## TEXTBOOK REVIEW FORM

## MATHEMATICS

## ALGEBRA II WITH TRIGONOMETRY

Textbook/Series: $\qquad$ Edition $\qquad$ Copyright $\qquad$ Publisher $\qquad$

Reviewed by: $\qquad$

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

Copyright permission obtained from The Charles A. Dana Center
Adapted for Alabama State Department of Education

Textbook/Series: $\qquad$


Weak: This is the lowest rating a book can receive. In general, a book that was rated as "weak" scored mostly 1 s and 2 s 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 3 s and 4 s on a 4-point scale.

## Documenting Alignment to the <br> 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.

Summary/Justification/Evidence
Overall Rating


## TEXTBOOK REVIEW FORM - MATHEMATICS - STANDARDS FOR MATHEMATICAL PRACTICE - GRADES K-12

## Documenting Alignment to the <br> 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

## Summary/Justification/Evidence

## Overall Rating



Documenting Alignment to the
Standards for Mathematical Practice
Mathematically proficient students:

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

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

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

## Summary/Justification/Evidence

## Overall Rating



## Documenting Alignment to the <br> Standards for Mathematical Practice

## Mathematically proficient students:

## 4. Model with mathematics.

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

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

## Summary/Justification/Evidence



## Documenting Alignment to the <br> Standards for Mathematical Practice

Mathematically proficient students:

## 5. Use appropriate tools strategically.

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

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

## Summary/Justification/Evidence

Overall Rating


## TEXTBOOK REVIEW FORM - MATHEMATICS - STANDARDS FOR MATHEMATICAL PRACTICE - GRADES K-12

## Documenting Alignment to the <br> Standards for Mathematical Practice

Mathematically proficient students:

## 6. Attend to precision.

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

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

Summary/Justification/Evidence
Overall Rating


Documenting Alignment to the
Standards for Mathematical Practice
Mathematically proficient students:

## 7. Look for and make use of structure.

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

Indicate the chapter(s), sections, and/or page(s) reviewed.
Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

## Summary/Justification/Evidence

Overall Rating


## TEXTBOOK REVIEW FORM - MATHEMATICS - STANDARDS FOR MATHEMATICAL PRACTICE - GRADES K-12

## 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 $(x-1)(x+1),(x-1)\left(x^{2}+x+1\right)$, and $(x-1)\left(x^{3}+x^{2}+x+1\right)$ 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

## Summary/Justification/Evidence




## TEXTBOOK REVIEW FORM - MATHEMATICS - OVERALL

## COLLEGE- AND CAREER-READY STANDARDS \& OTHER CRITERIA - GRADE K

Textbook/Series: $\qquad$

Edition $\qquad$ Copyright $\qquad$ Publisher $\qquad$

| OVERALL RATING: | $\square$ | Weak (1-2) | Important Mathematical Ideas: <br> Summary/Justification/Evidence: | Weak (1-2) <br>  <br>  | $\square$ | Moderate (2-3) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Weak: This is the lowest rating a book can receive. In general, a book that was rated as "weak" scored mostly 1 s and 2 s 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 2 s and 3 s 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 3 s and 4 s on a 4-point scale.

## TEXTBOOK REVIEW FORM - MATHEMATICS

## COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will:

## NUMBER AND QUANTITY

## The Complex Number System



## TEXTBOOK REVIEW FORM - MATHEMATICS

## COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will:

## NUMBER AND QUANTITY

## The Complex Number System

| Perform arithmetic operations with complex numbers. |
| :--- |
| 2. Use the relation i2 $2=-1$ and the commutative, associative, and |
| distributive properties to add, subtract, and multiply complex numbers. |
| [N-CN2] |

Summary and documentation of how the domain, cluster, and standard are met Cite examples from the materials.

Important Mathematical Ideas


Skills and Procedures


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



## TEXTBOOK REVIEW FORM - MATHEMATICS

## COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will: <br> NUMBER AND QUANTITY

## The Complex Number System



## TEXTBOOK REVIEW FORM - MATHEMATICS

## COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will: <br> NUMBER AND QUANTITY

## The Complex Number System

| Use complex numbers in polynomial identities and equations. (Polynomials with real coefficients.) | Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials. |
| :---: | :---: |
| 4. (+) Extend polynomial identities to the complex numbers. [N-CN8] Example: Rewrite $x 2+4$ as $(x+2 i)(x-2 i)$. <br> 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 |

## TEXTBOOK REVIEW FORM - MATHEMATICS

## COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will: <br> NUMBER AND QUANTITY

## The Complex Number System



## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will:

## ALCEBRA

## Seeing Structure in Expressions



## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will:

## ALGEBRA

## Seeing Structure in Expressions

| Interpret the structure of expressions. (Polynomial and rational.) | 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] <br> 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 |

## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will:

## ALGEBRA

## Seeing Structure in Expressions



## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will:

## ALGEBRA

## Seeing Structure in Expressions

| Interpret the structure of expressions. (Polynomial and rational.) | Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials. |
| :---: | :---: |
| 7. Use the structure of an expression to identify ways to rewrite it. [ASSE2] <br> Example: See $\mathrm{x} 4-\mathrm{y} 4$ as $(\mathrm{x} 2) 2-(\mathrm{y} 2) 2$, thus recognizing it as a difference of squares that can be factored as $(x 2-y 2)(x 2+$ y 2 ). | 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 |

## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will:

## ALGEBRA

## Seeing Structure in Expressions

| Write expressions in equivalent forms to solve problems. | Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials. |
| :---: | :---: |
| 8. Derive the formula for the sum of a finite geometric series (when the common ratio is not 1 ), and use the formula to solve problems.* [ASSE4] <br> Example: Calculate mortgage payments. |  |
| 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 |

## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will:

## ALGEBRA

## Arithmetic With Polynomials and Rational Expressions

| Perform arithmetic operations on polynomials. (Beyond quadratic.) |
| :--- |
| 9. 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] |

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

Summary and documentation of how the domain, cluster, and standard are met Cite examples from the materials.

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



## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY


## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY


## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will:

## ALGEBRA

## Arithmetic With Polynomials and Rational Expressions



## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will:

## ALGEBRA

## Arithmetic With Polynomials and Rational Expressions

| Use polynomial identities to solve problems. |
| :--- |
| 13. (+) Know and apply the Binomial Theorem for the expansion of $(x+y) n$ |
| in powers of x and y for a positive integer n , where x and y are any | in powers of x and y for a positive integer n , where x and y are any numbers, with coefficients determined, for example, by Pascal's Triangle. (The Binomial Theorem can be proved by mathematical induction or by a combinatorial argument.) [A-APR5]

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

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas


Skills and Procedures


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



## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY


## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will:

## ALGEBRA

## Arithmetic With Polynomials and Rational Expressions

| Rewrite rational expressions. (Linear and quadratic denominators.) |
| :--- |
| 15. (+) Understand that rational expressions form a system analogous to the |
| rational numbers, closed under addition, subtraction, multiplication, and |
| division by a nonzero rational expression; add, subtract, multiply, and |
| divide rational expressions. [A-APR7] |

Summary and documentation of how the domain, cluster, and standard are met Cite examples from the materials.

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



## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will:

## ALGEBRA

## Creating Equations*

| Create equations that describe numbers or relationships. (Equations using <br> all available types of expressions, including simple root functions.) |
| :---: |
| 16. 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] |

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas


Skills and Procedures


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



## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will:

## ALCEBRA

## Creating Equations*



## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will:

## ALGEBRA

## Creating Equations*

| Create equations that describe numbers or relationships. (Equations using all available types of expressions | Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials. |
| :---: | :---: |
| 18. Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context. [A-CED3] <br> Example: Represent inequalities describing nutritional and cost constraints on combinations of different foods. | 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 |

## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will:

## ALGEBRA

## Creating Equations*

| Create equations that describe numbers or relationships. (Equations using all available types of expressions, including simple root functions.) | Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials. |
| :---: | :---: |
| 19. Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. [A-CED4] <br> Example: Rearrange Ohm's law V = IR to highlight resistance R . | 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 |

## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will:

## ALGEBRA

## Reasoning With Equations and Inequalities

| Understand solving equations as a process of reasoning and explain the reasoning. (Simple rational and radical.) | Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials. |
| :---: | :---: |
| 20. Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise. [A-REI2] <br> Indicate the chapter(s), sections, and/or page(s) reviewed. | 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 |

## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will:

## ALGEBRA

## Reasoning With Equations and Inequalities

| Represent and solve equations and inequalities graphically. (Combine <br> polynomial, rational, radical, absolute value, and exponential functions.) |
| :--- |
| 21. 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 |
| $\mathrm{f}(\mathrm{x})=\mathrm{g}(\mathrm{x})$; find the solutions approximately, e.g., using technology to |
| graph the functions, make tables of values, or find successive |
| approximations. Include cases where $\mathrm{f}(\mathrm{x})$ and/or $\mathrm{g}(\mathrm{x})$ are linear, |
| polynomial, rational, absolute value, exponential, and logarithmic |
| functions.* [A-REI11] |



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



## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will: <br> FUNCTIONS

## Interpreting Functions



## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will: <br> FUNCTIONS

## Interpreting Functions

| Interpret functions that arise in applications in terms of the context. (Emphasize selection of appropriate models.) | Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials. |
| :---: | :---: |
| 23. Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes.* [F-IF5] <br> 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. |  |
| 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 |

## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will: <br> FUNCTIONS

## Interpreting Functions



## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will: <br> FUNCTIONS

## Interpreting Functions



## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will: <br> FUNCTIONS

## Interpreting Functions



## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will: <br> FUNCTIONS

## Interpreting Functions

| Analyze functions using different representations. (Focus on using key features to guide selection of appropriate type of model function.) | Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials. |
| :---: | :---: |
| b. Graph polynomial functions, identifying zeros when suitable factorizations are available, and showing end behavior. [F-IF7c] <br> 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 |

## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will: <br> FUNCTIONS

## Interpreting Functions



## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will: <br> FUNCTIONS

## Interpreting Functions

| Analyze functions using different representations. (Focus on using key features to guide selection of appropriate type of model function.) | Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials. |
| :---: | :---: |
| 26. Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. [F-IF8] <br> Indicate the chapter(s), sections, and/or page(s) reviewed. |  |
| 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 |

## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will: <br> FUNCTIONS

## Interpreting Functions

| Analyze functions using different representations. (Focus on using key features to guide selection of appropriate type of model function.) | Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials. |
| :---: | :---: |
| 27. Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). [F-IF9] <br> Example: Given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum. |  |
| 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 |

## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will: <br> FUNCTIONS

## Building Functions



## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will: <br> FUNCTIONS

## Building Functions

| Build a function that models a relationship between two quantities. (Include all types of functions studied.) | Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials. |
| :---: | :---: |
| a. 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. |  |
| 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 |

## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will: <br> FUNETIONS

## Building Functions

| Build new functions from existing functions. (Include simple radical, rational, and exponential functions; emphasize common effect of each transformation across function types.) | Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials. |
| :---: | :---: |
| 29. Identify the effect on the graph of replacing $f(x)$ by $f(x)+k, k f(x), f(k x)$, 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] |  |
| 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 |

## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will: <br> FUNCTIONS

## Building Functions

| Build new functions from existing functions. (Include simple radical, rational, and exponential functions; emphasize common effect of each transformation across function types.) | Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials. |
| :---: | :---: |
| 30. 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: $\mathrm{f}(\mathrm{x})=2 \mathrm{x} 3$ or $\mathrm{f}(\mathrm{x})=(\mathrm{x}+1) /(\mathrm{x}-1)$ for $\mathrm{x} \neq 1$. <br> Indicate the chapter(s), sections, and/or page(s) reviewed. |  |
| 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 |

## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will:

## FUNCTIONS

## Linear, Quadratic, and Exponential Models*

| Construct and compare linear, quadratic, and exponential models and solve problems. (Logarithms as solutions for exponentials.) | Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials. |
| :---: | :---: |
| 31. For exponential models, express as a logarithm the solution to abct $=\mathrm{d}$ where $\mathrm{a}, \mathrm{c}$, and d are numbers, and the base b is 2,10 , or e; evaluate the logarithm using technology. [F-LE4] |  |
| 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 |

## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will: <br> FUNCTIONS

## Trigonometric Functions

| Extend the domain of trigonometric functions using the unit circle. |
| :--- |
| $\begin{array}{l}\text { 32. Understand radian measure of an angle as the length of the arc on the unit } \\ \text { circle subtended by the angle. [F-TF1] }\end{array}$ |

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

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas


Skills and Procedures


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



## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will: <br> FUNCTIONS

## Trigonometric Functions

| Extend the domain of trigonometric functions using the unit circle. |
| :--- |
| 33. Explain how the unit circle in the coordinate plane enables the extension |
| of trigonometric functions to all real numbers, interpreted as radian |
| measures of angles traversed counterclockwise around the unit circle. |
| [F-TF2] |

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
mportant Mathematical Ideas


Skills and Procedures


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




suo!̣วun ${ }_{\text {H. }}$ ग!!
SNOIIONOS
II!M słuəpnłS

## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will: <br> FUNETIONS

## Making Inferences and Justifying Conclusions



## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will:

## FUNCTIONS

## Making Inferences and Justifying Conclusions

| Prove and apply trigonometric identities. | Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials. |
| :---: | :---: |
| 36. Prove the Pythagorean identity $\sin 2(\theta)+\cos 2(\theta)=1$, and use it to find $\sin (\theta), \cos (\theta)$, or $\tan (\theta)$ given $\sin (\theta), \cos (\theta)$, or $\tan (\theta)$ and the quadrant of the angle. [F-TF8] |  |
| 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 |

## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will:

## STATISTICS AND PROBABIIITY

## 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. |
| :---: | :---: |
| 37. Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets, and tables to estimate areas under the normal curve. [S-ID4] | 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 |

## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will:

## STATISTICS AND PROBABIIITY

## Making Inferences and Justifying Conclusions



## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will:

## STATISTICS AND PROBABIIITY

## Making Inferences and Justifying Conclusions

| Understand and evaluate random processes underlying statistical experiments. | Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials. |
| :---: | :---: |
| 39. Decide if a specified model is consistent with results from a given datagenerating process, e.g., using simulation. [S-IC2] <br> Example: A model says a spinning coin falls heads up with probability 0.5 . Would a result of 5 tails in a row cause you to question the model? |  |
| 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 |

## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will: <br> STATISTICS AND PROBABIIITY

## Making Inferences and Justifying Conclusions



## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will:

## STATISTICS AND PROBABIIITY

## Making Inferences and Justifying Conclusions



## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will:

## STATISTICS AND PROBABIIITY

## Making Inferences and Justifying Conclusions



## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will: <br> STATISTICS AND PROBABIIITY

## Making Inferences and Justifying Conclusions



## TEXTBOOK REVIEW FORM - MATHEMATICS

COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

## Students will:

## STATISTICS AND PROBABIIITY

## Using Probability to Make Decisions

| Use probability to evaluate outcomes of decisions. (Include more complex |
| :---: | :---: | :---: | :---: |
| situations.) |

## TEXTBOOK REVIEW FORM - MATHEMATICS

## COLLEGE- AND CAREER-READY STANDARDS - ALGEBRA II WITH TRIGONOMETRY

Students will:

## STATISTICS AND PROBABIIITY

Using Probability to Make Decisions

Use probability to evaluate outcomes of decisions. (Include more complex
situations.)
45. (+) Analyze decisions and strategies using probability concepts (e.g., product testing, medical testing, pulling a hockey goalie at the end of a game). [S-MD7]

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.


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


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

## Documenting Alignment to

## Additional Criteria and Indicators

Content


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

Documenting Alignment to
Additional Criteria and Indicators
Technology


## 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. <br> 2. Guidance is provided to teacher regarding how assessment information can be used to inform instruction. <br> 3. Rubrics are provided for grading some assignments. <br> 4. Some opportunities are provided for students to check their own understanding. | Overall Rating <br> Overall Rating <br> Overall Rating <br> 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 (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. <br> 6. Multiple means of assessments are used, informal as well as formal. <br> 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 <br> Overall Rating <br> 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


