Fall Semester Algebra I
Pacing Guide

First 4.5 Weeks		Second 4.5 Weeks		Third 4.5 Weeks		Fourth 4.5 Weeks	
Standard	Days	Standard	Days	Standards	Days	Standards	Days
Build Relationships & Establish Routines Number sense routines *this is to continue at least 3 times a week throughout the rest of the course* Spiral Reviews will be done daily throughout the course	3	**A.6 & A.9** - Linear Functions Determine slope Graphing Linear Linear Regression A.6 The student will a) determine the slope of a line when given an equation of the line, the graph of the line, or two points on the line; b) write the equation of a line when given the graph of the line, two points on the line, or the slope and a point on the line; and c) graph linear equations in two variables. A.9 The student will collect and analyze data, determine the equation of the curve of best fit in order to make predictions, and solve practical problems, using mathematical models of linear and quadratic functions. ** Just LINEAR right now**	12	**A.4d,e & A.5d** - Systems Solving systems of linear equations and inequalities A.4 The student will solve d) systems of two linear equations in two variables algebraically and graphically; and e) practical problems involving equations and systems of equations. A.5 The student will d) represent the solution to a system of inequalities graphically.	6	**A.7c,d,f & A.4b** - Solving Quadratics Solving Quadratics Graphically and Algebraically A.7 The student will investigate and analyze linear and quadratic function families and their characteristics both algebraically and graphically, including c) zeros; d) intercepts; f) connections between and among multiple representations of functions using verbal descriptions, tables, equations, and graphs. A.4 The student will solve b) quadratic equations in one variable algebraically;	5
A.1 - Expressions Translating Evaluating for given values A.1 The student will a) represent verbal quantitative situations algebraically; and b) evaluate algebraic expressions for given replacement values of the variables.	3	**A.8** - Variations Direct/Inverse Variation A.8 The student, given a situation in a real-world context, will analyze a relation to determine whether a direct or inverse variation exists, and represent a direct variation algebraically and graphically and an inverse variation algebraically.	5	**A.3**- Radicals Simplifying square roots and cubic roots A.3 The student will simplify a) square roots of whole numbers and monomial algebraic expressions; b) cube roots of all integers; and c) numerical expressions containing square or cube roots	3	**A.9** - Best Fit Line/Curve of best fit **make sure to show calculator method** A.9 The student will collect and analyze data, determine the equation of the curve of best fit in order to make predictions, and solve practical problems, using mathematical models of linear and quadratic functions.	2
A.4a,c,e & A.5a,b,c - Equations & Inequalites Solving Equations and inequalities **use properties to prove solving** A.4 The student will solve a) multistep linear equations in one variable algebraically; c) literal equations for a specified variable; e) practical problems involving equations A.5 The student will a) solve multistep linear inequalities in one variable algebraically and represent the solution graphically; b) represent the solution of linear inequalities in two variables graphically; c) solve practical problems involving inequalities;	8	**A.4d,e & A.5d** - Systems **Continued into 3rd 4.5 Weeks** Solving systems of linear equations and inequalities A.4 The student will solve d) systems of two linear equations in two variables algebraically and graphically; and e) practical problems involving equations and systems of equations. A.5 The student will d) represent the solution to a system of inequalities graphically.	5	**A.2a,b** - Monomials/Polynomials Laws of exponents Operations with polynomials A.2 The student will perform operations on polynomials, including a) applying the laws of exponents to perform operations on expressions; b) adding, subtracting, multiplying, and dividing polynomials;	4	Review for SOL	8
A.7a,b,e - Functions Determine Functions Domain and Range A.7 The student will investigate and analyze linear and quadratic function families and their characteristics both algebraically and graphically, including a) determining whether a relation is a function; b) domain and range; e) values of a function for elements in its domain;	10			**A.2c** - Factoring Binomial & Trinomial Factoring A.2 The student will perform operations on polynomials, including c) factoring completely first- and second-degree binomials and trinomials in one variable.	6	Box and Whisker Plots: The student will compare and contr	3
				A.7c,d,f & A.4b - Solving Quadratics Solving Quadratics Graphically and Algebraically A.7 The student will investigate and analyze linear and quadratic function families and their characteristics both algebraically and graphically, including c) zeros; d) intercepts; f) connections between and among multiple representations of functions using verbal descriptions, tables, equations, and graphs. A.4 The student will solve b) quadratic equations in one variable algebraically;	5	Statistics: The student will, given a set of data will find and interpret the mean absolute deviation, standard deviation and z score	5
Standards covered = 4	24	Standards covered = 4	22	Standards covered = 3	24	Standards covered = All	23
						Total = 82 days leaving 8 days for Benchmarks and Review for Benchmarks	93