	DESOTO COUNTY SCHOOL DISTRICT	
	YEAR-LONG (TRADITIONAL) ALGEBRA	
	1st Nine Weeks	
Power Standard	**Learning Target**	**MS CCRS**
Prerequisites Skills	I can write an expression using variables.	A-SSE.1
	I can simplify an expression using substitution and/or order of operations.	-
	I can identify rational numbers, integers, whole numbers, and irrational numbers.	N-RN.3
	I can use the close property or show by example that the sum or product of two rational numbers is rational, the sum of a rational and an irrational number is irrational, and the product of a nonzero rational number and an irrational number is irrational.	N-RN.3
	I can graph points on a coordinate plane.	-
	I can add, subtract, multiply, and divide integers, fractions, and decimals.	-
	I can simplify variable expressions using the distributive property and combining like terms.	-
	I can interpret units in the context of the problem, especially in regards to formulas.	N-Q.1
	I can use unit analysis to check the reasonableness of a solution.	N-Q.1
	I can determine an appropriate quantity to model a situation and can choose an appropriate level of accuracy.	N-Q.2/N-Q.3
Functions	I can identify domain and range and determine if a graph, table, or set of ordered pairs is a function.	F.IF.1
	I can use and evaluate function notation.	F.IF.2
	I can write a function rule from given information.	F.IF.1
	I can relate the domain of a function to its graph and to the quantities relationship it describes.	F-IF.5
	I can recognize even and odd functions from their graphs and algebraic expressions.	F-BF.3
Linear Equations	I can find, interpret and compare the rates of change from tables, graphs, equations and situations.	F-IF.6/F-IF.9/S-ID.7
	I can find and interpret the average rate of change of a function over a specified interval.	F-IF.6
	I can write equations in slope-intercept form from given information.	A-CED.2
	I can graph and analyze linear equations.	A-CED.2
	I can interpret the meaning of coefficients, constants, factors, and intercepts in linear functions in terms of a context.	F-LE.5
	I can describe situations where one quantity grows or decays by a constant rate per unit interval relative to another.	F-LE.5
	I can understand that the graph of an equation in two variables is the set of solutions plotted in the coordinate plane.	A-REI.10
	2nd Nine Weeks	
Power Standard	**Learning Target**	**MS CCRS**
Equations	I can create and solve multi-step equations in one variable.	A-CED.1/A-REI.3
	I can explain each step in solving an equation.	A-REI.1
	I can rearrange a formula to solve for a given variable.	A-CED.4
	I can interpret the solution to equations in mathematical and real-world contexts.	A-CED.3
	I can identify and explain why solutions to equations have one solution, no solutions, or infinitely many solutions.	A-CED.3
Polynomial Operations/Exponents	I can add and subtract polynomials.	A-APR.1
	I can multiply polynomials.	A-APR.1
	I can manipulate the terms, factors, and coefficients in expressions to explain the individual parts of the expression.	A-SSE.1a
Systems of Equations	I can solve systems of linear equations by graphing.	A-REI.6/A-REI.11
	I can create and solve linear systems algebraically.	A-REI. 5/A-REI.11
	I can identify and explain why some linear systems have one solution, no solutions, or infinitely many solutions.	A-CED.3
	I can interpret solutions to systems of equations in mathematical and real-world contexts.	A-CED.3

Sequences	I can identify and write formulas for arithmetic and geometric sequences.	F-IF.3
	I can write an linear and exponential function (including arithmetic and geometric sequences) from a graph, relationship, or table and interpret its parts.	F-LE.2
	3rd Nine Weeks	
Power Standard	**Learning Target**	**MS CCRS**
Statistics (Part 1)	I can summarize, display, and interpret data for two variables, including writing a line of fit function for a scatter plot.	S-ID.6
	I can calculate a residual and create and analyze a residual plot.	S-ID. 6
	I can explain the meaning of the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.	S-ID.7
	I can compute (using technology) and interpret the meaning of the correlation coefficient of a linear fit in the context of the data.	S-ID.8
	I can distinguish between correlation and causation.	S-ID.9
Exponential Models	I can use properties of exponents to transform expressions for exponential functions.	A-SSE.3c
	I can interpret the meaning of coefficients, constants, factors, exponents, and intercepts in exponential functions in terms of a context.	F-LE.5
	I can distinguish between situations that can be modeled with linear functions and with exponential functions.	F-LE.1
	I can describe situations where one quantity grows or decays by a constant percent per unit interval relative to another.	F-LE.1
Quadratics	I can factor polynomials and find zeros of the quadratic function they represent.	A-SSE.3
	I can graph quadratic functions and show key features, such as intercepts, maximums, and minimums.	F-IF.4/F-IF.7
	I can compare quadratic functions in different forms, including equations, graphs, tables, and situations.	F-IF.8/F-IF.9
	I can solve quadratic equations by taking square roots, factoring, completing the square, or using the quadratic formula.	A-REI.4
	I can construct and compare linear, quadratic, and exponential models and use them to solve problems.	F-BF.1
	I can translate among equivalent forms of quadratic functions (standard form, factored form, and graphing form.	A-SSE.3
Inequalities	I can create and solve multi-step inequalities in one variable.	A-REI.3
	I can create and solve systems of linear inequalities by graphing.	A-REI.12/A-CED.3
	I can interpret the solutions to inequalities and systems of inequalities in mathematical and real-world contexts.	A-CED.3
	4th Nine Weeks	
Power Standard	**Learning Target**	**MS CCRS**
Transformations and Graphs	I can graph and compare key features, such as intercepts, maximums, and minimums of linear, exponential, quadratic, square root, piecewise-defined, and absolute value functions.	F-IF.7/F-IF.9
	I can identify the effect on the graph (in vertex form) by replacing f(x) by f(x) +k, k f(x), f(kx), and f(x+k) for specific values of k.	F-BF.3
	I can find the value of *k* given the graph of a transformed function.	F-BF.3
Statistics (Part 2)	I can summarize, display, and interpret data for one variable (dot plots, histograms, and box plots).	S-ID.1
	I can describe data distribution to compare center (median, mean) and spread (IQR, standard deviation) of two or more different data sets.	S-ID. 2
	I can use the correct measure of center and spread to describe a distribution that is symmetric or skewed.	S-ID.2
	I can interpret the differences shape, center, and spread in the context of the data sets, especially those due to outliers.	S-ID.3
	I can create two-way tables from two categorical variables, interpret relative frequencies in context, and recognize association and trends in data.	S-ID.5