

Quarter 1

Chapter 1 – Quadratic Functions and Factoring

AII.4.1 – Simplify expressions using the order of operations, including radicals and absolute value.

AII.4.2 – Identify numbers and relationships among numbers (properties, equations, inequalities, etc.).

AII.5.1 – Use and evaluate expressions involving variables.

AII.5.2 – Write higher orders equations and inequalities from written and oral expression, recognizing equivalent forms.

AII.5.3 – Identify, graph, and interpret various functions (quadratic, inverse, trigonometric, conic, logarithmic, exponential, etc.).

AII.6.1 – Solve systems of equations and inequalities using graphs and algebraic methods.

AII.6.3 – Solve quadratic, exponential, radical, rational, and logarithmic equations.

AII.6.4 – Graph and perform operations involving polynomials and rational expressions.

AII.6.5 – Demonstrate mathematical proficiency using a graphing utility.

Chapter 2 – Polynomials and Polynomial Functions

AII.4.4 – Know how the Fundamental Theorem of Algebra applies to polynomials.

AII.5.1 – Use and evaluate expressions involving variables.

AII.5.2 – Write higher orders equations and inequalities from written and oral expression, recognizing equivalent forms.

AII.6.4 – Graph and perform operations involving polynomials and rational expressions.

AII.6.5 – Demonstrate mathematical proficiency using a graphing utility.

Quarter 2

Chapter 3 – Rational Exponents and Radical Functions

AII.4.1 – Simplify expressions using the order of operations, including radicals and absolute value.

AII.5.1 – Use and evaluate expressions involving variables.

AII.5.2 – Write higher orders equations and inequalities from written and oral expression, recognizing equivalent forms.

AII.5.3 – Identify, graph, and interpret various functions (quadratic, inverse, trigonometric, conic, logarithmic, exponential, etc.).

AII.6.3 – Solve quadratic, exponential, radical, rational, and logarithmic equations.

AII.6.5 – Demonstrate mathematical proficiency using a graphing utility.

Chapter 4 – Exponential and Logarithmic Functions

AII.4.2 – Identify numbers and relationships among numbers (properties, equations, inequalities, etc.).

AII.5.1 – Use and evaluate expressions involving variables.

AII.5.2 – Write higher orders equations and inequalities from written and oral expression, recognizing

equivalent forms.

AII.5.3 – Identify, graph, and interpret various functions (quadratic, inverse, trigonometric, conic, logarithmic, exponential, etc.).

AII.6.3 – Solve quadratic, exponential, radical, rational, and logarithmic equations.

AII.6.5 – Demonstrate mathematical proficiency using a graphing utility.

Quarter 3

Chapter 5 – Rational Functions

AII.5.1 – Use and evaluate expressions involving variables.

AII.5.2 – Write higher orders equations and inequalities from written and oral expression, recognizing equivalent forms.

AII.6.2 – Solve consumer related problems involving linear programming.

AII.6.3 – Solve quadratic, exponential, radical, rational, and logarithmic equations.

AII.6.4 – Graph and perform operations involving polynomials and rational expressions.

AII.6.5 – Demonstrate mathematical proficiency using a graphing utility.

AII.5.3 – Identify, graph, and interpret various functions (quadratic, inverse, trigonometric, conic, logarithmic, exponential, etc.).

AII.7.3 – Judge meaning, utility, and reasonableness of findings in a variety of situations, including those carried out by technology.

Chapter 6 – Data Analysis and Statistics

AII.5.1 – Use and evaluate expressions involving variables.

AII.5.4 – Present data using statistics and probability (linear regressions, counting techniques)

AII.6.5 – Demonstrate mathematical proficiency using a graphing utility.

AII.7.1 – Find and interpret information from graphs, charts, and numerical data.

AII.7.2 – Predict patterns and generalize trends.

Quarter 4

Chapter 7 – Sequences and Series

AII.5.1 – Use and evaluate expressions involving variables.

AII.5.5 – *Understand, interpret, and evaluate sequences and series.*

AII.6.5 – Demonstrate mathematical proficiency using a graphing utility.

AII.7.2 – Predict patterns and generalize trends.

Chapter 8 – Quadratic Relations and Conic Sections

AII.5.1 – Use and evaluate expressions involving variables.

AII.5.3 – *Identify, graph, and interpret various functions (quadratic, inverse, trigonometric, conic, logarithmic, exponential, etc.).*

AII.6.5 – Demonstrate mathematical proficiency using a graphing utility.

Chapter 9 – Trigonometric Ratios and Functions

AII.5.1 – Use and evaluate expressions involving variables.

AII.5.3 – *Identify, graph, and interpret various functions (quadratic, inverse, trigonometric, conic, logarithmic, exponential, etc.).*

Chapter 10 – Trigonometric Graphs, Identities, and Equations

AII.4.3 – Determine trigonometric values using the unit circle and right triangles.

AII.5.1 – Use and evaluate expressions involving variables.

AII.5.3 – Identify, graph, and interpret various functions (quadratic, inverse, trigonometric, conic, logarithmic, exponential, etc.).