TEXTBOOK REVIEW FORM

MATHEMATICS

ALGEBRA I WITH PROBABILITY

Textbook/Series:		
Edition:	Copyright:	Publisher:
Reviewed by:		
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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:	
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.

Strong: 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.

Overall Rating

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



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.

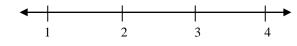
These students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, 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):

Summary/Justification/Evidence

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.

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:

5. Use appropriate tools strategically.

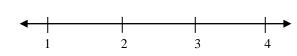
Mathematically proficient students consider available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient 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.

Overall Rating

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



Documenting Alignment to the Standards for Mathematical Practice

Mathematically proficient students:

6. Attend to precision.	
meaning of the symbols they choose, including using the equal sign con specifying units of measure and labeling axes to clarify the corresponde	lear definitions in discussion with others and in their own reasoning. They state the sistently and appropriately. Mathematically proficient students are careful about nce with quantities in a problem. They calculate accurately and efficiently, and express m context. In the elementary grades, students give carefully formulated explanations to mine 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
-	1 2 3 4

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.

Overall Rating

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

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Documenting Alignment to the Standards for Mathematical Practice

Mathematically proficient students:

8.	Look for and express	regularity in	renested	reasoning
ο.	LOOK IOI allu express	regularity in	repeateu	reasoning.

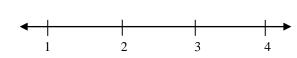
They notice if calculations are repeated, and look both for general methods and for shortcuts. Upper elementary students might notice when dividing 25 by 11 that they are repeating the same calculations over and over again and conclude they have a repeating decimal. By paying attention to the calculation 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.

Overall Rating

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



TEXTBOOK REVIEW FORM – MATHEMATICS – OVERALL MATHEMATICAL STANDARDS & OTHER CRITERIA – ALGEBRA I WITH PROBABILITY

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)

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Number and Quantity

	Summary and documentation of he are met. Cite examples from the m		nain, clusto	er, and star	ıdard
Students will:	Important Mathematical Ideas	1	2	3	4
1. Explain how the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for an additional notation for radicals using rational exponents.	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 developed in the instructional mate			nissing or r	not well
	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.				
Students will:	Important Mathematical Ideas	1	2	3	4
2. Rewrite expressions involving radicals and rational exponents using the properties of exponents.	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 developed in the instructional mate	and standard that are missing or not wel naterials (if any):			not well
	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.				
Students will:	Important Mathematical Ideas	1	2	3	4
3. Define the imaginary number i such that $i^2 = -1$.	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 developed in the instructional mat			nissing or 1	not well
	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.				ndard
Students will:	Important Mathematical Ideas	1	2	3	4
4. Interpret linear, quadratic, and exponential expressions in terms of a context by viewing one or more of their parts as a single entity.	Skills and Procedures	1	2	3	4
Example: Interpret the accrued amount of investment $P(1 + r) t$, where P is the principal and r is the interest rate, as the product of P and a factor depending on time t .	Mathematical Relationships	1	2	3	4
	Summary/Justification/Evidence				
Indicate the chapter(s), sections, and/or page(s) reviewed.	Portions of the domain, cluster, an developed in the instructional mate			missing or 1	not well
	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.				ndard
Students will:	Important Mathematical Ideas	1	2	3	4
5. Use the structure of an expression to identify ways to rewrite it.	Skills and Procedures	1	2	3	4
Example: See x^4 - y^4 as $(x^2)^2$ - $(y^2)^2$, thus recognizing it as a difference of squares that can be factored as $(x^2 - y^2)(x^2 + y^2)$.	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 miss developed in the instructional materials (if any):		missing or 1	not well	
	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.				ndard
Students will:	Important Mathematical Ideas	1	2	3	4
 6. Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. a. Factor quadratic expressions with leading coefficients of one, and use the factored form to reveal the zeros of the function it defines. b. Use the vertex form of a quadratic expression to reveal the maximum or minimum value and the axis of symmetry of the function it defines; complete the square to find the vertex form of quadratics with a leading coefficient of one. c. Use the properties of exponents to transform expressions for exponential functions. Example: Identify percent rate of change in functions such as y = (1.02)^t, y = (0.97)^t, y = (1.01)^{12t}, y = (1.2)^{t/10}, and classify them as representing exponential growth or decay. 	Skills and Procedures Mathematical Relationships Summary/Justification/Evidence	1	2 2	3	4
Indicate the chapter(s), sections, and/or page(s) reviewed.	Portions of the domain, cluster, and developed in the instructional mater			nissing or 1	not well
	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.				ndard
Students will:	Important Mathematical Ideas	1	2	3	4
7. Add, subtract, and multiply polynomials, showing that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication.	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, an developed in the instructional mat			nissing or 1	not well
	Overall Rating	1	2	3	4

Focus 1: Algebra	Summary and documentation of how the domain, cluster, and stand are met. Cite examples from the materials.									ndard
Students will:	Important Mathematical Ideas	1	2	3	4					
8. Explain why extraneous solutions to an equation involving absolute values may arise and how to check to be sure that a candidate solution satisfies an equation.	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 developed in the instructional mate			nissing or r	not well					
	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.						
Students will:	Important Mathematical Ideas	1	2	3	4	
 9. Select an appropriate method to solve a quadratic equation in one variable. a. Use the method of completing the square to transform any quadratic equation in x into an equation of the form (x – p)² = q that has the 	Skills and Procedures	1	2	3	4	
same solutions. Explain how the quadratic formula is derived from this form.	Mathematical Relationships	1	2	3	4	
b. Solve quadratic equations by inspection (such as $x^2 = 49$), taking square roots, completing the square, the quadratic formula, and factoring, as appropriate to the initial form of the equation, and recognize that some solutions may not be real.	Wathematical Relationships 1 2 3					
	Portions of the domain, cluster, and developed in the instructional mate			nissing or 1	not well	
Indicate the chapter(s), sections, and/or page(s) reviewed.						
	Overall Rating	1	2	3	4	
		1	2	3	4	

Focus 1: Algebra	Summary and documentation of how the domain, cluster, and standar are met. Cite examples from the materials.					
Students will:	Important Mathematical Ideas	1	2	3	4	
10. Select an appropriate method to solve a system of two linear equations in two variables.a. Solve a system of two equations in two variables by using linear	Skills and Procedures	1	2	3	4	
combinations; contrast situations in two variables by using inical combinations; contrast situations in which use of linear combinations is more efficient with those in which substitution is more efficient.	Mathematical Relationships	1	2	3	4	
b. Contrast solutions to a system of two linear equations in two variables produced by algebraic methods with graphical and tabular methods.	Summary/Justification/Evidence					
Indicate the chapter(s), sections, and/or page(s) reviewed.	Portions of the domain, cluster, an developed in the instructional mat			missing or 1	not well	
	Overall Rating					
	Overum Kutting	1	2	3	4	

Focus 1: Algebra Summary and documentation of how the domain, cluster, and standare met. Cite examples from the materials.						
Students will:	Important Mathematical Ideas	1	2	3	4	
11. Create equations and inequalities in one variable and use them to solve problems in context, either exactly or approximately. Extend from contexts arising from linear functions to those involving quadratic, exponential,	Skills and Procedures	1	2	3	4	
and absolute value functions.	Mathematical Relationships	1	2	3	4	
	Summary/Justification/Evidence					
Indicate the chapter(s), sections, and/or page(s) reviewed.	Portions of the domain, cluster, an developed in the instructional mate			nissing or 1	not well	
	Overall Rating	1	2	3	4	

Focus 1: Algebra Summary and documentation of how the domain, cluster, and stand are met. Cite examples from the materials.							
Students will:	Important Mathematical Ideas	1	2	3	4		
12. Create equations in two or more variables to represent relationships between quantities in context; graph equations on coordinate axes with labels and scales and use them to make predictions. Limit to contexts	Skills and Procedures	1	2	3	4		
arising from linear, quadratic, exponential, absolute value, and linear piecewise functions.	Mathematical Relationships	1	2	3	4		
	Summary/Justification/Evidence						
Indicate the chapter(s), sections, and/or page(s) reviewed.	Portions of the domain, cluster, an developed in the instructional mate			missing or 1	not well		
	Overall Rating	1	2	3	4		

Focus 1: Algebra Summary and documentation of how the domain, cluster, and sare met. Cite examples from the materials.					
Students will:	Important Mathematical Ideas	1	2	3	4
13. Represent constraints by equations and/or inequalities, and solve systems of equations and/or inequalities, interpreting solutions as viable or nonviable options in a modeling context. Limit to contexts	Skills and Procedures	1	2	3	4
arising from linear, quadratic, exponential, absolute value, and linear piecewise functions.	Mathematical Relationships	1	2	3	4
	Summary/Justification/Evidence				
Indicate the chapter(s), sections, and/or page(s) reviewed.	Portions of the domain, cluster, an developed in the instructional mat			missing or 1	not well
	Overall Rating	1	2	3	4

Focus 2: Connecting Algebra to Functions	Summary and documentation of how the domain, cluster, and standar are met. Cite examples from the materials.					
Students will:	Important Mathematical Ideas	1	2	3	4	
14. Given a relation defined by an equation in two variables, identify the graph of the relation as the set of all its solutions plotted in the coordinate plane. <i>Note: The graph of a relation often forms a curve</i>	Skills and Procedures	1	2	3	4	
(which could be a line).	Mathematical Relationships	1	2	3	4	
	Summary/Justification/Evidence					
Indicate the chapter(s), sections, and/or page(s) reviewed.	Portions of the domain, cluster, an developed in the instructional mate			nissing or 1	not well	
	Overall Rating	1	2	3	4	

Focus 2: Connecting Algebra to Functions	Summary and documentation of he are met. Cite examples from the m		nain, clust	er, and star	ndard
Students will:	Important Mathematical Ideas	1	2	3	4
15. Define a function as a mapping from one set (called the domain) to another set (called the range) that assigns to each element of the domain exactly one element of the range.	Skills and Procedures	1	2	3	4
a. Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in	Mathematical Relationships	1	2	3	4
terms of a context. Note: If f is a function and x is an element of its domain, then $f(x)$ denotes the output of f corresponding to the input x.	nt Summary/Instiffedtion/Enidones				
b. b. Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. Limit to linear, quadratic, exponential, and absolute value functions.					
	Portions of the domain, cluster, an developed in the instructional mate			nissing or 1	not well
Indicate the chapter(s), sections, and/or page(s) reviewed.	Overall Rating	1	2	3	4

Focus 2: Connecting Algebra to Functions	Summary and documentation of hare met. Cite examples from the m		nain, clusto	er, and star	ndard
Students will:	Important Mathematical Ideas	1	2	3	4
16. Compare and contrast relations and functions represented by equations, graphs, or tables that show related values; determine whether a relation is a function. Explain that a function f is a special kind of relation defined by the	Skills and Procedures	1	2	3	4
equation $y = f(x)$.	Mathematical Relationships	1	2	3	4
	Summary/Justification/Evidence				
Indicate the chapter(s), sections, and/or page(s) reviewed.					
	Portions of the domain, cluster, an developed in the instructional mat			nissing or 1	not well
	Overall Rating				
		1	2	3	4

Focus 2: Connecting Algebra to Functions			Summary and documentation of are met. Cite examples from the		nain, clust	er, and sta	ndard
Students will: 17. Combine different types of standard functions to write, evaluate, and interpret functions in context. Limit to linear, quadratic, exponential, and absolute value functions.		Important Mathematical Ideas	1	2	3	4	
		Skills and Procedures	1	2	3	4	
a. U	se arithmetic operations to c	combine different types of	Mathematical Relationships	1	2	3	4
standard functions to write and evaluate functions. Example: Given two functions, one representing flow rate of water and the other representing evaporation of that water, combine the two functions to determine the amount of water in a container at a given time. b. Use function composition to combine different types of standard functions to write and evaluate functions. Example: Given the following relationships, determine what the expression S(T(t)) represents.		Summary/Justification/Evidence					
Function G S T	Input Grade in course: g Amount of studying: s Amount of screen time: t	Output Grade in course: G(s) Amount of screen time: S(g) Number of followers: T(t) ge(s) reviewed.	Portions of the domain, cluster, and standard that are missing or n developed in the instructional materials (if any):				
			Overall Rating	1	2	3	4

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.					
Students will:	Important Mathematical Ideas	1	2	3	4
18. Solve systems consisting of linear and/or quadratic equations in two variables graphically, using technology where appropriate.	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, an developed in the instructional mat			nissing or 1	not well
	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.						
Students will:	Important Mathematical Ideas	1	2	3	4		
19. Explain why the x-coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$.	Skills and Procedures	1	2	3	4		
a. Find the approximate solutions of an equation graphically, using tables of values, or finding successive approximations,	Mathematical Relationships	1	2	3	4		
using technology where appropriate. <i>Note: Include cases</i> where $f(x)$ is a linear, quadratic, exponential, or absolute value function and $g(x)$ is constant or linear.	Summary/Justification/Evidence						
Indicate the chapter(s), sections, and/or page(s) reviewed.	Portions of the domain, cluster, an developed in the instructional mat			nissing or 1	not well		
	Overall Rating						
	0	1	2	3	4		

	cumentation of how the domain, cluster, and standard nples from the materials.					
Important Mathematical Ideas	1	2	3	4		
Skills and Procedures	1	2	3	4		
Mathematical Relationships	1	2	3	4		
Summary/Justification/Evidence						
			missing or 1	not well		
Overall Rating						
	1	2	3	4		
	are met. Cite examples from the management of th	are met. Cite examples from the materials. Important Mathematical Ideas 1 Skills and Procedures 1 Mathematical Relationships 1 Summary/Justification/Evidence Portions of the domain, cluster, and standard developed in the instructional materials (if an overlast) overall Rating	are met. Cite examples from the materials. Important Mathematical Ideas 1 2 Skills and Procedures 1 2 Mathematical Relationships 1 2 Summary/Justification/Evidence Portions of the domain, cluster, and standard that are redeveloped in the instructional materials (if any): Overall Rating	are met. Cite examples from the materials. Important Mathematical Ideas 1 2 3 Skills and Procedures 1 2 3 Mathematical Relationships 1 2 3 Summary/Justification/Evidence Portions of the domain, cluster, and standard that are missing or redeveloped in the instructional materials (if any): Overall Rating		

Socus 3: Functions Summary and documentation of how the domain, cluster, are met. Cite examples from the materials.				er, and star	ıdard		
Students will:	Important Mathematical Ideas	1	2	3	4		
21. Compare properties of two functions, each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). Extend from linear to quadratic, exponential,	Skills and Procedures	1	2	3	4		
absolute value, and general piecewise.	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 developed in the instructional materials (if any):				or not well		
	Overall Rating						
		1	2	3	4		

Focus 3: Functions	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.				ndard
Students will:	Important Mathematical Ideas	1	2	3	4
22. Define sequences as functions, including recursive definitions, whose domain is a subset of the integers. a. Write explicit and recursive formulas for arithmetic and	Skills and Procedures	1	2	3	4
geometric sequences and connect them to linear and exponential functions.	Mathematical Relationships	1	2	3	4
Example: A sequence with constant growth will be a linear function, while a sequence with proportional growth will be an exponential function.	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 videveloped in the instructional materials (if any):				ot well
	Overall Rating	1	2	2	4
		1	2	3	4

Focus 3: Functions	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.				
Students will:	Important Mathematical Ideas	1	2	3	4
23. Identify the effect on the graph of replacing $ff(xx)$ by $ff(xx) + kk$, $kk \cdot ff(xx)$, $ff(kk \cdot xx)$, and $ff(xx + kk)$ for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases	Skills and Procedures	1	2	3	4
and explain the effects on the graph, using technology as appropriate. Limit to linear, quadratic, exponential, absolute value, and linear piecewise functions.	Mathematical Relationships	1	2	3	4
Tuncuons.	Summary/Justification/Evidence				
Indicate the chapter(s), sections, and/or page(s) reviewed.					
Portions of the domain, cluster, and standard the developed in the instructional materials (if any)				nissing or n	ot well
	Overall Rating				
		1	2	3	4

Focus 3: Functions	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.				ıdard
Students will:	Important Mathematical Ideas	1	2	3	4
24. Distinguish between situations that can be modeled with linear functions and those that can be modeled with exponential functions. a. Show that linear functions grow by equal differences over	Skills and Procedures	1	2	3	4
equal intervals, while exponential functions grow by equal factors over equal intervals.	Mathematical Relationships	1	2	3	4
b. Define linear functions to represent situations in which one quantity changes at a constant rate per unit interval relative to another.c. Define exponential functions to represent situations in which a	Summary/Justification/Evidence				
quantity grows or decays by a constant percent rate per unit interval relative to another.					
Indicate the chapter(s), sections, and/or page(s) reviewed.	Portions of the domain, cluster, and standard that are missing or not we developed in the instructional materials (if any):				
	Overall Rating	1	2	3	4

Summary and documentation of how the domain, cluster, as are met. Cite examples from the materials.				ndard
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
	are met. Cite examples from the management of th	are met. Cite examples from the materials. Important Mathematical Ideas 1 Skills and Procedures 1 Mathematical Relationships 1 Summary/Justification/Evidence Portions of the domain, cluster, and standard developed in the instructional materials (if an overlast) overall Rating	are met. Cite examples from the materials. Important Mathematical Ideas 1 2 Skills and Procedures 1 2 Mathematical Relationships 1 2 Summary/Justification/Evidence Portions of the domain, cluster, and standard that are redeveloped in the instructional materials (if any): Overall Rating	Important Mathematical Ideas 1 2 3 Skills and Procedures 1 2 3 Mathematical Relationships 1 2 3 Summary/Justification/Evidence Portions of the domain, cluster, and standard that are missing or redeveloped in the instructional materials (if any): Overall Rating

Focus 3: Functions	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.					
Students will:	Important Mathematical Ideas	1	2	3	4	
26. Use graphs and tables to show that a quantity increasing exponentially eventually exceeds a quantity increasing linearly or quadratically.	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, an developed in the instructional mat			nissing or r	not well	
	Overall Rating					
		1	2	3	4	

Focus 3: Functions	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.					
Students will:	Important Mathematical Ideas	1	2	3	4	
27. Interpret the parameters of functions in terms of a context. Extend from linear functions, written in the form mx + b, to exponential functions, written in the form ab ^x .	Skills and Procedures	1	2	3	4	
Example: If the function $V(t) = 19885(0.75)^t$ describes the value of a car after it has been owned for t years, 19885 represents the purchase price of the car when $t = 0$, and 0.75 represents the annual rate at	Mathematical Relationships	1	2	3	4	
which its value decreases.	Summary/Justification/Evidence					
Indicate the chapter(s), sections, and/or page(s) reviewed.	Destinant of the dessertion destates and	J -4 JJ	1414		411	
	Portions of the domain, cluster, and developed in the instructional mate			mssing or i	iot weii	
	Overall Rating					
		1	2	3	4	

Focus 3: Functions	Summary and documentation of how the domain, cluster, and standar are met. Cite examples from the materials.					
Students will:	Important Mathematical Ideas	1	2	3	4	
28. For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of	Skills and Procedures	1	2	3	4	
the relationship. Note: Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative;	Mathematical Relationships	1	2	3	4	
maximums and minimums; symmetries; and end behavior. Extend from relationships that can be represented by linear functions to quadratic, exponential, absolute value, and linear piecewise functions.	Summary/Justification/Evidence					
Indicate the chapter(s), sections, and/or page(s) reviewed.	Portions of the domain, cluster, and developed in the instructional mate			nissing or 1	not well	
	Overall Rating					
		1	2	3	4	

Focus 3: Functions	Summary and documentation of how the domain, cluster, and standar are met. Cite examples from the materials.				
Students will:	Important Mathematical Ideas	1	2	3	4
29. Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph. Limit to linear, quadratic,	Skills and Procedures	1	2	3	4
exponential, and absolute value functions.	Mathematical Relationships	1	2	3	4
	Summary/Justification/Evidence				
Indicate the chapter(s), sections, and/or page(s) reviewed.					
	Portions of the domain, cluster, an developed in the instructional mat			nissing or 1	not well
	Overall Rating	1	2	3	4

Focus 3: Functions	Summary and documentation of h are met. Cite examples from the m		nain, clust	er, and star	ndard
Students will:	Important Mathematical Ideas	1	2	3	4
30. Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.	Skills and Procedures	1	2	3	4
a. Graph linear and quadratic functions and show intercepts, maxima, and minima.	Mathematical Relationships	1	2	3	4
 b. Graph piecewise-defined functions, including step functions and absolute value functions. c. Graph exponential functions, showing intercepts and end behavior. Indicate the chapter(s), sections, and/or page(s) reviewed.	Portions of the domain, cluster, an developed in the instructional mat			nissing or 1	not well
	Overall Rating	1	2	3	4

Focus 3: Functions	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.					
Students will:	Important Mathematical Ideas	1	2	3	4	
31. Use the mathematical modeling cycle to solve real-world problems involving linear, quadratic, exponential, absolute value, and linear piecewise functions.	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, an	d standard	that are n	missing or r	not well	
	developed in the instructional mate			mssing of 1	iot wen	
	Overall Rating					
		1	2	3	4	

Data Analysis, Statistics, and Probability

			Summary and documentation of how the domain, cluster, and standa are met. Cite examples from the materials.				
dents will:			Important Mathematical Ideas 1 2				4
data in order t	to draw conclusions and	soning with bivariate categorical d assess risk. ng the effectiveness of flu shots 1	Skills and Procedures	1	2	3	4
and B, 21 sub	jects in treatment grou	up A avoided getting the flu while ided the flu while 13 contracted	Mathematical Relationships	1	2	3	4
chances of con Possible answ than in group is greater than	ntracting the flu. ver: Even though more B, the proportion of pe n the proportion in gro	e more effective in reducing the people in group A avoided the feople avoiding the flu in group I bup A, which suggests that a lowering the risk of getting the					
	Contracted Flu	Did Not Contract Flu	D (1 64 1 1 1 1 1	1 4 1 1		• •	
Flu Shot A	29	21	Portions of the domain, cluster, ar developed in the instructional mat			nissing or i	iot well
Flu Shot B	13	12	developed in the instructional mat	citais (ii ai	· y)•		
	42	33					
Total		33					

Focus 1: Quantitative Literacy Summary and documentation of how the domain, cluster are met. Cite examples from the materials.					ndard
Students will:	Important Mathematical Ideas	1	2	3	4
33. Design and carry out an investigation to determine whether there appears to be an association between two categorical variables, and write a persuasive argument based on the results of the investigation.	Skills and Procedures	1	2	3	4
Example: Investigate whether there appears to be an association between successfully completing a task in a given length of time and	Mathematical Relationships	1	2	3	4
listening to music while attempting the task. Randomly assign some students to listen to music while attempting to complete the task and others to complete the task without listening to music. Discuss whether	Summary/Justification/Evidence				
students should listen to music while studying, based on that analysis.					
Indicate the chapter(s), sections, and/or page(s) reviewed.	Portions of the domain, cluster, an	d standard	l that are r	nissing or 1	not well
indicate the chapter(s), sections, and/or page(s) reviewed.	developed in the instructional mat	erials (if ar	ny):		
	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.						
Students will:	Important Mathematical Ideas	1	2	3	4		
34. Distinguish between quantitative and categorical data and between the techniques that may be used for analyzing data of these two types. <i>Example: The color of cars is categorical and so is summarized by</i>	Skills and Procedures	1	2	3	4		
frequency and proportion for each color category, while the mileage on each car's odometer is quantitative and can be summarized by the mean.	Mathematical Relationships	1	2	3	4		
	Summary/Justification/Evidence						
Indicate the chapter(s), sections, and/or page(s) reviewed.	Portions of the domain, cluster, an developed in the instructional mat			nissing or 1	not well		
	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.					
Students will:	Important Mathematical Ideas	1	2	3	4	
35. Analyze the possible association between two categorical variables. a. Summarize categorical data for two categories in two-way frequency tables and represent using segmented bar graphs.	Skills and Procedures	1	2	3	4	
 b. Interpret relative frequencies in the context of categorical data (including joint, marginal, and conditional relative frequencies). c. Identify possible associations and trends in categorical data. 	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 developed in the instructional mat			nissing or r	not well	
	Overall Rating	1	2	3	4	

Focus 2: Visualizing and Summarizing Data	Summary and documentation of hare met. Cite examples from the m		nain, clust	er, and star	ndard
Students will:	Important Mathematical Ideas	1	2	3	4
36. Generate a two-way categorical table in order to find and evaluate solutions to real-world problems.	Skills and Procedures	1	2	3	4
a. Aggregate data from several groups to find an overall association between two categorical variables.	Mathematical Relationships	1	2	3	4
b. Recognize and explore situations where the association between two categorical variables is reversed when a third variable is considered (Simpson's Paradox). Example: In a certain city, Hospital 1 has a higher fatality rate than Hospital 2. But when considering mildly-injured patients and severely-injured patients as separate groups, Hospital 1 has a lower fatality rate among both groups than Hospital 2, since Hospital 1 is a Level 1 Trauma Center. Thus, Hospital 1 receives most of the severely injured patients who are less likely to survive overall but have a better chance of surviving in Hospital 1 than they would in Hospital 2.	he association resed when a third x). So a higher fatality rate ildly-injured patients groups, Hospital 1 ups than Hospital 2, ter. Thus, Hospital 1 ents who are less chance of surviving Portions of the domain, cluster, and standard tha				not well
Indicate the chapter(s), sections, and/or page(s) reviewed.	Overall Rating				
		1	2	3	4

Focus 3: Statistical Inference (Note: There are no Algebra I with Probability standards in Focus 3)	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.						
Students will:	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.							
and of page (b) feet one	Portions of the domain, cluster, an developed in the instructional mat			missing or 1	not well		
	Overall Rating	1	2	3	4		

Focus 4: Probability	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.					
Students will:	Important Mathematical Ideas	1	2	3	4	
37. Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events ("or," "and," "not").	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: Probability	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.				
Students will:	Important Mathematical Ideas	1	2	3	4
38. Explain whether two events, A and B, are independent, using two-way tables or tree diagrams	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, ar developed in the instructional mat			nissing or r	not well
	Overall Rating				
		1	2	3	4

Focus 4: Probability	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.					
Students will:	Important Mathematical Ideas	1	2	3	4	
39. Compute the conditional probability of event A given event B, using two-way tables or tree diagrams.	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: Probability	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.				
Students will:	Important Mathematical Ideas	1	2	3	4
40. Recognize and describe the concepts of conditional probability and independence in everyday situations and explain them using everyday language.	Skills and Procedures	1	2	3	4
Example: Contrast the chance of having lung cancer if you are a smoker with the chance of being a smoker if you have lung cancer.	Mathematical Relationships	1	2	3	4
	Summary/Justification/Evidence				
Indicate the chapter(s), sections, and/or page(s) reviewed.	Portions of the domain, cluster, an	nd standard	that are n	nissing or 1	not well
	developed in the instructional mat				
	Overall Rating				
		1	2	3	4

Focus 4: Probability	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.				
Students will:	Important Mathematical Ideas	1	2	3	4
41. Explain why the conditional probability of A given B is the fraction of B's outcomes that also belong to A, and interpret the answer in context. <i>Example: the probability of drawing a king from a deck of</i>	Skills and Procedures	1	2	3	4
cards, given that it is a face card, is $\frac{4/52}{12/52}$, which is $\frac{1}{3}$	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 developed in the instructional mate			nissing or r	not well
	Overall Rating	1	2	3	4

Documenting Alignment to Additional Criteria and Indicators

Content

		Summary and documentation indicators are met. Cite exam				ıd
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
Indica	ate the chapter(s), sections, and/or page(s) reviewed.	Summary/Justification/Eviden	ace:			

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.				
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:				

Documenting Alignment to Additional Criteria and Indicators

Assessment

Crite	ria 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	
Indica	ate the chapter(s), sections, and/or page(s) reviewed.	Summary/Justification/Evidence	:				

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	:				

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
Indica	ate the chapter(s), sections, and/or page(s) reviewed.	Summary/Justification/Evidence	:			