Course	Cluster Statement		Standard	Keep or Propose Change	Type of Change: Removed, Broken Up, Re-written	Quality Standards Rule	Reason for Proposed Change
Algebra I	Create equations that describe numbers or relationships.	A.CED.1	A.CED.1 Create equations and inequalities in one variable **arising from situations in which linear, quadratic, and exponential functions are appropriate** and use them to solve problems. (Uses Modeling) ~~*Include equations arising from linear and quadratic functions, and simple rational and exponential functions.*~~	change	rewritten	1 - clarity	added the type of functions for Alg 1
Algebra I	Understand solving equations as a process of reasoning and explain the reasoning.	A.REI.1	A.REI.1 Explain each step in solving a **n** ~~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.	change		3	
Algebra I	Represent and solve equations and inequalities graphically.	A.REI.10	A.REI.10 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).	keep			
Algebra I	Represent and solve equations and inequalities graphically.	A.REI.12	A.REI.12 Graph~~the solutions to~~ a linear inequality **(strict or inclusive)** 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.	change	rewritten	clarity #3	clear language
Algebra I	Solve equations and inequalities in one variable.	A.REI.3	A.REI.3 Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.	keep			
Algebra I	Solve equations and inequalities in one variable.	A.REI.4	A.REI.4 Solve quadratic equations in one variable. 4a. 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.~~ 4b. Solve quadratic equations by inspection (e.g., for $x^2 = 49$), taking square roots, completing the square, ~~he 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~~.	change	remove part	connections -2	Clarify that solving of quadratics for Algebra 1 is by factoring, graphing, and completeing the square. Deriving teh quadratic formula and solving with the formula will be placed into Alg 2.
Algebra I	Solve systems of equations.	A.REI.5	A.REI.5 ~~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.~~ **Understand the principles of the elimination method.**	change	rewritten	1 - clarity	The intent of the standard is to understand conceptually why the elimation method works.
Algebra I	Solve systems of equations.	A.REI.6	A.REI.6 Solve systems of linear equations exactly and approximately **by graphing** ~~(e.g., with graphs)~~ focusing on pairs of linear equations in two variables.	change	rewritten	1 -clarity	We included the specific type of graphing.
Algebra I	Solve systems of equations.	A.REI.7	A.REI.7 Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically ~~*For example, find the points of intersection between the line y = -3x and the circle x^2 + y^2 = 3*~~	keep			

Course	Cluster Statement		Standard	Keep or Propose Change	Type of Change: Removed, Broken Up, Re-written	Quality Standards Rule	Reason for Proposed Change
Algebra I	Write expressions in equivalent forms to solve problems.	A.SSE.3	A.SSE.3 Choose and produce an equivalent form of an expressio to reveal and explain properties of the quantity represented by the expression. (Uses Modeling) 3a. Factor a quadratic expression to reveal the zeros of the function it defines. 3b. Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines. 3c. Use the properties of exponents to~~transform~~ **write equivalent** expressions for exponential functions.	change		1-clarity	Language is more specific
Algebra I	Build a function that models a relationship between two quantities.	F.BF.2	F.BF.2 Write arithmetic and geometric sequences both recursively and with an explicit formula**and** use them to model situations~~, and translate between the two forms~~ (Uses Modeling)	change	removed	1 - clarity	removed last part that is repetitive
Algebra I	Understand the concept of a function and use function notation.	F.IF.1	F.IF.1 Understand that a function**maps each element of** ~~from one set (called~~ the domain~~)~~ to **exactly one element of** ~~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).	change	rewritten	Clarity # 3	removed exessive language that repeated itself.
Algebra I	Understand the concept of a function and use function notation.	F.IF.2	F.IF.2 Use function notation, evaluate functions~~for inputs in their domains~~, and interpret statements that use function notation in terms of a context.	change	remove part	Clarity #3	for inputs in their domains does not add clarity
Algebra I	Understand the concept of a function and use function notation.	F.IF.3	F.IF.3 Recognize that sequences are functions, sometimes defined recursively, whose domain is a subset of the integers~~*For example, the Fibonacci sequence is defined recursively by f(0) = f(1)=1, f(n+1) = f(n) + f(n-1) for n>1.*~~	change	remove example	clarity # 3	the example may limit the type of sequecents
Algebra I	Construct and compare linear and exponential models and solve problems.	F.LE.1	F.LE.1 Distinguish between situations that can be modeled with linear **and exponential** functions ~~and with exponential functions~~ (Uses Modeling) 1a. Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals. (Uses Modeling) 1b. Recognize situations in which one quantity changes at a constant rate per unit interval relative to another. (Uses Modeling) 1c. Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another. (Uses Modeling)	change	rewritten	1- clarity	just clarify language
Algebra I	Construct and compare linear and exponential models and solve problems.	F.LE.2	F.LE.2 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). (Uses Modeling)	keep			

Course	Cluster Statement		Standard	Keep or Propose Change	Type of Change: Removed, Broken Up, Re-written	Quality Standards Rule	Reason for Proposed Change
Algebra I	Construct and compare linear and exponential models and solve problems.	F.LE.3	F.LE.3 ~~Observe~~**Recognize,** using graphs and tables~~,~~ that a quantity increasing exponentially eventually exceeds a quantity increasing linearly **or** quadratically~~., or (more generally) as a polynomial function~~ (Uses Modeling)	change	rewritten	1 - clarity	changed verb to Recognize instead of observe to raise the rigor.
Algebra I	Interpret expressions for functions in terms of the situation they model.	F.LE.5	F.LE.5 Interpret the parameters in a linear or exponential function in terms of a context. (Uses Modeling)	keep			
Algebra I	Reason quantitatively and use units to solve problems.	N.Q.1	N.Q.1 Use **unit analysis to understand and guide the process of solving** ~~to units as a way to understand problems and to guide the solution of~~ multi-step problems; ~~and~~ choose and interpret units consistently in formulas; **and** choose and interpret the scale and ~~the~~ origin in graphs and data displays. (Uses modeling)	change	rewritten	clarity - 1	removed words and added words to make it read more clear
Algebra I	Reason quantitatively and use units to solve problems.	N.Q.2	N.Q.2 Define appropriate quantities for the purpose of descriptive modeling. (Uses modeling)	keep			
Algebra I	Reason quantitatively and use units to solve problems.	N.Q.3	N.Q.3 Choose a level of accuracy appropriate to limitations on measurement when reporting quantities. (Uses modeling)	keep			
Algebra I	Extend the properties of exponents to rational exponents	N.RN.1	N.RN.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.	change	removed words	clarity - 1	remove words to make it read more clear
Algebra I	Extend the properties of exponents to rational exponents.	N.RN.2	N.RN.2 Rewrite expressions involving radicals and rational exponents using the properties of exponents.	keep			
Algebra I	Use properties of rational and irrational numbers.	N.RN.3	N.RN.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.	change	removed words	clarity - 1	remove words to make it read more clear
Algebra I	Summarize, represent, and interpret data on a single count or measurement variable.	S.ID.1	S.ID.1 Represent data with plots on the real number line (dot plots, histograms, and box plots).	keep			

Course	Cluster Statement		Standard	Keep or Propose Change	Type of Change: Removed, Broken Up, Re-written	Quality Standards Rule	Reason for Proposed Change
Algebra I	Summarize, represent, and interpret data on a single count or measurement variable.	S.ID.2	S.ID.2 Use statistics appropriate to the shape **and context** of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets.	change	re-written	1 - clarity	Include mode as measure of center and the context of the data.
Algebra I	Summarize, represent, and interpret data on a single count or measurement variable.	S.ID.3	S.ID.3 Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).	keep			
Algebra I	Summarize, represent, and interpret data on two categorical and quantitative variables.	S.ID.5	S.ID.5 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.	keep			
Algebra I	Summarize, represent, and interpret data on two categorical and quantitative variables.	S.ID.6	S.ID.6 Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. 6a. **Determine the function (linear, quadratic, or exponential model) that best fits a set of data and use that function** ~~Fit a function to the data; use function~~s fitted to data to solve problems **with**in ~~the~~ context ~~of the data~~. 6b. Informally **and using technology** assess the fit of a function by plotting and analyzing residuals. 6c. Fit a linear function for a scatter plot that suggests a linear association.	change	rewritten	1 - clarity	Write to clarify finding a funciton to model a set of data.
Algebra I	Interpret linear models.	S.ID.7	S.ID.7 Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.	keep			
Algebra I	Interpret linear models.	S.ID.8	S.ID.8 Compute (using technology) and interpret the correlation coefficient of a linear fit.	keep			
Algebra I	Interpret linear models.	S.ID.9	S.ID.9 Distinguish between correlation and causation.	keep			
Algebra I ~~and Algebra II~~	Create equations that describe numbers or relationships.	A.CED.2	A.CED.2 Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. (Uses Modeling)	keep			
Algebra I ~~and Algebra II~~	Create equations that describe numbers or relationships.	A.CED.3	A.CED.3 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. (Uses Modeling) ~~*For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.*~~	keep			

Course	Cluster Statement		Standard	Keep or Propose Change	Type of Change: Removed, Broken Up, Re-written	Quality Standards Rule	Reason for Proposed Change
Algebra I ~~and Algebra II~~	Create equations that describe numbers or relationships.	A.CED.4	A.CED.4 ~~Rearrange~~**Rewrite** formulas to highlight a quantity of interest, using the same reasoning as in solving equations. (Uses Modeling) ~~*For example, reaarange Ohm's law V = IR to highlight reisistance R.*~~	change	rewritten	1 - clarity	changed rearrange to rewrite
Algebra I ~~and Algebra II~~	Interpret the structure of expressions.	A.SSE.1	A.SSE.1 Interpret expressions that represent a quantity in terms of its context. (Uses Modeling) 1a. Interpret parts of an expression, such as terms, factors, and coefficients. 1b. Interpret complicated expressions by viewing one or more of their parts as a single entity **in context**.	change	rewritten	clarity - 1	Added in context so this does not get lost
Algebra I ~~and Algebra II~~	Interpret the structure of expressions.	A.SSE.2	A.SSE.2 **Recognize and** use the structure of an expression to identify ways to rewrite it.	change	added the words recognize	clartiy -1	We feel they need to regonize the structure first and then student can use it to rewrite expressions.
Algebra I	Build a function that models a relationship between two quantities.	F.BF.1	F.BF.1 Write a function **(linear, quadratic, and exponential)** that describes a relationship between two quantities. (Uses Modeling) 1a. Determine an explicit expression, a recursive process, or steps for calculation from a context. (Uses modeling) **1b. Determine an explicit expression from a graph. (Uses modeling)** 1**c**. Combine standard function types using arithmetic operations. (Uses modeling) ~~1c. (+) Compose functions. (Uses modeling)~~	change/added	rewritten	2 - connection	added Missing concept of writing a function expression from a graph.
Algebra I ~~and Algebra II~~	Perform arithmetic operations on polynomials.	A.APR.1	A.APR.1 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.	change	rewritten	1 = clarity	
Algebra I ~~and Algebra II~~	Represent and solve equations and inequalities graphically.	A.REI.11	A.REI.11 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.,~~ **including but not limited to** 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, **quadratic and** ~~polynomial, rational, absolute value,~~ exponential.~~, and logarithmic functions. (Uses Modeling)~~	change	rewritten	1-clarity	clear language; added clarity with quadratic
Algebra I ~~and Algebra II~~	Build new functions from existing functions.	F.BF.3	F.BF.3 Identify the effect on the graph of~~replacing~~ f(x) **(linear, exponential, quadratic) replaced with** ~~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 **contrasting** cases and illustrate an explanation of the effects on the graph using technology.	change	rewritten	1 - clarity	added the type of functions

Course	Cluster Statement		Standard	Keep or Propose Change	Type of Change: Removed, Broken Up, Re-written	Quality Standards Rule	Reason for Proposed Change
Algebra I ~~and Algebra II~~	Interpret functions that arise in applications in terms of the context.	F.IF.4	F.IF.4 For functions, **including linear, quadratic, and exponential,** that model~~s~~ 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. (Uses Modeling) *Key features include: intercepts; ~~intervals~~ where the function is increasing, decreasing~~, positive, or negative; relative~~ maximums and minimums; symmetries; ~~end behavior; and periodicity~~**	change	add and remove parts	clarity #3	added the type of functions an removed the key features that match those functions.
Algebra I ~~and Algebra II~~	Interpret functions that arise in applications in terms of the context.	F.IF.5	F.IF.5 Relate the domain of a function to its graph and **find an appropriate domain in the context of the problem.** ~~where applicable, to the quantitative relationship it describes~~ (Uses Modeling)	keep			
~~Algebra I and~~ Algebra II	Interpret functions that arise in applications in terms of the context.	F.IF.6	F.IF.6 Calculate and interpret the average rate of change of a function, **both** ~~(presented~~ symbolically ~~or~~ **and** ~~as~~ **from** a table~~)~~ over a specified interval. Estimate the rate of change from a graph. (Uses Modeling)	change		3	clarify language and meaning
Algebra I ~~and Algebra II~~	Analyze functions using different representations.	F.IF.7	F.IF.7 Graph **parent** functions **and their transformations** expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. (Uses Modeling) 7a. Graph linear, **exponential** , and quadratic functions and show intercepts, maxima, and minima. ~~7b. Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions~~.	change	remove parts from Algebra 2	clarity	remove the types of functions that belong in Algebra II
Algebra I ~~and Algebra II~~	Analyze functions using different representations.	F.IF.8	F.IF.8 Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. 8a. Use the process of **graphing,** 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. 8b. ~~Use the properties of exponents to~~ Interpret expressions for exponential ~~functions~~ **growth and decay.** ~~*For example, identify percent rate of change in functions such as y = (1.02)t, y = (0.97)t, y = (1.01)12t, y = (1.2)t/10, and classify them as representing exponential growth or decay*~~.	change	rewritten	1-clarity	adding wording to clarify what methodes for quadratics
Algebra I ~~and Algebra II~~	Analyze functions using different representations.	F.IF.9	F.IF.9 Compare properties of two functions **(linear, quadratic and exponential)** each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). ~~*For example, given a graph of one quadratic function and an algebraic expression for another, say which has the larger maximum*~~.	change	rewritten	1 - clarity	added the type of functions
Algebra II	Understand the relationship between zeros and factors of polynomials.	A.APR.2	A.APR.2 Know and apply the Remainder Theorem: ~~For a polynomial p(x) and a number a, the remainder on division by x – a is p(a), so p(a) = 0 if and only if (x – a) is a factor of p(x).~~	change	rewritten	1 - clarity	no need for the definition of the remainder theorem in the actual standards document

Course	Cluster Statement		Standard	Keep or Propose Change	Type of Change: Removed, Broken Up, Re-written	Quality Standards Rule	Reason for Proposed Change
Algebra II	Understand the relationship between zeros and factors of polynomials.	A.APR.3	A.APR.3 Identify zeros of polynomials **by factoring**. ~~when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial.~~ **1a. When suitable factorizations are available, use the zeros to construct a rough graph of the related function.** **1b. When given a graph, use the zeros to construct a possible factorization of a polynomial.**	change			
~~Algebra II~~	~~Use polynomial identities to solve problems.~~	~~A.APR.4~~	~~A.APR.4 Prove polynomial identities and use them to describe numerical relationships~~.	change	remove	1 - clarity	repetitive concept covered in A.SSE.2
~~Algebra II~~	~~Use polynomial identities to solve problems.~~	~~A.APR.5*~~	~~A.APR.5 (+) 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 numbers, with coefficients determined for example by Pascal's Triangle. (The Binomial Theorem can be proved by mathematical induction or by a combinatorial argument.~~)	change	remove	2-connection	move to fourth year
Algebra II	Rewrite rational expressions.	A.APR.6	A.APR.6 Rewrite simple rational expressions in different forms; ~~write a(x)/b(x) in the form q(x) + r(x)/b(x), where a(x), b(x), q(x), and r(x) are polynomials with the degree of r(x) less than the degree of b(x),~~using inspection, **synthetic division**, long division, **box method** or, for the more complicated examples, a computer algebra system.	change			
~~Algebra II~~	~~Rewrite rational expressions.~~	~~A.APR.7*~~	~~A.APR.7 (+) 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.~~	change	remove	2 - connection	move to fourth year
Algebra II	**Create equations that describe numbers or relationships.**	**A.CED.1**	**A.CED.1 Create equations and inequalities in one variable and use them to solve problems. (Uses Modeling)**	**change**	**add**	**2 - connection**	**added to Algera 2**
Algebra II	**Create equations that describe numbers or relationships.**	**A.CED.2**	**A.CED.2 Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. (Uses Modeling)**	**change**	**add**	**2 - connection**	**added to Algera 2**

Course	Cluster Statement		Standard	Keep or Propose Change	Type of Change: Removed, Broken Up, Re-written	Quality Standards Rule	Reason for Proposed Change
Algebra II	**Create equations that describe numbers or relationships.**	**A.CED.3**	**A.CED.3 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. (Uses Modeling)**	**change**	**add**	**2 - connection**	**added to Algera 2**
Algebra II	**Create equations that describe numbers or relationships.**	**A.CED.4**	**A.CED.4 Rewrite formulas to highlight a quantity of interest, using the same reasoning as in solving equations. (Uses Modeling)**	**change**	**add**	**2 - connection**	**added to Algera 2**
Algebra II	**Represent and solve equations and inequalities graphically.**	**A.REI.11**	**A.REI.11 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, including but not limited to 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. (Uses Modeling)**	**change**	**added**		
Algebra II	Understand solving equations as a process of reasoning and explain the reasoning.	A.REI.2	A.REI.2 Solve ~~simple~~ rational and radical equations in one variable and give examples showing how extraneous solutions may arise. ***Rational functions are limited to those whose numerators are of degree at most 1 and denominators of degree at most 2. Radical functions are limited to square roots or cube roots of at most quadratic polynomials.***	change			
Algebra II	**Solve equations and inequalities in one variable.**	**A.REI.4**	**A.REI.4 Solve quadratic equations in one variable.** **4a. Derive the quadratic formula by completing the square.** **4b. Solve quadratic equations using any method, including the quadratic formula, 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.**	new			
Algebra II	**Interpret the structure of expressions.**	**A.SSE.1**	**A.SSE.1 Interpret expressions that represent a quantity in terms of its context. (Uses Modeling)** **1a. Interpret parts of an expression, such as terms, factors, and coefficients.** **1b. Interpret <u>complicated expressions</u> by viewing one or more of their parts as a single entity in context.**	**change**	**added**	**added to Algebra 2**	**added to Algebra 2 Added in context so this does not get lost**
Algebra II	**Interpret the structure of expressions.**	**A.SSE.2**	**A.SSE.2 Recognize and use the structure of an expression to identify ways to rewrite it.**	**change**	**added**	**added to Algebra 2**	**added to Algebra 2**
~~Algebra II~~	~~Write expressions in equivalent forms to solve problems.~~	~~A.SSE.4~~	~~A.SSE.4 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. (Uses Modeling~~)	change	remove	3 - connection	move to 4th year

Course	Cluster Statement		Standard	Keep or Propose Change	Type of Change: Removed, Broken Up, Re-written	Quality Standards Rule	Reason for Proposed Change
Algebra II	**Build new functions from existing functions.**	**F.BF.3**	**F.BF.3 Identify the effect on the graph of f(x) replaced with 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 contrasting cases and illustrate an explanation of the effects on the graph using technology.**	added	rewritten	1 - clarity	added the type of functions
Algebra II	Build new functions from existing functions.	F.BF.4	F.BF.4 Find inverse functions. 4a. Solve an equation**for the independent variable** of ~~the form f (x) = c for a simple~~ a function f that has an inverse**function and** write an expression for the inverse ~~*For example, f(x) = 2x^3 or f(x) = (x+1)/(x-1) for x (not equal) 1.*~~ 4b. Verify by composition that one function is the inverse of another. ~~(+)~~ 4c. Read values of an inverse function from a graph or a table, given that the function has an inverse~~(+)~~	added	moved	2 - connection	drop the plus symbol - connect inverse standards because it make sense.
Algebra II	**Build new functions from existing functions.**	**F.BF.5**	**F.BF.5 (+) Understand the inverse relationship between exponents and logarithms and use this relationship to solve problems involving logarithms and exponents.**	**added**	**Added Alg. 2 standard**	**2- connection to year 4**	**developmentally appropriate**
Algebra II	**Interpret functions that arise in applications in terms of the context.**	**F.IF.4**	**F.IF.4 For functions that model 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. (Uses Modeling) *Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries (including even, odd, or neither); end behavior; and periodicity.****	**add standard to Algebra II**	**add standard to Algebra II**		
Algebra II	**Interpret functions that arise in applications in terms of the context.**	**F.IF.5**	**F.IF.5 Relate the domain of a function to its graph and find an appropriate domain in the context of the problem. (Uses Modeling)**	**add standard to Algebra II**	**add standard to Alg II**		

Course	Cluster Statement		Standard	Keep or Propose Change	Type of Change: Removed, Broken Up, Re-written	Quality Standards Rule	Reason for Proposed Change
Algebra II	**Analyze functions using different representations.**	**F.IF.7**	**F.IF.7 Graph parent functions and their transformations expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. (Uses Modeling)** **7b. Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions.** **7c. Graph polynomial functions, identifying zeros when suitable factoriations are available, and showing end behavior.** **7d. Graph rational functions, identifying zeros and asymptotes when suitable factorizations are available and showing end behavior.** **7e. Graph logrithmic functions, showing intercepts and end behavior.** **7f. Graph trigonometric functions (sine and cosine), showing period, midline, and amplitude.**	**change**	**add the standard to Algebra II**	**clarity**	**identify the functions that belong in Algebra II**
Algebra II	**Analyze functions using different representations.**	**F.IF.9**	**F.IF.9 Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions).**	change	Added Alg. 2 standard		
Algebra II	Construct and compare linear and exponential models and solve problems.	F.LE.4	F.LE.4 For exponential models, express as a logarithm the solution to ab^(ct) = d where a, c, and d are numbers and the base b is 2, 10, or e; evaluate the logarithm using technology. (Uses Modeling)	keep			
Algebra II	Extend the domain of trigonometric functions using the unit circle.	F.TF.1	F.TF.1 Understand radian measure of an angle as the length of the arc on the unit circle subtended by the angle.	keep			
Algebra II	Extend the domain of trigonometric functions using the unit circle.	F.TF.2	F.TF.2 Explain how the unit circle in the coordinate plane enables the extension of trigonometric functions **(sine and cosine)** to all real numbers, interpreted as radian measures of angles traversed counterclockwise around the unit circle.	change	rewritten	1 - clarity	added the type of functions
Algebra II	Model periodic phenomena with trigonometric functions.	F.TF.5	F.TF.5 Choose trigonometric functions **(sine and cosine)** to model periodic phenomena with specified amplitude, frequency, and midline. (Uses Modeling)	change	rewritten	1- clarity	added the type of funcitons
Algebra II	Prove and apply trigonometric identities.	F.TF.8	F.TF.8 Prove the Pythagorean identity $\sin^2(A) + \cos^2(A) = 1$ and use it to calculate trigonometric ratios.	keep			

Course	Cluster Statement		Standard	Keep or Propose Change	Type of Change: Removed, Broken Up, Re-written	Quality Standards Rule	Reason for Proposed Change
Algebra II	Use complex numbers in polynomial identities and equations.	N.CN 7	N.CN.7 Solve quadratic equations with real coefficients that have complex solutions.	keep			
Algebra II	Perform arithmetic operations with complex numbers.	N.CN.1	N.CN.1 Know there is a complex number i such that $i^2 = –1$, and every complex number has the form a + bi **where** ~~with~~ a and b **are** real **numbers**.	change	rewritten	clarity - 1	removed words and added words to make it read more clear
Algebra II	Perform arithmetic operations with complex numbers.	N.CN.2	N.CN.2 Use the relation $i^2 = –1$ and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers.	keep			
~~Algebra II~~	~~Use complex numbers in polynomial identities and equations.~~	~~N.CN.8~~	~~N.CN.8 (+) Extend polynomial identities to the complex numbers.~~	moved to year 4			
~~Algebra II~~	~~Use complex numbers in polynomial identities and equations.~~	~~N.CN.9~~	~~N.CN.9 (+) Know the Fundamental Theorem of Algebra; show that it is true for quadratic polynomials.~~	moved to year 4			
Algebra II	Understand and evaluate random processes underlying statistical experiments.	S.IC.1	S.IC.1 Understand statistics as a process for making inferences about population parameters based on a random sample from that population.	keep			
Algebra II	Understand and evaluate random processes underlying statistical experiments.	S.IC.2	S.IC.2 ~~Decide if~~ **Determine whether** a specified model is consistent with results from a given data-generating process. ~~, e.g., by using simulation.~~	change	clarify	3	
Algebra II	Make inferences and justify conclusions from sample surveys, experiments and observational studies.	S.IC.3	S.IC.3 Recognize the purposes of and differences among sample surveys, experiments, and observational studies; explain how randomization relates to each.	keep			

Course	Cluster Statement		Standard	Keep or Propose Change	Type of Change: Removed, Broken Up, Re-written	Quality Standards Rule	Reason for Proposed Change
Algebra II	Make inferences and justify conclusions from sample surveys, experiments and observational studies.	S.IC.4	S.IC.4 Use data from a sample survey to estimate a population mean or proportion; develop a margin of error through the use of simulation models for random sampling.	keep			
Algebra II	Make inferences and justify conclusions from sample surveys, experiments and observational studies.	S.IC.5	S.IC.5 Use data from a randomized experiment to compare two treatment **groups**; use simulations to decide if differences between parameters are significant.	change	rewritten	1 - clarity	added the word groups to clarify the wording
Algebra II	Make inferences and justify conclusions from sample surveys, experiments and observational studies.	S.IC.6	S.IC.6 Evaluate reports based on data.	keep			
Algebra II	Summarize, represent, and interpret data on a single count or measurement variable.	S.ID.4	S.ID.4 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.	keep			
Algebra II	(+) Use probability to evaluate outcomes of decisions.	S.MD.6	~~S.MD.6 (+) Use probabilities to make fair decisions (e.g., drawing by lots, using a random number generator).~~	move to year 4			
Algebra II	(+) Use probability to evaluate outcomes of decisions.	S.MD.7	~~S.MD.7 (+) Analyze decisions and strategies using probability concepts (e.g., product testing, medical testing, pulling a hockey goalie at the end of a game).~~	move to year 4			
Algebra II	**Build a function that models a relationship between two quantities.**	**F.BF.1**	**F.BF.1 Write a function that describes a relationship between two quantities. (Uses Modeling)** **1a. Determine an explicit expression, a recursive process, or steps for calculation from a context. (Uses modeling)** **1b. Determine an explicit expression from a graph. (Uses modeling)** **1c. Combine standard function types using arithmetic operations. (Uses modeling)** **1d. ~~(+)~~ Compose functions. (Uses modeling)**	change/added	Added Alg. 2 standard	1 - clarity	Took plus standard away and added it to algebra 2.