TEXTBOOK REVIEW FORM

MATHEMATICS

GEOMETRY WITH DATA ANALYSIS

Textbook/Series: _____

Edition: _____ Copyright: _____ Publisher: _____

Reviewed by: _____

This form was based in part on:

A project of
The Charles A. Dana Center
At the University of Texas at Austin

Adapted for Alabama State Department of Education

STANDARDS FOR MATHEMATICAL PRACTICE – MATHEMATICS – GRADE K-12 – OVERALL

Textbook/Series: _____

Edition: _____ Copyright: _____ Publisher: _____

OVERALL RATING:	Weak (1-2) Moderate (2-3) Strong (3-4)	**Comments:**	
1. Make sense of problems and preserve in solving them. **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)	2. Reason abstractly and quantitatively. **Summary/Justification/Evidence**	Weak (1-2) Moderate (2-3) Strong (3-4)
3. Construct viable arguments and critique the reasoning of others. **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)	4. Model with mathematics. **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)
5. Use appropriate tools strategically. **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)	6. Attend to precision. **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)
7. Look for and make use of structure. **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)	8. Look for and express regularity in repeated reasoning. **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)

Weak: This is the lowest rating a book can receive. In general, a book that was rated as "weak" scored mostly 1s and 2s on a 4-point scale.

Moderate: This is the middle rating a book can receive. In general, a book that was rated as "moderate" scored mostly 2s and 3s on a 4-point scale.

S**trong**: This is the highest rating a book can receive. In general, a book that was rated as "strong" scored mostly 3s and 4s on a 4-point scale.

Documenting Alignment to the Standards for Mathematical Practice

Mathematically proficient students:

1. Make sense of problems and persevere in solving them.

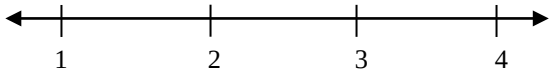
These students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. These students consider analogous problems and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to obtain the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, "Does this make sense?" They can understand the approaches of others to solve complex problems and identify correspondences between different approaches.

Indicate the chapter(s), sections, and/or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating



Documenting Alignment to the Standards for Mathematical Practice

Mathematically proficient students:

2. Reason abstractly and quantitatively.

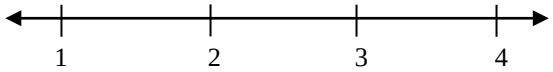
Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships. One is the ability to *decontextualize*, to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents. The second is the ability to *contextualize*, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.

Indicate the chapter(s), sections, and/or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating



Documenting Alignment to the Standards for Mathematical Practice

Mathematically proficient students:

3. Construct viable arguments and critique the reasoning of others.

These students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. These students justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments; distinguish correct logic or reasoning from that which is flawed; and, if there is a flaw in an argument, explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until the middle or upper grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen to or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.

Indicate the chapter(s), sections, and/or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

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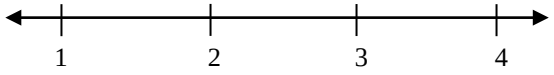
Overall Rating



Documenting Alignment to the Standards for Mathematical Practice

Mathematically proficient students:

4. Model with mathematics.

These students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, students might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, students might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts, and formulas and can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.

Indicate the chapter(s), sections, and/or page(s) reviewed.

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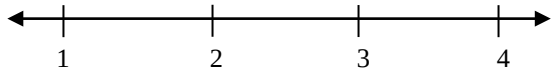


Documenting Alignment to the Standards for Mathematical Practice

Mathematically proficient students:

5. Use appropriate tools strategically.

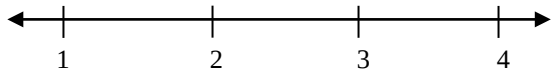
Mathematically proficient students consider available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a Web site, and use these to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.

Indicate the chapter(s), sections, and/or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating



Documenting Alignment to the Standards for Mathematical Practice

Mathematically proficient students:

6. Attend to precision.

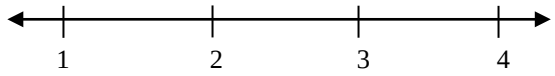
These students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. Mathematically proficient students are careful about specifying units of measure and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, and express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions.

Indicate the chapter(s), sections, and/or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating



Documenting Alignment to the Standards for Mathematical Practice

Mathematically proficient students:

7. Look for and make use of structure.

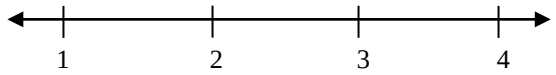
Mathematically proficient students look closely to discern a pattern or structure. Young students, for example, might notice that three and seven more is the same amount as seven and three more, or they may sort a collection of shapes according to how many sides the shapes have. Later, students will see 7×8 equals the well-remembered $7 \times 5 + 7 \times 3$, in preparation for learning about the distributive property. In the expression $x^2 + 9x + 14$, older students can see the 14 as 2×7 and the 9 as $2 + 7$. They recognize the significance of an existing line in a geometric figure and can use the strategy of drawing an auxiliary line for solving problems. These students also can pause and reflect for an overview and shift perspective. They can observe the complexities of mathematics, such as some algebraic expressions as single objects or as being composed of several objects. For example, they can see $5 - 3(x - y)^2$ as 5 minus a positive number times a square and use that to realize that its value cannot be more than 5 for any real numbers x and y.

Indicate the chapter(s), sections, and/or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating



Documenting Alignment to the Standards for Mathematical Practice

Mathematically proficient students:

8. Look for and express regularity in repeated reasoning.

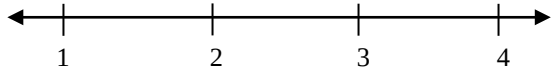
They notice if calculations are repeated, and look both for general methods and for shortcuts. Upper elementary students might notice when dividing 25 by 11 that they are repeating the same calculations over and over again and conclude they have a repeating decimal. By paying attention to the calculation of slope as they repeatedly check whether points are on the line through (1, 2) with slope 3, middle school students might abstract the equation $(y – 2)/(x – 1) = 3$. Noticing the regularity in the way terms cancel when expanding $(x – 1)(x + 1)$, $(x – 1)(x^2 + x + 1)$, and $(x – 1)(x^3 + x^2 + x + 1)$ might lead them to the general formula for the sum of a geometric series. As students work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details and continually evaluate the reasonableness of their intermediate results.

Indicate the chapter(s), sections, and/or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating



TEXTBOOK REVIEW FORM – MATHEMATICS – OVERALL
MATHEMATICAL STANDARDS & OTHER CRITERIA – GEOMETRY

Textbook/Series: _____

Edition: _____ Copyright: _____ Publisher: _____

OVERALL RATING:	Weak (1-2) Moderate (2-3) Strong (3-4)	Important Mathematical Ideas: **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)
Skills and Procedures: **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)	Mathematical Relationships: **Summary/Justification/Evidence**	Weak (1-2) Moderate (2-3) Strong (3-4)
Content: **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)	Instruction: **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)
Assessment: **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)	Technology: **Summary/Justification/Evidence:**	Weak (1-2) Moderate (2-3) Strong (3-4)

Weak: This is the lowest rating a book can receive. In general, a book that was rated as "weak" scored mostly 1s and 2s on a 4-point scale.

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Number and Quantity

	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
Student will: 1. Extend understanding of irrational and rational numbers by rewriting expressions involving radicals, including addition, subtraction, multiplication, and division, in order to recognize geometric patterns. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Number and Quantity

	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
Student will: 2. Use units as a way to understand problems and to guide the solution of multi-step problems. a. Choose and interpret units consistently in formulas. b. Choose and interpret the scale and the origin in graphs and data displays. c. Define appropriate quantities for the purpose of descriptive modeling. d. Choose a level of accuracy appropriate to limitations of measurements when reporting quantities.	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
Indicate the chapter(s), sections, and/or page(s) reviewed.	**Overall Rating** 1 2 3 4

Algebra and Functions

Focus 1: Algebra	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 3. Find the coordinates of the vertices of a polygon determined by a set of lines, given their equations, by setting their function rules equal and solving, or by using their graphs.	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
Indicate the chapter(s), sections, and/or page(s) reviewed.	**Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):**
	Overall Rating 1 2 3 4

Focus 1: Algebra	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 4. Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. *Example*: *Rearrange the formula for the area of a trapezoid to highlight one of the bases.* **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Focus 2: Connecting Algebra to Functions	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 5. Verify that the graph of a linear equation in two variables is the set of all its solutions plotted in the coordinate plane, which forms a line.	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
Indicate the chapter(s), sections, and/or page(s) reviewed.	**Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):**
	Overall Rating 1 2 3 4

Focus 2: Connecting Algebra to Functions	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 5. Derive the equation of a circle of given center and radius using the Pythagorean Theorem. a. Given the endpoints of the diameter of a circle, use the midpoint formula to find its center and then use the Pythagorean Theorem to find its equation. b. Derive the distance formula from the Pythagorean Theorem. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Data Analysis, Statistics, and Probability

Focus 1: Quantitative Literacy	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 7. Use mathematical and statistical reasoning with quantitative data, both univariate data (set of values) and bivariate data (set of pairs of values) that suggest a linear association, in order to draw conclusions and assess risk. *Example*: *Estimate the typical age at which a lung cancer patient is diagnosed, and estimate how the typical age differs depending on the number of cigarettes smoked per day.* **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Focus 2: Visualizing and Summarizing Data	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 8. Use technology to organize data, including very large data sets, into a useful and manageable structure. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Focus 2: Visualizing and Summarizing Data	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: **9.** Represent the distribution of univariate quantitative data with plots on the real number line, choosing a format (dot plot, histogram, or box plot) most appropriate to the data set, and represent the distribution of bivariate quantitative data with a scatter plot. **Extend from simple cases by hand to more complex cases involving large data sets using technology.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
Indicate the chapter(s), sections, and/or page(s) reviewed.	**Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):**
	Overall Rating 1 2 3 4

Focus 2: Visualizing and Summarizing Data	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 10. Use statistics appropriate to the shape of the data distribution to compare and contrast two or more data sets, utilizing the mean and median for center and the interquartile range and standard deviation for variability. a. Explain how standard deviation develops from mean absolute deviation. b. Calculate the standard deviation for a data set, using technology where appropriate. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

<table>
<tr><td>Focus 2: Visualizing and Summarizing Data</td><td colspan="5">Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.</td></tr>
<tr><td rowspan="3">Student will:

11. Interpret differences in shape, center, and spread in the context of data sets, accounting for possible effects of extreme data points (outliers) on mean and standard deviation.

Indicate the chapter(s), sections, and/or page(s) reviewed.</td><td>Important Mathematical Ideas</td><td>1</td><td>2</td><td>3</td><td>4</td></tr>
<tr><td>Skills and Procedures</td><td>1</td><td>2</td><td>3</td><td>4</td></tr>
<tr><td>Mathematical Relationships</td><td>1</td><td>2</td><td>3</td><td>4</td></tr>
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<tr><td colspan="5">Overall Rating

1 2 3 4</td></tr>
</table>

Focus 2: Visualizing and Summarizing Data	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 12. Represent data of two quantitative variables on a scatter plot, and describe how the variables are related. a. Find a linear function for a scatter plot that suggests a linear association and informally assess its fit by plotting and analyzing residuals, including the squares of the residuals, in order to improve its fit. b. Use technology to find the least-squares line of best fit for two quantitative variables. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Focus 2: Visualizing and Summarizing Data	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 13. Compute (using technology) and interpret the correlation coefficient of a linear relationship **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Focus 2: Visualizing and Summarizing Data	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 14. Distinguish between correlation and causation **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Focus 2: Visualizing and Summarizing Data	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 15. Evaluate possible solutions to real-life problems by developing linear models of contextual situations and using them to predict unknown values. a. Use the linear model to solve problems in the context of the given data. b. Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the given data. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Geometry and Measurement

<table>
<tr><td>Focus 1: Measurement</td><td colspan="5">Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.</td></tr>
<tr><td rowspan="3">Student will:

16. Identify the shapes of two-dimensional cross-sections of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects.

Indicate the chapter(s), sections, and/or page(s) reviewed.</td><td>Important Mathematical Ideas</td><td>1</td><td>2</td><td>3</td><td>4</td></tr>
<tr><td>Skills and Procedures</td><td>1</td><td>2</td><td>3</td><td>4</td></tr>
<tr><td>Mathematical Relationships</td><td>1</td><td>2</td><td>3</td><td>4</td></tr>
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<tr><td></td><td colspan="5">Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):</td></tr>
<tr><td></td><td colspan="5">Overall Rating

1 2 3 4</td></tr>
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Focus 1: Measurement	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 17. Model and solve problems using surface area and volume of solids, including composite solids and solids with portions removed. a. Give an informal argument for the formulas for the surface area and volume of a sphere, cylinder, pyramid, and cone using dissection arguments, Cavalieri's Principle, and informal limit arguments. b. Apply geometric concepts to find missing dimensions to solve surface area or volume problems. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Focus 1: Measurement	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 18. Given the coordinates of the vertices of a polygon, compute its perimeter and area using a variety of methods, including the distance formula and dynamic geometry software, and evaluate the accuracy of the results. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

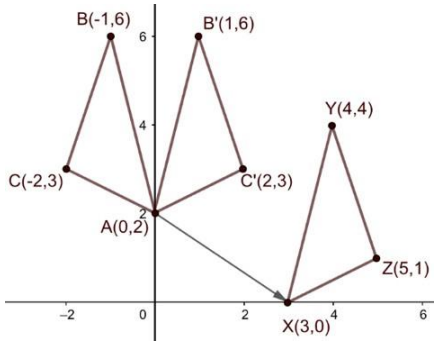
Focus 1: Measurement	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 19. Derive and apply the relationships between the lengths, perimeters, areas, and volumes of similar figures in relation to their scale factor. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Focus 1: Measurement	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 20. Derive and apply the formula for the length of an arc and the formula for the area of a sector. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Focus 2: Transformations	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 21. Represent transformations and compositions of transformations in the plane (coordinate and otherwise) using tools such as tracing paper and geometry software. a. Describe transformations and compositions of transformations as functions that take points in the plane as inputs and give other points as outputs, using informal and formal notation. b. Compare transformations which preserve distance and angle measure to those that do not. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Focus 2: Transformations	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 22. Explore rotations, reflections, and translations using graph paper, tracing paper, and geometry software. a. Given a geometric figure and a rotation, reflection, or translation, draw the image of the transformed figure using graph paper, tracing paper, or geometry software. b. Specify a sequence of rotations, reflections, or translations that will carry a given figure onto another. c. Draw figures with different types of symmetries and describe their attributes.	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
Indicate the chapter(s), sections, and/or page(s) reviewed.	**Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):**
	Overall Rating 1 2 3 4

Focus 2: Transformations	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 23. Develop definitions of rotation, reflection, and translation in terms of angles, circles, perpendicular lines, parallel lines, and line segments. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Focus 2: Transformations	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 24. Define congruence of two figures in terms of rigid motions (a sequence of translations, rotations, and reflections); show that two figures are congruent by finding a sequence of rigid motions that maps one figure to the other. *Example: ⊿ABC is congruent to ⊿XYZ since a reflection followed by a translation maps* *⊿ABC onto ⊿XYZ.*  **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Focus 2: Transformations	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 25. Verify criteria for showing triangles are congruent using a sequence of rigid motions that map one triangle to another. a. Verify that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent. b. Verify that two triangles are congruent if (but not only if) the following groups of corresponding parts are congruent: angle-side-angle (ASA), side-angle-side (SAS), side- side-side (SSS), and angle-angle-side (AAS). *Example: Given two triangles with two pairs of congruent corresponding sides and a pair of congruent included angles, show that there must be a sequence of rigid motions will map one onto the other.* **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Focus 2: Transformations	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 26. Verify experimentally the properties of dilations given by a center and a scale factor. a. Verify that a dilation takes a line not passing through the center of the dilation to a parallel line, and leaves a line passing through the center unchanged. b. Verify that the dilation of a line segment is longer or shorter in the ratio given by the scale factor. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Focus 2: Transformations	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 27. Given two figures, determine whether they are similar by identifying a similarity transformation (sequence of rigid motions and dilations) that maps one figure to the other. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Focus 2: Transformations	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 28. Verify criteria for showing triangles are similar using a similarity transformation (sequence of rigid motions and dilations) that maps one triangle to another. a. Verify that two triangles are similar if and only if corresponding pairs of sides are proportional and corresponding pairs of angles are congruent. b. Verify that two triangles are similar if (but not only if) two pairs of corresponding angles are congruent (AA), the corresponding sides are proportional (SSS), or two pairs of corresponding sides are proportional and the pair of included angles is congruent (SAS). *Example: Given two triangles with two pairs of congruent corresponding sides and a pair of congruent included angles, show there must be a set of rigid motions that maps one onto the other.* **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Focus 3: Geometric Arguments, Reasoning, and Proof	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 29. Find patterns and relationships in figures including lines, triangles, quadrilaterals, and circles, using technology and other tools. a. Construct figures, using technology and other tools, in order to make and test conjectures about their properties. b. Identify different sets of properties necessary to define and construct figures. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Focus 3: Geometric Arguments, Reasoning, and Proof	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 30. Develop and use precise definitions of figures such as angle, circle, perpendicular lines, parallel lines, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Focus 3: Geometric Arguments, Reasoning, and Proof	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 31. Justify whether conjectures are true or false in order to prove theorems and then apply those theorems in solving problems, communicating proofs in a variety of ways, including flow chart, two-column, and paragraph formats. a. Investigate, prove, and apply theorems about lines and angles, including but not limited to: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; the points on the perpendicular bisector of a line segment are those equidistant from the segment's endpoints. b. Investigate, prove, and apply theorems about triangles, including but not limited to: the sum of the measures of the interior angles of a triangle is 180˚; the base angles of isosceles triangles are congruent; the segment joining the midpoints of two sides of a triangle is parallel to the third side and half the length; a line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean Theorem using triangle similarity. c. Investigate, prove, and apply theorems about parallelograms and other quadrilaterals, including but not limited to both necessary and sufficient conditions for parallelograms and other quadrilaterals, as well as relationships among kinds of quadrilaterals. *Example*: *Prove that rectangles are parallelograms with congruent diagonals.* **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Focus 3: Geometric Arguments, Reasoning, and Proof	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 32. Use coordinates to prove simple geometric theorems algebraically. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Focus 3: Geometric Arguments, Reasoning, and Proof	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 33. Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems. *Example*: *Find the equation of a line parallel or perpendicular to a given line that passes through a given point.* **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Focus 4: Solving Applied Problems and Modeling in Geometry	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 34. Use congruence and similarity criteria for triangles to solve problems in real-world contexts. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

Focus 4: Solving Applied Problems and Modeling in Geometry	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 35. Discover and apply relationships in similar right triangles. a. Derive and apply the constant ratios of the sides in special right triangles (45˚-45˚-90˚ and 30˚-60˚-90˚). b. Use similarity to explore and define basic trigonometric ratios, including sine ratio, cosine ratio, and tangent ratio. c. Explain and use the relationship between the sine and cosine of complementary angles. d. Demonstrate the converse of the Pythagorean Theorem. e. Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems, including finding areas of regular polygons.	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
Indicate the chapter(s), sections, and/or page(s) reviewed.	**Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):**
	Overall Rating 1 2 3 4

Focus 4: Solving Applied Problems and Modeling in Geometry	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 36. Use geometric shapes, their measures, and their properties to model objects and use those models to solve problems **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Focus 4: Solving Applied Problems and Modeling in Geometry	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 37. Investigate and apply relationships among inscribed angles, radii, and chords, including but not limited to: the relationship between central, inscribed, and circumscribed angles; inscribed angles on a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence** **Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):** **Overall Rating** 1 2 3 4

Focus 4: Solving Applied Problems and Modeling in Geometry	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
Student will: 38.Use the mathematical modeling cycle involving geometric methods to solve design problems. *Examples: Design an object or structure to satisfy physical constraints or minimize cost; work with typographic grid systems based on ratios; apply concepts of density based on area and volume.* **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas 1 2 3 4 Skills and Procedures 1 2 3 4 Mathematical Relationships 1 2 3 4 **Summary/Justification/Evidence**
	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating 1 2 3 4

TEXTBOOK REVIEW FORM – MATHEMATICS – ADDITIONAL CRITIERIA AND INDICATORS

Documenting Alignment to
Additional Criteria and Indicators

Content

Criteria and Indicators	**Summary and documentation of how the additional criteria and indicators are met. Cite examples from the materials.**
1. Content is designed for students of varied abilities and understanding.	**Overall Rating** 1 2 3 4
2. Content is free of bias and/or controversial information.	**Overall Rating** 1 2 3 4
3. Content includes strategies for vocabulary instruction and graphic organizers.	**Overall Rating** 1 2 3 4
4. Content includes assignments that encourage integration of other content areas to support a math concept/skill.	**Overall Rating** 1 2 3 4
Indicate the chapter(s), sections, and/or page(s) reviewed.	**Summary/Justification/Evidence:**

TEXTBOOK REVIEW FORM – MATHEMATICS – ADDITIONAL CRITIERIA AND INDICATORS

Documenting Alignment to
Additional Criteria and Indicators

Technology

Criteria and Indicators	**Summary and documentation of how the additional criteria and indicators are met. Cite examples from the materials.**
1. Technology support and suggestions for appropriate use of multimedia resources are provided.	**Overall Rating** 1 2 3 4
2. Technology is integrated with student activities so that students collect, organize, analyze, and present data.	**Overall Rating** 1 2 3 4
3. Textbook and supplemental Contents are available online and/or on CD-ROM.	**Overall Rating** 1 2 3 4
Indicate the chapter(s), sections, and/or page(s) reviewed.	**Summary/Justification/Evidence:**

TEXTBOOK REVIEW FORM – MATHEMATICS – ADDITIONAL CRITIERIA AND INDICATORS

Documenting Alignment to
Additional Criteria and Indicators

Assessment

Criteria and Indicators	**Summary and documentation of how the additional criteria and indicators are met. Cite examples from the materials.**
1. Some assessments are designed to measure student understanding above the knowledge level.	**Overall Rating** 1 2 3 4
2. Guidance is provided to teacher regarding how assessment information can be used to inform instruction.	**Overall Rating** 1 2 3 4
3. Rubrics are provided for grading some assignments.	**Overall Rating** 1 2 3 4
4. Some opportunities are provided for students to check their own understanding.	**Overall Rating** 1 2 3 4
Indicate the chapter(s), sections, and/or page(s) reviewed.	**Summary/Justification/Evidence:**

TEXTBOOK REVIEW FORM – MATHEMATICS – ADDITIONAL CRITIERIA AND INDICATORS

Documenting Alignment to
Additional Criteria and Indicators

Assessment (Continued)

Criteria and Indicators	**Summary and documentation of how the additional criteria and indicators are met. Cite examples from the materials.**
5. Assessment activities examine the extent to which students can apply information to situations that require reasoning and creative thinking.	**Overall Rating** 1 2 3 4
6. Multiple means of assessments are used, informal as well as formal.	**Overall Rating** 1 2 3 4
7. Conceptual understanding and procedural knowledge are frequently assessed through tasks that ask students to apply information about a given concept in novel situations.	**Overall Rating** 1 2 3 4
Indicate the chapter(s), sections, and/or page(s) reviewed.	**Summary/Justification/Evidence:**

TEXTBOOK REVIEW FORM – MATHEMATICS – ADDITIONAL CRITIERIA AND INDICATORS

Documenting Alignment to
Additional Criteria and Indicators

Instruction

Criteria and Indicators	**Summary and documentation of how the additional criteria and indicators are met. Cite examples from the materials.**
1. Teacher guide provides suggestions for how to demonstrate/model skills or use of knowledge.	**Overall Rating** 1 2 3 4
2. Teacher guide offers alternative instructional strategies for advanced learners, struggling learners, ELL and Sp. Ed.	**Overall Rating** 1 2 3 4
3. Teacher guide suggests multiple opportunities for students to demonstrate understanding.	**Overall Rating** 1 2 3 4
4. Teacher guide provides opportunities for guided practice and scaffolded support.	**Overall Rating** 1 2 3 4
5. Teacher guide includes suggestions to diagnose student errors, explanations of how these errors may be corrected, and how to further develop student ideas.	**Overall Rating** 1 2 3 4
Indicate the chapter(s), sections, and/or page(s) reviewed.	**Summary/Justification/Evidence:**