

SpringBoard Algebra 1 Correlations Crosswalk

**SpringBoard Algebra 1 Correlations Crosswalk to New Louisiana Standards**

Course	Conceptual Category	Domain	Cluster	2015-2016 Louisiana Student Standards	New Louisiana Student Standards	SpringBoard Correlations
Algebra I	N: Number and Quantity	RN: The Real Number System	B. Use properties of rational and irrational numbers.	3. Explain why the sum or product of two rational numbers are 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.	3. Explain why the sum or product of two rational numbers are 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.	
Algebra I	N: Number and Quantity	Q: Quantities	A. Reason quantitatively and use units to solve problems.	1. Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.	1. Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.	
Algebra I	N: Number and Quantity	Q: Quantities	A. Reason quantitatively and use units to solve problems.	2. Define appropriate quantities for the purpose of descriptive modeling.	2. Define appropriate quantities for the purpose of descriptive modeling.	
Algebra I	N: Number and Quantity	Q: Quantities	A. Reason quantitatively and use units to solve problems.	3. Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.	3. Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.	
Algebra I	A: Algebra	SSE: Seeing Structure in Expressions	A. Interpret the structure of expressions.	1. Interpret expressions that represent a quantity in terms of its context. a. Interpret parts of an expression, such as terms, factors, and coefficients.	1. Interpret expressions that represent a quantity in terms of its context. a. Interpret parts of an expression, such as terms, factors, and coefficients.	
Algebra I	A: Algebra	SSE: Seeing Structure in Expressions	A. Interpret the structure of expressions.	1. Interpret expressions that represent a quantity in terms of its context. b. Interpret complicated expressions by viewing one or more of their parts as a single entity. For example, interpret $P(1+r)^n$ as the product of $P$ and a factor not depending on $P$ .	1. Interpret expressions that represent a quantity in terms of its context. b. Interpret complicated expressions by viewing one or more of their parts as a single entity. For example, interpret $P(1+r)^n$ as the product of $P$ and a factor not depending on $P$ .	
Algebra I	A: Algebra	SSE: Seeing Structure in Expressions	A. Interpret the structure of expressions.	2. Use the structure of an expression to identify ways to rewrite it. For example, see $x^4 - y^4$ as $(x^2)^2 - (y^2)^2$ , thus recognizing it as a difference of squares that can be factored as $(x^2 - y^2)(x^2 + y^2)$ .	<b>2. Use the structure of an expression to identify ways to rewrite it. For example, see <math>x^4 - y^4</math> as <math>(x^2)^2 - (y^2)^2</math>, thus recognizing it as a difference of squares that can be factored as <math>(x^2 - y^2)(x^2 + y^2)</math> or see <math>(2x^2 + 8x)</math> as <math>(2x)(x) + (2x)(4)</math>, thus recognizing it as a polynomial whose terms are products of monomials and the polynomial can be factored as <math>2x(x+4)</math>.</b>	p. 385–392 Activity 26: Factoring  p. 393–402 Activity 27: Factoring Trinomials

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Algebra I	A: Algebra	SSE: Seeing Structure in Expressions	B. Write expressions in equivalent forms to solve problems.	3. Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. a. Factor a quadratic expression to reveal the zeros of the function it defines.	3. Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. a. Factor a quadratic expression to reveal the zeros of the function it defines.	
Algebra I	A: Algebra	SSE: Seeing Structure in Expressions	B. Write expressions in equivalent forms to solve problems.	3. Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. b. Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines.	3. Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. b. Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines.	
Algebra I	A: Algebra	SSE: Seeing Structure in Expressions	B. Write expressions in equivalent forms to solve problems.	3. Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. c. Use the properties of exponents to transform expressions for exponential functions. For example the expression $1.15^t$ can be rewritten as $(1.15^{(1/12)})^{12t} \approx 1.012^{12t}$ to reveal the approximate equivalent monthly interest rate if the annual rate is 15%.	<b>3. Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.</b> <b>c. Use the properties of exponents to transform expressions for exponential functions emphasizing integer exponents. For example the growth of bacteria can be modeled by either <math>f(t) = 3^{(t+2)}</math> or <math>g(t) = 9(3^t)</math> because the expression <math>3^{(t+2)}</math> can be rewritten as <math>(3^t)(3^2) = 9(3^t)</math>.</b>	p. 341–353 Activity 23: Modeling with Exponential Functions
Algebra I	A: Algebra	APR: Arithmetic with Polynomials and Rational Expressions	A. Perform arithmetic operations on polynomials.	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.	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.	
Algebra I	A: Algebra	APR: Arithmetic with Polynomials and Rational Expressions	B. Understand the relationship between zeros and factors of polynomials.	3. Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial.	<b>3. Identify zeros of quadratic functions and use the zeros to sketch a graph of the function defined by the polynomial.</b>	p. 463–466 Activity 31: Solving Quadratic Equations by Factoring and Graphing
Algebra I	A: Algebra	CED: Creating Equations	A. Create equations that describe numbers or relationships.	1. 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.	<b>1. Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear, quadratic and exponential functions.</b>	p. 15–24 Activity 2: Solving Equations  p.35–48 Activity 3: Solving Inequalities  p. 423–426 Activity 29: Introduction to Quadratic Functions  p. 325–332 Activity 22: Exponential Functions

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Algebra I	A: Algebra	CED: Creating Equations	A. Create equations that describe numbers or relationships.	2. Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.	2. Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.	
Algebra I	A: Algebra	CED: Creating Equations	A. Create equations that describe numbers or relationships.	3. 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. For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.	3. 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. For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.	
Algebra I	A: Algebra	CED: Creating Equations	A. Create equations that describe numbers or relationships.	4. Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. For example, rearrange Ohm's law $V = IR$ to highlight resistance $R$ .	4. Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. For example, rearrange Ohm's law $V = IR$ to highlight resistance $R$ .	
Algebra I	A: Algebra	REI: Reasoning with Equations and Inequalities	A. Understand solving equations as a process of reasoning and explain the reasoning.	1. 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.	1. 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.	
Algebra I	A: Algebra	REI: Reasoning with Equations and Inequalities	B. Solve equations and inequalities in one variable.	3. Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.	3. Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.	
Algebra I	A: Algebra	REI: Reasoning with Equations and Inequalities	B. Solve equations and inequalities in one variable.	4. Solve quadratic equations in one variable. a. Use the method of completing the square to transform any quadratic equation in $x$ into an equation of the form $(x - p)^2 = q$ that has the same solutions. Derive the quadratic formula from this form.	4. Solve quadratic equations in one variable. a. Use the method of completing the square to transform any quadratic equation in $x$ into an equation of the form $(x - p)^2 = q$ that has the same solutions. Derive the quadratic formula from this form.	
Algebra I	A: Algebra	REI: Reasoning with Equations and Inequalities	B. Solve equations and inequalities in one variable.	4. Solve quadratic equations in one variable. b. Solve quadratic equations by inspection (e.g., for $x^2 = 49$ ), taking square roots, completing the square, 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 $a \pm bi$ for real numbers $a$ and $b$ .	<b>4. Solve quadratic equations in one variable.</b> <b>b. Solve quadratic equations by inspection (e.g., for <math>x^2 = 49</math>), taking square roots, completing the square, 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 "no real solution."</b>	p. 467–479 Activity 32: Algebraic Methods of Solving Quadratic Equations
Algebra I	A: Algebra	REI: Reasoning with Equations and Inequalities	C. Solve systems of equations.	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.	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.	

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Algebra I	A: Algebra	REI: Reasoning with Equations and Inequalities	C. Solve systems of equations.	6. Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.	6. Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.	
Algebra I	A: Algebra	REI: Reasoning with Equations and Inequalities	D. Represent and solve equations and inequalities graphically.	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).	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).	
Algebra I	A: Algebra	REI: Reasoning with Equations and Inequalities	D. Represent and solve equations and inequalities graphically.	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., 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.	<b>11. Explain why the x-coordinates of the points where the graphs of the equations <math>y = f(x)</math> and <math>y = g(x)</math> intersect are the solutions of the equation <math>f(x) = g(x)</math>; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where <math>f(x)</math> and/or <math>g(x)</math> are linear, polynomial, rational, piecewise linear (to include absolute value), and exponential functions.</b>	p. 251–272 Activity 17: Systems of Linear Equations  p. 509–518 Activity 35: Systems of Equations
Algebra I	A: Algebra	REI: Reasoning with Equations and Inequalities	D. Represent and solve equations and inequalities graphically.	12. 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.	12. 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.	
Algebra I	F: Functions	IF: Interpreting Functions	A. Understand the concept of a function and use function notation.	1. 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 $y = f(x)$ .	1. 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 $y = f(x)$ .	
Algebra I	F: Functions	IF: Interpreting Functions	A. Understand the concept of a function and use function notation.	2. Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.	2. Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.	
Algebra I	F: Functions	IF: Interpreting Functions	A. Understand the concept of a function and use function notation.	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 $n \geq 1$	<b>3. Recognize that sequences are functions whose domain is a subset of the integers. Relate arithmetic sequences to linear functions and geometric sequences to exponential functions.</b>	p. 159–172 Activity 11: Arithmetic Sequences  p. 313–322 Activity 21: Geometric Sequences

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Course	Conceptual Category	Domain	Cluster	2015-2016 Louisiana Student Standards	New Louisiana Student Standards	SpringBoard Correlations
Algebra I	F: Functions	IF: Interpreting Functions	B. Interpret functions that arise in applications in terms of the context.	4. 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.	<b>4. For linear, piecewise linear (to include absolute value), quadratic, and exponential 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. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; and end behavior.</b>	p. 81–96 Activity 6: Interpreting Graphs of Functions  p. 97–110 Activity 7: Graphs of Functions  p. 427–430 Activity 29: Introduction to Quadratic Functions
Algebra I	F: Functions	IF: Interpreting Functions	B. Interpret functions that arise in applications in terms of the context.	5. Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For 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.	5. Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For 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.	
Algebra I	F: Functions	IF: Interpreting Functions	B. Interpret functions that arise in applications in terms of the context.	6. 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.	<b>6. Calculate and interpret the average rate of change of a linear, quadratic, piecewise linear (to include absolute value) and exponential function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.</b>	p. 123–138 Activity 9: Rates of Change  p. 211–214 Activity 14: Piecewise-Defined Linear Functions
Algebra I	F: Functions	IF: Interpreting Functions	C. Analyze functions using different representations.	7. Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. a. Graph linear and quadratic functions and show intercepts, maxima, and minima.	7. Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. a. Graph linear and quadratic functions and show intercepts, maxima, and minima.	
Algebra I	F: Functions	IF: Interpreting Functions	C. Analyze functions using different representations.	7. Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. b. Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions.	<b>7. Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. b. Graph piecewise linear (to include absolute value) and exponential functions.</b>	p. 81–96 Activity 6: Interpreting Graphs of Functions  p. 219–220 Activity 14: Piecewise-Defined Linear Functions
Algebra I	F: Functions	IF: Interpreting Functions	C. Analyze functions using different representations.	8. Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. 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.	8. Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. 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.	

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Algebra I	F: Functions	IF: Interpreting Functions	C. Analyze functions using different representations.	9. Compare properties of two functions 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.	<b>9. Compare properties of two functions [linear, quadratic, piecewise linear (to include absolute value) or 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, determine which has the larger maximum.</b>	p. 221–224 Activity 14: Piecewise-Defined Linear Functions  p.500–508 Activity 34: Modeling with Functions
Algebra I	F: Functions	BF: Building Functions	A. Build a function that models a relationship between two quantities.	1. Write a function that describes a relationship between two quantities. a. Determine an explicit expression, a recursive process, or steps for calculation from a context.	<b>1. Write a linear, quadratic, or exponential function that describes a relationship between two quantities. a. Determine an explicit expression, a recursive process, or steps for calculation from a context.</b>	p. 139–151 Activity 10: Linear Models  p. 341–352 Activity 23: Modeling with Exponential Functions  p. 423–426 Activity 29: Introduction to Quadratic Functions  p. 495–499 Activity 34: Modeling with Functions
Algebra I	F: Functions	BF: Building Functions	B. Build new functions from existing functions.	3. 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.	<b>3. Identify the effect on the graph of replacing <math>f(x)</math> by <math>f(x) + k</math>, <math>k f(x)</math>, <math>f(kx)</math>, and <math>f(x + k)</math> for specific values of <math>k</math> (both positive and negative). Without technology find the value of <math>k</math> given the graphs of linear and quadratic functions. With technology, experiment with cases and illustrate an explanation of the effects on the graphs that include cases where <math>f(x)</math> is a linear, quadratic, piecewise linear (to include absolute value) or an exponential function.</b>	p. 111–120 Activity 8: Transformations of Functions  p. 433–450 Activity 30: Graphing Quadratic Functions
Algebra I	F: Functions	LE: Linear, Quadratic, and Exponential Models	A. Construct and compare linear, quadratic, and exponential models and solve problems.	1. Distinguish between situations that can be modeled with linear functions and with exponential functions. a. Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals.	1. Distinguish between situations that can be modeled with linear functions and with exponential functions. a. Prove that linear functions grow by equal differences over equal intervals, and that exponential functions grow by equal factors over equal intervals.	
Algebra I	F: Functions	LE: Linear, Quadratic, and Exponential Models	A. Construct and compare linear, quadratic, and exponential models and solve problems.	1. Distinguish between situations that can be modeled with linear functions and with exponential functions. b. Recognize situations in which one quantity changes at a constant rate per unit interval relative to another.	1. Distinguish between situations that can be modeled with linear functions and with exponential functions. b. Recognize situations in which one quantity changes at a constant rate per unit interval relative to another.	

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Algebra I	F: Functions	LE: Linear, Quadratic, and Exponential Models	A. Construct and compare linear, quadratic, and exponential models and solve problems.	1. Distinguish between situations that can be modeled with linear functions and with exponential functions. c. Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.	1. Distinguish between situations that can be modeled with linear functions and with exponential functions. c. Recognize situations in which a quantity grows or decays by a constant percent rate per unit interval relative to another.	
Algebra I	F: Functions	LE: Linear, Quadratic, and Exponential Models	A. Construct and compare linear, quadratic, and exponential models and solve problems.	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).	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).	
Algebra I	F: Functions	LE: Linear, Quadratic, and Exponential Models	A. Construct and compare linear, quadratic, and exponential models and solve problems.	3. Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function.	3. Observe using graphs and tables that a quantity increasing exponentially eventually exceeds a quantity increasing linearly, quadratically, or (more generally) as a polynomial function.	
Algebra I	F: Functions	LE: Linear, Quadratic, and Exponential Models	B. Interpret expressions for functions in terms of the situation they model.	5. Interpret the parameters in a linear, quadratic, or exponential function in terms of a context.	5. Interpret the parameters in a linear, quadratic, or exponential function in terms of a context.	
Algebra I	S: Statistics and Probability	ID: Interpreting Categorical and Quantitative Data	A. Summarize, represent, and interpret data on a single count or measurement variable.	1. Represent data with plots on the real number line (dot plots, histograms, and box plots).	<b>Delete standard</b>	
Algebra I	S: Statistics and Probability	ID: Interpreting Categorical and Quantitative Data	A. Summarize, represent, and interpret data on a single count or measurement variable.	2. 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.	2. 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.	
Algebra I	S: Statistics and Probability	ID: Interpreting Categorical and Quantitative Data	A. Summarize, represent, and interpret data on a single count or measurement variable.	3. Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).	3. Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).	
Algebra I	S: Statistics and Probability	ID: Interpreting Categorical and Quantitative Data	B. Summarize, represent, and interpret data on two categorical and quantitative variables.	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.	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.	

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Algebra I	S: Statistics and Probability	ID: Interpreting Categorical and Quantitative Data	B. Summarize, represent, and interpret data on two categorical and quantitative variables.	6. Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. 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.	<b>6. Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. 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 and quadratic models.</b>	p. 193–206 Activity 13: Equations From Data  p. 559–594 Activity 38: Correlation
Algebra I	S: Statistics and Probability	ID: Interpreting Categorical and Quantitative Data	B. Summarize, represent, and interpret data on two categorical and quantitative variables.	6. Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. b. Informally assess the fit of a function by plotting and analyzing residuals.	6. Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. b. Informally assess the fit of a function by plotting and analyzing residuals.	
Algebra I	S: Statistics and Probability	ID: Interpreting Categorical and Quantitative Data	B. Summarize, represent, and interpret data on two categorical and quantitative variables.	6. Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. c. Fit a linear function for a scatter plot that suggests a linear association.	6. Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. c. Fit a linear function for a scatter plot that suggests a linear association.	
Algebra I	S: Statistics and Probability	ID: Interpreting Categorical and Quantitative Data	C. Interpret linear models.	7. Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.	7. Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.	
Algebra I	S: Statistics and Probability	ID: Interpreting Categorical and Quantitative Data	C. Interpret linear models.	8. Compute (using technology) and interpret the correlation coefficient of a linear fit.	8. Compute (using technology) and interpret the correlation coefficient of a linear fit.	
Algebra I	S: Statistics and Probability	ID: Interpreting Categorical and Quantitative Data	C. Interpret linear models.	9. Distinguish between correlation and causation.	9. Distinguish between correlation and causation.	

## SpringBoard Geometry Correlations Crosswalk to New Louisiana Standards

Course	Conceptual Category	Domain	Cluster	2015-2016 Louisiana Student Standards	New Louisiana Student Standards	SpringBoard Correlations
Geometry	G: Geometry	CO: Congruence	A. Experiment with transformations in the plane.	1. Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.	1. Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.	
Geometry	G: Geometry	CO: Congruence	A. Experiment with transformations in the plane.	2. Represent transformations in the plane using, e.g., transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch).	<b>2. Represent transformations in the plane using, e.g., transparencies, tracing paper or geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch).</b>	p. 103–126 Activity 9: Translations, Reflections, and Rotations
Geometry	G: Geometry	CO: Congruence	A. Experiment with transformations in the plane.	3. Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself.	3. Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself.	
Geometry	G: Geometry	CO: Congruence	A. Experiment with transformations in the plane.	4. Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments.	4. Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments.	
Geometry	G: Geometry	CO: Congruence	A. Experiment with transformations in the plane.	5. Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another.	5. Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another.	
Geometry	G: Geometry	CO: Congruence	B. Understand congruence in terms of rigid motions.	6. Use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent.	6. Use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent.	
Geometry	G: Geometry	CO: Congruence	B. Understand congruence in terms of rigid motions.	7. Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent.	7. Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent.	
Geometry	G: Geometry	CO: Congruence	B. Understand congruence in terms of rigid motions.	8. Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.	8. Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.	
Geometry	G: Geometry	CO: Congruence	C. Prove geometric theorems.	9. Prove theorems about lines and angles. Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints.	<b>9. Prove and apply theorems about lines and angles. Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints.</b>	p. 63–72 Activity 6: Proofs about Line Segments and Angles  p. 73–88 Activity 7: Parallel and Perpendicular Lines
Geometry	G: Geometry	CO: Congruence	C. Prove geometric theorems.	10. Prove theorems about triangles. Theorems include: measures of interior angles of a triangle sum to 180°; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point.	<b>10. Prove and apply theorems about triangles. Theorems include: measures of interior angles of a triangle sum to 180°; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point.</b>	p. 181–190 Activity 13: Properties of Triangles  p. 191–202 Activity 14: Concurrent Segments in Triangles

SpringBoard Geometry Correlations Crosswalk

Course	Conceptual Category	Domain	Cluster	2015-2016 Louisiana Student Standards	New Louisiana Student Standards	SpringBoard Correlations
Geometry	G: Geometry	CO: Congruence	C. Prove geometric theorems.	11. Prove theorems about parallelograms. Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals.	<b>11. Prove and apply theorems about parallelograms. Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals.</b>	p. 205–222 Activity 15: Quadrilaterals and Their Properties  p. 223–236 Activity 16: More About Quadrilaterals
Geometry	G: Geometry	CO: Congruence	D. Make geometric constructions.	12. Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.). Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line	<b>12. Make formal geometric constructions with a variety of tools and methods e.g. compass and straightedge, string, reflective devices, paper folding or dynamic geometric software. Examples: Copying a segment; copying an angle; bisecting a segment; bisecting an angle; constructing perpendicular lines, including the perpendicular bisector of a line segment; and constructing a line parallel to a given line through a point not on the line.</b>	p. 411–428 Activity 29: Constructions
Geometry	G: Geometry	CO: Congruence	D. Make geometric constructions.	13. Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle.	13. Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle.	
Geometry	G: Geometry	SRT: Similarity, Right Triangles, and Trigonometry	A. Understand similarity in terms of similarity transformations.	1. Verify experimentally the properties of dilations given by a center and a scale factor: a. A dilation takes a line not passing through the center of the dilation to a parallel line, and leaves a line passing through the center unchanged.	1. Verify experimentally the properties of dilations given by a center and a scale factor: a. A dilation takes a line not passing through the center of the dilation to a parallel line, and leaves a line passing through the center unchanged.	
Geometry	G: Geometry	SRT: Similarity, Right Triangles, and Trigonometry	A. Understand similarity in terms of similarity transformations.	1. Verify experimentally the properties of dilations given by a center and a scale factor: b. The dilation of a line segment is longer or shorter in the ratio given by the scale factor.	1. Verify experimentally the properties of dilations given by a center and a scale factor: b. The dilation of a line segment is longer or shorter in the ratio given by the scale factor.	
Geometry	G: Geometry	SRT: Similarity, Right Triangles, and Trigonometry	A. Understand similarity in terms of similarity transformations.	2. Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides.	2. Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides.	
Geometry	G: Geometry	SRT: Similarity, Right Triangles, and Trigonometry	A. Understand similarity in terms of similarity transformations.	3. Use the properties of similarity transformations to establish the AA criterion for two triangles to be similar.	3. Use the properties of similarity transformations to establish the AA criterion for two triangles to be similar.	
Geometry	G: Geometry	SRT: Similarity, Right Triangles, and Trigonometry	B. Prove theorems involving similarity.	4. Prove theorems about triangles. Theorems include: a line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean Theorem proved using triangle similarity.	<b>4. Prove and apply theorems about triangles. Theorems include: a line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean Theorem proved using triangle similarity; SAS similarity criteria; SSS similarity criteria; ASA similarity.</b>	p. 257–272 Activity 18: Similar Triangles  p. 283–290 Activity 20: The Pythagorean Theorem and Its Converse
Geometry	G: Geometry	SRT: Similarity, Right Triangles, and Trigonometry	B. Prove theorems involving similarity.	5. Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.	5. Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.	
Geometry	G: Geometry	SRT: Similarity, Right Triangles, and Trigonometry	C. Define trigonometric ratios and solve problems involving right triangles.	6. Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles.	<b>6. Understand that by similarity, side ratios in right triangles, including special right triangles (30-60-90 and 45-45-90), are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles.</b>	p. 291–300 Activity 21: Special Right Triangles  p. 303–318 Activity 22: Basic Trigonometric Relationships

SpringBoard Geometry Correlations Crosswalk

Course	Conceptual Category	Domain	Cluster	2015-2016 Louisiana Student Standards	New Louisiana Student Standards	SpringBoard Correlations
Geometry	G: Geometry	SRT: Similarity, Right Triangles, and Trigonometry	C. Define trigonometric ratios and solve problems involving right triangles.	7. Explain and use the relationship between the sine and cosine of complementary angles.	7. Explain and use the relationship between the sine and cosine of complementary angles.	
Geometry	G: Geometry	SRT: Similarity, Right Triangles, and Trigonometry	C. Define trigonometric ratios and solve problems involving right triangles.	8. Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.	8. Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.	
Geometry	G: Geometry	C: Circles	A. Understand and apply theorems about circles.	1. Prove that all circles are similar.	1. Prove that all circles are similar.	
Geometry	G: Geometry	C: Circles	A. Understand and apply theorems about circles.	2. Identify and describe relationships among inscribed angles, radii, and chords. Include the relationship between central, inscribed, and circumscribed angles; inscribed angles on a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle.	<b>2. Identify and describe relationships among inscribed angles, radii, and chords, including the following: the relationship that exists between central, inscribed, and circumscribed angles; inscribed angles on a diameter are right angles; and a radius of a circle is perpendicular to the tangent where the radius intersects the circle.</b>	p. 335–348 Activity 24: Tangents and Chords  p. 349–370 Activity 25: Arcs and Angles
Geometry	G: Geometry	C: Circles	A. Understand and apply theorems about circles.	3. Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle.	3. Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle.	
Geometry	G: Geometry	C: Circles	B. Find arc lengths and areas of sectors of circles.	5. Derive using similarity the fact that the length of the arc intercepted by an angle is proportional to the radius, and define the radian measure of the angle as the constant of proportionality; derive the formula for the area of a sector.	<b>5. Use similarity to determine that the length of the arc intercepted by an angle is proportional to the radius, and define the radian measure of the angle as the constant of proportionality; derive the formula for the area of a sector.</b>	p. 467–476 Activity 32: Length and Area of Circles
Geometry	G: Geometry	GPE: Expressing Geometric Properties with Equations	B. Find arc lengths and areas of sectors of circles.	1. Derive the equation of a circle of given center and radius using the Pythagorean Theorem; complete the square to find the center and radius of a circle given by an equation.	1. Derive the equation of a circle of given center and radius using the Pythagorean Theorem; complete the square to find the center and radius of a circle given by an equation.	
Geometry	G: Geometry	GPE: Expressing Geometric Properties with Equations	B. Use coordinates to prove simple geometric theorems algebraically.	4. Use coordinates to prove simple geometric theorems algebraically. For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point $(1, \sqrt{3})$ lies on the circle centered at the origin and containing the point $(0, 2)$ .	4. Use coordinates to prove simple geometric theorems algebraically. For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point $(1, \sqrt{3})$ lies on the circle centered at the origin and containing the point $(0, 2)$ .	
Geometry	G: Geometry	GPE: Expressing Geometric Properties with Equations	B. Use coordinates to prove simple geometric theorems algebraically.	5. Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point).	5. Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point).	
Geometry	G: Geometry	GPE: Expressing Geometric Properties with Equations	B. Use coordinates to prove simple geometric theorems algebraically.	6. Find the point on a directed line segment between two given points that partitions the segment in a given ratio.	6. Find the point on a directed line segment between two given points that partitions the segment in a given ratio.	
Geometry	G: Geometry	GPE: Expressing Geometric Properties with Equations	B. Use coordinates to prove simple geometric theorems algebraically.	7. Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula.	7. Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula.	
Geometry	G: Geometry	GMD: Geometric Measurement and Dimension	A. Explain volume formulas and use them to solve problems.	1. Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone. Use dissection arguments, Cavalieri's principle, and informal limit arguments.	<b>1. Give an informal argument, e.g., dissection arguments, Cavalieri's principle, or informal limit arguments, for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone.</b>	p. 463–466 Activity 32: Length and Area of Circles  p. 500–504 Activity 34: Prisms and Cylinders  p. 513–517 Activity 35: Pyramids and Cones

SpringBoard Geometry Correlations Crosswalk

Course	Conceptual Category	Domain	Cluster	2015-2016 Louisiana Student Standards	New Louisiana Student Standards	SpringBoard Correlations
Geometry	G: Geometry	GMD: Geometric Measurement and Dimension	A. Explain volume formulas and use them to solve problems.	3. Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.	3. Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.	
Geometry	G: Geometry	GMD: Geometric Measurement and Dimension	B. Visualize relationships between two-dimensional and three-dimensional	4. Identify the shapes of two-dimensional cross-sections of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects.	4. Identify the shapes of two-dimensional cross-sections of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects.	
Geometry	G: Geometry	MG: Modeling with Geometry	A. Apply geometric concepts in modeling situations.	1. Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).	1. Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).	
Geometry	G: Geometry	MG: Modeling with Geometry	A. Apply geometric concepts in modeling situations.	2. Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot).	2. Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot).	
Geometry	G: Geometry	MG: Modeling with Geometry	A. Apply geometric concepts in modeling situations.	3. Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios).	3. Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios).	
Algebra II	SP: Statistics and Probability	CP: Conditional Probability and the Rules of Probability	A. Understand independence and conditional probability and use them to interpret data.	1. 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”).	<b>1. 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”).</b>	p. 553–566 Activity 38: Sample Space
Algebra II	SP: Statistics and Probability	CP: Conditional Probability and the Rules of Probability	A. Understand independence and conditional probability and use them to interpret data.	2. 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.	<b>2. 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.</b>	p. 613–632 Activity 42: Independent Events
Algebra II	SP: Statistics and Probability	CP: Conditional Probability and the Rules of Probability	A. Understand independence and conditional probability and use them to interpret data.	3. Understand the conditional probability of A given B as $P(A \text{ and } B)/P(B)$ , and interpret independence of A and B as saying that the conditional probability of A given B is the same as the probability of A, and the conditional probability of B given A is the same as the probability of B.	<b>3. Understand the conditional probability of A given B as <math>P(A \text{ and } B)/P(B)</math>, and interpret independence of A and B as saying that the conditional probability of A given B is the same as the probability of A, and the conditional probability of B given A is the same as the probability of B.</b>	p. 595–612 Activity 41: Dependent Events
Algebra II	SP: Statistics and Probability	CP: Conditional Probability and the Rules of Probability	A. Understand independence and conditional probability and use them to interpret data.	4. Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities. For example, collect data from a random sample of students in your school on their favorite subject among math, science, and English. Estimate the probability that a randomly selected student from your school will favor science given that the student is in tenth grade. Do the same for other subjects and compare the results.	<b>4. Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities. For example, collect data from a random sample of students in your school on their favorite subject among math, science, and English. Estimate the probability that a randomly selected student from your school will favor science given that the student is in tenth grade. Do the same for other subjects and compare the results.</b>	p. 553–566 Activity 38: Sample Space
Algebra II	SP: Statistics and Probability	CP: Conditional Probability and the Rules of Probability	A. Understand independence and conditional probability and use them to interpret data.	5. Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. For example, compare the chance of having lung cancer if you are a smoker with the chance of being a smoker if you have lung cancer.	<b>5. Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. For example, compare the chance of having lung cancer if you are a smoker with the chance of being a smoker if you have lung cancer.</b>	p. 595–612 Activity 41: Dependent Events
Algebra II	SP: Statistics and Probability	CP: Conditional Probability and the Rules of Probability	B. Use the rules of probability to compute probabilities of compound events in a uniform probability model.	6. Find the conditional probability of A given B as the fraction of B's outcomes that also belong to A, and interpret the answer in terms of the model.	<b>6. Find the conditional probability of A given B as the fraction of B's outcomes that also belong to A, and interpret the answer in terms of the model.</b>	p. 595–612 Activity 41: Dependent Events

SpringBoard Geometry Correlations Crosswalk

Course	Conceptual Category	Domain	Cluster	2015-2016 Louisiana Student Standards	New Louisiana Student Standards	SpringBoard Correlations
Algebra II	SP: Statistics and Probability	CP: Conditional Probability and the Rules of Probability	B. Use the rules of probability to compute probabilities of compound events in a uniform probability	7. Apply the Addition Rule, $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$ , and interpret the answer in terms of the model	<b>7. Apply the Addition Rule, <math>P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)</math>, and interpret the answer in terms of the model</b>	p. 581–594 Activity 40: Addition Rule and Mutually Exclusive Events

## SpringBoard Algebra 2 Correlations Crosswalk to New Louisiana Standards

Course	Conceptual Category	Domain	Cluster	2015-2016 Louisiana Student Standards	New Louisiana Student Standards	SpringBoard Correlations
Algebra II	N: Number and Quantity	RN: The Real Number System	A. Extend the properties of exponents to rational exponents.	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. For example, we define $5^{1/3}$ to be the cube root of 5 because we want $(5^{1/3})^3 = 5^{1/3 \times 3}$ to hold, so $(5^{1/3})^3$ must equal 5.	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. For example, we define $5^{1/3}$ to be the cube root of 5 because we want $(5^{1/3})^3 = 5^{1/3 \times 3}$ to hold, so $(5^{1/3})^3$ must equal 5.	
Algebra II	N: Number and Quantity	RN: The Real Number System	A. Extend the properties of exponents to rational	2. Rewrite expressions involving radicals and rational exponents using the properties of exponents.	2. Rewrite expressions involving radicals and rational exponents using the properties of exponents.	
Algebra II	N: Number and Quantity	A: Quantities	A. Reason quantitatively and use units to solve problems.	2. Define appropriate quantities for the purpose of descriptive modeling.	2. Define appropriate quantities for the purpose of descriptive modeling.	
Algebra II	N: Number and Quantity	CN: The Complex Number System	A. Perform arithmetic operations with complex numbers.	1. Know there is a complex number $i$ such that $i^2 = -1$ , and every complex number has the form $a + bi$ with $a$ and $b$ real.	1. Know there is a complex number $i$ such that $i^2 = -1$ , and every complex number has the form $a + bi$ with $a$ and $b$ real.	
Algebra II	N: Number and Quantity	CN: The Complex Number System	A. Perform arithmetic operations with complex numbers.	2. Use the relation $i^2 = -1$ and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers.	2. Use the relation $i^2 = -1$ and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers.	
Algebra II	N: Number and Quantity	CN: The Complex Number System	C. Use complex numbers in polynomial identities and equations.	7. Solve quadratic equations with real coefficients that have complex solutions.	7. Solve quadratic equations with real coefficients that have complex solutions.	
Algebra II	A: Algebra	SSE: Seeing Structure in Expressions	A. Interpret the structure of expressions.	2. Use the structure of an expression to identify ways to rewrite it. For example, see $x^4 - y^4$ as $(x^2)^2 - (y^2)^2$ , thus recognizing it as a difference of squares that can be factored as $(x^2 - y^2)(x^2 + y^2)$ .	2. Use the structure of an expression to identify ways to rewrite it. For example, see $x^4 - y^4$ as $(x^2)^2 - (y^2)^2$ , thus recognizing it as a difference of squares that can be factored as $(x^2 - y^2)(x^2 + y^2)$ .	
Algebra II	A: Algebra	SSE: Seeing Structure in Expressions	B. Write expressions in equivalent forms to solve problems.	3. Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. c. Use the properties of exponents to transform expressions for exponential functions. For example the expression $1.15^t$ can be rewritten as $(1.15^{1/12})^{12t} \approx 1.012^{12t}$ to reveal the approximate equivalent monthly interest rate if the annual rate is 15%.	3. Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression. c. Use the properties of exponents to transform expressions for exponential functions. For example the expression $1.15^t$ can be rewritten as $(1.15^{1/12})^{12t} \approx 1.012^{12t}$ to reveal the approximate equivalent monthly interest rate if the annual rate is 15%.	
Algebra II	A: Algebra	SSE: Seeing Structure in Expressions	B. Write expressions in equivalent forms to solve problems.	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. For example, calculate mortgage payments.	<b>4. Apply the formula for the sum of a finite geometric series (when the common ratio is not 1) to solve problems. For example, calculate mortgage payments.</b>	p. 312–320 Activity 20: Geometric Sequences and Series
Algebra II	A: Algebra	APR: Arithmetic with Polynomials and Rational Expressions	B. Understand the relationship between zeros and factors of polynomials.	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 $p(x)$ .	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 $p(x)$ .	

SpringBoard Algebra 2 Correlations Crosswalk

Course	Conceptual Category	Domain	Cluster	2015-2016 Louisiana Student Standards	New Louisiana Student Standards	SpringBoard Correlations
Algebra II	A: Algebra	APR: Arithmetic with Polynomials and Rational Expressions	B. Understand the relationship between zeros and factors of polynomials.	3. Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial.	3. Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial.	
Algebra II	A: Algebra	APR: Arithmetic with Polynomials and Rational Expressions	C. Use polynomial identities to solve problems.	4. Prove polynomial identities and use them to describe numerical relationships. For example, the polynomial identity $(x^2 + y^2)^2 = (x^2 - y^2)^2 + (2xy)^2$ can be used to generate Pythagorean triples.	<b>4. Use polynomial identities to describe numerical relationships. For example, the polynomial identity <math>(x^2 + y^2)^2 = (x^2 - y^2)^2 + (2xy)^2</math> can be used to generate Pythagorean triples.</b>	p. 248–252 Activity 15: Polynomial Operations
Algebra II	A: Algebra	APR: Arithmetic with Polynomials and Rational Expressions	D. Rewrite rational expressions.	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, long division, or, for the more complicated examples, a computer algebra system.	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, long division, or, for the more complicated examples, a computer algebra system.	
Algebra II	A: Algebra	CED: Creating Equations	A. Create equations that describe numbers or relationships.	1. 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.	1. 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.	
Algebra II	A: Algebra	REI: Reasoning with Equations and Inequalities	A. Understand solving equations as a process of reasoning and explain the reasoning.	1. 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.	<b>1. Explain each step in solving an 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.</b>	p. 3–6 Activity 1: Creating Equations and Getting Ready Practice titled "Solving Linear and Literal Equations"
Algebra II	A: Algebra	REI: Reasoning with Equations and Inequalities	A. Understand solving equations as a process of reasoning and explain the reasoning.	2. Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise.	2. Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise.	
Algebra II	A: Algebra	REI: Reasoning with Equations and Inequalities	B. Solve equations and inequalities in one variable.	4. Solve quadratic equations in one variable. b. Solve quadratic equations by inspection (e.g., for $x^2 = 49$ ), taking square roots, completing the square, 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 $a \pm bi$ for real numbers $a$ and $b$ .	4. Solve quadratic equations in one variable. b. Solve quadratic equations by inspection (e.g., for $x^2 = 49$ ), taking square roots, completing the square, 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 $a \pm bi$ for real numbers $a$ and $b$ .	
Algebra II	A: Algebra	REI: Reasoning with Equations and Inequalities	C. Solve systems of equations.	6. Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.	<b>6. Solve systems of linear equations exactly and approximately (e.g., with graphs), limited to systems of at most three equations and three variables. With graphic solutions, systems are limited to two variables.</b>	p. 29–40 Activity 3: Systems of Linear Equations
Algebra II	A: Algebra	REI: Reasoning with Equations and Inequalities	C. Solve systems of equations.	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 $x^2 + y^2 = 3$ .	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 $x^2 + y^2 = 3$ .	

## SpringBoard Algebra 2 Correlations Crosswalk

Course	Conceptual Category	Domain	Cluster	2015-2016 Louisiana Student Standards	New Louisiana Student Standards	SpringBoard Correlations
Algebra II	A: Algebra	REI: Reasoning with Equations and Inequalities	D. Represent and solve equations and inequalities graphically.	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., 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.	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., 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.	
Algebra II	F: Functions	IF: Interpreting Functions	A. Understand the concept of a function and use function notation.	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 $n \geq 1$ .	<del>Delete standard</del>	
Algebra II	F: Functions	IF: Interpreting Functions	B. Interpret functions that arise in applications in terms of the context.	4. 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.	4. 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.	
Algebra II	F: Functions	IF: Interpreting Functions	B. Interpret functions that arise in applications in terms of the context.	6. 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.	6. 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.	
Algebra I	F: Functions	IF: Interpreting Functions	C. Analyze functions using different representations.	7. Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. b. Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions.	<b>7. Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. b. Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions.</b>	p. 57–72 Activity 4: Piecewise-Defined Functions  p. 193–210 Activity 12: Graphing Quadratics and Quadratic Inequalities  p. 387–400 Activity 25: Square Root and Cube Root Functions
Algebra II	F: Functions	IF: Interpreting Functions	C. Analyze functions using different representations.	7. Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. c. Graph polynomial functions, identifying zeros when suitable factorizations are available, and showing end behavior.	7. Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. c. Graph polynomial functions, identifying zeros when suitable factorizations are available, and showing end behavior.	

SpringBoard Algebra 2 Correlations Crosswalk

Course	Conceptual Category	Domain	Cluster	2015-2016 Louisiana Student Standards	New Louisiana Student Standards	SpringBoard Correlations
Algebra II	F: Functions	IF: Interpreting Functions	C. Analyze functions using different representations.	7. Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. e. Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude.	7. Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. e. Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude.	
Algebra II	F: Functions	IF: Interpreting Functions	C. Analyze functions using different representations.	8. Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. b. Use the properties of exponents to interpret expressions for exponential functions. 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.	8. Write a function defined by an expression in different but equivalent forms to reveal and explain different properties of the function. b. Use the properties of exponents to interpret expressions for exponential functions. 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.	
Algebra II	F: Functions	IF: Interpreting Functions	C. Analyze functions using different representations.	9. Compare properties of two functions 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.	<b>9. Compare properties of two functions 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, determine which has the larger maximum.</b>	p. 29–41 Activity 3: Systems of Linear Equations  p. 211–222 Activity 13: Systems of Linear and Nonlinear Equations  p. 241–244 Activity 15: Adding and Subtracting Polynomials  p. 287–288 Activity 18: Comparing Polynomial Functions
Algebra II	F: Functions	BF: Building Functions	A. Build a function that models a relationship between two quantities.	1. Write a function that describes a relationship between two quantities. a. Determine an explicit expression, a recursive process, or steps for calculation from a context.	1. Write a function that describes a relationship between two quantities. a. Determine an explicit expression, a recursive process, or steps for calculation from a context.	
Algebra II	F: Functions	BF: Building Functions	A. Build a function that models a relationship between two quantities.	1. Write a function that describes a relationship between two quantities. b. Combine standard function types using arithmetic operations. For 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.	1. Write a function that describes a relationship between two quantities. b. Combine standard function types using arithmetic operations. For 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.	
Algebra II	F: Functions	BF: Building Functions	A. Build a function that models a relationship between two quantities.	2. Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms.	2. Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms.	

SpringBoard Algebra 2 Correlations Crosswalk

Course	Conceptual Category	Domain	Cluster	2015-2016 Louisiana Student Standards	New Louisiana Student Standards	SpringBoard Correlations
Algebra II	F: Functions	BF: Building Functions	B. Build new functions from existing functions.	3. 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.	3. 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.	
Algebra II	F: Functions	BF: Building Functions	B. Build new functions from existing functions.	4. Find inverse functions. 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. For example, $f(x) = 2x^3$ or $f(x) = (x+1)/(x-1)$ for $x \neq 1$ .	4. Find inverse functions. 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. For example, $f(x) = 2x^3$ or $f(x) = (x+1)/(x-1)$ for $x \neq 1$ .	
Algebra II	F: Functions	LE: Linear, Quadratic, and Exponential Models	A. Construct and compare linear, quadratic, and exponential models and solve problems.	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).	<b>2. Given a graph, a description of a relationship, or two input-output pairs (include reading these from a table) construct linear and exponential functions, including arithmetic and geometric sequences, to solve multi-step problems.</b>	p. 295–298 Activity 19: Arithmetic Sequences and Series  p. 307–312 Activity 20: Geometric Sequences
Algebra II	F: Functions	LE: Linear, Quadratic, and Exponential Models	A. Construct and compare linear, quadratic, and exponential models and solve problems.	4. For exponential models, express as a logarithm the solution to $a b^{(ct)} = d$ where $a$ , $c$ , and $d$ are numbers and the base $b$ is 2, 10, or $e$ ; evaluate the logarithm using technology.	4. For exponential models, express as a logarithm the solution to $a b^{(ct)} = d$ where $a$ , $c$ , and $d$ are numbers and the base $b$ is 2, 10, or $e$ ; evaluate the logarithm using technology.	
Algebra II	F: Functions	LE: Linear, Quadratic, and Exponential Models	B. Interpret expressions for functions in terms of the situation they model.	5. Interpret the parameters in a linear, quadratic, or exponential function in terms of a context.	5. Interpret the parameters in a linear, quadratic, or exponential function in terms of a context.	
Algebra II	F: Functions	TF: Trigonometric Functions	A. Extend the domain of trigonometric functions using the unit circle.	1. Understand radian measure of an angle as the length of the arc on the unit circle subtended by the angle.	1. Understand radian measure of an angle as the length of the arc on the unit circle subtended by the angle.	
Algebra II	F: Functions	TF: Trigonometric Functions	A. Extend the domain of trigonometric functions using the unit circle.	2. 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.	2. 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.	
Algebra II	F: Functions	TF: Trigonometric Functions	B. Model periodic phenomena with trigonometric functions.	5. Choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline.	5. Choose trigonometric functions to model periodic phenomena with specified amplitude, frequency, and midline.	
Algebra II	F: Functions	TF: Trigonometric Functions	C. Prove and apply trigonometric identities.	8. Prove the Pythagorean identity $\sin^2(\theta) + \cos^2(\theta) = 1$ and use it find $\sin(\theta)$ , $\cos(\theta)$ , or $\tan(\theta)$ given $\sin(\theta)$ , $\cos(\theta)$ , or $\tan(\theta)$ and the quadrant.	8. Prove the Pythagorean identity $\sin^2(\theta) + \cos^2(\theta) = 1$ and use it find $\sin(\theta)$ , $\cos(\theta)$ , or $\tan(\theta)$ given $\sin(\theta)$ , $\cos(\theta)$ , or $\tan(\theta)$ and the quadrant.	
Algebra II	G: Geometry	GPE: Expressing Geometric Properties with Equations	A. Translate between the geometric description and the equation for a conic section.	2. Derive the equation of a parabola given a focus and directrix.	<b>Delete standard</b>	

SpringBoard Algebra 2 Correlations Crosswalk

Course	Conceptual Category	Domain	Cluster	2015-2016 Louisiana Student Standards	New Louisiana Student Standards	SpringBoard Correlations
Algebra II	SP: Statistics and Probability	ID: Interpreting Categorical and Quantitative Data	A. Summarize, represent, and interpret data on a single count or measurement variable.	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.	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.	
Algebra II	SP: Statistics and Probability	ID: Interpreting Categorical and Quantitative Data	B. Summarize, represent, and interpret data on two categorical and quantitative variables.	6. Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. 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.	<b>6. Represent data on two quantitative variables on a scatter plot, and describe how the variables are related. 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 exponential models.</b>	Algebra 2, Activity 26; Getting Ready Practice titled "Finding Association in Bivariate Data"; Algebra 2 Activity 21, Exponential Functions and Graphs; Building foundations for this standard is covered in Algebra 1 p. 193–206 Activity 13: Equations From Data
Algebra II	SP: Statistics and Probability	IC: Making Inferences and Justifying Conclusions	A. Understand and evaluate random processes underlying statistical experiments.	1. Understand statistics as a process for making inferences to be made about population parameters based on a random sample from that population.	1. Understand statistics as a process for making inferences to be made about population parameters based on a random sample from that population.	
Algebra II	SP: Statistics and Probability	IC: Making Inferences and Justifying Conclusions	A. Understand and evaluate random processes underlying statistical experiments.	2. Decide if a specified model is consistent with results from a given data-generating process, e.g., using simulation. For 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?	2. Decide if a specified model is consistent with results from a given data-generating process, e.g., using simulation. For 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?	
Algebra II	SP: Statistics and Probability	IC: Making Inferences and Justifying Conclusions	B. Make inferences and justify conclusions from sample surveys, experiments, and observational studies.	3. Recognize the purposes of and differences among sample surveys, experiments, and observational studies; explain how randomization relates to each.	3. Recognize the purposes of and differences among sample surveys, experiments, and observational studies; explain how randomization relates to each.	
Algebra II	SP: Statistics and Probability	IC: Making Inferences and Justifying Conclusions	B. Make inferences and justify conclusions from sample surveys, experiments, and observational studies.	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.	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.	
Algebra II	SP: Statistics and Probability	IC: Making Inferences and Justifying Conclusions	B. Make inferences and justify conclusions from sample surveys, experiments, and observational studies.	5. Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant.	5. Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant.	
Algebra II	SP: Statistics and Probability	IC: Making Inferences and Justifying Conclusions	B. Make inferences and justify conclusions from sample surveys, experiments, and observational studies.	6. Evaluate reports based on data.	6. Evaluate reports based on data.	
Algebra II	SP: Statistics and Probability	CP: Conditional Probability and the Rules of Probability	A. Understand independence and conditional probability and use them to interpret	1. 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").	<b>Move to Geometry</b>	See SpringBoard Geometry Correlation Crosswalk

SpringBoard Algebra 2 Correlations Crosswalk

Course	Conceptual Category	Domain	Cluster	2015-2016 Louisiana Student Standards	New Louisiana Student Standards	SpringBoard Correlations
Algebra II	SP: Statistics and Probability	CP: Conditional Probability and the Rules of Probability	A. Understand independence and conditional probability and use them to interpret data.	2. 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.	<i>Move to Geometry</i>	See SpringBoard Geometry Correlation Crosswalk
Algebra II	SP: Statistics and Probability	CP: Conditional Probability and the Rules of Probability	A. Understand independence and conditional probability and use them to interpret data.	3. Understand the conditional probability of A given B as $P(A \text{ and } B)/P(B)$ , and interpret independence of A and B as saying that the conditional probability of A given B is the same as the probability of A, and the conditional probability of B given A is the same as the probability of B.	<i>Move to Geometry</i>	See SpringBoard Geometry Correlation Crosswalk
Algebra II	SP: Statistics and Probability	CP: Conditional Probability and the Rules of Probability	A. Understand independence and conditional probability and use them to interpret data.	4. Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities. For example, collect data from a random sample of students in your school on their favorite subject among math, science, and English. Estimate the probability that a randomly selected student from your school will favor science given that the student is in tenth grade. Do the same for other subjects and compare the results.	<i>Move to Geometry</i>	See SpringBoard Geometry Correlation Crosswalk
Algebra II	SP: Statistics and Probability	CP: Conditional Probability and the Rules of Probability	A. Understand independence and conditional probability and use them to interpret data.	5. Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. For example, compare the chance of having lung cancer if you are a smoker with the chance of being a smoker if you have lung cancer.	<i>Move to Geometry</i>	See SpringBoard Geometry Correlation Crosswalk
Algebra II	SP: Statistics and Probability	CP: Conditional Probability and the Rules of Probability	B. Use the rules of probability to compute probabilities of compound events in a uniform probability model.	6. Find the conditional probability of A given B as the fraction of B's outcomes that also belong to A, and interpret the answer in terms of the model.	<i>Move to Geometry</i>	See SpringBoard Geometry Correlation Crosswalk
Algebra II	SP: Statistics and Probability	CP: Conditional Probability and the Rules of Probability	B. Use the rules of probability to compute probabilities of compound events in a uniform probability model.	7. Apply the Addition Rule, $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$ , and interpret the answer in terms of the model	<i>Move to Geometry</i>	See SpringBoard Geometry Correlation Crosswalk