Unit	Objective	CCRS	Q1	Q2	Q3	Textbook
Unit 1: Expressions, Equations, and Inequalities	SWBAT identify and describe patterns	N 401				1-1
	SWBAT evaluate and simplify algebraic expressions using order of operations	A 301				1-3
	SWBAT choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression					1-1
	SWBAT graph and order real numbers	N 703				1-2
	SWBAT identify properties of real numbers	N 703				1-2
	SWBAT explain why sums and products of rational numbers are rational	N 702				1-2
	SWBAT explain why the sum of a rational number and an irrational number is irrational	N 702, N 703				1-2
	SWBAT explain why the product of a nonzero rational number and an irrational number is irrational	N 702, N 703				1-2
	SWBAT interpret parts of an expression, such as terms, factors, and coefficients					1-3
	SWBAT combine like terms using basic operations.	A 402, A303	4, 8			1-3
	SWBAT combine like terms using basic operations.	A 402	15			1-4
	SWBAT solve for a variable in terms of the other variable	AF 502, A402	2, 3, 7, 20, 24, 27, 47			1-4
	SWBAT solve and graph inequalities on a number line	A 504				1-5
	SWBAT write and solve compound inequalities using properties of inequalities (ex. If a < b, then a + c < b + c)	A 504				1-5
	SWBAT interpret absolute value as the distance from zero	A 606, N 701	46			1-6
	SWBAT use absolute value to simplify numerical equations	AF 302	1			1-6
	SWBAT write and solve equations and inequalities involving absolute value					1-6
	Spiraled Objectives					
	SWBAT add, subtract, multiply, and divide rational numbers					
	SWBAT follow order of operations using parentheses and exponents	A 401				
	SWBAT use basic operations within the parameters of a specific problem.	AF 501				
Unit 2: Functions, Equations, and Graphs	SWBAT understand that a function assigns to each element of the domain exactly one element of the range	F 506				2-1
	SWBAT identify and graph inputs and outputs of functions.	F 604, AF 704				2-1
	SWBAT evaluate functions, given input values.	AF 602, N 602, A 512	30, 41, 31			2-1
	SWBAT understand slope as the rate of change, change in y over change in x, vertical change over horizontal change, rise over run	G 510, A 406				2-3
	SWBAT Determine whether a slope is negative or positive, based on the graph.	F 601, A 406, A 514	52			2-3
	SWBAT identify the quadrants of the coordinate plane.	G 704	23, 37			2-3
	SWBAT identify the signs of the x and y values on the coordinate plane	G 704	23			2-3
	SWBAT create ordered pairs					2-3
	SWBAT write and graph linear functions in slope-intercept form	A 514				2-3
	SWBAT Match the slope of a graph to the context of a problem.	G 510, A 406	52			2-3
	SWBAT write equations and parallel and perpendicular lines	G 606	17			2-4
	SWBAT write and graph a linear equation in point-slope form					2-4
	SWBAT compare and contrast when it would be more convenient to use slope intercept versus point slope form	A 514, G 510				2-4
	SWBAT write linear equations in slope-intercept form to model real-world data from a scatterplot and make predictions	A 514, G 510				2-5
	SWBAT analyze transformations of functions by identifying the effect on the graph of replacing f(x) by f(x) + k					2-6
	SWBAT analyze transformations of functions by identifying the effect on the graph of replacing f(x) by k*f(x)					2-6
	SWBAT analyze transformations of functions by identifying the effect on the graph of replacing f(x) by f(x+k)					2-6
	SWBAT find composite functions by plugging one function into another	F 604, F 708	32			2-6
	Spiraled Objectives					
	SWBAT graph ordered pairs on a coordinate plane	AF 503				
	SWBAT understand slope as the rate of change and change in y over change in x					
	SWBAT identify slope, y-intercept, and x-intercept on a graph					
	SWBAT solve a linear inequality using inverse operations.	A 602	36			
	SWBAT solve an inequality involving a negative value by changing the inequality sign	A 602	36			
	SWBAT solve a linear system using a graph by finding the intersection	A 604, A 503				3-1
	SWBAT solve a linear system using a table by finding the x-value that produces the same y value	A 604				3-1
	SWBAT classify a system of equations as independent, dependent, or inconsistent	A 604				3-1
	SWBAT solve a system of equations using substitution	A 604				3-2
	SWBAT solve a system of equations using elimination	A 604				3-2
	SWBAT determine whether using substitution or elimination would be a more appropriate method for a system of equations	A 604				3-2
	SWBAT represent a system of linear equations with a matrix (IF TIME PERMITS)	N 406, N 505, N 607, N 705, N 706				3-6
	SWBAT to solve a system of linear equations using matrices (IF TIME PERMITS)	N 406, N 505, N 607, N 705, N 706				3-6
	Spiraled Objectives					
	Match simple inequalities with their graphs on the number line	A 405				
	Solve real-world problems by using first-degree equations	A 502				
	Solve first-degree inequalities when the method does not involve reversing the inequality sign	A 503				

Unit 4: Quadratic Functions and Equations	SWBAT graph a function of the form f(x) = ax^2 by using a table			14		4-1
	SWBAT graph a translations of f(x) = x^2	AF 604				4-1
	SWBAT interpret, write and graph vertex form	G 609				4-1
	SWBAT find features of a quadratic function on a graphing calculator					4-2
	SWBAT identify and graph the properties of a quadratic function in standard form	G 609		34		4-2
	SWBAT convert from standard form to vertex form					4-2
	SWBAT interpret a quadratic graph within a word problem	G 609				4-2
	SWBAT write the equation of a parabola in standard form given 3 points					4-3
	SWBAT compare quadratic models in word problems					4-3
	SWBAT enter data, used QuadReg, and find the min / max of a parabola on a graphing calculator	G 609				4-3
	SWBAT find common and binomial factors of quadratic equations	A 506, A 507	6	16		4-4
	SWBAT factor special quadratic equations (perfect trinomial, difference of two squares)	A 508				4-4
	SWBAT solve a quadratic equation by factoring	A 605	6			4-5
	SWBAT solve a quadratic equation with tables	A 605				4-5
	SWBAT solve a quadratic equation by graphing	A 605, G 609				4-5
	SWBAT use a quadratic equation to determine the max / min, domain, and range of a word problem			52		4-5
	SWBAT solve quadratic equations using the quadratic formula	A 605				4-7
	SWBAT determine the number of solutions by using the discriminant					4-7
	SWBAT solve and graph systems of linear and quadratic equations		57			4-9
	SWBAT solve and graph systems of quadratic inequalities	A 702	57			4-9
	Spiraled Objectives:					
	SWBAT solve a linear inequality using inverse operations.	A 602	36	55		
	SWBAT solve an inequality involving a negative value by changing the inequality sign	A 602	36	55		
	SWBAT combine like terms using basic operations.	A 402, A303	4, 8, 15			
	SWBAT solve for a variable in terms of the other variable	AF 502, A402	2, 3, 7, 20, 24, 27, 47			
	SWBAT evaluate functions, given input values.	AF 602, N 602, A 512	30, 41, 31			
	SWBAT identify the quadrants of the coordinate plane.	G 704	23, 37			
	SWBAT understand slope as the rate of change, change in y over change in x, vertical change over horizontal change, rise over run	G 510, A 406				
	SWBAT Determine whether a slope is negative or positive, based on the graph.	F 601, A 406, A 514	52			
Unit 5: Polynomials and Polynomial Functions	SWBAT classify polynomials by degree and number of terms	F 501	4			5-1
	SWBAT graph polynomial functions and describe end behavior	F 508, F 509				5-1
	SWBAT write and analyze the factored form of a polynomial	F 501				5-2
	SWBAT write a polynomial function from its zeros	F 501				5-2
	SWBAT solve polynomial equations by factoring	F 501		25		5-3
	SWBAT solve polynomial equations (find the real roots) by graphing	F 508, F 509				5-3
	SWBAT divide polynomials using long division	A 505				5-4
	SWBAT solve equations using the Rational Root Theorem	F 501				5-5
	SWBAT use Descartes Rule of Signs to find the real roots	F 501				5-5
	SWBAT find all zeros of a polynomial function using a graphing calculator					5-6
	SWBAT fit scatterplot data from word problems to linear, quadratic, cubic, or quartic linear regression in a graphing calculator	N 504, N 606, N 704				5-8
	SWBAT apply transformations to graphs of polynomials and find their zeros					5-9
	Spiraled Objectives					
	SWBAT add, subtract, multiply, and divide rational numbers		45			
	SWBAT follow order of operations using parentheses and exponents	A 401				
	SWBAT use basic operations within the parameters of a specific problem.	AF 501				
	SWBAT combine like terms using basic operations.	A 402, A303	4, 8, 15			
	SWBAT solve for a variable in terms of the other variable	AF 502, A402	2, 3, 7, 20, 24, 27, 47			
	SWBAT evaluate functions, given input values.	AF 602, N 602, A 512	30, 41, 31			
	SWBAT identify the quadrants of the coordinate plane.	G 704	23, 37			
onal Exponents	SWBAT find all real roots	N 703				6-1
	SWBAT simplify radical expressions	A 509	19			6-1
	SWBAT define and identify complex numbers	N 504, N 606, N 704	48			**4-8**
	SWBAT identify, graph, and perform operations with complex numbers	N 504, N 606, N 704	48			**4-8**
	SWBAT multiply and divide radical expressions, and simplify them	A 509	26			6-2
	SWBAT add and subtract radical expressions	A 509				6-3
	SWBAT simplify numbers and expressions with rational exponents	N 605	35, 49	9, 15, 25		6-4
	SWBAT convert between exponential and radical forms			31		6-4
	SWBAT simplify expressions with both rational exponents and radicals	F 702				6-4
	SWBAT solve a square root and other radical equations, and check for extraneous solutions	A 509				6-5
	SWBAT solve a square root and other radical equation word problems	A 509				6-5
	SWBAT solve an equation with two radicals					6-5

Unit 6: Radical Functions and Ratio	SWBAT add, subtract, multiply, and divide radical functions	F 708	26			6-6
	SWBAT find the composite of two functions	F 708	32			6-6
	SWBAT find the inverse of a relation and determine if the inverse is a function	F 602				6-7
	SWBAT write the inverse of an equation	F 602				6-7
	SWBAT recognize that radical and rational functions are inverse					6-7
	SWBAT compose the inverse of a function	F 602				6-7
	SWBAT graph a square root function		48			6-8
	SWBAT graphically translate a square root function vertically	AF 706				6-8
	SWBAT graphically translate a square root function horizontally	AF 706				6-8
	SWBAT solve a radical equation by graphing					6-8
	Spiraled Objectives					
	SWBAT apply properties of rational exponents	N 605		19		
	SWBAT isolate a variable using inverse operations	AF 602		54		
	SWBAT combine like terms using basic operations.	A 402, A303	4, 8, 15			
	SWBAT solve for a variable in terms of the other variable	AF 502, A402	2, 3, 7, 20, 24, 27, 47			
	SWBAT evaluate functions, given input values.	AF 602, N 602, A 512	30, 41, 31			
	SWBAT identify the quadrants of the coordinate plane.	G 704	23, 37			
	SWBAT identify properties of real numbers	N 703				
Unit 8: Rational Functions	SWBAT identify direct and inverse variation that can be modeled by a rational function	F 602	2, 24, 27	1, 54	11, 43	8-1
	SWBAT model an inverse variation	F 602		54	43	8-1
	SWBAT apply combined variation to word problems	F 602	24, 27	3, 54	11, 43	8-1
	SWBAT graph and inverse variation function	F 602			43	8-2
	SWBAT identify reciprocal function transformations	AF 604				8-2
	SWBAT graph a translation of a rational function by drawing asymptotes and identify it's domain and range. Write the equation of a translation	F 508				8-2
	SWBAT model a reciprocal function on a graphing calculator	AF 604	52			8-2
	SWBAT find points of discontinuity					8-3
	SWBAT find vertical asymptotes	F510, F 508				8-3
	SWBAT find horizontal asymptotes					8-3
	SWBAT graph a rational function by hand	F 702				8-3
	SWBAT model a rational function in a graphing calculator	F 702				8-3
	SWBAT simplify a rational expression with a numerator and denominator	N 605	19, 20, 26, 45		48	8-4
	SWBAT multiply and divide rational expressions	N 605	19, 20, 26, 45		48	8-4
	SWBAT create rational expressions from a word problem to find a solution	N 605	19, 20, 26, 45		48	8-4
	SWBAT find the LCM of two rational expressions. SWBAT add and subtract rational expressions with different denominators	N 502, N 605	19, 20, 26, 45	19	48	8-5
	SWBAT simplify a complex fraction by multiplying both numerator and denominator by the LCD of all the rational expressions and apply to word problems		26, 44, 48		29	8-5
	SWBAT solve rational equations with different denominators	F 508	26, 44			8-6
	SWBAT create and solve rational equations in word problems	F 508	44			8-6
	SWBAT use a graphing calculator to solve rational equations by looking at the intersection of both sides of the equation on a graph	F 508	44			8-6
Unit 11: Probability	SWBAT use the fundamental counting principle to determine the number of permutations	S 405				11-1
	SWBAT determine the number of combinations and differentiate when to use permutation vs. combination	S 404				11-1
	SWBAT find experimental probability using a simulation and compare it to theoretical probability	S 705				11-2
	SWBAT find the theoretical probability and determine whether to use combinations or permutations	S 404				11-2
	SWBAT classify events as independent or dependent and find the probability of independent events	S 403			31, 47, 59	11-3
	SWBAT determine if events are mutually exclusive and find their probability	S 403			31, 47, 59	11-3
	SWBAT find the conditional probability in the context of a diagram	S 702			55	11-4
	SWBAT use the conditional probability formula and a tree diagram to solve for conditional probability	S 605			55	11-4
Unit 9: Sequences and Series	SWBAT generate a sequence using an explicit formula	F 502	24	28	7, 11, 54	9-1
	SWBAT write a recursive definition for a sequence	F 502		28	7, 54	9-1
	SWBAT write an explicit formula for a sequence and find its terms	F 502		28	7, 54	9-1
	SWBAT identify and determine the nth term of arithmetic sequences	F 502		58	54	9-2
	SWBAT use the arithmetic mean to find a missing term in a sequence	F 502	47	4	2	9-2
	SWBAT create an explicit formula for an arithmetic sequence	F 502	60		54	9-2
	SWBAT identify and determine the nth term of geometric sequences	F 703	60		7	9-3
	SWBAT create a geometric sequence to model and solve a word problem	F 703	60		7	9-3
	SWBAT use the geometric mean to find a missing term in a sequence	F 703	60		7	9-3
	SWBAT find the sum of a finite arithmetic series and apply to word problems	F 502			54	9-4
	SWBAT write a series in summation notation	F 502				9-4
	SWBAT find the sum of a series written in summation notation					9-4
	SWBAT use a graphing calculator to find the sum of a series					9-4
	SWBAT find the sums of finite geometric series	F 703	60		7	9-5
	SWBAT use the geometric series formula to solve real-world problems	F 703	60		7	9-5
	SWBAT determine if an infinite geometric series converges or diverges	F 703	60		7	9-5
	SWBAT graph an exponential function by hand	F 702	30, 57			7-1
	SWBAT identify exponential growth and decay and determine the y-intercept	F 702	30, 57	19	4, 5, 24	7-1
	SWBAT model and apply exponential growth in real-world situations	F 702	30, 57	19, 54	4, 5, 24	7-1
	SWBAT describe and graph transformations of y = ab^x, where a is transformed	AF 604		19	22	7-2
	SWBAT describe and graph transformations of y = b^x, where x is tranformed	AF 604			22	7-2
	SWBAT use exponential regression in a graphing calculator to model real world data	F 702	30			7-2
	SWBAT evaluate and graph e^x in a graphing calculator	F 702	30			7-2
	SWBAT solve word problems involving continuously compounded interest	F 702	30	54	43	7-2
	SWBAT write exponential equations in logarithmic form	F 707				7-3
	SWBAT evaluate a logarithm	F 707				7-3

Unit 7: Logarithms	SWBAT use a logarithm scale to solve real world problems	F 707				7-3
	SWBAT graph a logarithmic function by hand	F 707				7-3
	SWBAT translate y=logbx	F 707				7-3
	SWBAT add and subtract logarithms by applying the properties of logarithms	F 707				7-4
	SWBAT expand logarithms by applying the properties of logarithms	F 707				7-4
	SWBAT evaluate the value of a logarithm expression using the change of base formula	F 707				7-4
	SWBAT solve real world problems using a logarithm scale					7-4
	SWBAT solve an exponential equation with a common base	F 702	30	15	19	7-5
	SWBAT solve an exponential equation with different bases	F 702	30	15		7-5
	SWBAT solve an exponential equation with a graph or table	F 702	30			7-5
	SWBAT model and solve a real world problem with an exponential equation					7-5
	SWBAT solve a logarithmic equation using a graphing calculator	F 707				7-5
	SWBAT solve a logarithmic equation using logarithmic properties	F 707				7-5
	SWBAT simplify natural logarithmic expressions	F 707				7-6
	SWBAT solve natural logarithmic equations					7-6
	SWBAT solve exponential e equations					7-6
	SWBAT use natural logarithms to model and solve real world problems	F 707				7-6