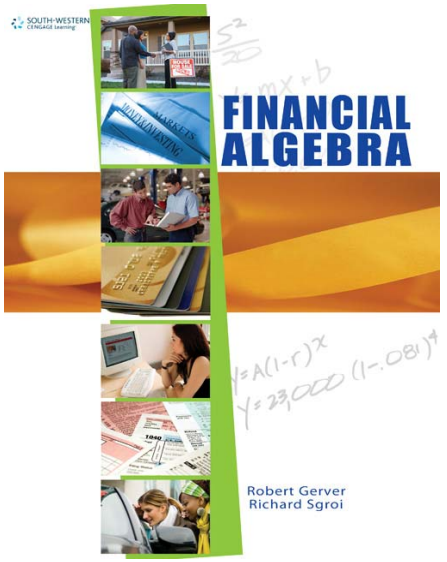

Correlation of

Financial Algebra,
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To

Common Core State Standards
For Mathematics

Financial Algebra by Gerver & Sgroi	**Common Core Standard**
In Financial Algebra, the mathematics necessary for daily living is embedded in content that directly relates to financial decisions adults make in their daily lives. The mathematical formulas, functions, and pictorial representations used in Financial Algebra assist students in making sense of the financial world around them through mathematical modeling and, equip them with the ability to make sound financial decisions based on data.	Mathematics| High School Modeling★ Modeling Standards *Modeling is best interpreted not as a collection of isolated topics but rather in relation to other standards. Making mathematical models is a Standard for Mathematical Practice, and specific modeling standards appear throughout the high school standards indicated by a star symbol* (★).

Financial Algebra Chapter & Section	**Financial Algebra Page Numbers**	**Common Core Standard**
CHAPTER 1		
C1 1-1	Pages 5-9	Algebra - Creating Equations★ A-CED **Creating 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.*
		Algebra - Reasoning with Equations and Inequalities A-REL **Solve equations and inequalities in one variable** 3. Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.
C1 1-2 (continued on next page)	Pages 10-15	Number and Quantity - Quantities★ N-Q **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.
		Number and Quantity - Quantities★ N-Q **Reason quantitatively and use units to solve problems** 2. Define appropriate quantities for the purpose of descriptive modeling.
		Number and Quantity - Quantities★ N-Q **Reason quantitatively and use units to solve problems** 3. Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.

Chapter & Section	Page Numbers	Common Core Standard
C1 1-2 (continued)	Pages 10-15	Algebra - Creating Equations★ A-CED **Creating 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.*
		Algebra - Reasoning with Equations and Inequalities A-REL **Solve equations and inequalities in one variable** 3. Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.
C1 1-3	Pages 16-21	Number and Quantity - Quantities★ N-Q **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.
		Number and Quantity - Quantities★ N-Q **Reason quantitatively and use units to solve problems** 2. Define appropriate quantities for the purpose of descriptive modeling.
C1 1-4	Pages 22-28	Number and Quantity - Quantities★ N-Q **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.
		Number and Quantity - Quantities★ N-Q **Reason quantitatively and use units to solve problems** 2. Define appropriate quantities for the purpose of descriptive modeling.
C1 1-5	Pages 29-24	Number and Quantity - Quantities★ N-Q **Reason quantitatively and use units to solve problems** 2. Define appropriate quantities for the purpose of descriptive modeling
		Algebra - Seeing Structure in Expressions A-SSE **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.
C1 1-6 (continued on next page)	Pages 36-39	Number and Quantity - Quantities★ N-Q **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.
		Algebra - Creating Equations★ A-CED **Creating 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.*

Chapter & Section	Page Numbers	Common Core Standard
C1 1-6 (continued)	Pages 36-39	Algebra - Creating Equations★ A-CED **Creating equations that describe numbers or relationships** 4. Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.
		Algebra - Reasoning with Equations and Inequalities A-REL **Solve equations and inequalities in one variable** 3. Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.
C1 1-7	Pages 40-45	Algebra - Creating Equations★ A-CED **Creating 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.
C1 1-8	Pages 46-50	Algebra - Creating Equations★ A-CED **Creating 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.*
		Algebra - Reasoning with Equations and Inequalities A-REL **Solve equations and inequalities in one variable** 3. Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.
C1 1-9	Pages 51-56	Algebra - Seeing Structure in Expressions A-SSE **Interpret the structure of expressions** 1. Interpret expressions that represent a quantity in terms of its context
CHAPTER 2		
C2 2-1 (continued on next page)	Pages 65-69	Number and Quantity - Quantities★ N-Q **Reason quantitatively and use units to solve problems** 2. Define appropriate quantities for the purpose of descriptive modeling.
		Number and Quantity - Quantities★ N-Q **Reason quantitatively and use units to solve problems** 3. Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.
		Functions - Interpreting Functions F-LF **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.

Chapter & Section	Page Numbers	Common Core Standard
C2 2-1 (continued)	Pages 65-69	Functions - Interpreting Functions F-LF **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.
		Statistics and Probability★ - Interpret Categorical and Quantitative Data S-ID **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.
		Statistics and Probability★ - Interpret categorical and Quantitative Data S-ID **Interpret Linear Models** 9. Distinguish between correlation and causation.
C2 2-2 (continued on next page)	Pages71-74	Number and Quantity - Quantities★ N-Q **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.
		Number and Quantity - Quantities★ N-Q **Reason quantitatively and use units to solve problems** 2. Define appropriate quantities for the purpose of descriptive modeling.
		Number and Quantity - Quantities★ N-Q **Reason quantitatively and use units to solve problems** 3. Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.
		Algebra - Creating Equations★ A-CED **Creating 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.
		Functions - Interpreting Functions F-LF **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 $y = f(x)$.
		Functions - Interpreting Functions F-LF **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.
		Functions - Interpreting Functions F-LF **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.

Chapter & Section	Page Numbers	Common Core Standard
C2 2-2 (continued)	Pages 71-74	Statistics and Probability★ – Interpret Categorical and Quantitative Data S-ID **Summarize, represent, and interpret data on two categorical and quantitative variables** 7c. Fit a linear function for a scatter plot that suggests a linear association.
		Statistics and Probability★ - Interpret categorical and Quantitative Data S-ID **Interpret Linear Models** 8. Compute (using technology) and interpret the correlation coefficient of a linear fit.
C2 2-3 (continued on next page)	Pages 75-79	Algebra - Creating Equations★ A-CED **Creating 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.
		Functions - Interpreting Functions F-LF **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 $y = f(x)$.
		Functions - Interpreting Functions F-LF **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. ★
		Functions - Interpreting Functions F-LF **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.★
		Functions - Interpreting Functions F-LF **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.
		Functions - Interpreting Functions F-LF **Analyze functions using different representations** 7a. Graph linear and quadratic functions and show intercepts, maxima, and minima.
		Functions - Interpreting Functions F-LF **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.
		Statistics and Probability★ – Interpret Categorical and Quantitative Data S-ID **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.

Chapter & Section	Page Numbers	Common Core Standard
C2 2-3	Pages 75-79	Statistics and Probability★-Interpret categorical and Quantitative Data S-ID **Interpret Linear Models** 8. Compute (using technology) and interpret the correlation coefficient of a linear fit.
C2 2-4	Pages 80-85	Algebra - Creating Equations★ A-CED **Creating 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.
		Algebra - Creating Equations★ A-CED **Creating 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 nonviable options in a modeling context.
		Algebra - Reasoning with Equations and Inequalities A-REL **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.
		Algebra - Reasoning with Equations and Inequalities A-REL **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.
		Algebra - Reasoning with Equations and Inequalities A-REL **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.
		Functions - Interpreting Functions F-LF **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.
		Statistics and Probability★- Interpret categorical and Quantitative Data S-ID Interpret Linear Models 8. Compute (using technology) and interpret the correlation coefficient of a linear fit.
C2 2-5 (continued on next page)	Pages 86-90	Number and Quantity - Quantities★ N-Q **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.
		Number and Quantity - Quantities★ N-Q **Reason quantitatively and use units to solve problems** 2. Define appropriate quantities for the purpose of descriptive modeling.
		Number and Quantity - Quantities★ N-Q **Reason quantitatively and use units to solve problems** 3. Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.

Chapter & Section	Page Numbers	Common Core Standard
C2 2-5 (continued)	Pages 86-90	Algebra - Seeing Structure in Expressions A-SSE **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.
		Algebra - Creating Equations★ A-CED **Creating 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.
		Algebra - Creating Equations★ A-CED **Creating 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 nonviable options in a modeling context.
		Algebra - Reasoning with Equations and Inequalities A-REL **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.
		Algebra - Reasoning with Equations and Inequalities A-REL **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).
		Functions- Interpreting Functions F-LF **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.
		Functions - Interpreting Functions F-LF **Analyze functions using different representations** 7a. Graph linear and quadratic functions and show intercepts, maxima, and minima.
		Functions - Interpreting Functions F-LF **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.
C2 2-6 (continued on next page)	Pages 91-96	Algebra - Creating Equations★ A-CED **Creating 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.
		Algebra - Creating Equations★ A-CED **Creating 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 nonviable options in a modeling context.

Chapter & Section	Page Numbers	Common Core Standard
C2 2-6 (continued)	Pages 91-96	Algebra - Reasoning with Equations and Inequalities A-REL **Solve equations and inequalities in one variable** 4. Solve quadratic equations in one variable.
		Algebra - Reasoning with Equations and Inequalities A-REL **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.
		Algebra - Reasoning with Equations and Inequalities A-REL **Solve systems of equations** 7. Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically.
		Algebra - Reasoning with Equations and Inequalities A-REL **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).
		Algebra - Reasoning with Equations and Inequalities A-REL **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.★
		Functions - Interpreting Functions F-LF **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.
		Functions- Interpreting Functions F-LF **Analyze functions using different representations** 7a. Graph linear and quadratic functions and show intercepts, maxima, and minima.
		Functions- Interpreting Functions F-LF **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.

Chapter & Section	Page Numbers	Common Core Standard
C2 2-7 (continued on next page)	Pages 97-102	Number and Quantity - Quantities★ N-Q **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.
		Number and Quantity - Quantities★ N-Q **Reason quantitatively and use units to solve problems** 2. Define appropriate quantities for the purpose of descriptive modeling.
		Number and Quantity - Quantities★ N-Q **Reason quantitatively and use units to solve problems** 3. Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.
		Algebra - Creating Equations★ A-CED **Creating 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.
		Algebra - Creating equations★ A-CED **Creating 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 nonviable options in a modeling context.
		Algebra - Reasoning with Equations and Inequalities A-REL **Solve systems of equations** 7. Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically.
		Algebra - Reasoning with Equations and Inequalities A-REL **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).
		Algebra - Reasoning with Equations and Inequalities A-REL **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.★
		Functions - Interpreting Functions F-LF **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.

Chapter & Section	Page Numbers	Common Core Standard
C2 2-7 (continued)	Pages 97-102	Functions - Interpreting Functions F-LF **Analyze functions using different representations** 7a. Graph linear and quadratic functions and show intercepts, maxima, and minima.
		Functions - Interpreting Functions F-LF **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.
C2 2-8 (continued on next page)	Pages 103-107	Number and Quantity - Quantities★ N-Q **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.
		Number and Quantity - Quantities★ N-Q **Reason quantitatively and use units to solve problems** 2. Define appropriate quantities for the purpose of descriptive modeling.
		Algebra - Creating Equations★ A-CED **Creating 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.
		Algebra - Creating equations★ A-CED **Creating 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 nonviable options in a modeling context.
		Algebra - Reasoning with Equations and Inequalities A-REL **Solve systems of equations** 7. Solve a simple system consisting of a linear equation and a quadratic equation in two variables algebraically and graphically.
		Algebra - Reasoning with Equations and Inequalities A-REL **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).
		Algebra - Reasoning with Equations and Inequalities A-REL **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.★
		Functions - Interpreting Functions F-LF **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.

Chapter & Section	Page Numbers	Common Core Standard
C2 2-8 (continued)	Pages 103-107	Functions - Interpreting Functions F-LF **Analyze functions using different representations** 7a. Graph linear and quadratic functions and show intercepts, maxima, and minima.
		Functions - Interpreting Functions F-LF **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.
		Functions - Interpreting Functions F-LF **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*★
CHAPTER 3		
C3 3-1	Pages 116-122	Algebra - Seeing Structure in Expressions A-SSE **Interpret the structure of expressions** 1. Interpret expressions that represent a quantity in terms of its context★
		Algebra - Seeing Structure in Expressions A-SSE **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.
		Functions - Building Functions F-BF **Build a function that models a relationship between two quantities** 1. Write a function that describes a relationship between two quantities ★
		Functions - Building Functions F-BF **Build a function that models a relationship between two quantities** 1a.. Determine an explicit expression, a recursive process, or steps for calculation from a context.
C3 3-2	Pages 123-130	Algebra - Creating Equations★ A-CED **Creating equations that describe numbers or relationships** 4. Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.
C3 3-3	Pages 131-136	Algebra - Creating equations★ A-CED **Creating equations that describe numbers or relationships** 4. Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.
C3 3-4	Pages 137-142	Algebra - Seeing Structure in Expressions A-SSE **Interpret the structure of expressions** 1. Interpret expressions that represent a quantity in terms of its context

Chapter & Section	Page Numbers	Common Core Standard
C3 3-4	Pages 137-142	Algebra - Seeing Structure in Expressions A-SSE **Interpret the structure of expressions** 1a. Interpret parts of an expression, such as terms, factors, and coefficients
		Algebra - Seeing Structure in Expressions A-SSE **Interpret the structure of expressions** 1b. Interpret complicated expressions by viewing one or more of their parts as a single entity
C3 3-5	Pages 143-149	Algebra - Seeing Structure in Expressions A-SSE **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.
		Algebra - Seeing Structure in Expressions A-SSE **Write expressions in equivalent forms to solve problems** 3c. Use the properties of exponents to transform expressions for exponential functions. *For example the expression 1.15t can be rewritten as (1.151/12)12t ≈ 1.01212t to reveal the approximate equivalent monthly interest rate if the annual rate is 15%.*
		Functions - Interpreting Functions F-LF **Analyze functions using different representations** 8b. Use the properties of exponents to interpret expressions for exponential functions.
C3 3-6	Pages 150-155	Number and Quantity - The Real Number System N-RN E**xtend the properties of exponents to rational numbers** 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.
		Number and Quantity - The Real Number System N-RN E**xtend the properties of exponents to rational numbers** 2. Rewrite expressions involving radicals and rational exponents using the properties of exponents
		Algebra - Seeing Structure in Expressions A-SSE **Interpret the structure of expressions** 1b. Interpret complicated expressions by viewing one or more of their parts as a single entity
		Algebra - Seeing Structure in Expressions A-SSE **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.
C3 3-7	Pages156-160	Functions - Interpreting Functions F-LF **Analyze functions using different representations** 8b. Use the properties of exponents to interpret expressions for exponential functions.

Chapter & Section	Page Numbers	Common Core Standard
C3 3-8	Pages 161-165	Functions - Interpreting Functions F-LF **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.* ★
		Algebra - Seeing Structure in Expressions A-SSE **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.
		Algebra - Creating Equations★ A-CED **Creating equations that describe numbers or relationships** 4. Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.
		Functions- Interpreting Functions F-LF **Analyze functions using different representations** 8b. Use the properties of exponents to interpret expressions for exponential functions.
CHAPTER 4		
C4 4-1	Pages174-180	Algebra - Seeing Structure in Expressions A-SSE **Interpret the structure of expressions** 1. Interpret expressions that represent a quantity in terms of its context★
		Algebra - Seeing Structure in Expressions A-SSE **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.
		Algebra - Creating Equations★ A-CED **Creating 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 nonviable options in a modeling context.
		Functions - Building Functions F-BF **Build a function that models a relationship between two quantities** 1. Write a function that describes a relationship between two quantities ★
		Functions - Building Functions F-BF **Build a function that models a relationship between two quantities** 1a. Determine an explicit expression, a recursive process, or steps for calculation from a context.
C4 4-2 (continued on next page)	Pages181-186	Algebra - Seeing Structure in Expressions A-SSE **Interpret the structure of expressions** 2. Use the structure of an expression to identify ways to rewrite it.
		Algebra - Seeing Structure in Expressions A-SSE **Write expressions in equivalent forms to solve problems** 3c. Use the properties of exponents to transform expressions for exponential functions

Chapter & Section	Page Numbers	Common Core Standard
C4 4-2 (continued)	Pages181-186	Functions - Interpreting Functions F-LF **Analyze functions using different representations** 8b. Use the properties of exponents to interpret expressions for exponential functions.
		Algebra - Seeing Structure in Expressions A-SSE **Interpret the structure of expressions** 1b. Interpret complicated expressions by viewing one or more of their parts as a single entity
		Linear and Exponential Model F-LE **Construct and compare linear and exponential models and solve problems** 5. Interpret the parameters in a linear or exponential function in terms of a context.
C4 4-3	Pages187-192	Statistics and Probability★- Interpret Categorical and Quantitative Data S-ID **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.
		Statistics and Probability★- Interpret Categorical and Quantitative Data S-ID **Summarize, represent, and interpret data on two categorical and quantitative variables** 6a. Fit a function to the data; use functions fitted to data to solve problems in the context of the data.
C4 4-4	Pages 193-199	Number and Quantity - Quantities★ N-Q **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.
		Number and Quantity - Quantities★ N-Q **Reason quantitatively and use units to solve problems** 2. Define appropriate quantities for the purpose of descriptive modeling
		Algebra - Seeing Structure in Expressions A-SSE **Interpret the structure of expressions** 1. Interpret expressions that represent a quantity in terms of its context★
C4 4-5	Pages 200-205	Number and Quantity - Quantities★ N-Q **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.
		Algebra - Structure in Expressions A-SSE **Interpret the structure of expressions** 1. Interpret expressions that represent a quantity in terms of its context★
C4 4-6	Pages 206-210	Number and Quantity - Quantities★ N-Q **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.
		Algebra - Seeing Structure in Expressions A-SSE **Interpret the structure of expressions** 1. Interpret expressions that represent a quantity in terms of its context★

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CHAPTER 5		
C5 5-1	Pages 220-223	Algebra - Creating equations★ A-CED **Creating 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.
		Functions - Interpreting Functions F-LF **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 $y = f(x)$.
		Functions - Interpreting Functions F-LF **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.
		Functions - Interpreting Functions F-LF **Analyze functions using different representations** 7b. Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions.
C5 5-2	Pages 224-230	Statistics and Probability★ - Interpret Categorical and Quantitative Data S-ID **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.
		Statistics and Probability★ - Interpret Categorical and Quantitative Data S-ID **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).
		Statistics and Probability★ - Interpret Categorical and Quantitative Data S-ID **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.
C5 5-3 (continued on next page)	Pages 232-237	Statistics and Probability★ - Interpret Categorical and Quantitative Data S-ID **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).

Chapter & Section	Page Numbers	Common Core Standard
C5 5-3 (continued)	Pages 232-237	Statistics and Probability★ - Interpret Categorical and Quantitative Data S-ID **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.
		Statistics and Probability★- Interpret Categorical and Quantitative Data S-ID **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).
		Statistics and Probability★- Interpret Categorical and Quantitative Data S-ID **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.
C5 5-4	Pages 240-251	Functions - Interpreting Functions F-LF **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.
		Functions - Interpreting Functions F-LF **Analyze functions using different representations** 7a. Graph linear and quadratic functions and show intercepts, maxima, and minima.
		Statistics and Probability★- Interpret categorical and Quantitative Data S-ID **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.
C5 5-5 (continued on next page)	Pages 245-251	Algebra - Creating Equations★ A-CED **Creating 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.
		Algebra - Creating Equations★ A-CED **Creating 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 nonviable options in a modeling context.
		Functions- Interpreting Functions F-LF **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.
		Functions - Interpreting Functions F-LF **Analyze functions using different representations** 7a. Graph linear and quadratic functions and show intercepts, maxima, and minima.

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C5 5-5 (continued)		Functions - Interpreting Functions F-LF **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).
		Functions – Linear, Quadratic, and Exponential Model F-LE **Construct and compare linear 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.
		Functions – Linear, Quadratic, and Exponential Model F-LE **Construct and compare linear and exponential models and solve problems** 5. Interpret the parameters in a linear or exponential function in terms of a context.
C5 5-6 (continued on next page)	Pages 252-258	Algebra - Creating Equations★ A-CED **Creating 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.
		Algebra - Creating Equations★ A-CED **Creating 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 nonviable options in a modeling context.
		Functions - Interpreting Functions F-LF **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.
		Functions -Interpreting Functions F-LF **Analyze functions using different representations** 7e. Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude.
		Functions - Interpreting Functions F-LF **Analyze functions using different representations** 8b. Use the properties of exponents to interpret expressions for exponential functions.
		Functions - Interpreting Functions F-LF **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).
		Functions – Linear, Quadratic, and Exponential Model F-LE **Construct and compare linear 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.

Chapter & Section	Page Numbers	Common Core Standard
C5 5-6 (continued)		Functions – Linear, Quadratic, and Exponential Model F-LE **Construct and compare linear and exponential models and solve problems** 5. Interpret the parameters in a linear or exponential function in terms of a context.
		Statistics and Probability★- Interpret Categorical and Quantitative Data S-ID **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.
		Statistics and Probability★- Interpret Categorical and Quantitative Data S-ID **Summarize, represent, and interpret data on two categorical and quantitative variables** 6a. Fit a function to the data; use functions fitted to data to solve problems in the context of the data.
C5 5-7	Pages 259-267	Algebra - Creating Equations★ A-CED **Creating equations that describe numbers or relationships** 4. Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.
C5 5-8	Pages 268-273	Algebra - Seeing Structure in Expressions A-SSE **Interpret the structure of expressions** 1b. Interpret complicated expressions by viewing one or more of their parts as a single entity
		Algebra -Seeing Structure in Expressions A-SSE **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.
C5 5-9	Pages 274-282	Algebra - Reasoning with Equations and Inequalities A-REL **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.
		Geometry - Circles G-C **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.
		Functions - Interpreting Functions F-LF **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*★

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CHAPTER 6		
C6 6-1	Pages 291-295	Algebra - Creating Equations★ A-CED **Creating 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.
		Functions - Interpreting Functions F-LF **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.
C6 6-2	Page 299	Algebra - Creating Equations★ A-CED **Creating equations that describe numbers or relationships** 4. Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations.
C6 6-3	Pages 303-309	Functions - Interpreting Functions F-LF **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..
C6 6-4	Pages 310-315	Algebra - Creating Equations★ A-CED **Creating 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.*
	Pages 310-315	Algebra - Reasoning with Equations and Inequalities A-REL **Solve equations and inequalities in one variable** 3. Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.
	Pages 310-315	Functions - Building Functions F-BF **Build a function that models a relationship between two quantities** 1. Write a function that describes a relationship between two quantities ★
	Pages 310-315	Functions – Linear, Quadratic, and Exponential Model F-LE **Construct and compare linear and exponential models and solve problems** 1. Distinguish between situations that can be modeled with linear functions and with exponential functions.
C6 6-5	Pages 316-321	Functions - Interpreting Functions F-LF **Analyze functions using different representations** 7b. Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions.
		Functions -Interpreting Functions F-LF **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* ★

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CHAPTER 7		
C7 7-1	Pages 328-334	Algebra - Creating Equations★ A-CED **Creating 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.
C7 7-2	Pages 335-343	Functions - Interpreting Functions F-LF **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 $y = f(x)$.
		Functions - Interpreting Functions F-LF **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.
		Functions - Interpreting Functions F-LF **Analyze functions using different representations** 7b. Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions.
		Functions - Interpreting Functions F-LF **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.
C7 7-3	Pages 344-351	Algebra - Seeing Structure in Expressions A-SSE **Interpret the structure of expressions** 1. Interpret expressions that represent a quantity in terms of its context★
		Functions - Building Functions F-BF **Build a function that models a relationship between two quantities** 1. Write a function that describes a relationship between two quantities ★
C7 7-4	Pages 352-364	Algebra - Seeing Structure in Expressions A-SSE **Interpret the structure of expressions** 1. Interpret expressions that represent a quantity in terms of its context★
		Algebra - Creating Equations★ A-CED **Creating 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 nonviable options in a modeling context.
C7 7-5	Pages 365-376	Algebra - Seeing Structure in Expressions A-SSE **Interpret the structure of expressions** 1. Interpret expressions that represent a quantity in terms of its context★

Chapter & Section	Page Numbers	Common Core Standard
C7 7-5 (continued)	Pages 365-376	Algebra - Creating Equations★ A-CED **Creating 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 nonviable options in a modeling context.
CHAPTER 8		
C8 8-1	Pages 387-392	Algebra - Creating Equations★ A-CED **Creating 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.
		Algebra - Creating Equations★ A-CED **Creating 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 nonviable options in a modeling context.
		Statistics and Probability★- Interpret Categorical and Quantitative Data S-ID **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.
		Statistics and Probability★- Interpret Categorical and Quantitative Data S-ID **Summarize, represent, and interpret data on two categorical and quantitative variables** 6a. Fit a function to the data; use functions fitted to data to solve problems in the context of the data.
		Statistics and Probability★- Interpret Categorical and Quantitative Data S-ID **Summarize, represent, and interpret data on two categorical and quantitative variables** 7c. Fit a linear function for a scatter plot that suggests a linear association.
		Statistics and Probability★- Interpret categorical and Quantitative Data S-ID **Interpret Linear Models** 8. Compute (using technology) and interpret the correlation coefficient of a linear fit.
C8 8-2	Pages 393-400	Geometry - Circles G-C **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.
C8 8-3 (continued on next page)	Pages 401-410	Algebra - Seeing Structure in Expressions A-SSE **Interpret the structure of expressions** 1. Interpret expressions that represent a quantity in terms of its context★
		Algebra - Seeing Structure in Expressions A-SSE **Interpret the structure of 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), 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.

Chapter & Section	Page Numbers	Common Core Standard
C8 8-3 (continued)	Pages 401-410	Algebra - Creating Equations★ A-CED **Creating 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 nonviable options in a modeling context.
		Building Functions F-BF **Build a function that models a relationship between two quantities** 1. Write a function that describes a relationship between two quantities ★
C8 8-4	Pages 411-421	Algebra - Seeing Structure in Expressions A-SSE **Interpret the structure of expressions** 1. Interpret expressions that represent a quantity in terms of its context★
		Functions - Building Functions F-BF **Build a function that models a relationship between two quantities** 1. Write a function that describes a relationship between two quantities ★
C8 8-5	Pages 422-429	Algebra - Seeing Structure in Expressions A-SSE **Interpret the structure of expressions** 1b. Interpret complicated expressions by viewing one or more of their parts as a single entity
		Building Functions F-BF **Build a function that models a relationship between two quantities** 1. Write a function that describes a relationship between two quantities ★
		Functions – Linear, Quadratic, and Exponential Model F-LE **Construct and compare linear and exponential models and solve problems** 1. Distinguish between situations that can be modeled with linear functions and with exponential functions.
CHAPTER 9		
C9 9-1	Pages 439-446	Functions - Interpreting Functions F-LF **Analyze functions using different representations** 8b. Use the properties of exponents to interpret expressions for exponential functions.
C9 9-2	Pages 447-455	Algebra - Seeing Structure in Expressions A-SSE **Interpret the structure of expressions** 1. Interpret expressions that represent a quantity in terms of its context★
		Algebra - Creating Equations★ A-CED **Creating 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 nonviable options in a modeling context.
C9 9-3	Pages 456-466	Functions - Building Functions F-BF **Build a function that models a relationship between two quantities** 1. Write a function that describes a relationship between two quantities ★

Chapter & Section	Page Numbers	Common Core Standard
C9 9-4	Pages 467-471	Statistics and Probability★- Using probability to Make decisions S-MD **Calculate expected values and use them to solve problems** 1. (+) Define a random variable for a quantity of interest by assigning a numerical value to each event in a sample space; graph the corresponding probability distribution using the same graphical displays as for data distributions.
		Statistics and Probability★- Using probability to Make decisions S-MD **Calculate expected values and use them to solve problems** 2. (+) Calculate the expected value of a random variable; interpret it as the mean of the probability distribution.
		Statistics and Probability★- Using probability to Make decisions S-MD **Calculate expected values and use them to solve problems** 4. (+) Develop a probability distribution for a random variable defined for a sample space in which probabilities are assigned empirically; find the expected value.
		Statistics and Probability★- Using probability to Make decisions S-MD **Calculate expected values and use them to solve problems** 5. (+) Weigh the possible outcomes of a decision by assigning probabilities to payoff values and finding expected values.
		Functions- Interpreting Functions F-LF I**nterpret 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★
CHAPTER 10		
C10 10-1	Pages 482-487	Number and Quantity – Quantities★ N-Q **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.
		Number and Quantity - Quantities★ N-Q **Reason quantitatively and use units to solve problems** 2. Define appropriate quantities for the purpose of descriptive modeling
		Algebra - Seeing Structure in Expressions A-SSE **Interpret the structure of expressions** 1. Interpret expressions that represent a quantity in terms of its context★
C10 10-2	Pages 489-495	Functions - Interpreting Functions F-LF **Analyze functions using different representations** 7b. Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions.

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C10 10-3	Pages 496-507	Number and Quantity - The Complex Number System N-CM **Perform Operations on matrices and use matrices in applications.** 6. (+) Use matrices to represent and manipulate data, e.g., to represent payoffs or incidence relationships in a network.
		Algebra - Reasoning with Equations and Inequalities A-REL **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).
		Algebra - Reasoning with Equations and Inequalities A-REL **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).
		Functions - Interpreting Functions F-LF **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* ★
		Functions - Interpreting Functions F-LF **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.★
		Functions - Interpreting Functions F-LF **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.
		Functions - Interpreting Functions F-LF **Analyze functions using different representations** 7a. Graph linear and quadratic functions and show intercepts, maxima, and minima.
C10 10-4	Pages 508-519	Algebra -Seeing Structure in Expressions A-SSE **Interpret the structure of expressions** 1. Interpret expressions that represent a quantity in terms of its context★
		Functions - Building Functions F-BF **Build a function that models a relationship between two quantities** 1. Write a function that describes a relationship between two quantities ★

Chapter & Section	Page Numbers	Common Core Standard
Chapters 1-10	Used throughout the text when constructing algebraic models for real life situations	Algebra - Seeing Structure in Expressions A-SSE I**nterpret the structure of expressions** 1. Interpret expressions that represent a quantity in terms of its context.★
		Algebra - Seeing Structure in Expressions A-SSE **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.*
		Functions - Building Functions F-BF **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. Combine standard function types using arithmetic operations.