Reporting Topic 1			
Foundational Functions			
		1 week (August/Jan.)	**Assessed**
Priority Standard(s)	A2.IF.A.2	Translate between equivalent forms of functions.	
	A2.IF.A.1	Identify and interpret key characteristics of functions represented graphically, with tables and with algebraic symbolism to solve problems.	
Supporting Standard(s)			

Reporting Topic 2			
Factor & Graph Quadratic Functions			
Duration		**2 weeks (Sept./Jan.)**	**Assessed**
Priority Standard(s)	A2.BF.A.3	Describe the effects of transformations algebraically and graphically, creating vertical and horizontal translations, vertical and horizontal reflections and dilations (expansions/compressions) for linear, quadratic, cubic, square and cube root, absolute value, exponential and logarithmic functions.	
Supporting Standard(s)	A2.IF.A.2	Translate between equivalent forms of functions.	
	A2.IF.A.1	Identify and interpret key characteristics of functions represented graphically, with tables and with algebraic symbolism to solve problems.	
	A2.REI.A.1	Create and solve equations and inequalities, including those that involve absolute value.	
	A2.APR.A.1	Extend the knowledge of factoring to include factors with complex coefficients.	
	A1.REI.A.2	Solve problems involving quadratic equations. a) Use the method of completing the square to create an equivalent quadratic equation.	
	A1.SSE.A.3	Choose and produce equivalent forms of a quadratic expression or equations to reveal and explain properties. a. Find the zeros of a quadratic function by rewriting it in factored form. b. Find the maximum or minimum value of a quadratic function by completing the square.	

Reporting Topic 3			
Solving Quadratics & Complex Operations			
Duration		**2 weeks (Sept./Feb.)**	**Assessed**
Priority Standard(s)	A2.FM.A.1	Create functions and use them to solve applications of quadratic and exponential function modeling problems.	
	A2.NQ.B.1	Represent complex numbers.	
Supporting Standard(s)	A2.NQ.B.6	Add, subtract, multiply and divide complex numbers.	
	A2.REI.A.1	Create and solve equations and inequalities, including those that involve absolute value.	
	A2.APR.A.1	Extend the knowledge of factoring to include factors with complex coefficients.	
	A1.REI.A.2	Solve problems involving quadratic equations. a) Use the method of completing the square to create an equivalent quadratic equation. b) Derive the quadratic formula. c) Analyze different methods of solving quadratic equations.	

Reporting Topic 4			
Linear and Quadratic Systems			
Duration		**1.5 weeks (Oct./March)**	**Assessed**
Priority Standard(s)	A2.REI.B.3	Create and solve systems of equations that may include non- linear equations and inequalities.	
Supporting Standard(s)	A1.REI.B.3	Solve a system of linear equations algebraically and/or graphically.	

Reporting Topic 5			
Polynomial Functions			
Duration		**2 weeks (Oct./March)**	**Assessed**
Priority Standard(s)	A2.BF.A.1	Create new functions by applying the four arithmetic operations and composition of functions (modifying the domain and range as necessary).	
	A2.APR.A.2	Understand the Remainder Theorem and use it to solve problems.	
	A2.APR.A.5	Identify zeros of polynomials when suitable factorizations are available, and use the zeros to sketch the function defined by the polynomial.	
	A2.NQ.B.7	Know and apply the Fundamental Theorem of Algebra (a polynomial of nth degree will have exactly n roots, including repeated roots).	
Supporting Standard(s)	A2.APR.A.3	Find the least common multiple of two or more polynomials	
	A2.APR.A.4	Add, subtract, multiply and divide rational expressions.	
	A2.BF.A.3	Describe the effects of transformations algebraically and graphically, creating vertical and horizontal translations, vertical and horizontal reflections and dilations (expansions/compressions) for linear, quadratic, cubic, square and cube root, absolute value, exponential and logarithmic functions.	
	A2.IF.A.1	Identify and interpret key characteristics of functions represented graphically, with tables and with algebraic symbolism to solve problems.	
	A2.IF.A.2	Translate between equivalent forms of functions.	

Reporting Topic 6			
Exponential & Logarithmic Functions			
Duration		**4 weeks (Nov./April)**	**Assessed**
Priority Standard(s)	A2.SSE.A.1	Develop the definition of logarithms based on properties of exponents.	
	A2.SSE.A.2	Use the inverse relationship between exponents and logarithms to solve exponential and logarithmic equations.	
	A2.SSE.A.3	Use properties of logarithms to solve equations or find equivalent expressions.	
	A2.SSE.A.4	Understand why logarithmic scales are used, and use them to solve problems.	
	A2.FM.A.1	Create functions and use them to solve applications of quadratic and exponential function modeling problems.	
Supporting Standard(s)	A2.IF.A.1	Identify and interpret key characteristics of functions represented graphically, with tables and with algebraic symbolism to solve problems.	
	A2.BF.A.3	Describe the effects of transformations algebraically and graphically, creating vertical and horizontal translations, vertical and horizontal reflections and dilations (expansions/compressions) for linear, quadratic, cubic, square and cube root, absolute value, exponential and logarithmic functions.	
	A2.IF.A.2	Translate between equivalent forms of functions.	

Reporting Topic 7			
Matrices			
Duration		**2 week (Dec./May)**	**Assessed**
Priority Standard(s)		Create and solve systems using matrices	
Supporting Standard(s)			