TEXTBOOK REVIEW FORM

MATHEMATICS

ALGEBRA I

Textbook/Series: _____

Edition _____ **Copyright** _____ **Publisher** _____

Reviewed by: _____

This form was based in part on:

Instructional Materials Analysis and Selection

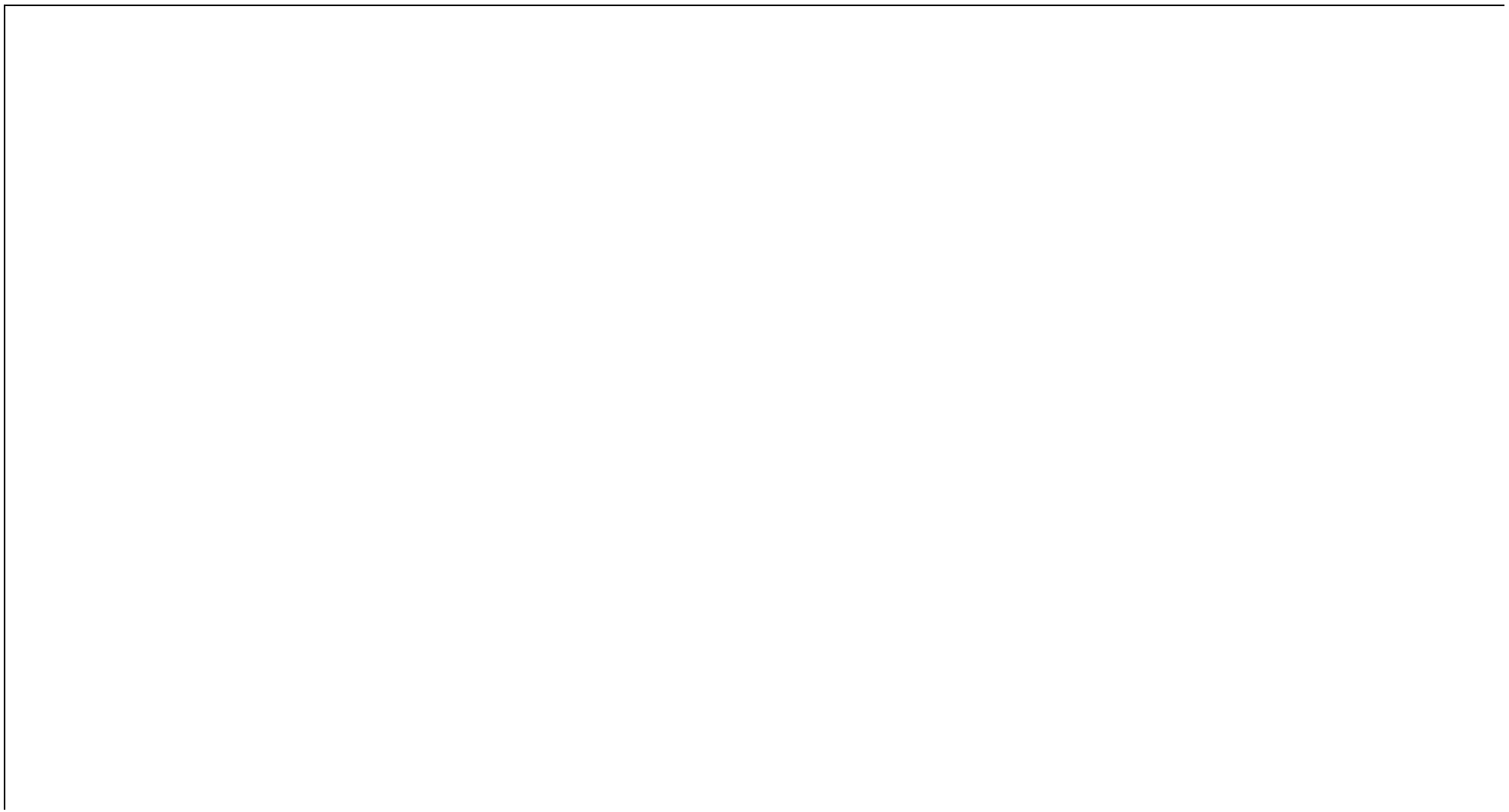
Phase 3: Assessing Content Alignment to the Common Core Standards for Mathematics

A project of

The Charles A. Dana Center

At the University of Texas at Austin

Adapted for Alabama State Department of Education



Documenting Alignment to the Standards for Mathematical Practice

Mathematically proficient students:

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

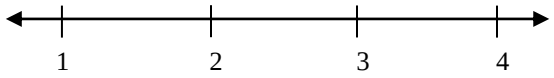
These students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into 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.

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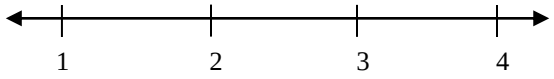

Documenting Alignment to the Standards for Mathematical Practice

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.

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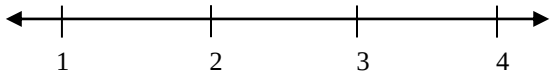

Documenting Alignment to the Standards for Mathematical Practice

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.

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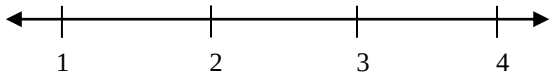

Documenting Alignment to the Standards for Mathematical Practice

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.

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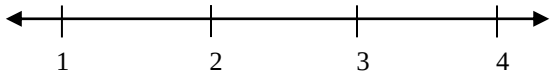

Documenting Alignment to the Standards for Mathematical Practice

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.

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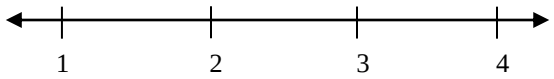

Documenting Alignment to the Standards for Mathematical Practice

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.

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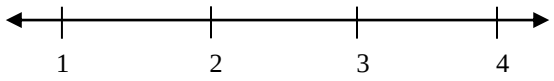

Documenting Alignment to the Standards for Mathematical Practice

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.

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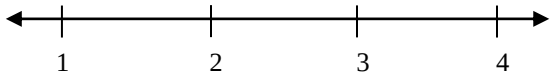


TEXTBOOK REVIEW FORM – MATHEMATICS – OVERALL
COLLEGE- AND CAREER-READY STANDARDS & OTHER CRITERIA – GRADE K

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.

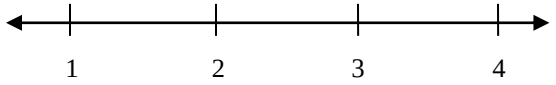
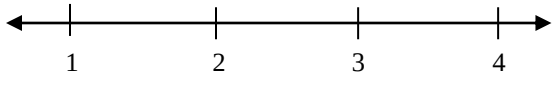
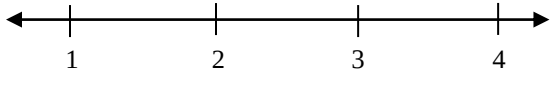
Moderate: This is the middle rating a book can receive. In general, a book that was rated as "moderate" scored mostly 2s and 3s on a 4-point scale.

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.

Students will:

NUMBER AND QUANTITY

The Real Number System

Extend the properties of exponents to rational exponents.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
1. Explain how the definition of the meaning of rational exponents follows from extending the properties of integer exponents to those values, allowing for a notation for radicals in terms of rational exponents. [N-RN1] Example: We define 51/3 to be the cube root of 5 because we want (51/3)3 = 5(1/3)3 to hold, so (51/3)3 must equal 5.	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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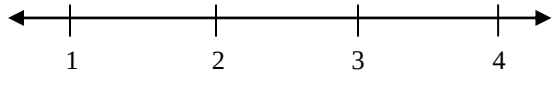
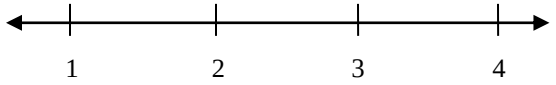
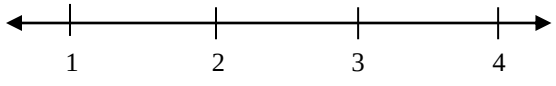
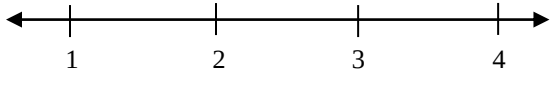
	Overall Rating 

Students will:

NUMBER AND QUANTITY

The Real Number System

Extend the properties of exponents to rational exponents.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
2. Rewrite expressions involving radicals and rational exponents using the properties of exponents. [N-RN2] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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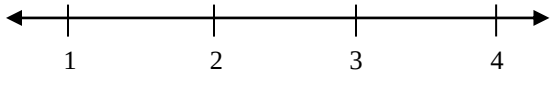
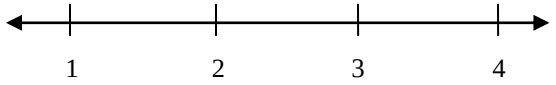
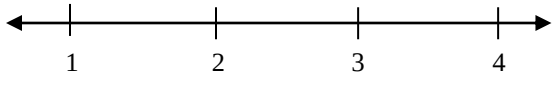
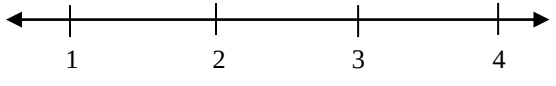
	Overall Rating 

Students will:

NUMBER AND QUANTITY

The Real Number System

Use properties of rational and irrational numbers.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
3. Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational. [N-RN3]	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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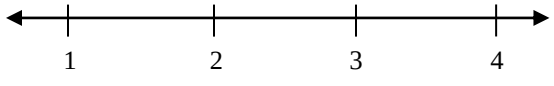
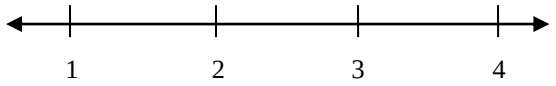
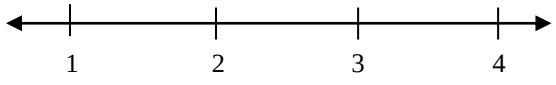
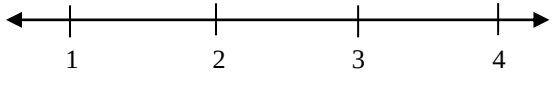
	Overall Rating 

Students will:

NUMBER AND QUANTITY

Quantities*

Reason quantitatively and use units to solve problems. (Foundation for work with expressions, equations, and functions.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
4. Use units as a way to understand problems and to guide the solution of multistep problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays. [N-Q1]	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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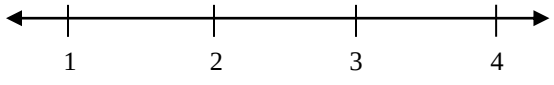
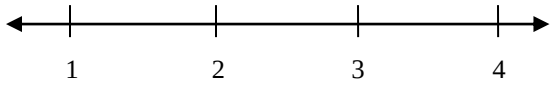
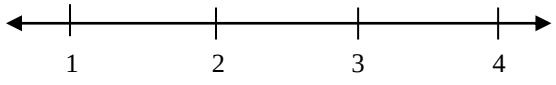
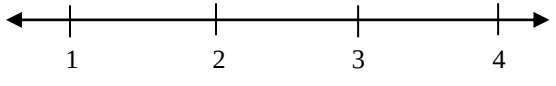
	Overall Rating 

Students will:

NUMBER AND QUANTITY

Quantities*

Reason quantitatively and use units to solve problems. (Foundation for work with expressions, equations, and functions.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
5. Define appropriate quantities for the purpose of descriptive modeling. [N-Q2]	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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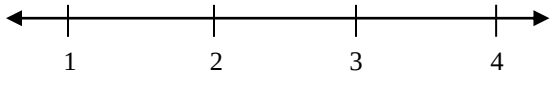
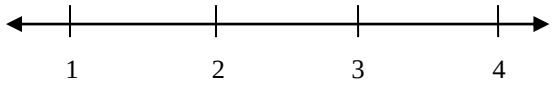
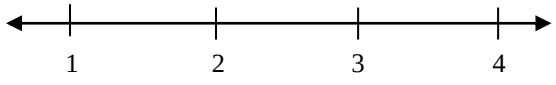
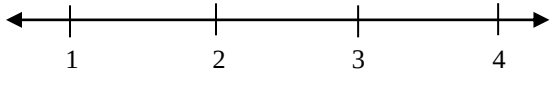
	Overall Rating 

Students will:

NUMBER AND QUANTITY

Quantities*

Reason quantitatively and use units to solve problems. (Foundation for work with expressions, equations, and functions.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
6. Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. [N-Q3] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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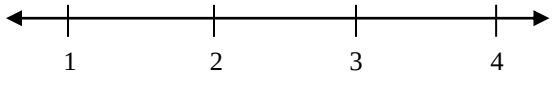
	Overall Rating 

Students will:

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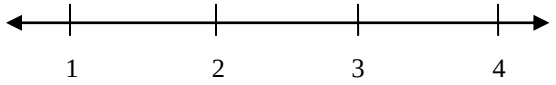
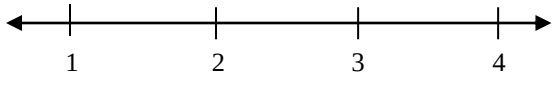
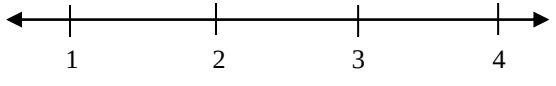
Seeing Structure in Expressions

Interpret the structure of expressions. (Linear, exponential, quadratic.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
7. Interpret expressions that represent a quantity in terms of its context.* [A-SSE1 **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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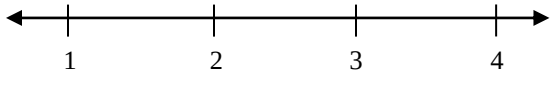
	Overall Rating 

Students will:

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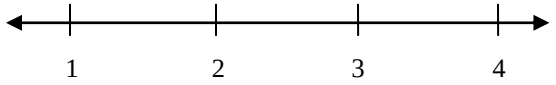
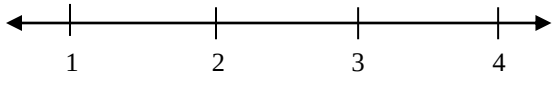
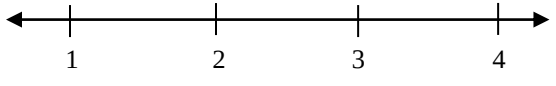
Seeing Structure in Expressions

Interpret the structure of expressions. (Linear, exponential, quadratic.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
a. Interpret parts of an expression such as terms, factors, and coefficients. [A-SSE1a] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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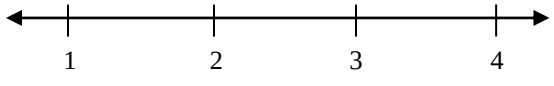
	Overall Rating 

Students will:

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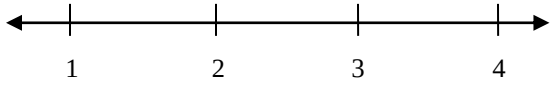
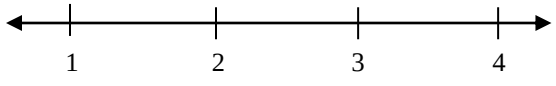
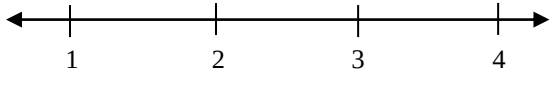
Seeing Structure in Expressions

Interpret the structure of expressions. (Linear, exponential, quadratic.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
b. Interpret complicated expressions by viewing one or more of their parts as a single entity. [A-SSE1b] Example: Interpret P(1+r)n as the product of P and a factor not depending on P.	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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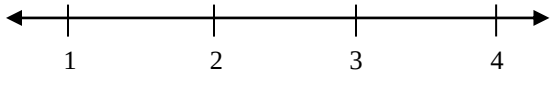
	Overall Rating 

Students will:

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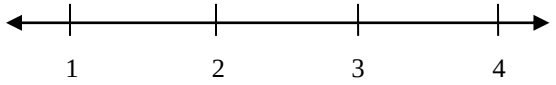
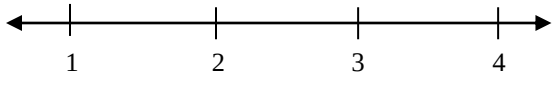
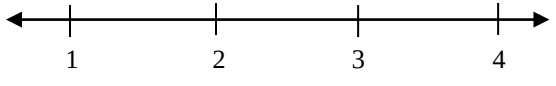
Seeing Structure in Expressions

Interpret the structure of expressions. (Linear, exponential, quadratic.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
8. Use the structure of an expression to identify ways to rewrite it. [A-SSE2] Example: See x4 - y4 as (x2)2 - (y2)2, thus recognizing it as a difference of squares that can be factored as (x2 - y2)(x2 + y2).	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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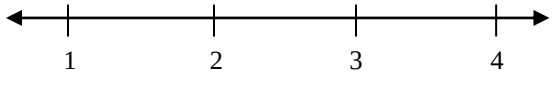
	Overall Rating 

Students will:

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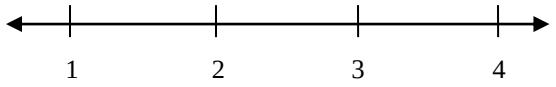
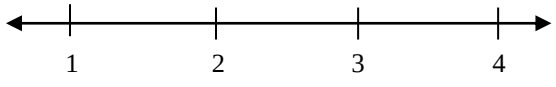
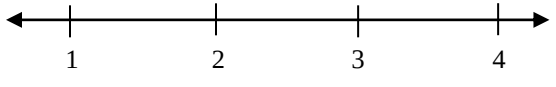
Seeing Structure in Expressions

Write expressions in equivalent forms to solve problems. (Quadratic and exponential.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
9. Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.* [A-SSE3]	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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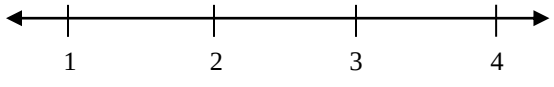
	Overall Rating 

Students will:

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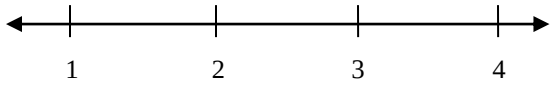
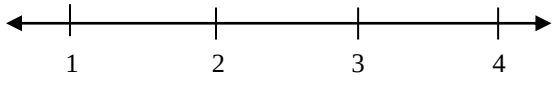
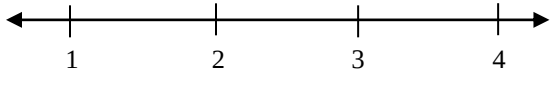
Seeing Structure in Expressions

Write expressions in equivalent forms to solve problems. (Quadratic and exponential.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
a. Factor a quadratic expression to reveal the zeros of the function it defines. [A-SSE3a] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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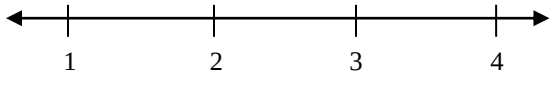
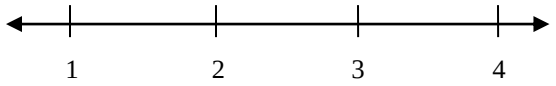
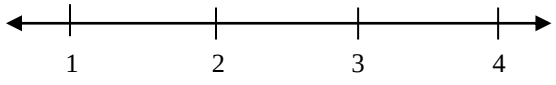
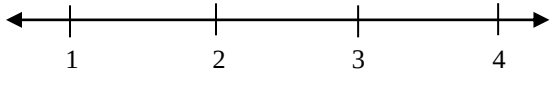
	Overall Rating 

Students will:

ALGEBRA

Seeing Structure in Expressions

Write expressions in equivalent forms to solve problems. (Quadratic and exponential.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
b. Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines. [A-SSE3b] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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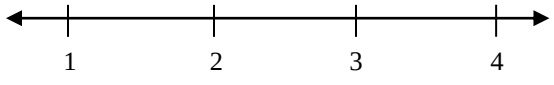
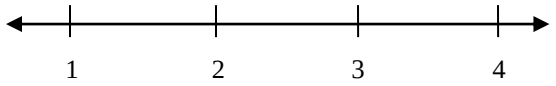
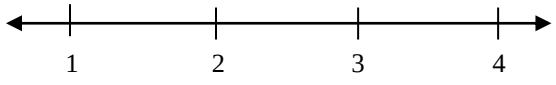
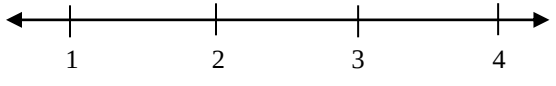
	Overall Rating 

Students will:

ALGEBRA

Seeing Structure in Expressions

Write expressions in equivalent forms to solve problems. (Quadratic and exponential.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
c. Determine a quadratic equation when given its graph or roots.	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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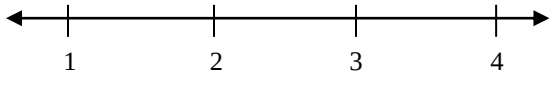
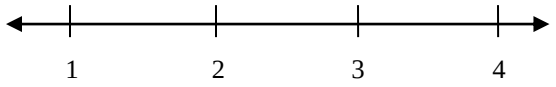
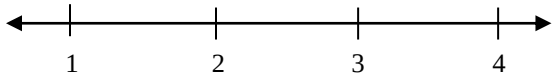
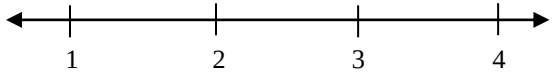
	Overall Rating 

Students will:

ALGEBRA

Seeing Structure in Expressions

Write expressions in equivalent forms to solve problems. (Quadratic and exponential.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
d. Use the properties of exponents to transform expressions for exponential functions. [A-SSE3c] Example: The expression 1.15t can be rewritten as (1.151/12)12t ≈ 1.01212t to reveal the approximate equivalent monthly interest rate if the annual rate is 15%.	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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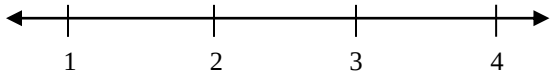
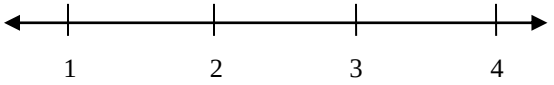
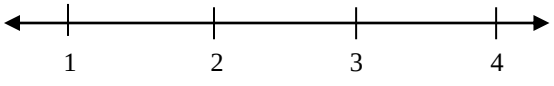
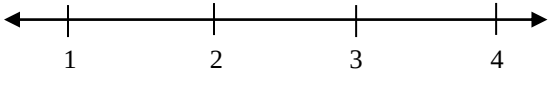
	Overall Rating 

Students will:

ALGEBRA

Arithmetic With Polynomials and Rational Expressions

Perform arithmetic operations on polynomials. (Linear and quadratic.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
10. Understand that polynomials form a system analogous to the integers; namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials. [A-APR1]	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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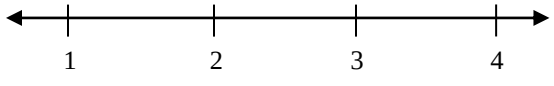
	Overall Rating 

Students will:

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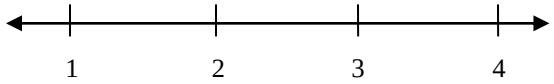
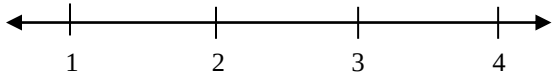
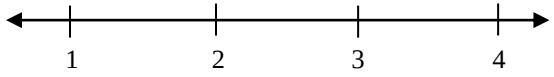
Creating Equations*

Create equations that describe numbers or relationships. (Linear, quadratic, and exponential (integer inputs only); for Standard 13, linear only.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
11. Create equations and inequalities in one variable, and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions. [A-CED1] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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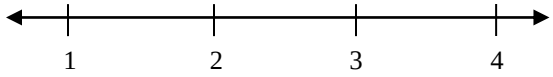
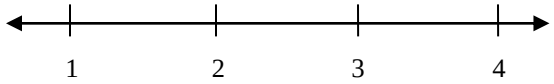
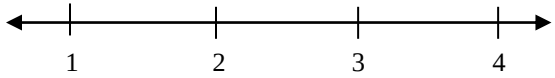
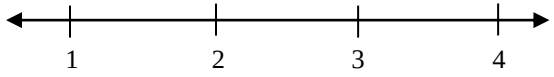
	Overall Rating 

Students will:

ALGEBRA

Creating Equations*

Create equations that describe numbers or relationships. (Linear, quadratic, and exponential (integer inputs only); for Standard 13, linear only.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
12. Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. [A-CED2] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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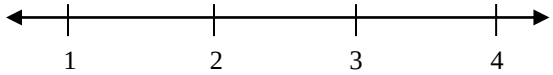
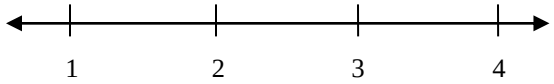
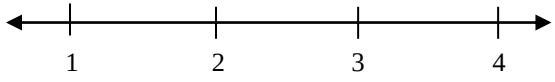
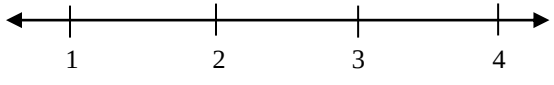
	Overall Rating 

Students will:

ALGEBRA

Creating Equations*

Create equations that describe numbers or relationships. (Linear, quadratic, and exponential (integer inputs only); for Standard 13, linear only.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
13. Represent constraints by equations or inequalities, and by systems of equations and/or inequalities and interpret solutions as viable or non-viable options in a modeling context. [A-CED3] Example: Represent inequalities describing nutritional and cost constraints on combinations of different foods. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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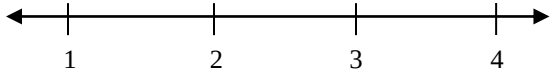
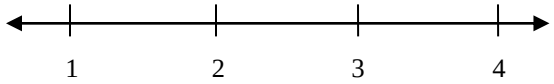
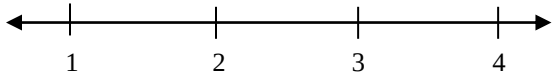
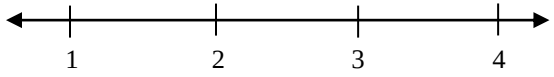
	Overall Rating 

Students will:

ALGEBRA

Creating Equations*

Create equations that describe numbers or relationships. (Linear, quadratic, and exponential (integer inputs only); for Standard 13, linear only.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
14. Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. [A-CED4] Example: Rearrange Ohm's law V = IR to highlight resistance R. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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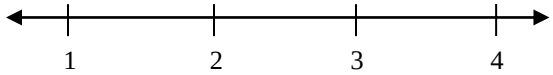
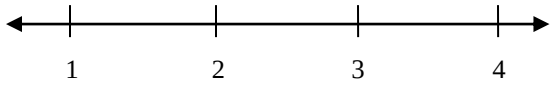
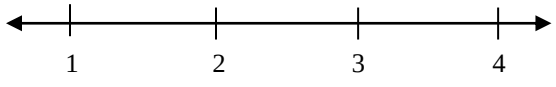
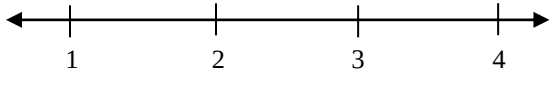
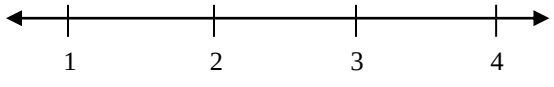
	Overall Rating 

Students will:

ALGEBRA

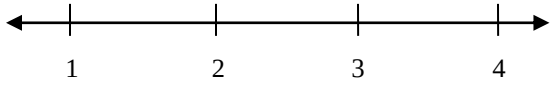
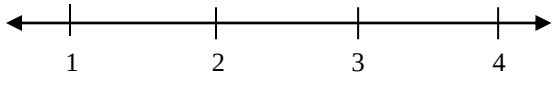
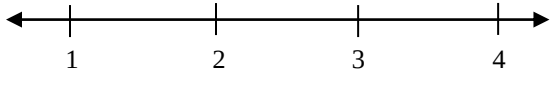
Reasoning With Equations and Inequalities

Understand solving equations as a process of reasoning and explain the reasoning. (Master linear; learn as general principle.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
15. Explain each step in solving a simple equation as following from the equality of numbers asserted at the previous step, starting from the assumption that the original equation has a solution. Construct a viable argument to justify a solution method. [A-REI1]	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **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 

Students will:

ALGEBRA

Reasoning With Equations and Inequalities

Solve equations and inequalities in one variable. (Linear inequalities; literal that are linear in the variables being solved for; quadratics with real solutions.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
16. Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters. [A-REI3] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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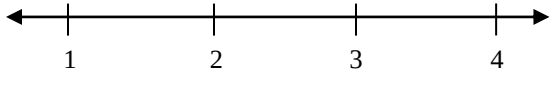
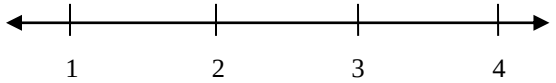
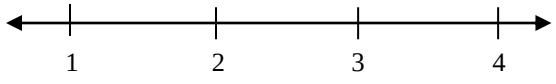
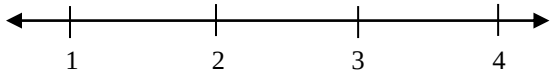
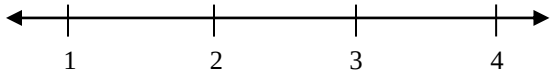
	Overall Rating 

Students will:

ALGEBRA

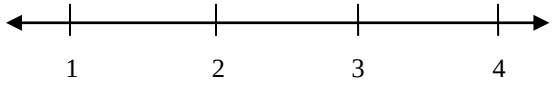
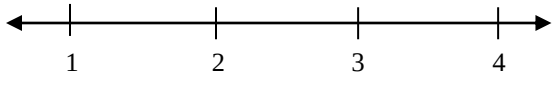
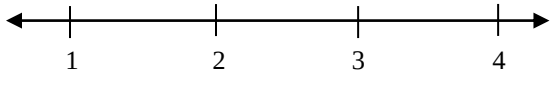
Reasoning With Equations and Inequalities

Solve equations and inequalities in one variable. (Linear inequalities; literal that are linear in the variables being solved for; quadratics with real solutions.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
17. Solve quadratic equations in one variable. [A-REI4]	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **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 

Students will:

ALGEBRA

Reasoning With Equations and Inequalities

Solve equations and inequalities in one variable. (Linear inequalities; literal that are linear in the variables being solved for; quadratics with real solutions.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
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 same solutions. Derive the quadratic formula from this form. [A-REI4a] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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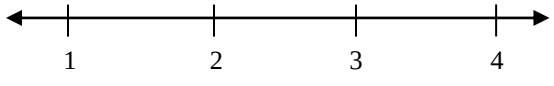
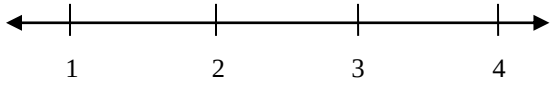
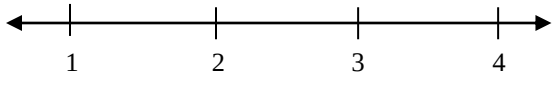
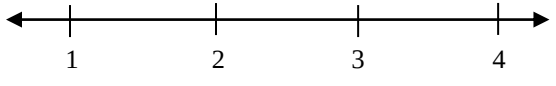
	Overall Rating 

Students will:

ALGEBRA

Reasoning With Equations and Inequalities

Solve equations and inequalities in one variable. (Linear inequalities; literal that are linear in the variables being solved for; quadratics with real solutions.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
b. Solve quadratic equations by inspection (e.g., for x2 = 49), taking square roots, completing the square and the quadratic formula, and factoring as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions, and write them as a ± bi for real numbers a and b. [A-REI4b]	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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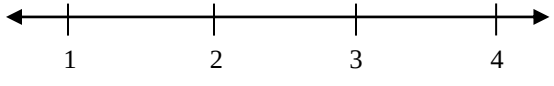
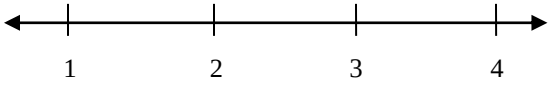
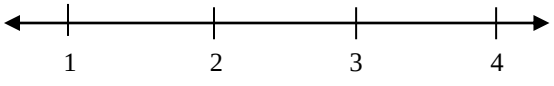
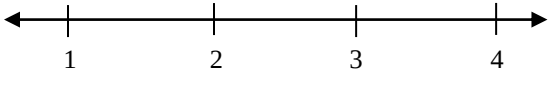
	Overall Rating 

Students will:

ALGEBRA

Reasoning With Equations and Inequalities

Solve systems of equations. (Linear-linear and linear-quadratic.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
18. Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions. [A-REI5]	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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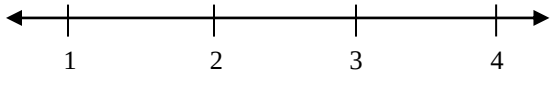
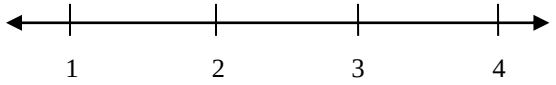
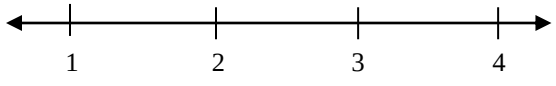
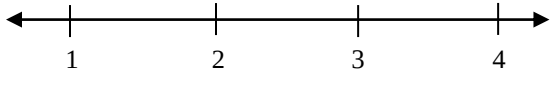
	Overall Rating 

Students will:

ALGEBRA

Reasoning With Equations and Inequalities

Solve systems of equations. (Linear-linear and linear-quadratic.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
19. Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables. [A-REI6] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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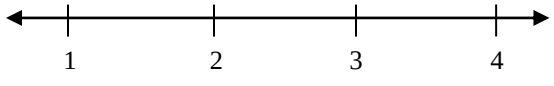
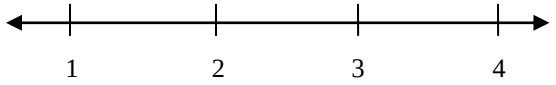
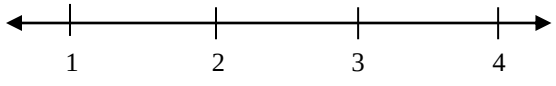
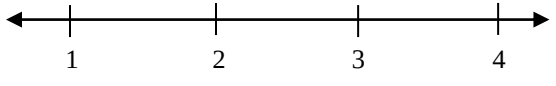
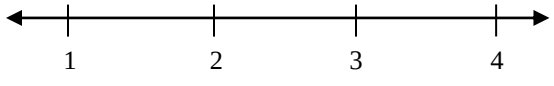
	Overall Rating 

Students will:

ALGEBRA

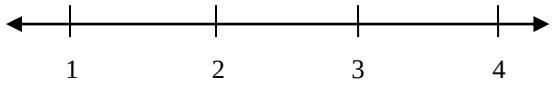
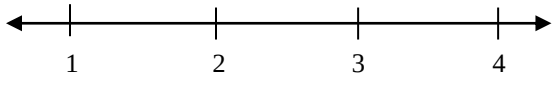
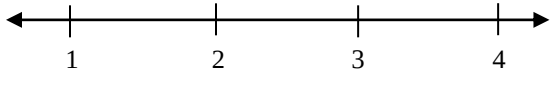
Reasoning With Equations and Inequalities

Solve systems of equations. (Linear-linear and linear-quadratic.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
20. Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically. [A-REI7] Example: Find the points of intersection between the line y = –3x and the circle x2 + y2 = 3.	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **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 

Students will:

ALGEBRA

Reasoning With Equations and Inequalities

Represent and solve equations and inequalities graphically. (Linear and exponential; learn as general principle.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
21. Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line). [A-REI10]	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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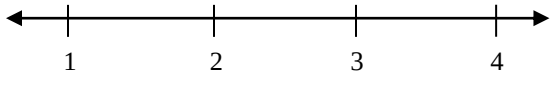
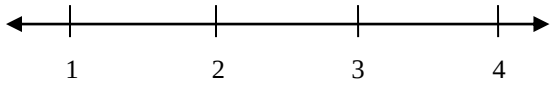
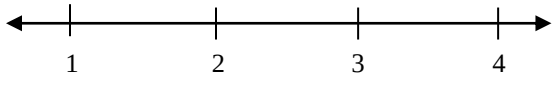
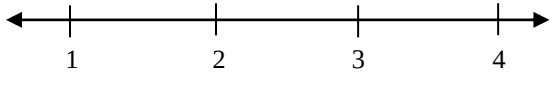
	Overall Rating 

Students will:

ALGEBRA

Reasoning With Equations and Inequalities

Represent and solve equations and inequalities graphically. (Linear and exponential; learn as general principle.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
22. 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); find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where f(x) and/or g(x) are linear, polynomial, rational, absolute value, exponential, and logarithmic functions.* [A-REI11]	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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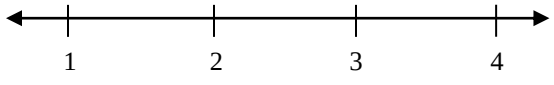
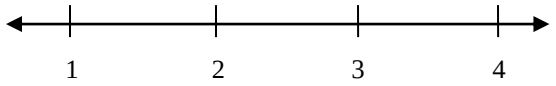
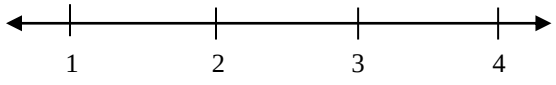
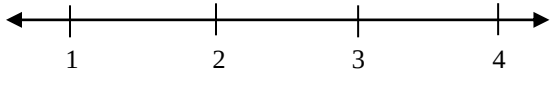
	Overall Rating 

Students will:

ALGEBRA

Reasoning With Equations and Inequalities

Represent and solve equations and inequalities graphically. (Linear and exponential; learn as general principle.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
23. Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes. [A-REI12]	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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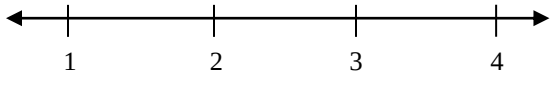
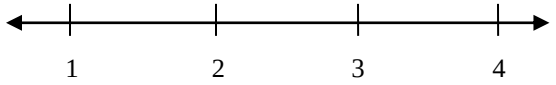
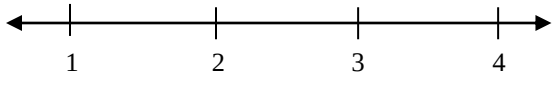
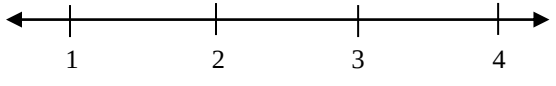
	Overall Rating 

Students will:

FUNCTIONS

Interpreting Functions

Understand the concept of a function and use function notation. (Learn as general principle; focus on linear and exponential and on arithmetic and geometric sequences.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
24. Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. 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. The graph of f is the graph of the equation y = f(x). [F-IF1] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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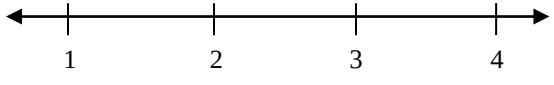
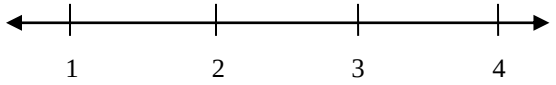
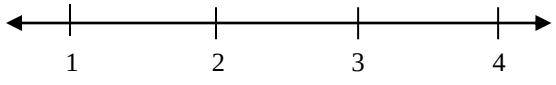
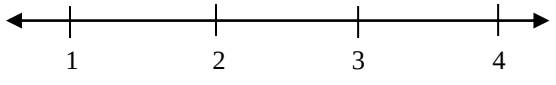
	Overall Rating 

Students will:

FUNCTIONS

Interpreting Functions

Understand the concept of a function and use function notation. (Learn as general principle; focus on linear and exponential and on arithmetic and geometric sequences.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
25. Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context. [F-IF2] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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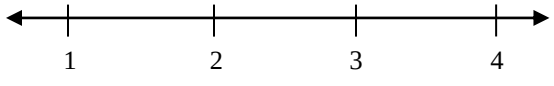
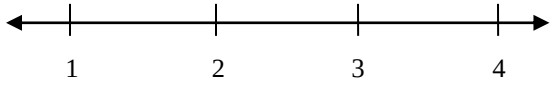
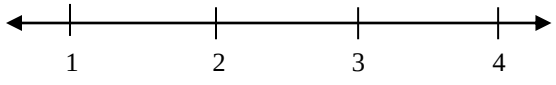
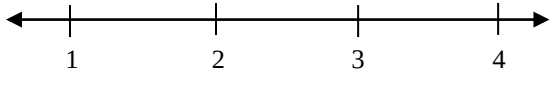
	Overall Rating 

Students will:

FUNCTIONS

Interpreting Functions

Understand the concept of a function and use function notation. (Learn as general principle; focus on linear and exponential and on arithmetic and geometric sequences.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
26. Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers. [F-IF3] Example: The Fibonacci sequence is defined recursively by $f(0) = f(1) = 1$, $f(n+1) = f(n) + f(n-1)$ for $n \geq 1$.	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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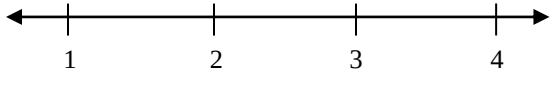
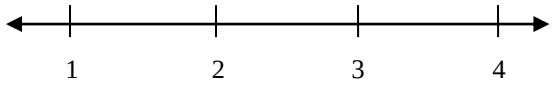
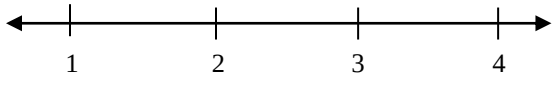
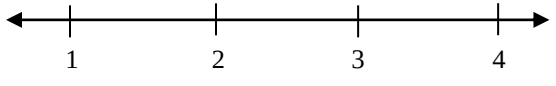
	Overall Rating 

Students will:

FUNCTIONS

Interpreting Functions

Interpret functions that arise in applications in terms of the context. (Linear, exponential, and quadratic.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
27. 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 the relationship. Key features include intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.* [F-IF4]	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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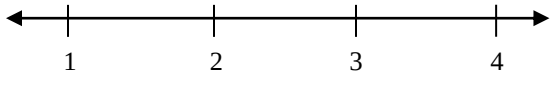
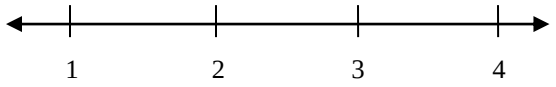
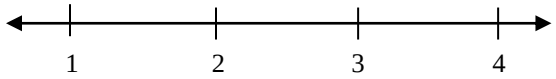
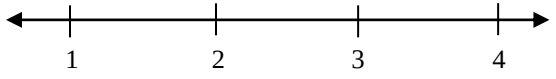
	Overall Rating 

Students will:

FUNCTIONS

Interpreting Functions

Interpret functions that arise in applications in terms of the context. (Linear, exponential, and quadratic.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
28. Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes.* [F-IF5] Example: If the function h(n) gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function.	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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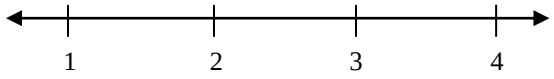
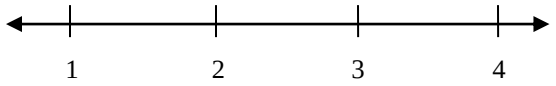
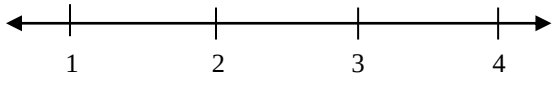
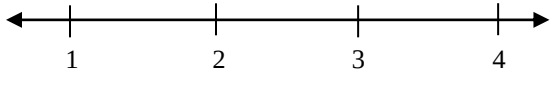
	Overall Rating 

Students will:

FUNCTIONS

Interpreting Functions

Interpret functions that arise in applications in terms of the context. (Linear, exponential, and quadratic.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
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.* [F-IF6]	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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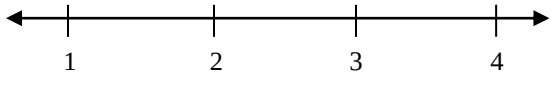
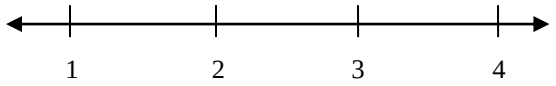
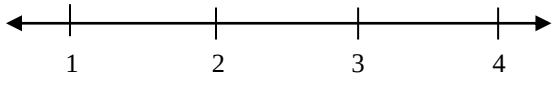
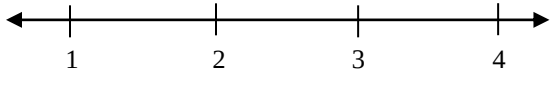
	Overall Rating 

Students will:

FUNCTIONS

Interpreting Functions

Analyze functions using different representations. (Linear, exponential, quadratic, absolute value, step, piecewise-defined.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
30. Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.* [F-IF7]	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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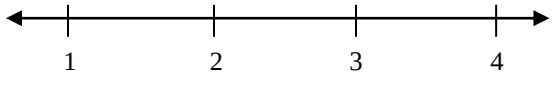
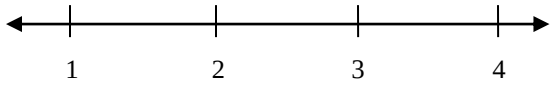
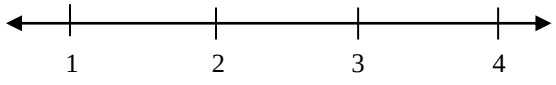
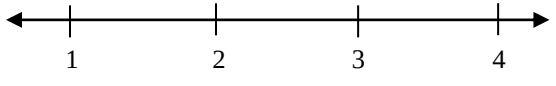
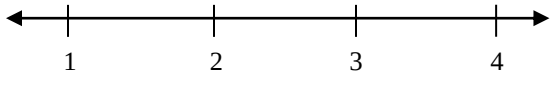
	Overall Rating 

Students will:

FUNCTIONS

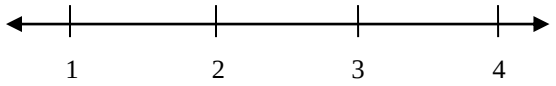
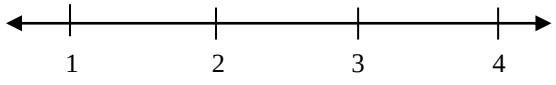
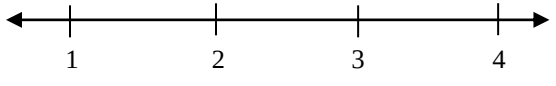
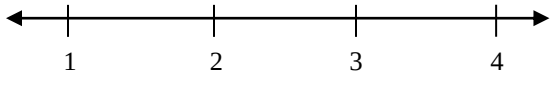
Interpreting Functions

Analyze functions using different representations. (Linear, exponential, quadratic, absolute value, step, piecewise-defined.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
a. Graph linear and quadratic functions, and show intercepts, maxima, and minima. [F-IF7a] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **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 

Students will:

FUNCTIONS

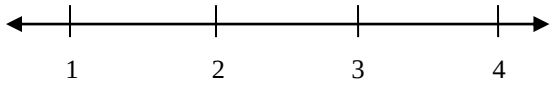
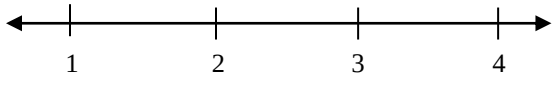
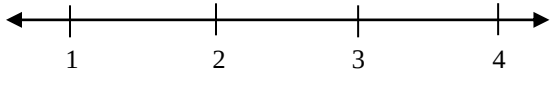
Interpreting Functions

Analyze functions using different representations. (Linear, exponential, quadratic, absolute value, step, piecewise-defined.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
b. Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions. [F-IF7b] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **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** 

Students will:

FUNCTIONS

Interpreting Functions

Analyze functions using different representations. (Linear, exponential, quadratic, absolute value, step, piecewise-defined.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
c. Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude. [F-IF7e]	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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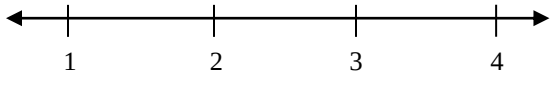
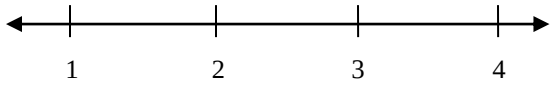
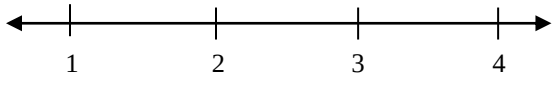
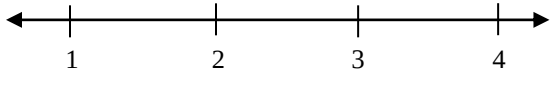
	Overall Rating 

Students will:

FUNCTIONS

Interpreting Functions

Analyze functions using different representations. (Linear, exponential, quadratic, absolute value, step, piecewise-defined.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
31. Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. [F-IF8] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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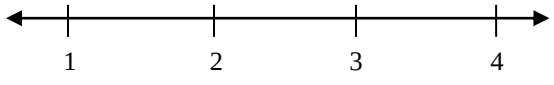
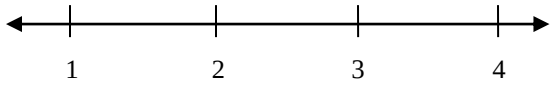
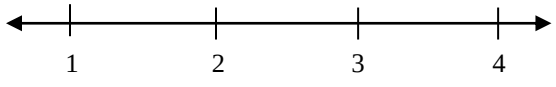
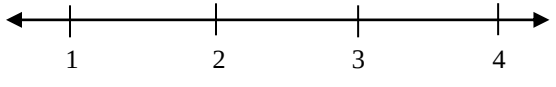
	Overall Rating 

Students will:

FUNCTIONS

Interpreting Functions

Analyze functions using different representations. (Linear, exponential, quadratic, absolute value, step, piecewise-defined.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
a. Use the process of factoring and completing the square in a quadratic function to show zeros, extreme values, and symmetry of the graph, and interpret these in terms of a context. [F-IF8a]	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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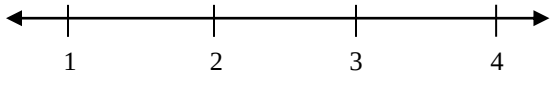
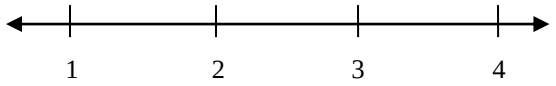
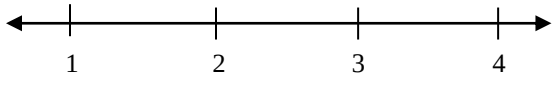
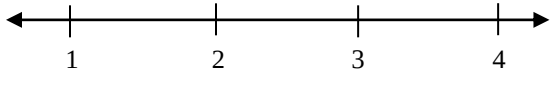
	Overall Rating 

Students will:

FUNCTIONS

Interpreting Functions

Analyze functions using different representations. (Linear, exponential, quadratic, absolute value, step, piecewise-defined.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
b. Use the properties of exponents to interpret expressions for exponential functions. [F-IF8b] Example: Identify percent rate of change in functions such as y = (1.02)t, y = (0.97)t, y = (1.01)12t, and y = (1.2)t/10, and classify them as representing exponential growth and decay.	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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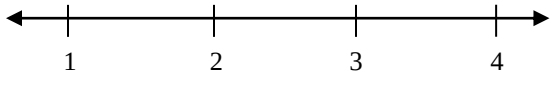
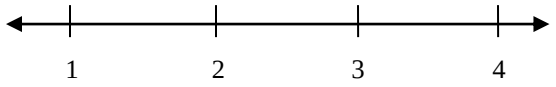
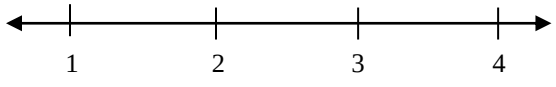
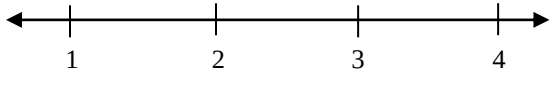
	Overall Rating 

Students will:

FUNCTIONS

Interpreting Functions

Analyze functions using different representations. (Linear, exponential, quadratic, absolute value, step, piecewise-defined.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
32. Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). [F-IF9] Example: Given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum.	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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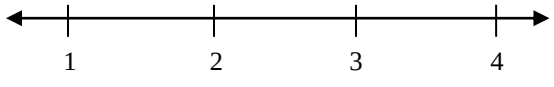
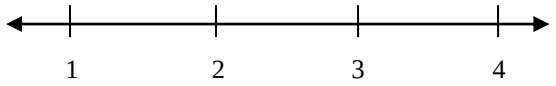
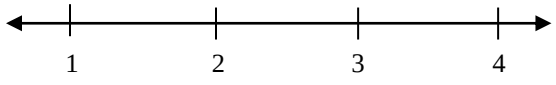
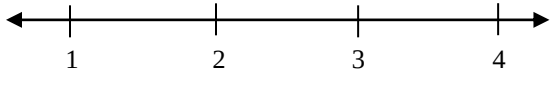
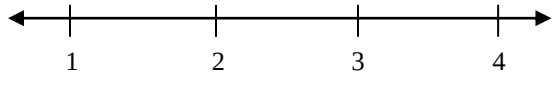
	Overall Rating 

Students will:

FUNCTIONS

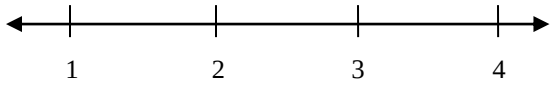
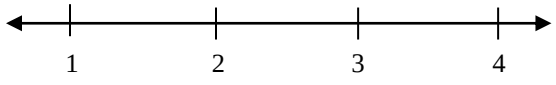
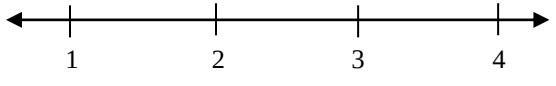
Building Functions

Build a function that models a relationship between two quantities. (For standards 33 and 34, linear, exponential, and quadratic.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
33. Write a function that describes a relationship between two quantities.* [F-BF1] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **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** 

Students will:

FUNCTIONS

Building Functions

Build a function that models a relationship between two quantities. (For standards 33 and 34, linear, exponential, and quadratic.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
a. Determine an explicit expression, a recursive process, or steps for calculation from a context. [F-BF1a] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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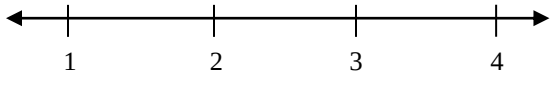
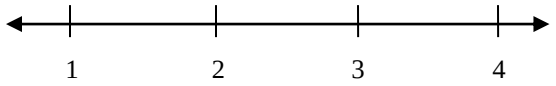
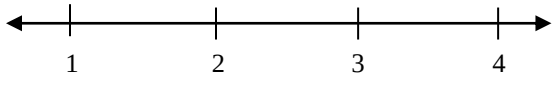
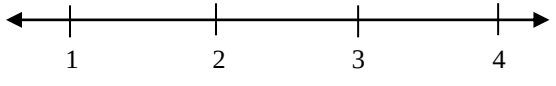
	Overall Rating 

Students will:

FUNCTIONS

Building Functions

Build a function that models a relationship between two quantities. (For standards 33 and 34, linear, exponential, and quadratic.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
b. Combine standard function types using arithmetic operations. [F-BF1b] Example: Build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model.	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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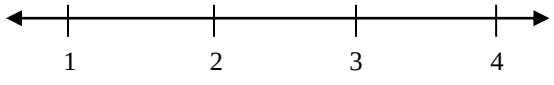
	Overall Rating 

Students will:

FUNCTIONS

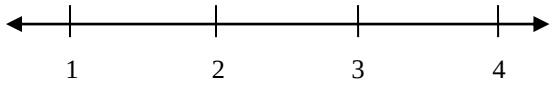
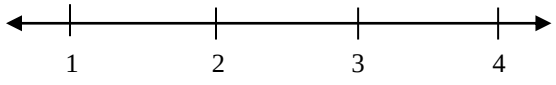
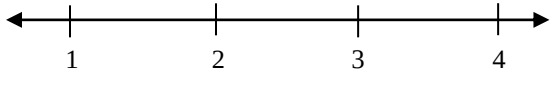
Building Functions

Build a function that models a relationship between two quantities. (For standards 33 and 34, linear, exponential, and quadratic.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
34. Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms.* [F-BF2]	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

Students will:

FUNCTIONS

Building Functions

Build new functions from existing functions. (Linear, exponential, quadratic, and absolute value; for standard 36a, linear only.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
35. Identify the effect on the graph of replacing f(x) by f(x) + k, k f(x), f(kx), and f(x + k) for specific values of k (both positive and negative); find the value of k given the graphs. Experiment with cases and illustrate an explanation of the effects on the graph using technology. Include recognizing even and odd functions from their graphs and algebraic expressions for them. [F-BF3]	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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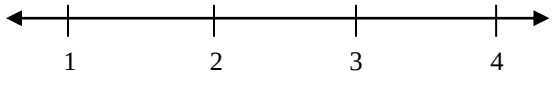
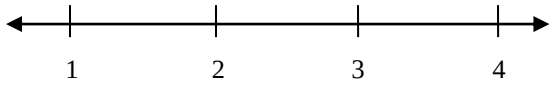
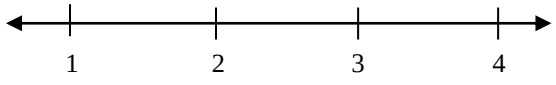
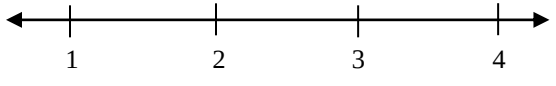
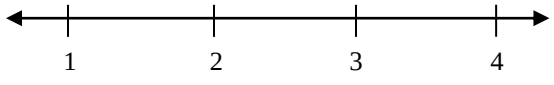
	Overall Rating 

Students will:

FUNCTIONS

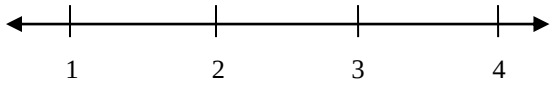
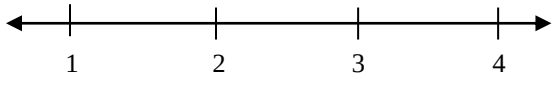
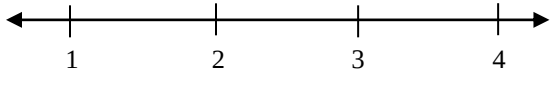
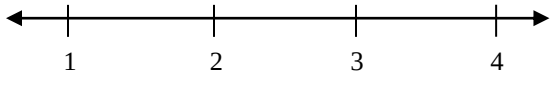
Building Functions

Build new functions from existing functions. (Linear, exponential, quadratic, and absolute value; for standard 36a, linear only.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
36. Find inverse functions. [F-BF4]	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **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 

Students will:

FUNCTIONS

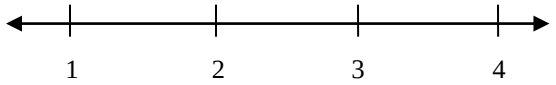
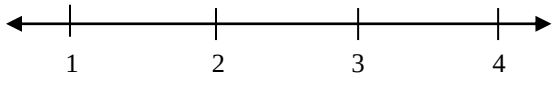
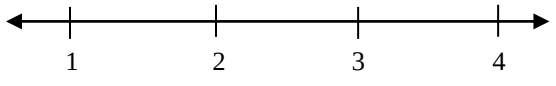
Building Functions

Build new functions from existing functions. (Linear, exponential, quadratic, and absolute value; for standard 36a, linear only.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
a. Solve an equation of the form f(x) = c for a simple function f that has an inverse, and write an expression for the inverse. [F-BF4a] Example: f(x) =2x3 or f(x) = (x+1)/(x-1) for x ≠ 1.	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **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 

Students will:

FUNCTIONS

Linear, Quadratic, and Exponential Models*

Construct and compare linear, quadratic, and exponential models and solve problems.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
37. Distinguish between situations that can be modeled with linear functions and with exponential functions. [F-LE1] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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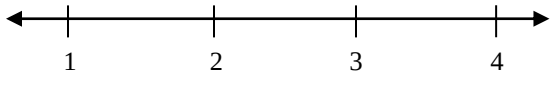
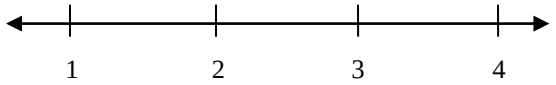
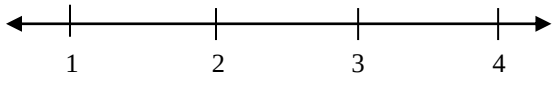
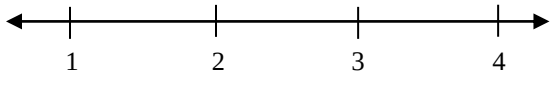
	Overall Rating 

Students will:

FUNCTIONS

Linear, Quadratic, and Exponential Models*

Construct and compare linear, quadratic, and exponential models and solve problems.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
a. Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals. [F-LE1a]	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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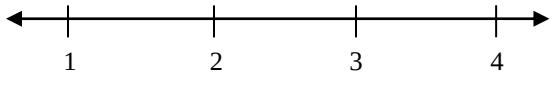
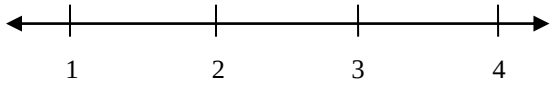
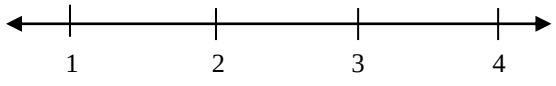
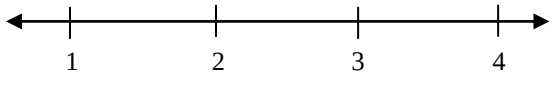
	Overall Rating 

Students will:

FUNCTIONS

Linear, Quadratic, and Exponential Models*

Construct and compare linear, quadratic, and exponential models and solve problems.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
b. Recognize situations in which one quantity changes at a constant rate per unit interval relative to another. [F-LE1b]	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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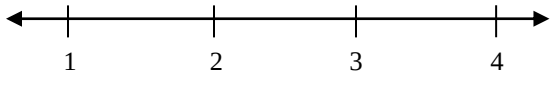
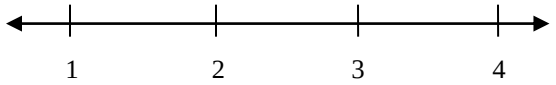
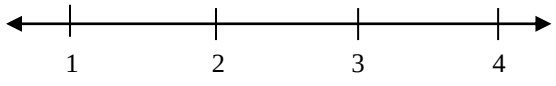
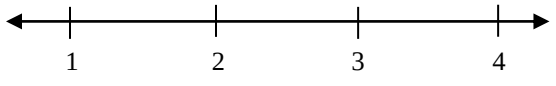
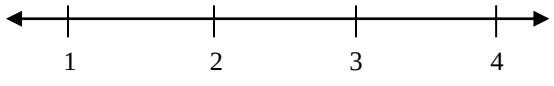
	Overall Rating 

Students will:

FUNCTIONS

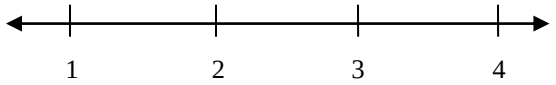
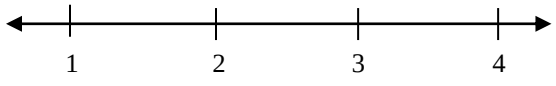
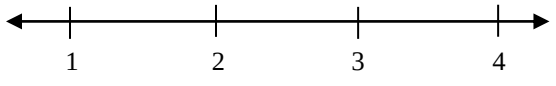
Linear, Quadratic, and Exponential Models*

Construct and compare linear, quadratic, and exponential models and solve problems.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
c. Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another. [F-LE1c] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **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** 

Students will:

FUNCTIONS

Linear, Quadratic, and Exponential Models*

Construct and compare linear, quadratic, and exponential models and solve problems.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
38. Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table). [F-LE2] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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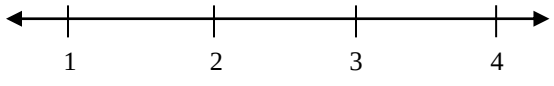
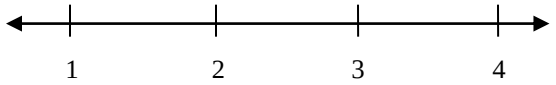
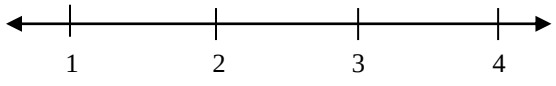
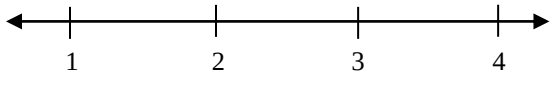
	Overall Rating 

Students will:

FUNCTIONS

Linear, Quadratic, and Exponential Models*

Construct and compare linear, quadratic, and exponential models and solve problems.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
39. Observe, using graphs and tables, that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function. [F-LE3] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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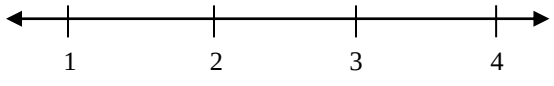
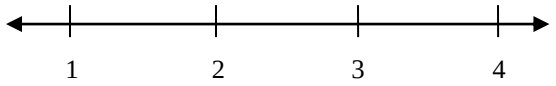
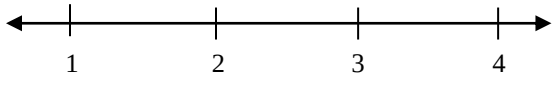
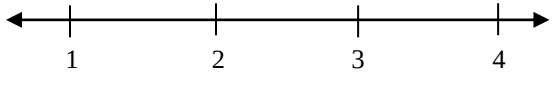
	Overall Rating 

Students will:

FUNCTIONS

Linear, Quadratic, and Exponential Models*

Interpret expressions for functions in terms of the situation they model. (Linear and exponential of form f(x) = bx + k.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
40. Interpret the parameters in a linear or exponential function in terms of a context. [F-LE5] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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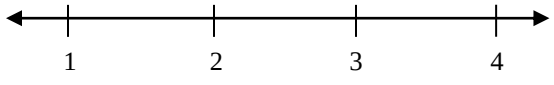
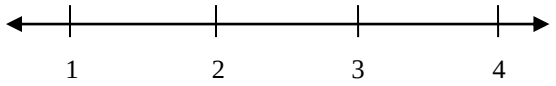
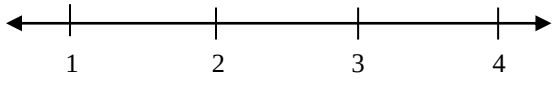
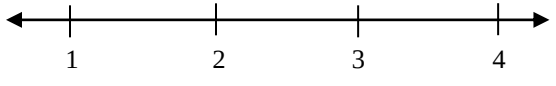
	Overall Rating 

Students will:

STATISTICS AND PROBABILITY

Interpreting Categorical and Quantitative Data.

Summarize, represent, and interpret data on a single count or measurement variable.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
41. Represent data with plots on the real number line (dot plots, histograms, and box plots). [S-ID1] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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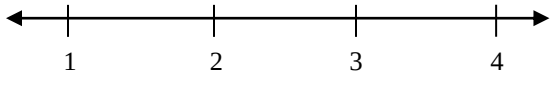
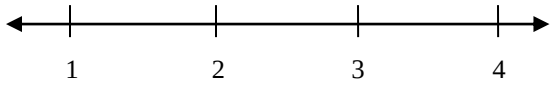
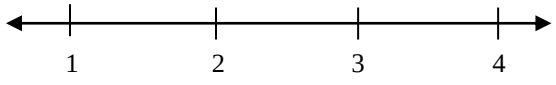
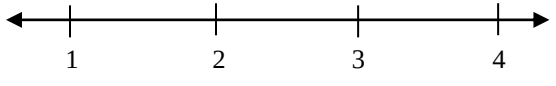
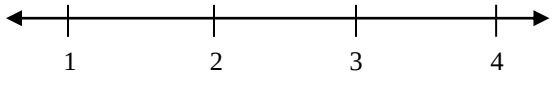
	Overall Rating 

Students will:

STATISTICS AND PROBABILITY

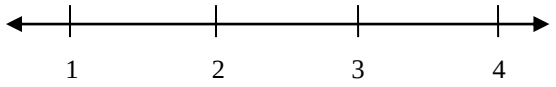
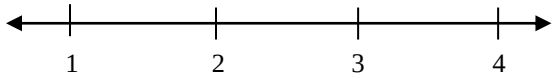
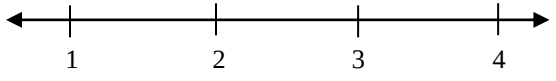
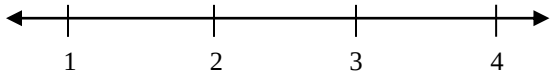
Interpreting Categorical and Quantitative Data.

Summarize, represent, and interpret data on a single count or measurement variable.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
42. Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. [S-ID2]	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **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 

Students will:

STATISTICS AND PROBABILITY

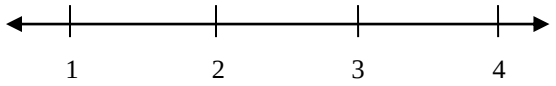
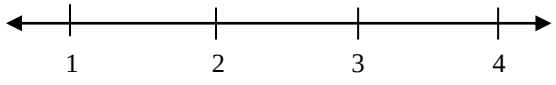
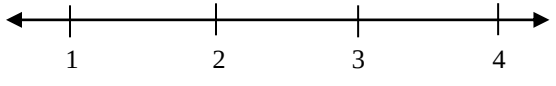
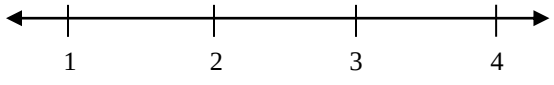
Interpreting Categorical and Quantitative Data.

Summarize, represent, and interpret data on a single count or measurement variable.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
43. Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers). [S-ID3]	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **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 

Students will:

STATISTICS AND PROBABILITY

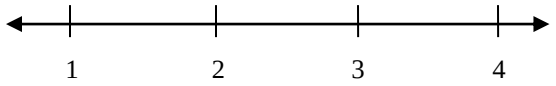
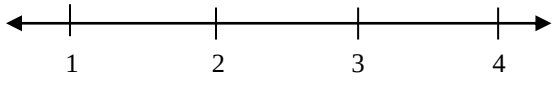
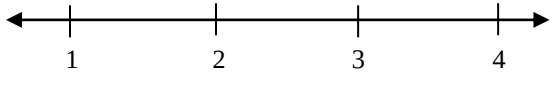
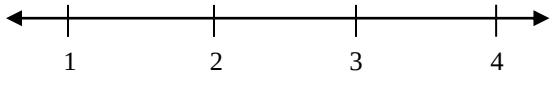
Interpreting Categorical and Quantitative Data.

Summarize, represent, and interpret data on two categorical and quantitative variables. (Linear focus, discuss general principle.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
44. Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal, and conditional relative frequencies). Recognize possible associations and trends in the data. [S-ID5]	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **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 

Students will:

STATISTICS AND PROBABILITY

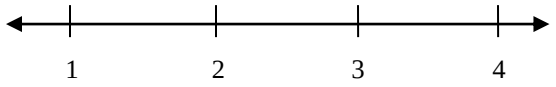
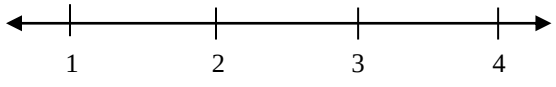
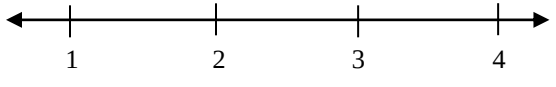
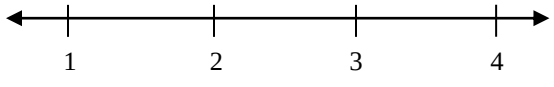
Interpreting Categorical and Quantitative Data.

Summarize, represent, and interpret data on two categorical and quantitative variables. (Linear focus, discuss general principle.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
45. Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. [S-ID6] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **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 

Students will:

STATISTICS AND PROBABILITY

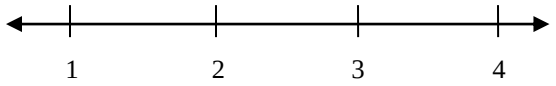
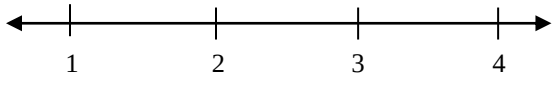
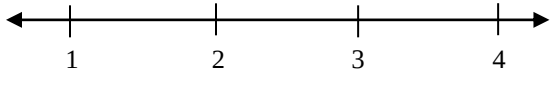
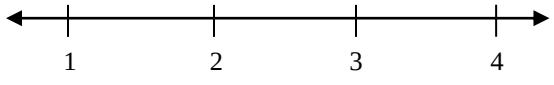
Interpreting Categorical and Quantitative Data.

Summarize, represent, and interpret data on two categorical and quantitative variables. (Linear focus, discuss general principle.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
a. Fit a function to the data; use functions fitted to data to solve problems in the context of the data. Use given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models. [S-ID6a]	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **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 

Students will:

STATISTICS AND PROBABILITY

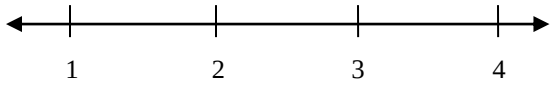
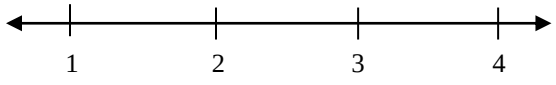
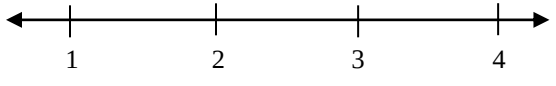
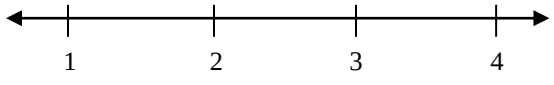
Interpreting Categorical and Quantitative Data.

Summarize, represent, and interpret data on two categorical and quantitative variables. (Linear focus, discuss general principle.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
b. Informally assess the fit of a function by plotting and analyzing residuals. [S-ID6b] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **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 

Students will:

STATISTICS AND PROBABILITY

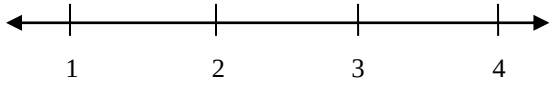
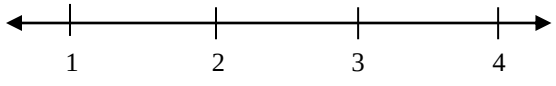
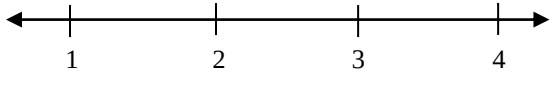
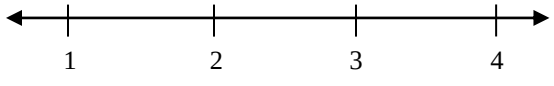
Interpreting Categorical and Quantitative Data.

Summarize, represent, and interpret data on two categorical and quantitative variables. (Linear focus, discuss general principle.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
c. Fit a linear function for a scatter plot that suggests a linear association. [S-ID6c] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **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 

Students will:

STATISTICS AND PROBABILITY

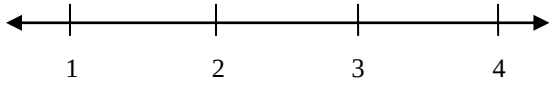
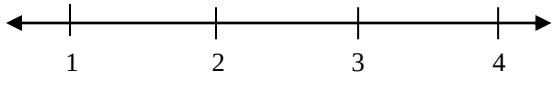
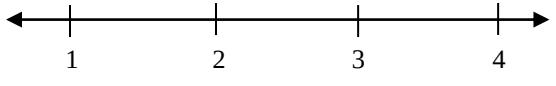
Interpreting Categorical and Quantitative Data

Interpret linear models.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
46. Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data. [S-ID7] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **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 

Students will:

STATISTICS AND PROBABILITY

Interpreting Categorical and Quantitative Data

Interpret linear models.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
47. Compute (using technology) and interpret the correlation coefficient of a linear fit. [S-ID8]. **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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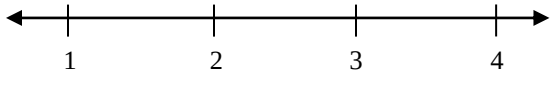
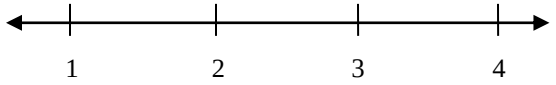
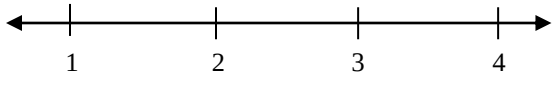
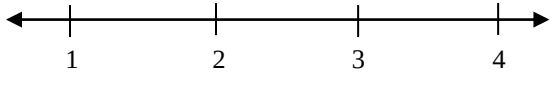
	Overall Rating 

Students will:

STATISTICS AND PROBABILITY

Interpreting Categorical and Quantitative Data

Interpret linear models.	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
48. Distinguish between correlation and causation. [S-ID9] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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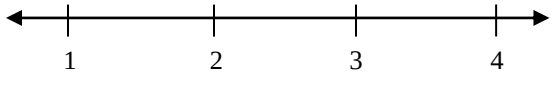
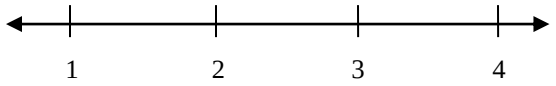
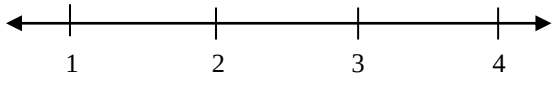
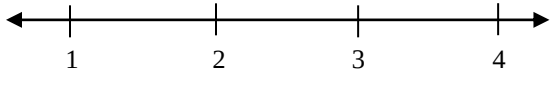
	Overall Rating 

Students will:

STATISTICS AND PROBABILITY

Conditional Probability and the Rules of Probability

Understand independence and conditional probability and use them to interpret data. (Link to data from simulations or experiments.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
49. 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"). [S-CP1] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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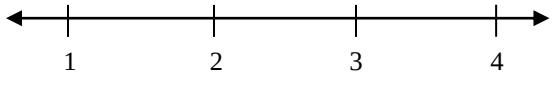
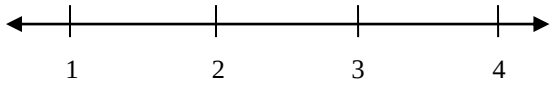
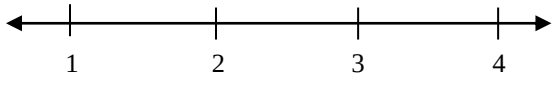
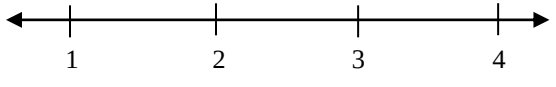
	Overall Rating 

Students will:

STATISTICS AND PROBABILITY

Conditional Probability and the Rules of Probability

Understand independence and conditional probability and use them to interpret data. (Link to data from simulations or experiments.)	**Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.**
50. Understand that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities, and use this characterization to determine if they are independent. [S-CP2] **Indicate the chapter(s), sections, and/or page(s) reviewed.**	Important Mathematical Ideas  Skills and Procedures  Mathematical Relationships  **Summary/Justification/Evidence**
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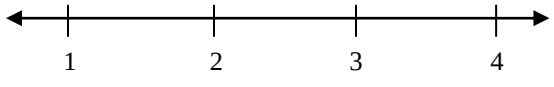
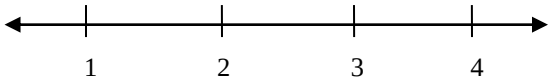
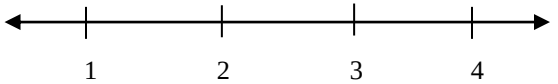
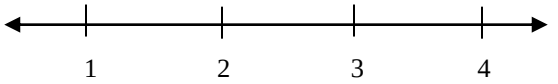
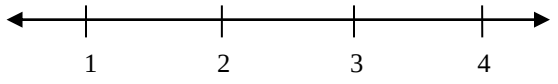
	Overall Rating 

TEXTBOOK REVIEW FORM – MATHEMATICS – ADDITIONAL CRITERIA AND INDICATORS – GRADES K-12

Documenting Alignment to
Additional Criteria and Indicators

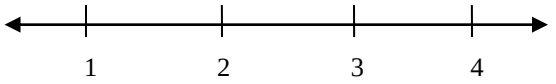
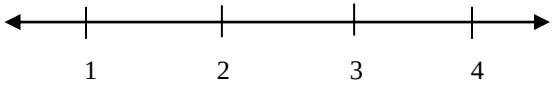
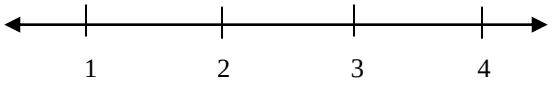
Content

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. 2. Content is free of bias and/or controversial information. 3. Content includes strategies for vocabulary instruction and graphic organizers. 4. Content includes assignments that encourage integration of other content areas to support a math concept/skill.	**Overall Rating**  **Overall Rating**  **Overall Rating**  **Overall Rating** 
Indicate the chapter(s), sections, and/or page(s) reviewed.	**Summary/Justification/Evidence:**

TEXTBOOK REVIEW FORM – MATHEMATICS – ADDITIONAL CRITERIA AND INDICATORS – GRADES K-12

Documenting Alignment to
Additional Criteria and Indicators

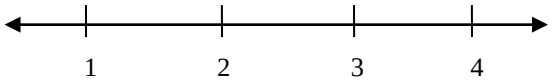
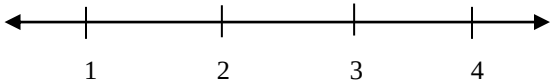
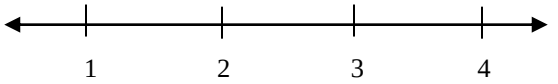
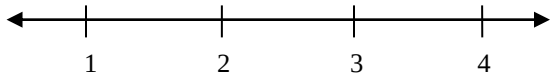
Technology

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. 2. Technology is integrated with student activities so that students collect, organize, analyze, and present data. 3. Textbook and supplemental Contents are available online and/or on CD-ROM.	**Overall Rating**  **Overall Rating**  **Overall Rating** 
Indicate the chapter(s), sections, and/or page(s) reviewed.	**Summary/Justification/Evidence:**

TEXTBOOK REVIEW FORM – MATHEMATICS – ADDITIONAL CRITERIA AND INDICATORS – GRADES K-12

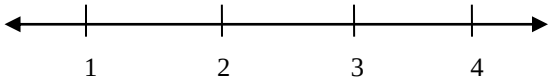
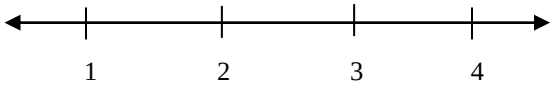
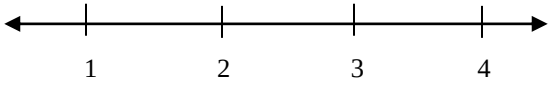
Documenting Alignment to
Additional Criteria and Indicators

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. 2. Guidance is provided to teacher regarding how assessment information can be used to inform instruction. 3. Rubrics are provided for grading some assignments. 4. Some opportunities are provided for students to check their own understanding.	**Overall Rating**  **Overall Rating**  **Overall Rating**  **Overall Rating** 
Indicate the chapter(s), sections, and/or page(s) reviewed.	**Summary/Justification/Evidence:**

Documenting Alignment to
Additional Criteria and Indicators

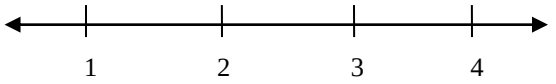
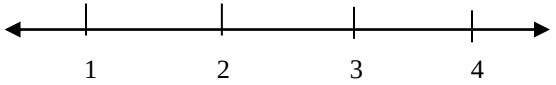
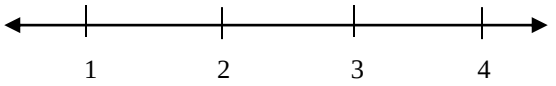
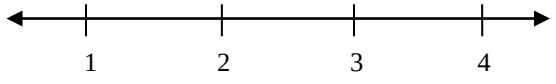
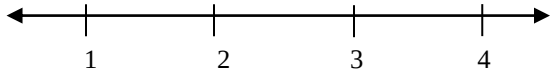
Assessment (Continued)

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. 6. Multiple means of assessments are used, informal as well as formal. 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**  **Overall Rating**  **Overall Rating** 
Indicate the chapter(s), sections, and/or page(s) reviewed.	**Summary/Justification/Evidence:**

TEXTBOOK REVIEW FORM – MATHEMATICS – ADDITIONAL CRITERIA AND INDICATORS – GRADES K-12

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. 2. Teacher guide offers alternative instructional strategies for advanced learners, struggling learners, ELL and Sp. Ed. 3. Teacher guide suggests multiple opportunities for students to demonstrate understanding. 4. Teacher guide provides opportunities for guided practice and scaffolded support. 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**  **Overall Rating**  **Overall Rating**  **Overall Rating**  **Overall Rating** 
Indicate the chapter(s), sections, and/or page(s) reviewed.	**Summary/Justification/Evidence:**