

# Assessment Materials Evaluation - Student Standards Review

Louisiana educators engaged in a professional review of the state’s academic standards for English language arts (ELA) and mathematics to ensure they continue to maintain strong expectations for teaching and learning aligned with college and workplace demands. The new ELA and math standards will be effective beginning with the 2016-2017 school year. As part of the Louisiana Department of Education’s support for a seamless transition to these new standards, the LDOE identified the major changes of the standards and their potential impact upon criteria used to review instructional materials.

Title: **MAP Assessments**

Grade: **9-11**

Publisher: **Northwest Evaluation Association (NWEA)**

Copyright: **2014**

Overall Rating: **Tier III, Not representing quality**

This Mathematics review has been examined for the following major shifts in alignment resulting from the Louisiana Student Standards Review:

- Include standards for money in grades K, 1, and 3 to ensure connections that provide smooth transitions from one grade to the next
- Provide developmentally appropriate content for all grades or courses while maintaining high expectations:
  - Additive area is moved to grade 4 from grade 3
  - The Statistics - Conditional Probability and the Rules of Probability (S-CP) domain is moved from Algebra II to Geometry
  - The standards provide extra clarity around the distinction between Algebra I and II

The following two indicators may be impacted:

- Focus on Major Work (Non-Negotiable)
- Focus in K-8 (Non-Negotiable)

**This review remains a Tier 3 rating.** As a result of these changes, the following chart identifies the potential impact on the current review. The LDOE recommends that district curriculum staff, principals, and teachers take these findings into consideration when using these benchmark assessments.

Criteria	Currently in the Rubric	Next Steps for Educators
Focus on Major Work (Non-Negotiable)	This program currently is reviewed as “Yes” for this criterion because the majority of points awarded in the assessments are given to content identified as widely applicable prerequisites as described by state standards.	Make sure to review all assessments to ensure that each meets or exceeds the expected score-point distributions for the major work of the grade.
Focus in K-8 (Non-Negotiable)	Not Applicable	Not Applicable

Strong mathematics instruction contains the following elements:



Focus strongly where the standards focus

Think across grades, and link to major topics within grades

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

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

STRONG	WEAK
2. Focus on Major Work (Non-Negotiable)	1. Alignment of Test Items (Non-Negotiable)

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 – 11.
- Tier 2 ratings** receive a “Yes” in Column 1 for all non-negotiable criteria (Criteria 1 – 3), a “Yes” in Column 1 for Criteria 4 in Section II, but at least one “No” in Section III.
- Tier 3 ratings** receive a “No” in Column 1 in Section I or Section II.

Click below for complete grade-level reviews:  
[Grade 9 \(Tier 3\)](#)      [Grade 10 \(Tier 3\)](#)      [Grade 11 \(Tier 3\)](#)

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In Section II, begin by reviewing the indicators in Column 2 for each criterion. If there is a “Yes” for all indicators in Column 2, then the materials receive a “Yes” in Column 1. If there is a “No” for any required indicators in Column 2, then the materials receive a “No” in Column 1. For Section III, review each indicator individually.

**Tier 1 ratings** receive a “Yes” in Column 1 for Criteria 1 – 11.

**Tier 2 ratings** receive a “Yes” in Column 1 for all non-negotiable criteria (Criteria 1–3), a “Yes” in Column 1 for Criteria 4 in Section II, but at least one “No” in Section III.

**Tier 3 ratings** receive a “No” in Column 1 in Section I or Section II.

**Assessment Evaluation Review for Alignment in  
 Mathematics Grades K – HS (AET)**

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<b>SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all non-negotiable criteria in order for the review to continue.</b>			
<p><b>Non-Negotiable 1. ALIGNMENT OF TEST ITEMS:</b>            90% of test items and/or sets of items exhibit alignment to the full intent of the CCSSM for that grade or course<sup>12</sup> by eliciting direct, observable evidence of the degree to which a student can independently demonstrate the targeted standard(s).</p> <p><i>This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. All items and/or sets of items should reflect the metric.</i></p> <p><input type="checkbox"/> Yes      <input checked="" type="checkbox"/> No</p>	<p><b>1a)</b> Items and/or sets of items directly reflect the language of individual standards.</p> <ul style="list-style-type: none"> <li>For example, 6.EE.3 puts the emphasis on applying properties of operations and generating equivalent expressions, not just mechanically simplifying.</li> <li>Most items aligned to a single standard should assess the central concern of the standard in question.</li> </ul>	<p><b>No</b></p>	<p>Less than 90% of the items and/or sets of items directly reflect the language of the individual standards. For example, the questions associated with A.REI.2 do not give examples showing how extraneous solutions may arise. For standard A.REI.4.b the questions provided do not meet the level of complexity expected as defined by the CCSS-M. The questions do not address the part of the standard that requires recognizing when the quadratic formula gives complex solutions, nor do they require writing the solutions in the form <math>abi</math> for real numbers <math>a</math> and <math>b</math>. For standard G.GPE.6, problems ask students to determine the midpoint of a line segment, however standard G.GPE.6 directs students to find the point on a directed line segment using a given ratio. Although it could be argued that midpoint is a ratio, the segment described by the problems are not directed line segments. None of the questions associated with F.BF.3 use experimentation with case and illustrate an explanation of the effects on the graph using technology.</p>
	<p><b>1b)</b> Items and/or sets of items align with <a href="#">PARCC's evidence tables</a> for grades 3-8 and adhere to content limitations outlined in that document. All limitations for all grade K-HS provided in footnotes of the CCSSM are also followed. For example, in Grade 3 denominators for fractions are limited to 2, 3, 4, 6 and 8.</p>	<p><b>N/A</b></p>	

<sup>1</sup>Refer also to the [K–8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013) and the [High School Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

<sup>2</sup> See the [Quality Criteria Checklist for Mathematics](#).

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	<p><b>1c)</b> The overall set of items reflect the <a href="#">progressions</a> in the Standards.</p> <ul style="list-style-type: none"> <li>For example, multiplication and division items in grade 3 emphasize equal groups, with no rate problems (grade 6 in CCSS).</li> </ul>	<b>No</b>	Not all standards are addressed equitably in the test bank making it difficult to determine if the overall set of items reflect the progressions in the Standards. Many of the standards provided assess only the basic concepts of the standard and do not advance. For example, A.SSE.A.2 never demands performance over the basic first level of quadratics. Many standards are only addressed once throughout the assessment not showing mastery of content. Example G.MG.2, F.BF.2, and F.BF.1b.
	<p><b>1d)</b> Within the complete set of items, there are items which assess all levels of the content hierarchy, including cluster headings.</p>	<b>No</b>	Within the complete set of items, items do not access all levels of content hierarchy as indicated in the high school CCSS. There are many individual standards and cluster headings that are not addressed. For example, there are no questions provided for HSF.TF. No questions were provided for the following high school standards: A.APR.2-4, 6; A.REI.5, 7, 10-11; A.SSE. 1, 3, 4; F.BF.4, F.IF.3, 5, 9; F.LE.3 - 4; G.CO.1, 4-12; G.SRT.3-4, 7; G.MG.1, 3; G.GMD.1; G.GPE.2, 4; G.C.1, 3, 5; N.Q.2-3; N.RN.1, 3; S.ID.2, 5, 8-9; and N.CN.1, 7.
	<p><b>1e)</b> Using the number system appropriate to the grade level.</p> <ul style="list-style-type: none"> <li>For example, in grade 3 there are some items involving fractions greater than 1; in the middle grades, arithmetic and algebra use the rational number system, not just the integers.</li> </ul>	<b>Yes</b>	The number systems used are appropriate for the high school level. However, integers are used for a majority of the problems. Rational numbers that are addressed are not complex in nature.
<p><b>Non-Negotiable 2. FOCUS ON MAJOR WORK*:</b> The large majority of points in each grade K–8 are devoted to the major work of the grade, and the majority of points in each High School course are devoted to widely applicable</p>	<p><b>FOR GRADES K–8 ONLY</b></p> <p><b>For grades K–8,</b> each grade/course’s assessments <b>meet or exceed</b> the following score-point distributions for the major work of the grade.</p> <ul style="list-style-type: none"> <li>85% of the total points in grades K–2 align exclusively to the major work of the grade.</li> </ul>	<b>N/A</b>	

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<p>prerequisites.<sup>3</sup></p> <p><i>This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. Item banks also should reflect the proportions in the metrics.</i></p> <p> <input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No         </p> <p><b>*As applicable to the grade level assessment being reviewed.</b></p>	<ul style="list-style-type: none"> <li>75% of the total points in grades 3–5 align exclusively to the major work of the grade.</li> <li>65% of the total points in grades 6–8 align exclusively to the major work of the grade.</li> </ul> <p><b>FOR HIGH SCHOOL ONLY</b></p> <p><b>For high school</b>, aligned assessments or sets of assessments <b>meet or exceed</b> the following score-point distribution:</p> <ul style="list-style-type: none"> <li>50% of the total points in high school align to content of Common Core State Standards identified as <a href="#">widely applicable prerequisites</a> for a range of college majors, postsecondary programs, and careers.<sup>4</sup></li> </ul>		
<p><b>Non-Negotiable 3. FOCUS IN K–8: No item assesses topics directly or indirectly before they are introduced in the CCSSM.<sup>5</sup></b></p> <p><i>This criterion applies to fixed form or CAT assessments, whether a summative assessment or a set of interim/benchmark assessments. All Items also should reflect the metric.</i></p>	<p>90% of items on an assessment address only knowledge of topics found in the CCSSM in the specified grade level.</p> <p>Commonly misaligned topics include, but are not limited to:</p> <ul style="list-style-type: none"> <li><b>Probability</b>, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7)</li> <li><b>Statistical distributions</b>, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and <b>statistical association or trends</b>, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grades 6–8; see CCSSM for specific expectations by grade level.)</li> </ul>	N/A	

<sup>3</sup> Refer also to criterion #1 in [K–8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013) and criterion #1 in the [High School Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

<sup>4</sup> Refer also to page 8 in the [High School Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

<sup>5</sup> Refer also to criterion #2 in the [K–8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

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CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/COMMENTS WITH EXAMPLES
<input type="checkbox"/> Yes <input type="checkbox"/> No	<ul style="list-style-type: none"> <li>• <b>Similarity, congruence, or geometric transformations.</b> (Introduced in the CCSSM in grade 8)</li> <li>• <b>Symmetry</b> of shapes, including line/reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4)</li> </ul>		
<b>SECTION II: Balance: Submissions must meet Rigor and Balance criterion in order for the review to continue.</b>			
<p><b>4. RIGOR AND BALANCE:</b> Each grade/course’s assessments 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.<sup>6</sup></p> <p><i>This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. Item banks also should reflect the proportions in the metrics.</i></p> <input type="checkbox"/> Yes <input type="checkbox"/> No	<p><b>4a) For Conceptual Understanding:</b> <i>K–High School:</i> At least 20% of the total score-points on the assessment(s) for each grade or course explicitly require students to demonstrate conceptual understanding of key mathematical concepts, especially where called for in specific content standards or cluster headings.</p>	<p><b>Not Evaluated</b></p>	<p>This section was not evaluated because the non-negotiable criteria were not met.</p>
	<p><b>4b) For Procedural Skill and Fluency:</b></p> <ul style="list-style-type: none"> <li>• <b>K–6:</b> At least 20% of the score-points on the assessment(s) for each grade explicitly assess procedural skill and fluency requirements in the Standards.</li> <li>• <b>7–8 and High School:</b> At least 20% of the score-points on the assessment(s) for each grade or course explicitly assess procedural skill and fluency/culminating standards.             <ul style="list-style-type: none"> <li>• Grade 7: 7.EE.3, 7.EE.4, 7.NS.1</li> <li>• Grade 8: 8.EE.7, 8.G.9</li> </ul> </li> </ul> <p>High School: See <a href="#">PARCC Model Content Frameworks</a>, pages 46, 49, 53, 54</p>	<p><b>Not Evaluated</b></p>	<p>This section was not evaluated because the non-negotiable criteria were not met.</p>
	<p><b>4c) For Applications</b></p> <ul style="list-style-type: none"> <li>• <b>K–5:</b> At least 20% of the total score-points on the assessment(s) for each grade explicitly assess solving</li> </ul>	<p><b>Not Evaluated</b></p>	<p>This section was not evaluated because the non-negotiable criteria were not met.</p>

<sup>6</sup> Refer also to criterion #4 in the [K–8 Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013) and criterion #2 in the [High School Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).



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	<p>single- or multi-step word problems.</p> <ul style="list-style-type: none"> <li>• <b>6–8:</b>At least 25% of the total score points on the assessment(s) for each grade explicitly assess solving single- and multi-step word problems and simple models.</li> </ul> <p><b>High School:</b>At least 30% of the total score-points on the assessment(s) for each high school course explicitly assess single- and multi-step word problems, simple models, and substantial modeling/application problems.</p>		
<b>SECTION III: ADDITIONAL INDICATORS OF QUALITY</b>			
	<p><b>4d) Grades 3-High School:</b> PARCC Type II and Type III Performance-Based Tasks <sup>7</sup></p> <ul style="list-style-type: none"> <li>• At least two items on each assessment for each grade or course align with PARCC’s Type II (Subclaim C) Evidence Statements. One item is a 3-point item and the second a 4-point item. A rubric for hand scoring any part of an item that cannot be machine scored is provided.</li> </ul> <p>At least two items on each assessment for each grade or course align with PARCC’s Type III (Subclaim D) Evidence Statements. One item is a 3-point item and the second a 6-point item. A rubric for hand scoring any part of an item that cannot be machine scored is provided.</p>	<b>Not Evaluated</b>	This section was not evaluated because the non-negotiable criteria were not met.
<p><b>5. Practice-Content Connections.</b> Each grade/course’s assessments include items that meaningfully connect the Standards for Mathematical Content and Standards for Mathematical Practice. However, not all items need to align to a Standard for Mathematical Practice. And there is no requirement to have an equal balance among the Standards for Mathematical Practice in any set of items or test forms.<sup>8</sup></p>		<b>Not Evaluated</b>	This section was not evaluated because the non-negotiable criteria were not met.

<sup>7</sup>See page 2 of [PARCC’s Evidence Tables](#) - High Level Overview and the PBA Evidence tables for each grade. An example of a Subclaim C evidence statement is 4.C.2. An example of a Subclaim D evidence statement is 4.D.1. To view PARCC’s prototype Type II and Type III items, go to <http://www.parcconline.org/samples/mathematics/grade-4-mathematics>.

<sup>8</sup> Refer also to criterion #7 in the [K–8 Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013) and criteria #5 [High School Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).



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<b>6. Assessing Supporting Content.</b> Assessment of supporting content enhances focus and coherence simultaneously by engaging students in the major work of the grade or course. <sup>9</sup>		<b>Not Evaluated</b>	This section was not evaluated because the non-negotiable criteria were not met.
<b>7. Addressing Every Standard for Mathematical Practice.</b> Every Standard for Mathematical Practice is represented on the assessment(s) for each grade or course.		<b>Not Evaluated</b>	This section was not evaluated because the non-negotiable criteria were not met.
<b>8. Expressing Mathematical Reasoning.</b> There are sufficiently many points on the assessment(s) for each grade or course that explicitly assess expressing and/or communicating mathematical reasoning.		<b>Not Evaluated</b>	This section was not evaluated because the non-negotiable criteria were not met.
<b>9. Constructing Forms Without Cueing Solution Processes.</b> Item sequences do not cue the student to use a certain solution process during problem solving and assessments include problems requiring different types of solution processes within the same section.		<b>Not Evaluated</b>	This section was not evaluated because the non-negotiable criteria were not met.
<b>10. Calling for Variety in Student Work.</b> Items require a variety in what students produce. For example, items require students to produce answers and solutions, but also, in a grade-appropriate way, arguments and explanations, diagrams, mathematical models, etc. <sup>10</sup>		<b>Not Evaluated</b>	This section was not evaluated because the non-negotiable criteria were not met.
<b>11. Quality Materials.</b> The assessment items, answer keys, and documentation are free from mathematical errors.		<b>Not Evaluated</b>	This section was not evaluated because the non-negotiable criteria were not met.
<b>FINAL EVALUATION</b>			
<i>Tier 1 ratings</i> receive a “Yes” in Column 1 for Criteria 1 – 3, a “Yes” in Column 1 for Criteria 4, and a “Yes” for all additional indicators 5 – 11.			
<i>Tier 2 ratings</i> receive a “Yes” in Column 1 for all non-negotiable criteria (Criteria 1 – 3), a “Yes” in Column 1 for Criteria 4, but at least one “No” for additional indicators 5 – 11.			
<i>Tier 3 ratings</i> receive a “No” in Column 1 for at least criteria in Section I or Section II.			
<b>Compile the results for Sections I and II to make a final decision for the material under review.</b>			
Section	Criteria	Yes/No	Final Justification/Comments
I: Non-Negotiables	1. Alignment of Test Items	<b>No</b>	Provided content is not fully aligned with CCSS. Not all standards are addressed in the provided content, therefore progressions were hard to establish. Progressions within each standard are not fully developed and some standards address only basic concepts of the standard. All levels of content

<sup>9</sup> Refer also to criterion #3 in the [K–8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

<sup>10</sup> Refer also to criterion #9 in the [K–8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013) and criteria #7 [High School Publishers' Criteria](#) for the CCSSM (Spring 2013).

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CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/COMMENTS WITH EXAMPLES
			hierarchy and cluster headings are not addressed. The appropriate number system is used for the grade level.
	2. Focus on Major Work	Yes	At least 50% of the provided content aligns with content standards defined as widely applicable prerequisites for a range of postsecondary majors and careers.
	3. Focus in K-8	N/A	
II. Balance	4. Rigor and Balance	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
III: Additional Indicators of Quality	5. Practice-Content Connections	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	6. Assessing Supporting Content	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	7. Addressing Every Standard for Mathematical Practice	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	8. Expressing Mathematical Reasoning	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	9. Constructing Forms Without Cueing Solution Processes	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	10. Calling for Variety in Student Work	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
	11. Quality Materials	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.
<b>FINAL DECISION FOR THIS MATERIAL: Tier III, Not representing quality</b>			

Appendix I.

Publisher Response

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**Tier 3 ratings** receive a “No” in Column 1 in Section I or Section II.

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[Grade 9 \(Tier 3\)](#)

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In Section II, begin by reviewing the indicators in Column 2 for each criterion. If there is a “Yes” for all indicators in Column 2, then the materials receive a “Yes” in Column 1. If there is a “No” for any required indicators in Column 2, then the materials receive a “No” in Column 1. For Section III, review each indicator individually.

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<b>SECTION I: NON-NEGOTIABLE CRITERIA: Submissions must meet all non-negotiable criteria in order for the review to continue.</b>				
<p><b>Non-Negotiable 1. ALIGNMENT OF TEST ITEMS:</b> 90% of test items and/or sets of items exhibit alignment to the full intent of the CCSSM for that grade or course<sup>12</sup> by eliciting direct, observable evidence of the degree to which a student can independently demonstrate the targeted standard(s).</p> <p><i>This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. All items and/or sets of items should reflect the metric.</i></p> <p><input type="checkbox"/> Yes      <input checked="" type="checkbox"/> No</p>	<p><b>1a)</b> Items and/or sets of items directly reflect the language of individual standards.</p> <ul style="list-style-type: none"> <li>For example, 6.EE.3 puts the emphasis on applying properties of operations and generating equivalent expressions, not just mechanically simplifying.</li> <li>Most items aligned to a single standard should assess the central concern of the standard in question.</li> </ul>	<b>No</b>	<p>Less than 90% of the items and/or sets of items directly reflect the language of the individual standards. For example, the questions associated with A.REI.2 do not give examples showing how extraneous solutions may arise. For standard A.REI.4.b the questions provided do not meet the level of complexity expected as defined by the CCSS-M. The questions do not address the part of the standard that requires recognizing when the quadratic formula gives complex solutions, nor do they require writing the solutions in the form <math>abi</math> for real numbers <math>a</math> and <math>b</math>. For standard G.GPE.6, problems ask students to determine the midpoint of a line segment, however standard G.GPE.6 directs students to find the point on a directed line segment using a given ratio. Although it could be argued that midpoint is a ratio, the segment described by the problems are not directed line segments. None of the questions associated with F.BF.3 use experimentation with case and illustrate an explanation of the effects on the graph using technology.</p>	
	<p><b>1b)</b> Items and/or sets of items align with <a href="#">PARCC's evidence tables</a> for grades 3-8 and adhere to content limitations outlined in that document. All limitations for all grade K-HS provided in footnotes of the CCSSM are also followed. For example, in Grade 3 denominators for fractions are limited to 2, 3, 4, 6 and 8.</p>	<b>N/A</b>		
	<p><b>1c)</b> The overall set of items reflect the <a href="#">progressions</a> in the Standards.</p> <ul style="list-style-type: none"> <li>For example, multiplication and division items in grade 3 emphasize equal groups, with no rate problems (grade 6 in CCSS).</li> </ul>	<b>No</b>	<p>Not all standards are addressed equitably in the test bank making it difficult to determine if the overall set of items reflect the progressions in the Standards. Many of the standards provided assess only the basic concepts of the standard and do not advance. For example, A.SSE.A.2 never demands</p>	

<sup>1</sup>Refer also to the [K-8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013) and the [High School Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

<sup>2</sup> See the [Quality Criteria Checklist for Mathematics](#).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/COMMENTS WITH EXAMPLES	PUBLISHER COMMENTS
			performance over the basic first level of quadratics. Many standards are only addressed once throughout the assessment not showing mastery of content. Example G.MG.2, F.BF.2, and F.BF.1b.	
	<p><b>1d)</b> Within the complete set of items, there are items which assess all levels of the content hierarchy, including cluster headings.</p>	<b>No</b>	Within the complete set of items, items do not access all levels of content hierarchy as indicated in the high school CCSS. There are many individual standards and cluster headings that are not addressed. For example, there are no questions provided for HSF.TF. No questions were provided for the following high school standards: A.APR.2-4, 6; A.REI.5, 7, 10-11; A.SSE. 1, 3, 4; F.BF.4, F.IF.3, 5, 9; F.LE.3 - 4; G.CO.1, 4-12; G.SRT.3-4, 7; G.MG.1, 3; G.GMD.1; G.GPE.2, 4; G.C.1, 3, 5; N.Q.2-3; N.RN.1, 3; S.ID.2, 5, 8-9; and N.CN.1, 7.	
	<p><b>1e)</b> Using the number system appropriate to the grade level.</p> <ul style="list-style-type: none"> <li>For example, in grade 3 there are some items involving fractions greater than 1; in the middle grades, arithmetic and algebra use the rational number system, not just the integers.</li> </ul>	<b>Yes</b>	The number systems used are appropriate for the high school level. However, integers are used for a majority of the problems. Rational numbers that are addressed are not complex in nature.	
<p><b>Non-Negotiable 2. FOCUS ON MAJOR WORK*:</b> The large majority of points in each grade K–8 are devoted to the major work of the grade, and the majority of points in each High School course are devoted to widely applicable prerequisites.<sup>3</sup></p> <p><i>This criterion applies to fixed form or CAT assessments, whether summative</i></p>	<p><b>FOR GRADES K–8 ONLY</b></p> <p><b>For grades K–8,</b> each grade/course’s assessments <b>meet or exceed</b> the following score-point distributions for the major work of the grade.</p> <ul style="list-style-type: none"> <li>85% of the total points in grades K–2 align exclusively to the major work of the grade.</li> <li>75% of the total points in grades 3–5 align exclusively to the major work of the grade.</li> </ul> <p>65% of the total points in grades 6–8 align exclusively to the major work of the grade.</p>	<b>N/A</b>		

<sup>3</sup> Refer also to criterion #1 in [K–8 Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013) and criterion #1 in the [High School Publishers’ Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).



CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/COMMENTS WITH EXAMPLES	PUBLISHER COMMENTS
<p><i>assessments or a set of interim/benchmark assessments. Item banks also should reflect the proportions in the metrics.</i></p> <p><input checked="" type="checkbox"/> Yes      <input type="checkbox"/> No</p> <p><b>*As applicable to the grade level assessment being reviewed.</b></p>	<p><b>FOR HIGH SCHOOL ONLY</b></p> <p><b>For high school</b>, aligned assessments or sets of assessments <b>meet or exceed</b> the following score-point distribution:</p> <ul style="list-style-type: none"> <li>50% of the total points in high school align to content of Common Core State Standards identified as <a href="#">widely applicable prerequisites</a> for a range of college majors, postsecondary programs, and careers.<sup>4</sup></li> </ul>	<p><b>Yes</b></p>	<p>The majority of points awarded in the assessments are given to content identified as widely applicable prerequisites as described by the CCSS. However, sample questions provided do not address all CCSS listed at the high school level.</p>	
<p><b>Non-Negotiable 3. FOCUS IN K–8: No item assesses topics directly or indirectly before they are introduced in the CCSSM.<sup>5</sup></b></p> <p><i>This criterion applies to fixed form or CAT assessments, whether a summative assessment or a set of interim/benchmark assessments. All items also should reflect the metric.</i></p> <p><input type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p>90% of items on an assessment address only knowledge of topics found in the CCSSM in the specified grade level.</p> <p>Commonly misaligned topics include, but are not limited to:</p> <ul style="list-style-type: none"> <li><b>Probability</b>, including chance, likely outcomes, probability models. (Introduced in the CCSSM in grade 7)</li> <li><b>Statistical distributions</b>, including center, variation, clumping, outliers, mean, median, mode, range, quartiles; and <b>statistical association or trends</b>, including two-way tables, bivariate measurement data, scatter plots, trend line, line of best fit, correlation. (Introduced in the CCSSM in grades 6–8; see CCSSM for specific expectations by grade level.)</li> <li><b>Similarity, congruence, or geometric transformations.</b> (Introduced in the CCSSM in grade 8)</li> <li><b>Symmetry</b> of shapes, including line/reflection symmetry, rotational symmetry. (Introduced in the CCSSM in grade 4)</li> </ul>	<p><b>N/A</b></p>		
<p><b>SECTION II: Balance: Submissions must meet Rigor and Balance criterion in order for the review to continue.</b></p>				
<p><b>4. RIGOR AND BALANCE: Each</b></p>	<p><b>4a) For Conceptual Understanding:</b></p>	<p><b>Not Evaluated</b></p>	<p>This section was not evaluated because the non-negotiable criteria were not met.</p>	

<sup>4</sup> Refer also to page 8 in the [High School Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

<sup>5</sup> Refer also to criterion #2 in the [K–8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/COMMENTS WITH EXAMPLES	PUBLISHER COMMENTS
<p><b>grade/course's assessments 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.<sup>6</sup></b></p> <p><i>This criterion applies to fixed form or CAT assessments, whether summative assessments or a set of interim/benchmark assessments. Item banks also should reflect the proportions in the metrics.</i></p> <p><input type="checkbox"/> Yes      <input type="checkbox"/> No</p>	<p><b>K–High School:</b> At least 20% of the total score-points on the assessment(s) for each grade or course explicitly require students to demonstrate conceptual understanding of key mathematical concepts, especially where called for in specific content standards or cluster headings.</p>			
	<p><b>4b) For Procedural Skill and Fluency:</b></p> <ul style="list-style-type: none"> <li><b>K–6:</b> At least 20% of the score-points on the assessment(s) for each grade explicitly assess procedural skill and fluency requirements in the Standards.</li> <li><b>7–8 and High School:</b> At least 20% of the score-points on the assessment(s) for each grade or course explicitly assess procedural skill and fluency/culminating standards. <ul style="list-style-type: none"> <li>Grade 7: 7.EE.3, 7.EE.4, 7.NS.1</li> <li>Grade 8: 8.EE.7, 8.G.9</li> </ul> </li> </ul> <p>High School: See <a href="#">PARCC Model Content Frameworks</a>, pages 46, 49, 53, 54</p>	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.	
	<p><b>4c) For Applications</b></p> <ul style="list-style-type: none"> <li><b>K–5:</b> At least 20% of the total score-points on the assessment(s) for each grade explicitly assess solving single- or multi-step word problems.</li> <li><b>6–8:</b> At least 25% of the total score points on the assessment(s) for each grade explicitly assess solving single- and multi-step word problems and simple models.</li> </ul> <p><b>High School:</b> At least 30% of the total score-points on the assessment(s) for each high school course explicitly assess single- and multi-step word problems, simple models, and substantial modeling/application problems.</p>	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.	
	<p><b>4d) Grades 3–High School:</b> PARCC Type II and Type III Performance-Based Tasks<sup>7</sup></p> <ul style="list-style-type: none"> <li>At least two items on each assessment for each grade or course align with PARCC's Type II (Subclaim C) Evidence</li> </ul>	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.	

<sup>6</sup> Refer also to criterion #4 in the [K–8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013) and criterion #2 in the [High School Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

<sup>7</sup> See page 2 of [PARCC's Evidence Tables](#) - High Level Overview and the PBA Evidence tables for each grade. An example of a Subclaim C evidence statement is 4.C.2. An example of a Subclaim D evidence statement is 4.D.1. To view PARCC's prototype Type II and Type III items, go to <http://www.parcconline.org/samples/mathematics/grade-4-mathematics>.

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/COMMENTS WITH EXAMPLES	PUBLISHER COMMENTS
	<p>Statements. One item is a 3-point item and the second a 4-point item. A rubric for hand scoring any part of an item that cannot be machine scored is provided.</p> <p>At least two items on each assessment for each grade or course align with PARCC's Type III (Subclaim D) Evidence Statements. One item is a 3-point item and the second a 6-point item. A rubric for hand scoring any part of an item that cannot be machine scored is provided.</p>			
<b>SECTION III: ADDITIONAL INDICATORS OF QUALITY</b>				
	<p><b>5. Practice-Content Connections.</b> Each grade/course's assessments include items that meaningfully connect the Standards for Mathematical Content and Standards for Mathematical Practice. However, not all items need to align to a Standard for Mathematical Practice. And there is no requirement to have an equal balance among the Standards for Mathematical Practice in any set of items or test forms.<sup>8</sup></p>	<b>Not Evaluated</b>	This section was not evaluated because the non-negotiable criteria were not met.	
	<p><b>6. Assessing Supporting Content.</b> Assessment of supporting content enhances focus and coherence simultaneously by engaging students in the major work of the grade or course.<sup>9</sup></p>	<b>Not Evaluated</b>	This section was not evaluated because the non-negotiable criteria were not met.	
	<p><b>7. Addressing Every Standard for Mathematical Practice.</b> Every Standard for Mathematical Practice is represented on the assessment(s) for each grade or course.</p>	<b>Not Evaluated</b>	This section was not evaluated because the non-negotiable criteria were not met.	
	<p><b>8. Expressing Mathematical Reasoning.</b> There are sufficiently many points on the assessment(s) for each grade or course that explicitly assess expressing and/or communicating mathematical reasoning.</p>	<b>Not Evaluated</b>	This section was not evaluated because the non-negotiable criteria were not met.	
	<p><b>9. Constructing Forms Without Cueing Solution Processes.</b> Item sequences do not cue the student to use a certain solution process during problem solving and assessments include problems requiring different types of solution processes within the same section.</p>	<b>Not Evaluated</b>	This section was not evaluated because the non-negotiable criteria were not met.	
	<p><b>10. Calling for Variety in Student Work.</b> Items require a variety in what students produce. For example, items require students to produce answers and solutions, but also, in a grade-appropriate way, arguments and explanations, diagrams, mathematical models, etc.<sup>10</sup></p>	<b>Not Evaluated</b>	This section was not evaluated because the non-negotiable criteria were not met.	
	<p><b>11. Quality Materials.</b> The assessment items, answer keys, and documentation are free from mathematical errors.</p>	<b>Not Evaluated</b>	This section was not evaluated because the non-negotiable criteria were not met.	

<sup>8</sup> Refer also to criterion #7 in the [K-8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013) and criteria #5 [High School Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

<sup>9</sup> Refer also to criterion #3 in the [K-8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013).

<sup>10</sup> Refer also to criterion #9 in the [K-8 Publishers' Criteria](#) for the Common Core State Standards for Mathematics (Spring 2013) and criteria #7 [High School Publishers' Criteria](#) for the CCSSM (Spring 2013).

CRITERIA	INDICATORS OF SUPERIOR QUALITY	MEETS METRICS (Yes/No)	JUSTIFICATION/COMMENTS WITH EXAMPLES	PUBLISHER COMMENTS
<b>FINAL EVALUATION</b>				
<i>Tier 1 ratings</i> receive a “Yes” in Column 1 for Criteria 1 – 3, a “Yes” in Column 1 for Criteria 4, and a “Yes” for all additional indicators 5 – 11.				
<i>Tier 2 ratings</i> receive a “Yes” in Column 1 for all non-negotiable criteria (Criteria 1 – 3), a “Yes” in Column 1 for Criteria 4, but at least one “No” for additional indicators 5 – 11.				
<i>Tier 3 ratings</i> receive a “No” in Column 1 for at least criteria in Section I or Section II.				
<b>Compile the results for Sections I and II to make a final decision for the material under review.</b>				
Section	Criteria	Yes/No	Final Justification/Comments	
I: Non-Negotiables	1. Alignment of Test Items	No	Provided content is not fully aligned with CCSS. Not all standards are addressed in the provided content, therefore progressions were hard to establish. Progressions within each standard are not fully developed and some standards address only basic concepts of the standard. All levels of content hierarchy and cluster headings are not addressed. The appropriate number system is used for the grade level.	
	2. Focus on Major Work	Yes	At least 50% of the provided content aligns with content standards defined as widely applicable prerequisites for a range of postsecondary majors and careers.	
	3. Focus in K-8	N/A		
II. Balance	4. Rigor and Balance	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.	
III: Additional Indicators of Quality	5. Practice-Content Connections	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.	
	6. Assessing Supporting Content	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.	
	7. Addressing Every Standard for Mathematical Practice	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.	
	8. Expressing Mathematical Reasoning	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.	
	9. Constructing Forms Without Cueing Solution Processes	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.	
	10. Calling for Variety in Student Work	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.	
	11. Quality Materials	Not Evaluated	This section was not evaluated because the non-negotiable criteria were not met.	
<b>FINAL DECISION FOR THIS MATERIAL: <u>Tier III, Not representing quality</u></b>				

Appendix II.

Public Comments

There were no public comments submitted.