scale Drawings is three weeks with thirteen lessons. The pacing for Mission 3, Measuring Circles, is three weeks with eleven lessons.
	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.	**Yes**	The materials are easy to use and well organized for students and teachers. Guidance is provided for lesson planning and instructional delivery, lesson flow, questions to help prompt student thinking, and expected student outcomes. Teacher materials contain student responses, anticipated misconceptions, and discussion guidance. The Course Guide provides a scope and sequence, pacing guidance, explicit instructions for implementing the materials, guidance for supporting diverse learners, and guidance for using assessments and reports. In addition, the Course Guide details instructional routines throughout the lessons, as well as strategies for multilingual learners. Guidance suggests that teachers familiarize themselves with the math of the Mission, work through a selection of the Independent Digital Lessons, and check the class reports to review student progress. Guidance for Core Days and Flex Days is provided so the teacher can meet all student needs. As students complete the Digital Lesson, the organization is easy to follow and understand, as each lesson follows the same structure. Each Mission begins with a Mission Overview. This overview

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			includes an Introduction, an Overview of topics and lesson objectives, Foundational Missions Pacing, Progression of Disciplinary Language, new terminology, and required materials. Lessons follow an intentional sequence that flows through Warm-Up, Concept Exploration: Collaborative Concept Exploration with teacher and peers, Independent Digital Lessons to explore concepts further on their own, and Wrap-Up Lesson Synthesis led by the teacher and the completion of an individual Exit Ticket. The Lesson Overviews provide teachers with the learning goals, learning targets, required materials, and required preparation. The materials offer an optional classroom presentation for every lesson. The classroom presentation contains Warm Up, Collaborative Concept Exploration, and Wrap Up activities. It also includes cues that support the teacher's transitions. For example, in Mission 1, Lesson 10, Activity 1, teacher-facing materials suggest questions to help students "focus the discussion on patterns or features students noticed in different scale drawings." Student-facing materials are easy to use and well organized. In Mission 3, Lesson 3, the learning goal is clearly stated underneath the title of the lesson and states, "Let's explore the circumference of circles."
	Required	**Yes**	Materials include unit and lesson study tools for teachers. The lesson summary

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	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.		provided at the start of each lesson describes the math and provides examples as well as the guidance provided throughout the lesson, such as discussion guidance and activity descriptions, etc. Additionally, the Teacher Guide explains how to plan for a lesson titled "Planning for a Mission." It suggests that teachers become familiar with the materials and understand how students progress throughout a lesson. Furthermore, each mission contains a Mission Overview that provides teachers with work that students learned in previous grades and an explanation of the key concepts in the lessons. Materials include study tools with recommendations such as, “teachers assign foundational missions during Flex Day or during additional non-core instruction time” to benefit students that may be struggling.” For example, the Mission 2 Overview states that "students develop the idea of a proportional relationship out of the grade 6 idea of equivalent ratios. Proportional relationships prepare the way for the study of linear functions in Grade 8." In Mission 4, Lesson 6, teachers provide the following introduction: "This is the first of four lessons about percent increase and percent decrease. The goal of this lesson is to understand what is meant by “20% more than” or “10% less than.” The contexts in the first lesson are similar where students use the original amount

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			and the percent increase or decrease to calculate the final amount. The Teacher Guide continues with discussions and activities that teachers can use as study tools to relate to the concepts of the unit and include discussions of student ways of thinking and anticipated student responses. In Mission 8, Lesson 11, students compare measures of the center between two groups. Guidance includes a Zearn Math Tip that states, "Zearn's digital lesson sequence focuses on using mean and mean absolute deviation (MAD) to compare data sets in lessons in Topics C and D, and not median and interquartile range (IQR). If your students need additional review on median and IQR, we recommend having them complete Grade 6 Mission 8 Lesson 15. This assists the teacher in organizing concepts in order to scaffold and promote student thinking". Also, based on student responses, the teacher can determine if additional review in Grade 6, Mission 8, Lesson 15 is required.
	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. Each mission contains a Foundational Lesson Guidance where lesson objectives align with prerequisite skills from previous grades. For example, Mission 4 Topic A (Lessons 1-5), focuses on LSSM 7.RP.A.1, 7.RP.A.2, 7.NS.A.2d and requires prerequisite skills from Grade 6, Mission 4, Lesson 11 (LSS 6.NS.A.1) and Grade 6,

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			Mission 5, Lesson 11 (LSSM 6.NS.A.2). Mission 6 Topic B (Lessons 7-12) focuses on LSSM 7.EE.B.3, 7.EE.B.4, 7.EE.B.4a and requires prerequisite skills from Grade 6, Mission 6, Lesson 5 (LSSM 6.EE.B.5-7) and Grade 7, Mission 4, Lesson 8 (LSSM 7.RP.A.3). Also, standards for the associated lessons are listed with each lesson, identifying prerequisite skills. For example, the Overview in Mission 1 states that "work with scale drawings in Grade 7 draws on earlier work with Geometry and Geometric measurement" Students "begin to learn about two- and three-dimensional shapes in Kindergarten, and continue this work in Grades 1 and 2, composing, decomposing, and identifying shapes. Students work with geometric measurement begins with length and continues with area. Students learn to structure two-dimensional space, that is, to see a rectangle with whole-number side lengths as an array of unit squares, or rows or columns of unit squares. In Grade 3, students distinguished between perimeter and area. Students connect rectangle area with multiplication, understanding why (for whole-number side lengths) multiplying the side lengths of a rectangle yields the number of unit squares that tile the rectangle."
	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-level work.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			There are no diagnostic tests, pre-assessments, or any other materials that help teachers identify students who need prerequisite work. Although student reports are provided, they are provided after lesson and Mission completion instead of before the learning takes place. For example, the materials include a Tower of Power activity during Independent Practice which provides a Boost when a student makes a mistake. The Boost breaks down the problem to help students understand what they did incorrectly. If a student continues to make mistakes after multiple attempts, the teacher receives an alert suggesting differentiated support for that student. However, the activity occurs after the lesson has been taught. Tools to identify students that need prerequisite work to access current, grade-level instruction prior to engaging in the on grade-level content are not provided.
	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.	**Yes**	Materials provide targeted, aligned, prerequisite work for the major work of the grade, directly connected to specific lessons and units in the curriculum. Each mission contains a Foundational Lesson Guidance to identify prerequisite standards and supporting grade-level content utilized for scaffolding. For example, Mission 2, Lesson 1 focuses on recalling equivalent ratios (LSSM 7.RP.A) and identifies that additional support is located in Grade 6, Mission 3, Lessons 1,

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			and 3-4 (LSSM 6.RP.A.2, 6.RP.A.3d). In Mission 5, Lesson 13, students make sense of expressions with signed numbers using all four operations (LSSM 7.NS.A, 7.NS.A.3). Additional support for Mission 5, Lesson 13 is located in Grade 6, Mission 6, Lesson 14 as students "use the order of operations to evaluate expressions with exponents, multiplication, division, addition, and subtraction" (LSSM 6.EE.A.1, 6.EE.A.2c). In Mission 4, Lesson 6 (LSSM 7.RP.3), the warm-up and Activity 2 are aligned to LSSM 6.RP.A.3. In these activities, students use the double number line to answer questions and match situations to a diagram.
	7g) Materials provide **clear guidance and support** for teachers about the structures that allow students to appropriately address unfinished learning using prerequisite work.	**Yes**	Materials provide clear guidance and support for teachers about the structures that allow students to appropriately address unfinished learning using prerequisite work. The Course Overview provides clear guidance and support for teachers to address unfinished learning using prerequisite work. For example, daily lessons address which prerequisite standards students are "building on" for that lesson. Within the daily lessons, there are Digital Lessons for independent practice. Through the Digital Lessons teachers receive a Tower Alert to identify which lessons students are struggling with. Furthermore, teachers can review the Student Report for a specific student to examine unfinished learning. As teachers identify where unfinished learning occurs,

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			the teacher can use the "building on" standards throughout the lessons to provide intervention to students. The materials provide built-in Tier 1 intervention through the Tower of Power. Students are required to complete grade-level work until the Tower Alert or Tower of Power identifies that a student has unfinished learning. Students continue to access grade-level content once students understand the content. If students need additional support, the materials give teachers individualized intervention recommendations that can be assigned to students.

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[4]	1. Focus on Major Work	**Yes**	Materials devote a large majority of time to the major work of the grade. Materials focus on major content standards throughout the year. Materials spend minimal time on content outside of the appropriate grade level. In assessment materials, assessment components do not make students responsible for any topics before the grade in which they are introduced.

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

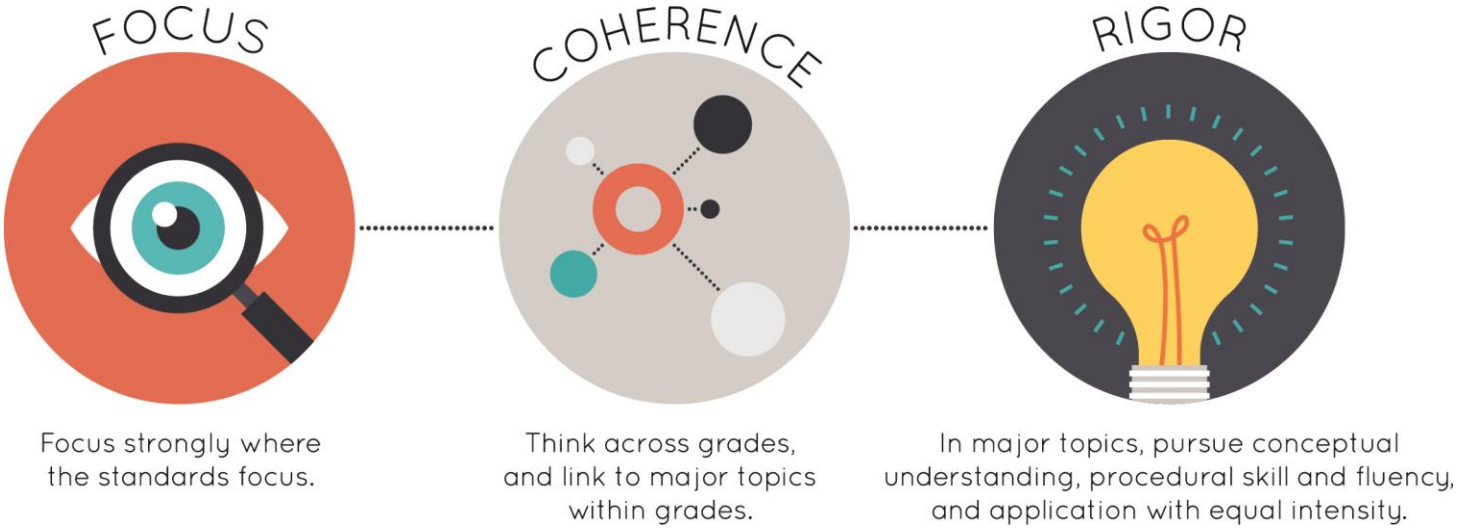
CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	2. Consistent, Coherent Content	**Yes**	Materials connect supporting content to major content in meaningful ways so that focus and coherence are enhanced throughout the year. Materials include problems and activities that connect two or more clusters in a domain, or two or more domains in a grade, in cases 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. It is evident in the materials that the three aspects of rigor are not always treated together and are not always treated separately.
	4. Focus and Coherence via Practice Standards	**Yes**	Materials attend to the full meaning of each practice standard. Each practice standard is connected to grade-level content in a meaningful way and is present throughout the year in assignments, activities, and/or problems. 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.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Mathematical language is emphasized throughout the lessons within each mission. 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[5]	5. Alignment Criteria for Standards for Mathematical Content	**Yes**	Materials provide all students extensive work with grade-level problems. Materials relate grade-level concepts explicitly to prior knowledge from earlier grades. The materials are designed so that prior knowledge is extended to accommodate the new knowledge, building to core instruction, on grade-level work. Lessons are appropriately structured and scaffolded to support student mastery. Students produce answers and solutions in a variety of ways. Support for English Learners and other special populations is provided.
	6. Quality of Assessments	**Yes**	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. 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

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			solutions, arguments, explanations, and models, in a grade-appropriate way.
	7. Additional Indicators of Quality	**Yes**	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.
FINAL DECISION FOR THIS MATERIAL: **Tier I, Exemplifies quality**			

Strong mathematics instruction contains the following elements:



Title: **Zearn Math**

Grade/Course: **8**

Publisher: **Zearn**

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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	

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

- Review the **required**[1] 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.

[1] **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[2]:** Students and teachers using the materials as designed devote the large majority[3] 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**	The materials devote the majority of class time to major work of the grade as defined by the Louisiana Student Standards for Mathematics (LSSM). Of the 126 instructional lessons, 81% are devoted to the major work of the grade. Specifically, 72% of lessons are spent on major standards alone, 8% are spent on a combination of major and supporting/additional standards, and 20% of the lessons are spent on supporting or additional standards.
	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 grade level. In assessment materials, assessment components do not make students/teachers responsible for any topics before the grade in which they are introduced. All lessons across the topics are related to grade-level work and align to LSSM for Grade 8; however, some Warm Ups and Activities refer to prior grade-level standards to strengthen students' conceptual understanding of grade-level content. For example, in Mission 2, Lesson 1, the Warm Up addresses LSSM 6.NS.A and Activity 1 addresses LSSM 7.G.A.1 to build towards

[2] For more on the major work of the grade, see Focus by Grade Level.
[3] 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
			student understanding of LSSM 8.G.A.1. Students recall scaled copies prior to introducing dilation of figures. Students use rectangles cut from an 8.5 x 11 sheet of paper and sort them into two categories: scaled copies and not scaled copies. Students analyze the length of the short and long sides of each rectangle and draw a diagonal to confirm scaled copies. In Mission 3, Lesson 5, the Warm Up focuses on LSSM 6.NS.A. Students find the value of dividing a fraction by a mixed number. In Activity 1, students use a picture of six cups with a height of 15 centimeters. Students predict the size of twelve cups and determine how many cups are needed for a height of 50 cm (LSSM 8.EE.B.5). In Activity 2, students connect the slope to the rate of change, building on LSSM 7.RP.A.2a). The lessons that go beyond the scope of the Grade 8 LSSM are clearly marked as optional in the Louisiana implementation guidance. In Mission 9, students create a mathematical model of bivariate data using a scatter plot and describe patterns with specific polygons that fill the plane. There are no digital lessons for this mission. Assessments focus only on grade-level standards. For example, in the End-of-Mission Assessment of Mission 4, only Grade 8 LSSM standards are assessed (LSSM 8.EE.C.7, LSSM 8.EE.C.7b, LSSM 8.EE.C.7a, LSSM 8.EE.C.8, LSSM 8.EE.C.8a, LSSM 8.EE.C.8b). This assessment includes

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			solving linear equations, giving examples of linear equations in one variable, and analyzing and solving pairs of simultaneous linear equations.
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. Culminating lessons are provided to connect supporting content to major content. Major work is often first developed and then reinforced in lessons addressing supporting standards. For example, in Mission 5 Lessons 1-4, students work with functions, such as determining the input (independent variable) or output (dependent variable) given a graph, table, or equation (major LSSM 8.F.A.1). In Mission 5, Lesson 5, Which One Doesn't Belong?, students recall characteristics of graphs of functions. In Activity 1, students connect input, output (major LSSM 8.F.A.1), and representation of a graph as a function in order to interpret the graph in a contextual situation (supporting LSSM 8.F.B.6). Students "begin using a functional relationship between two quantities to make quantitative observations about their relationship." Students use a graph of a function that represents change in temperature. Students connect input and output to interpret the values in the context of temperature. In Mission 8, Lesson 3, Activity 1, students investigate the

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			approximate value of √2 (supporting LSSM 8.NS.A.2) by drawing three squares on small grids to get an approximate value of √2 = 1.5. In Activity 2, students continue to investigate the value of √2 by finding a more precise value than 1.5 by rough estimating based on perfect squares or finding the exact solution to x^2 = 2 (major LSSM 8.EE.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 grade level where these connections are natural and important. Missions connect domains within a grade to develop conceptual understanding. For example, Mission 2, Lesson 12 connects the Geometry (G) and Expressions & Equations (EE) domains. In Activity 2, students analyze similar triangles to write a relationship between the points on the line (LSSM 8.EE.B.6) by dilating lines using a scale factor (LSSM 8.G.A.3). Students develop a rule to write the relationship between points which results in writing equations in slope-intercept form. Mission 3, Lesson 12 connects clusters B (Understand the connections between proportional relationships, lines, and linear equations) and C (Analyze and solve linear equations and pairs of simultaneous linear equations) of the Expressions and Equations (EE) domain. During the lesson, students use equations to describe the cost of apples and oranges in dollars

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			(LSSM 8.EE.A.5) and write equations representing a relationship between two quantities (LSSM 8.EE.B.6). Mission 5, Lesson 8, connects clusters A (Define, evaluate, and compare functions) and B (Use functions to model relationships between quantities) of the Functions (F) domain. In Activity 2, students connect features of an equation representing a function. Students answer questions about the amount of water in gallons in Tank A and Tank B with a given function and a description to interpret the y-intercept and slope (LSSM 8.F.A.2, 8.F.A.3, 8.F.B.4).
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. The instructional materials develop conceptual understanding of grade-level content through scaffolds, conceptual problems, and discussion questions throughout each lesson. Throughout the materials, students build conceptual understanding through the use of concrete and digital manipulatives, multiple means of representation, multiple strategies, sentence frames, tools, and templates. In addition, students build conceptual understanding with their teacher and their peers in Collaborative Concept Exploration through mathematical discourse, as well in the self-paced Independent Digital Lessons. Students express their

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			understanding in multiple ways, such as through creating models, critiquing the arguments of others, and interpreting solutions to problems. For example, in Mission 3, Lesson 7, students build conceptual understanding to generalize a formula to calculate the slope between two points (LSSM 8.EE.B.6). In Activity 2, students use three graphs, each with two points and a triangle, and calculate the vertical and horizontal change to determine the slope. Using the discovered pattern, students “write an expression for the slope of the line in the graph using u, v, s, and t”. In Mission 1, Lesson 1, students describe how a figure moves and turns to get from one position to another (LSSM 8.G.A.1). In the Concept Exploration Activity 1, students observe and describe translations and rotations. Students observe three pictures, each showing a different set of dance moves. Students write a description of each dance, emphasizing transformations. Teacher materials include a discussion to have with the students about ways to understand transformations, including guidance such as, "Consider asking students what they found most challenging about describing the dances?" and "Consider asking students if they were sometimes able to identify the dance before their partner finished describing all the moves?”
	Required	**Yes**	Materials are designed so that students attain the fluencies and procedural skills

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	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.		required by the standards. The materials are designed in a way that allows students to acquire procedural skill and fluency through a progression of learning over time. Students begin every lesson with a Warm-Up that provides students the opportunity to strengthen number sense or procedural fluency. During the Warm Up, students practice previously learned skills and prepare to practice and extend those skills in the current lesson. In addition, each Independent Digital Lesson also includes a fluency-aligned activity, such as Mix and Math, Totally Times, Pair Compare, and Sprints. The fluency practices flow with the lessons and connect with the appropriate standards. The materials also provide several opportunities to build procedural skills through optional problem sets and homework problems. In addition, the materials include lessons that focus solely on procedural skill and fluency as called for by the standards. For example, in Mission 4, Lessons 1- 7, students work toward fluency to solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms (LSSM 8.EE.C.7b). In Mission 4, Lesson 2, Activity 1, students use a picture that represents a hanger that is balanced with weight on both sides to solve the problem, “If a triangle weighs 1 gram, how

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			much does a square weigh?" Students write an equation and set it equal to find x, which is the weight of the square. Students continue to solve more complex linear equations with rational coefficients in Lesson 6. In Activity 2, students practice solving equations. Students choose three out of ten equations to solve. In the Independent Digital Lesson, students rewrite the equation 23(6 + 2y) = 15 + y and solve for y. In Mission, Topic C, students use the Pythagorean Theorem to determine the lengths of diagonals of rectangles and right rectangular prisms to estimate distances between points in the coordinate plane (LSSM 8.G.B.7). Specifically, in Lesson 8, students use Pythagorean Theorem to find the unknown side of a right triangle. Students solve for unknown sides in problems with labeled triangles as well as word problems such as, "A right triangle has sides of length 2.4 cm and 6.5 cm. What is the length of the hypotenuse?"
	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	**Yes**	Materials are designed so that teachers and students spend sufficient time working with engaging applications, including single- and multi-step contextual problems, and non-routine problems, that develop the mathematics of the grade, afford opportunities for practice, and engage students in problem solving. Each Mission includes Concept Exploration activities where students study the same content with their teacher and peers in

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	expectations for multi-step and real-world problems are explicit.		Collaborative Concept Exploration and in the self-paced Independent Digital Lessons. Missions also contain activities that allow students to apply key concepts to solve real-world problems. For example, in Mission 4, Lesson 9, students use an expression to find when two things are the same in a real-world context. In Activity 1, students use a table that shows the amount of water in two tanks every five minutes to describe what is happening in each tank, estimate when the tanks will have the same amount of water, and find the time when the amount of water will be equal. In Activity 2, Task 1, students work with partners to answer questions about a building with two elevators that go above and below ground, such as, “If the two elevators travel toward one another, at what height do they pass each other? How long would it take?” and "If you are on an underground parking level 14 meters below ground, which elevator would reach you first?" (LSSM 8.EE.C.8c). In Mission 5, Lesson 8, Activity 2, students “connect features of an equation representing a function to what that means in a context.” The prompt states, “There are four tanks of water. The amount of water in gallons, A, in Tanks A is given by the function A = 200 +8t, where t is in minutes. The amount of water in gallons, B, in Tank B starts at 400 gallons and is decreasing at 5 gallons per minute. These functions work when t≥0 and t≤8.”

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Students answer several questions using the prompt, such as, “Which tank started out with more water?” “Write an equation representing the relationship between B and t.” and “The amount of water in gallons, C, in Tank C is given by the function C = 800 - 7t. Is it filling up or draining out? Can you tell just by looking at the equation?” (LSSM 8.F.A.2). In Mission 3, Lesson 6, students interpret the vertical intercept of a graph through a real-world situation. In Activity 1, students use 6 cards describing different situations and 6 cards with graphs to match each graph with its corresponding situation. Students then find the slope and vertical intercept to interpret its meaning in the situation (LSSM 8.EE.B.5).
	Required **3d)** ***Balance:*** The three aspects of **rigor** are not always treated together and are not always treated separately.	**Yes**	It is evident in the materials that the three aspects of rigor are not always treated together and are not always treated separately. The materials reflect the balance of rigor in the standards. For example, in Mission 3, students build an understanding of slope and learn to recognize connections among the rate of change, slope, and constant of proportionality and between linear and proportional relationships. Mission 3, Lessons 1 - 2, integrates all three aspects of rigor as students graph a proportional relationship from a story and use the constant of proportionality to compare the pace of different animals (LSSM 8.EE.B.5). Throughout the mission,

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			students obtain an equation for a linear relationship by viewing the graph of a line in the coordinate plane as the vertical translation of a proportional relationship (LSSM 8.EE.C.7, LSSM 8.EE.C.8). Finally, students complete the Mission 3 End of Mission Assessment that requires an understanding of analyzing proportional relationships and using them to solve real-world and mathematical problems. In Mission 5, Lesson 7, students make connections between different representations of functions using all three components of rigor (LSSM 8.F.A.2 and LSSM 8.F.A.3). In Activity 1, students use a graph and a table to represent temperature for City A and City B. Students use conceptual understanding to interpret the graph and table in a real-world context. Also, students utilize procedural skills as they determine the output for each city when the input is 3. The Independent Digital Lesson provides a graph of the distance traveled by a car as a function of time and a table that represents the distance traveled by a motorcycle as a function of time. Students interpret whether the car or motorcycle traveled farther after 4 and 8 hours. In Mission 8, Lesson 5, Activity 2, students use equations containing squares and approximate the values of the equations on a number line, attending to conceptual understanding and procedural skill and fluency (LSSM 8.EE.A.2). In Lessons 6 and

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			7, students expand on their understanding of using Pythagorean Theorem to solve unknown lengths given the lengths of the other two sides of a right triangle. In Lesson 8, students determine unknown side lengths of a right triangle using the Pythagorean Theorem using procedural skill. In Lesson 10, students apply their understanding from Lessons 5-8 to solve real-world applications using the Pythagorean Theorem (LSSM 8.G.B.7). The balance of rigor is evident throughout these lessons as they build on one another for students to be able to perform applications involving the Pythagorean Theorem.
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. Practice standards are connected to grade content and are meaningfully present throughout the materials. Examples of the mathematical practices implemented within the units are described in the unit and lesson overviews. The materials provide students with an opportunity to engage with the practice standards in each lesson and support students in the development of mathematical practices, contributing to students' habits of mind as students develop procedural skills and fluency, and conceptual understanding. For example, in Mission 7, Lesson 13, students attend to precision (MP.6) "when determining whether a number is in scientific notation and converting numbers into scientific

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			notation." In Activity 1, students identify and write numbers in scientific form. Students use a table that shows the speed of light and electricity through different materials. They circle the speeds that are written in scientific notation and write the remaining numbers in the correct form (LSSM 8.EE.A.4). In Mission 4, Lesson 15, Activity 1, students use mathematical modeling (MP.4) to create a system of equations from a word description scenario (LSSM 8.EE.C.8). One of the prompts states, "Noah is planning a kayaking trip. Kayak Rental A charges a base fee of $15 plus $4.50 per hour. Kayak Rental B charges a base fee of $12.50 plus $5 per hour." Students interpret what the solution to the system tells about the scenario without actually solving the system. In Mission 3, Lesson 6, Activity 1, students match situations to graphs, while reasoning abstractly (MP.2) about the features of the graph, such as the slope and y-intercept. Once situations are matched with a graph, students find the slope of the graph and interpret the slope and y-intercept in the context of the situation (LSSM 8.EE.B.5).
	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	**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. Opportunities are provided that allow students to engage in mathematical

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
	the standards that explicitly set expectations for multi-step problems.		reasoning through viable arguments and critiquing student work. The materials provide opportunities for students to discuss their thinking and reasoning for the strategies they used to solve problems throughout the materials. In Mission 4, Lesson 4, Activity 1, students analyze two student responses of how the equation 14x - 2x + 3 = 3(5x + 9) was solved. Students determine if the solutions are correct and how the steps are alike and/or different. In Mission 5, students interpret solutions and critique reasoning, given linear functions represented by a table of values and algebraic expressions to determine which function has the greater rate of change. Students also justify reasoning about finding the volume of cubes, spheres, and cones and explain reasoning based on the volume in Lessons 2, 7, 11, and 21. Students justify reasoning by collecting data about a function and representing it as a graph. Students describe the graph of a function in words. Mission 2, Lesson 10, Activity, students analyze an image of two similar right triangles on a diagonal line. Students construct a viable argument to describe how to match up the two triangles to make them similar. Students share their reasoning with their partner and listen to their partner's explanation.
	Required **4c)** Materials explicitly attend to the **specialized language** of mathematics.	**Yes**	Materials explicitly attend to the specialized language of mathematics. The Course Guide describes Mathematical

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			Language Routines (MLR) that are used throughout the materials to support students' mathematical language development while they learn mathematical practices and content. The guide states that the feedback generated by the routines helps "students revise and refine not only the way they organize and communicate their own ideas, but also ask questions to clarify their understanding of others ideas." For example, the purpose of the MLR3: Clarify, Critique, and Correct is for students to analyze incorrect, incomplete, or ambiguous written mathematical statements and improve the work by correcting errors or clarifying meaning. The purpose of MLR5: Co-craft Questions is for students to "use conversation skills to generate, choose (argue for the best one), and improve questions and situations, as well as develop meta-awareness of the language used in mathematical questions and problems." In addition, each Mission Overview includes a Progression of Disciplinary Language section that teachers use to "anticipate students using language for mathematical purposes such as interpreting, explaining, and comparing" to support sense-making and building shared understanding with peers. A chart of New Terminology is also provided that shows lessons where the new terminology is first introduced, when students are expected to understand the

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			word or phrase, and when students are expected to use the terminology. Teacher guidance for supporting students in developing and using mathematical language is evident across the materials. For example, Mission 1, Lesson 12, students utilize precise language as they describe rigid motions to demonstrate congruence. The activity includes three pairs of figures, each on the coordinate plane. Students state whether the pairs are congruent and provide an explanation. The explanation includes precise language of transformations to demonstrate congruence. In Mission 4, Lesson 8, students use the specialized language to solve an equation and determine the outcomes. The vocabulary that students use during the lesson include: constant term, coefficient, linear equation, and infinitely many solutions. In Activity 1, students work with a partner to sort five equations and determine if they have one solution, no solution, or an infinite number of solutions. In Mission 3, Lesson 3, Activity 2, students use information gap cards as they work with partners. Partner A has the Problem Card and Partner B has the Data Card. Partner A asks Partner B for specific information on the Data Card to answer questions on the Problem Card. Partner B uses specific terminology and precise language to obtain information from the Data Card. Partner A's Card contains a blank graph and states "Sketch

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			a graph that shows the relationship between grams of honey and cups of flour needed for a bakery recipe. Show on the graph how much honey is needed for 17 cups of flour." Partner B's card contains information with values to include on the graph, such as amounts of salt, honey, and flour.
	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. The Teacher Lesson Materials and Course Guide provide teachers with insight into which practice standards are utilized in the lessons. Teacher-directed materials, such as Anticipated Misconceptions, provide teachers with strategies to develop the practice standards. In Mission 1, Lesson 2, "students experiment with ways to describe moves precisely enough for another to understand their meaning (MP.6)." In Lesson 2, Activity 2, the teacher gives partners a set of cards according to the type of move to use the math language of translations, rotations, and reflections (LSSM 8.G.A.1). An example of student responses are "Translations: 1, 7, 8, 10." In Mission 3, Lesson 6, students develop an understanding of the term vertical intercept or y-intercept. Teacher guidance states, "In the first activity, students match situations to graphs and then interpret different features of the graph

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			(slope and y-intercept) in terms of the situation being modeled (MP.2)" and that "Interpreting features of a graph or an equation in terms of a real-world context is an important component of mathematical modeling (MP.4)." In Mission 7, Lesson 7, Activity 2, students "analyze the structure of exponents to make sense of expressions with multiple bases, paving the way towards the rule $a^n \cdot b^n = (a \cdot b)$ in the next lesson (MP.7)." Then, in Lesson 8, guidance for student use of the practices standards states, that students "make use of structure when decomposing numbers into their constituent factors and regrouping them (MP.7)" and that students "create viable arguments and critique the reasoning of others when they generate expressions equivalent to 3,600 and 1/200 using exponent rules and determine the validity of other teams' expressions (MP.3)."
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.	**Required** **5a)** Materials provide all students **extensive work** with grade/course-level problems.	**Yes**	Materials provide all students extensive work with grade-level problems. Each lesson includes a Warm-Up, a Concept Exploration, and a Wrap Up. The Warm-Up helps students prepare for the lesson. It aids in strengthening number sense and procedural fluency. During the Concept Exploration, students first engage in a Collaborative Concept Exploration with their teacher and peers, which is followed by a self-paced Independent Digital Lesson

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
☒ Yes ☐ No			to study the same skills and/or concepts. During the Concept Exploration, the teacher facilitates mathematical discourse among students as they move through a series of scaffolded math problems that progress towards the overall objective of the lesson which includes three phases, Launch, Student Work Time, and Activity Synthesis. The materials provide suggestions for grouping students during Student Work Time that may include individual, partner, or small group work. In the Independent Digital Lesson, students first engage in a fluency activity and then continue to explore and develop concepts and skills during Guided Practice and apply what they learn in the Independent Practice section of the digital lesson. Students can also complete a Bonus section that addresses the focus standard of the lesson. The lesson ends with a Wrap-Up as the teacher guides students through discussion to process their learning and to "surface any misconceptions or misunderstandings." This activity is followed by an Exit Ticket in which students demonstrate their understanding of the lesson. The materials also include Optional Practice for additional practice with lesson content. For example, in Mission 5, Lesson 1, students write rules for input-output pairs and determine how an input-output diagram represents a rule. Students describe functions as increasing or

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			decreasing and use tables, equations, and graphs to represent functions After the Concept Exploration in both the collaborative and digital lesson, students complete the Tower of Power activity in the Independent Practice section of the Independent Digital Lesson. Students complete several problems to demonstrate their understanding of the content of the lesson, which is adaptive and based on their ability to complete the problems correctly. Students have the option to complete the Bonus section of the Independent Digital Lesson, as well. Students then complete an Exit Ticket. The Optional Practice includes a Problem Set with five questions, most of which include multiple parts, for additional practices for students to apply their learning.
	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.	**Yes**	Materials relate grade-level concepts explicitly to prior knowledge from earlier grades and are designed so that prior knowledge is extended to accommodate new knowledge. Lessons are appropriately structured and scaffolded to support student mastery. Each Mission consistently relates lesson content to previous grade-level material and standards in a way that helps the student progress to meet the current grade-level standard(s). In the Warm-Up portion of each lesson, students access prior knowledge before beginning grade-level work in order to prepare for practicing and extending their knowledge during the

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			lesson. The Concept Exploration supports student proficiency of grade-level standards by connecting and extending prior knowledge to support students in accessing grade-level content. At the beginning of each mission, the Foundation Guidance Document highlights foundational content developed from previous lessons or grades. The Mission Overview explains the progression of learning from previous grades and/or lessons to connect learning. Some of the lessons include a “Building On” section that indicates which standard the lesson is extending or building on. For example, in Mission 1, Lesson 2, Warm-Up, students estimate an angle rotation when "Quadrilateral A is rotated into the position of Quadrilateral B" (LSSM 4.MD.C.5). Students discuss the estimates and make a connection to clockwise and counterclockwise rotation. During Activity 2, students work in groups to analyze six cards they need to sort into categories based on the type of move. The purpose of the activity is for students to make connections with translation, rotation, and reflection (LSSM 8.G.A.1). In Mission 7, Lesson 1, students create expressions that represent repeated multiplication, and explain how the structure of the expression helps compare quantities. The lesson begins with a Warm-Up comparing four expressions with exponents while noting in the Teacher Guide that students

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			worked with whole number exponents in Grade 6. Students apply these concepts later in the Mission to the base-ten system (LSSM 8.EE.A.1). Students compare large numbers using powers of 10 and number lines to represent large numbers as multiples of powers of 10.
	Required **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.	**Yes**	In the materials, students are asked to produce answers in a variety of ways. Throughout the lessons, students use concrete and digital manipulatives, various models, and pictorial representations. Students create models such as tape diagrams, number lines, equations, tables, and graphs to represent solutions in a variety of ways. Students answer questions and provide explanations and/or justifications to support their answers. Lessons encourage students to produce solutions, but also encourage students to utilize multiple strategies as they find solutions. For example, in Mission 2, students explain how to apply dilations to find specific images, determine whether triangles are congruent, similar, or neither, and explain strategies for finding missing side lengths. In Mission 3, Lesson 2, Lesson Synthesis, students work in pairs and use blank graph paper to graph and write the equation y = 6x. Then, students model the equation using a different scale on the axes and explain how they decided on the new scale. In Mission 4, Lesson 3, Activity 2, students are given two different strategies

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			to solve the equation 14a - 2(a - 3). Students determine if they agree with either of the strategies and to explain why. In Mission 4, Lesson 6, students analyze features of equations with no solution, one solution, or many solutions. During the lesson, students use those features to create a series of equations to represent the different solutions. In Activity 2, Task 1, students use the equation 3x + 6 = 3(x + __) to complete the equation so that it is true for all values of x and true for no values of x. In Mission 6, Lesson 8, students justify and critique reasoning about angles, sides, and similarity and justify whether polygons are similar. In Mission 8, Lesson 4, students calculate an approximate value of a square root and represent the value as a point on the number line. Students also determine the exact length of a line segment on a coordinate grid and then express the length using square notation. During the digital lesson, students answer the following questions, "Is √14 rational or irrational? If it's rational, what is the value? If it's irrational, name the two consecutive whole numbers that √14 is between. Explain your thinking."
	5d) Support for **English 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.	**Yes**	Materials include support for English Learners (EL) and other special populations. The materials are designed to be accessible for all students, using the Universal Design for Learning (UDL) principles to maximize access and

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			engagement for all students. Each Mission provides a link to materials in Spanish for the Mission Overview, Assessments, Answer Keys, Teacher and Student Lesson Materials, Optional Practice, and Family Materials. The lessons include audio support for students during the Independent Digital Lessons, in addition to the closed captioning feature and visual supports. The assessments available in Spanish allow the teacher to assess the students' understanding of the standards without language barriers. The Course Guide describes Design Features That Support All Learners, such as consistent lesson structures, concepts developing over time from concrete to abstract, opportunities to apply mathematics to real-world context, access strategies, and physical math manipulatives. Accessible design features are included for students with disabilities, such as visual clarity through use of color, color contrast, font readability, volume consistency, assistive technology including text-to-speech, screen reader and Braille Translation Software, keyboard accessibility, and instructional accommodations including translation materials, guided notes and graphic organizers, read aloud, scribe, separate location or quiet place, breaks, checklists and other self-monitoring activities, and physical math manipulatives. Multiple Means of Representation, Engagement, and Action

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			and Expression sections are provided throughout the lessons to support all learners. For example, in Mission 2, Lesson 8 (LSSM 8.G.A.5), EL supports suggest using Conversing and Reading. In this lesson, students generalize a process for identifying similar triangles and justify that finding two pairs of congruent angles is sufficient to show similarity. The Teacher Guide recommends that students write down the words and phrases they use to justify why the triangles are or are not similar. Materials also recommend encouraging students to clarify the meaning of a word or phrase. In Mission 8, Lesson 5, Activity 1, Task 1, students estimate whole numbers that each square root lies between. The Teacher Guidance suggests providing additional processing time for students with disabilities. In Mission 3, Lesson 1, Activity 1, students use a diagram with tick marks for a ladybug and an ant that move at a constant speed on a graph with no numbers labeled on the axes (LSSM 8.EE.B.5) . The support provided for the EL students is to co-craft questions that allow EL students to “interpret the first image, and to increase awareness of language used to make comparisons about speed and pace. Display only the prompt and images (without the line graphs). Invite students to write possible mathematical questions about the situation. When students share their questions with the

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			class, highlight those that wonder about distance, time and the meaning of tick marks in the diagrams. Reveal the graph and ask students to work on the questions that follow. This helps students produce the language of mathematical questions about different representations for speed."
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.	**Yes**	Multiple assessment opportunities are embedded into content materials that measure student mastery of standards that reflect the balance of the standards as presented in materials. The materials offer formative assessments that are designed to provide teachers with detailed data to inform instruction and respond to the needs of each student. The materials provide teachers real-time data and insights into student and class-level reports. Daily lesson-level assessments such as The Tower of Power (digital) and Exit Tickets (paper) are embedded into the materials and occur as part of recommended daily core instructional time. The Tower of Power is a scaffolded assessment that focuses on the content of a single lesson and is administered automatically at the end of each Independent Digital Lesson. The Mission-Level Assessments consist of open-response items that require students to show their work or explain their reasoning. In some cases, students draw models and write explanations as a part of showing work. In the Mission 3 Mid-

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			Mission Assessment, Task 1, students use a data table to represent cups of cereal versus cups of raisins for Gianna and a graph representing cups of cereal versus cups of raisins for Jorge. Students then answer the following questions related to LSSM 8.EE.5 that follows: "a. Use the table to complete the sentences about Gianna's recipe. Show your work. Gianna would use ____cups of cereal for each cup of raisins. For 6 cups of raisins, Gianna would use ____cups of cereal. b. Use the graph to complete the sentences about Jorge's recipe. Name a coordinate pair to support your choice. For 4 cups of raisins, Jorge uses ____cups of cereal. (__,__) For ____cups of raisins, Jorge uses 6 cups of cereal. (__ ,__)." The Exit Ticket in Mission 4, Lesson 6 assesses LSSM 8.EE.7b. The Exit Ticket requires students to identify the equation that has a solution that is positive, negative, or zero: 3x - 5 = -3 and solve the equation -5(x - 1) = x - (2x - 3).
	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.	**Yes**	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 a real-world context. Assessment items require students to produce answers and solutions, arguments, explanations, and models, in a grade-appropriate way. Mission-level assessments assess a combination of rigor

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			while producing drawings and/or tables. For example, the Mission 6 End-of-Mission Assessment assesses LSSM 8.SP.A.1, 8.SP.A.2, 8.SP.A.3, and 8.SP.A.4 and aligns to all expectations of rigor. On Tasks 1-2, students demonstrate conceptual understanding and procedural skill, and fluency. Task 3 assesses only conceptual understanding. Tasks 4-6 assess conceptual understanding and application. Task 7 assesses all three forms of rigor. Tasks 1 and 3 require students to produce drawings such as constructing a scatter plot and drawing a best fit line, respectively. On the Mission 4 Mid-Mission Assessment, students use three different equations in which they fluently solve and decide if the equations have "one solution, no solutions, or infinitely many solutions and explain your reasoning" (LSSM 8.EE.C.7b). Mission 2, students develop visual models of triangles on a graph to determine similarity while using a visual representation. Mission 2 builds conceptual understanding by providing two different slopes and connecting with the intersection of the lines on the digital lesson. Students then conceptually connect writing slope relationships from slope triangles on different graphs. Students then use what they know about similar triangles to find the slope and write an equation. In Mission 2, Lesson 10, Activity 1 (LSSM 8.EE.B.6), students use

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			three right triangles on the same line on a graph and explain how the two triangles are similar on the vertical and horizontal sides. Students fill in the data table and calculate the vertical side divided by the horizontal side to make a connection to the slope. On the Lesson 10 Exit Ticket, students use a graph to "identify lines with different slopes and then draw a line with specified slope." Students use their conceptual understanding from Activity 1 to draw slope triangles and determine which line is steeper, which indicates a larger slope. Students also have to identify the line with a slope of 1, 2, and draw a line that represents a slope of 1/3.
	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.	**Yes**	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. For each Mid-Mission and End-of-Mission assessment, a standards alignment document and rubric are used to grade exemplar student responses and answer keys. For example, rubrics provide guidance on how to score students based on how they answered the question, ranging from initiating understanding, developing understanding, nearing understanding, to full understanding. In addition, the rubrics provide an example of each category within the various domains of

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			understanding. For example, on the Mission 4 Mid-Mission Assessment, Task 6, students solve three different equations and determine if the equations have one solution, no solutions, or infinitely many solutions and explain their reasoning" (LSSM 8.EE.C.7b). The rubric states that for full understanding the "student correctly determines that the equation has no solution and provides sufficient reasoning to support her answer" attains 10 points. The rubric states that for developing understanding the "student correctly determines that the equation has no solution but provides no reasoning to support her answer" attains 8 points. The Mission 1 Mid-Mission Assessment provides guidance for scoring Task 1 (LSSM 8.G.A.1) which states "name the transformation that takes Figure A to Figure B". Students exhibit full understanding and receive 6 points (maximum) for "correctly identifying all 3 transformations and providing sufficient reasoning to support her choice." Students show nearing understanding and receive 5 points for "correctly identifying all 3 transformations but providing insufficient and/or incomplete reasoning to support her choice" or "the student correctly identifies 2 of the 3 transformations and provides sufficient reasoning to support her choice." Students show developing understanding and receive 4 points for "correctly

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			identifying 1 of the 3 transformations and providing sufficient reasoning to support her choice." Students show that they are initiating understanding and receive 3 points if they show "initiating understanding of scaled drawings."
	6d) Materials provide 2-3 **comprehensive assessments** (interims/benchmarks) that measure student learning up to the point of administration.	**No**	Materials do not provide comprehensive assessments (interims/benchmarks) that measure student learning up to the point of administration. Mid-Mission and End-of-Mission Assessments assess students on the content addressed in that particular Mission, but do not include content from other Missions.
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.	**Yes**	The content can be reasonably completed within a regular school year, and the pacing of content allows for maximum student understanding. The materials include nine Missions addressed over a 36-week period. Guidance suggests that teachers address four lessons per week and reserve a fifth Flex Day for differentiated instruction or assessment days. Lessons contain a Warm Up, Concept Explorations (includes Activity 1, Activity 2, and an Independent Digital Lesson), and a Wrap Up (includes the Lesson Synthesis and Exit Ticket). Lessons provide students with independent practice in the Concept Exploration section. Teachers can also assign an Independent Digital Lesson for additional support. The pacing for Mission 1, Rigid Transformation and Congruence, is five weeks with seventeen lessons. The

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			pacing for Mission 3, Linear Relationships, is four weeks with fourteen lessons.
	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.	**Yes**	The materials are easy to use and well organized for students and teachers. Guidance is provided for lesson planning and instructional delivery, lesson flow, questions to help prompt student thinking, and expected student outcomes. Teacher materials contain student responses, anticipated misconceptions, and discussion guidance. The Course Guide provides a scope and sequence, pacing guidance, explicit instructions for implementing the materials, guidance for supporting diverse learners, and guidance for using assessments and reports. In addition, the Course Guide details instructional routines throughout the lessons, as well as strategies for multilingual learners. Guidance suggests that teachers familiarize themselves with the math of the Mission, work through a selection of the Independent Digital Lessons, and check the class reports to review student progress. Guidance for Core Days and Flex Days is provided so the teacher can meet all student needs. As students complete the Digital Lesson, the organization is easy to follow and understand, as each lesson follows the same structure. Each Mission begins with a Mission Overview. This overview includes an Introduction, an Overview of topics and lesson objectives, Foundational Missions Pacing, Progression of

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			Disciplinary Language, new terminology, and required materials. Lessons follow an intentional sequence that flows through Warm-Up, Concept Exploration: Collaborative Concept Exploration with teacher and peers, Independent Digital Lessons to explore concepts further on their own, and Wrap-Up Lesson Synthesis led by the teacher and the completion of an individual Exit Ticket. The Lesson Overviews provide teachers with the learning goals, learning targets, required materials, and required preparation. The materials offer an optional classroom presentation for every lesson. The classroom presentation contains Warm Up, Collaborative Concept Exploration, and Wrap Up activities. It also includes cues that support the teacher's transitions. For example, in Mission 4, Lesson 3, Activity 2, Task 3, the prompt states “Diego is asked to solve $3x – 8 = 4(x + 5)$. What do you recommend he does to each side first?” Teacher materials provide discussion guidance informing the teacher to highlight different strategies by asking questions such as “What are the advantages of choosing to distribute first? To divide first?” “What makes it easier to distribute versus divide first on the last question?” and “Is one path more ‘right’ than another?” Mission 6, Lesson 2, Activity 2, Task 1 provides Anticipated Misconceptions for teachers to address based on student responses and states,

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			"make sure that students understand the distinction between representations of the distribution of a single variable (height data alone) and this new representation that contains information about two variables at once (height and hand span)."
	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.	**Yes**	Materials include unit and lesson study tools for teachers. The lesson summary provided at the start of each lesson describes the math and provides examples as well as the guidance provided throughout the lesson, such as discussion guidance and activity descriptions, etc. Additionally, the Teacher Guide explains how to plan for a lesson titled "Planning for a Mission." It suggests that teachers become familiar with the materials and understand how students progress throughout a lesson. Furthermore, each mission contains a Mission Overview that provides teachers with work that students learned in previous grades and an explanation of the key concepts in the lessons. Materials include study tools with recommendations such as, "teachers assign foundational missions during Flex Day or during additional non-core instruction time" to benefit students that may be struggling." For example, in the Mission 1 Overview, materials list Foundational Missions where "earlier concepts are introduced and developed." In Mission 5, guidance is provided in the Overview that discusses foundational skills prior to Grade 8 and current grade-level

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			skills for the mission. The Mission 5 Overview states that "The terms 'independent variable' and 'dependent variable' were introduced in Grade 6." Mission 7, Lesson 6, begins with an introduction that students build on from Grade 6. In addition, the first section of the Mission begins with a lesson that reviews exponential expressions. In Mission 3, Lesson 1, a brief overview explains students will work on proportional relationships by graphing the data and states, "Attending to precision in labeling axes, choosing an appropriate scale, and drawing lines are skills students work on within this lesson and refine throughout this unit and in units that follow (MP6). The purpose of this lesson is to get students thinking about what makes a 'good' graph by first considering what are the components of a graph (e.g., labels, scale) and then adding scale to graphs of the pace of two bugs. Students also graph a line based on a verbal relationship description and compare the newly graphed line to already graphed proportional relationships."
	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. Each mission contains a Foundational Lesson Guidance where lesson objectives align with prerequisite skills from previous grades. For example, Mission 2, Topic C (Lessons 10-12) focuses on LSSM 8.EE.B.6 and 8.G.A.3 and require prerequisite skills

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			from Grade 7 Mission 2, Lesson 11 (LSSM 7.RP.A.2). Mission 8, Topic E (Lessons 14-15) focuses on LSSM 8.NS.A.1 and require prerequisite skills from Grade 6, Mission 5, Lesson 11 (LSSM 6.EE.A.1). Also, standards for the associated lessons are listed with each lesson, identifying prerequisite skills. The Overview in Mission 3 states that students "work with linear relationships in Grade 8" which "builds on earlier work with rates and proportional relationships in Grade 7, and Grade 8 work with Geometry." The Overview in Mission 4 states that "students build on their Grades 6 and 7 work with equivalent expressions and equations with one occurrence of one variable, learning algebraic methods to solve systems of linear equations in two variables, building on their Grades 7 and 8 work with graphs and equations of linear 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-level work. There are no diagnostic tests, pre-assessments, or any other materials that help teachers identify students who need prerequisite work. Although student reports are provided, they are provided after lesson and Mission completion instead of before the learning takes place. For example, the materials include a Tower of Power activity during Independent Practice which provides a

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			Boost when a student makes a mistake. The Boost breaks down the problem to help students understand what they did incorrectly. If a student continues to make mistakes after multiple attempts, the teacher receives an alert suggesting differentiated support for that student. However, the activity occurs after the lesson has been taught. Tools to identify students that need prerequisite work to access current, grade-level instruction prior to engaging in the on grade-level content are not provided.
	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.	**Yes**	Materials provide targeted, aligned, prerequisite work for the major work of the grade, directly connected to specific lessons and units in the curriculum. Each mission contains a Foundational Lesson Guidance to identify prerequisite standards and supporting grade-level content utilized for scaffolding. For example, in Mission 2, Lesson 1 (LSSM, 8.G.A.1), the Warm Up, Activity 1, Activity 2, and Exit Ticket are aligned to LSSM 6.RP.A.1. In Mission 3, Lesson 6 (LSSM 8.EE.B.5), the Warm Up is aligned to LSSM 5.OA.B.3, Activity 1 is aligned to LSSM 7.RP.A.2.a and 8.EE.B.5, and the Activity 2 and the Exit Ticket are aligned to LSSM 8.EE.B.5. In these activities, students develop understanding of slope and intercepts of a line. Mission 4, Lessons 2-9 focus on resolving linear equations and producing different numbers of solutions (LSSM 8.EE.C.7, 8.EE.C.8) and identify that

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			additional support is located in Grade 7, Mission 6, Lessons 9-11 (LSSM 7.EE.B.4). Mission 5, Lessons 11-16 focus on calculating volume (LSSM 8.F.B.4, 8.G.C.9) and identify that additional support is located in Grade 7, Mission 3, Lesson 8 (LSSM 7.G.B.4).
	7g) Materials provide **clear guidance and support** for teachers about the structures that allow students to appropriately address unfinished learning using prerequisite work.	**Yes**	Materials provide clear guidance and support for teachers about the structures that allow students to appropriately address unfinished learning using prerequisite work. The Course Overview provides clear guidance and support for teachers to address unfinished learning using prerequisite work. For example, daily lessons address which prerequisite standards students are "building on" for that lesson. Within the daily lessons, there are Digital Lessons for independent practice. Through the Digital Lessons teachers receive a Tower Alert to identify which lessons students are struggling with. Furthermore, teachers can review the Student Report for a specific student to examine unfinished learning. As teachers identify where unfinished learning occurs, the teacher can use the "building on" standards throughout the lessons to provide intervention to students. The materials provide built-in Tier 1 intervention through the Tower of Power. Students are required to complete grade-level work until the Tower Alert or Tower of Power identifies that a student has unfinished learning. Students continue to

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			access grade-level content once students understand the content. If students need additional support, the materials give teachers individualized intervention recommendations that can be assigned to students.
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[4]	1. Focus on Major Work	**Yes**	Materials devote a large majority of time to the major work of the grade. Materials focus on major content standards throughout the year. Materials spend minimal time on content outside of the appropriate grade level. In assessment materials, assessment components do not make students responsible for any topics before the grade in which they are introduced.
	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, or two or more domains in a grade, in cases where these connections are natural and important.

[4] 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
	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. It is evident in the materials that the three aspects of rigor are not always treated together and are not always treated separately.
	4. Focus and Coherence via Practice Standards	**Yes**	Materials attend to the full meaning of each practice standard. Each practice standard is connected to grade-level content in a meaningful way and is present throughout the year in assignments, activities, and/or problems. 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. Mathematical language is emphasized throughout the lessons within each mission. 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[5]	5. Alignment Criteria for Standards for Mathematical Content	**Yes**	Materials provide all students extensive work with grade-level problems. Materials relate grade-level concepts explicitly to prior knowledge from earlier grades. The materials are designed so that prior knowledge is extended to accommodate the new knowledge, building to core instruction, on grade-level work. Lessons are appropriately structured and scaffolded to support student mastery. Students produce answers and solutions in a variety of ways. Support for English Learners and other special populations is provided.
	6. Quality of Assessments	**Yes**	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. 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-appropriate way.
	7. Additional Indicators of Quality	**Yes**	Scoring guidelines and rubrics align to standards, incorporate criteria that are specific, observable, and measurable, and provide sufficient guidance for interpreting student performance,

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

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (YES/NO)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			misconceptions, and targeted support to engage in core instruction.
FINAL DECISION FOR THIS MATERIAL: **Tier I, Exemplifies quality**			

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 6-12.

Appendix I.

Publisher Response

The publisher had no response.

Appendix II.

Public Comments

There were no public comments submitted.