	TOPICS	PRE-CLASS ASSIGNMENT TO BE COMPLETED BEFORE CLASS MEETING	SUGESSTED WORKBOOK ACTIVITIES/ASSESSMENTS
August 22 - 30	Order of operations, fractions	Review the syllabus	Gateway practice problems
	Review Integer exponents	Complete Pre-Class Assignment 1; Integer exponents/Order of operations	Developing rules of exponents
	Review Integer exponents	Complete Pre-Class Assignment 2; Integer exponents/Order of operation	Simplify integer exponents
	Polynomials	Complete Pre-Class Assignment 1; Polynomial Operations	Key terms associated with Polynomials; Operations with Polynomials Functions
	Polynomials	Complete Pre-Class Assignment 2; Polynomial Operations	Gateway practice addition/ subtraction/select multiplication problems
	Last Day to Add Wednesday August 28 at Midnight		
	1.1 Introduction to functions	Complete Pre-Class Assignment 1 section 1.1; Functions and models	Domain & range exploration or Domain worksheet
	1.1 Functions and models		Understanding function notation; **Quiz 1**
Sept 3 - 6	1.1 Functions and models	Complete Pre-Class Assignment 2 section 1.1; Functions and models	Activity with graphs, Graph reading
	1.1 Functions	Complete Pre-Class Assignment 3 section 1.1; Functions and models	Working with functions
	1.2 Graphs of functions	Complete Pre-Class Assignment section 1.2; Graphs of Functions	Distance Match (CBR's)
	1.3 Linear functions	Complete Pre-Class Assignment 1 section 1.3; Linear functions	Rates of change investigation; **Quiz 2**
Sept 9 - 13	1.3 Linear functions		Worked examples interpreting slope; Interpreting slope, vertical intercepts
	1.3 Profit/revenue/cost	Complete Pre-Class Assignment 2 section 1.3; Linear functions	Total Revenue, Cost and Profit activity
	1.4 Equations of lines	Complete Pre-Class Assignment 1 section 1.4; Equations of lines	Walking Student (CBR's)
	1.4 Equations of lines, approximate linear data and scatterplots	Complete Pre-Class Assignment 2 section 1.4; Equations of lines	Linear modeling part I; **Quiz 3**
	Linear Project Introduction		Have students find linear data (see grading rubric Unit Two guidelines);
Sept 16 - 20	Review		
	Exam 1: Review, ch.1		
	2.1 Solving linear equations	Complete Pre-Class Assignment 1 section 2.1 ; Working with fractions	Practice set solving equations with fractions (instructor created); Function behavior-Zeros
	2.1 Solving linear equations	Complete Pre-Class Assignment 2 section 2.1; Solving linear equations	Linear Modeling Direct Variation, complete #86,87,88 **pg. 104 e-book**
	2.2 Linear models using real data	Complete Pre-Class Assignment section 2.2; Linear models using real data	Is this set of data linear?, **Quiz 4**
Sept 23 - 27	2.2 Linear Models using real data		Linear modeling part II, **Linear Modeling Project due**
	2.3 Solving linear systems	Complete Pre-Class Assignment section 2.3; Solving linear systems	Solving Linear systems
	2.3 Solving linear systems		Solving Linear systems
	2.3 Solving linear systems		Supply/Demand activity
	2.4 Solutions of linear inequalities	Complete Pre-Class Assignment section 2.4; Solving linear inequalities	Linear inequalities, **Quiz 5**

Sept 30 Oct 4	3.3 Piecewise functions	Complete Pre-Class Assignment 1 section 3.3; Piecewise functions	Piecewise functions defined (activity 14)
	3.3 Piecewise functions	Complete Pre-Class Assignment 2 section 3.3; Piecewise functions	Piecewise function application
	Review		
	Exam 2 chapter 2, 3.3		
	3.4 Quadratic Models		Falling Object (CBR's)
Oct 7 -11	3.4 Quadratic Models with Technology	Complete Pre-Class Assignment 1 section 3.4; Quadratic models	Maximize Revenue
	3.1 Graphs of quadratic functions	Complete Pre-Class Assignment section 3.1; Graphs of quadratic functions	Characteristics of Quadratics, Working with quadratic functions
	Factoring Review	Complete Pre-Class Assignment 1: Factoring	Select problems; Factor completely workbook; **Quiz 6**
	MIDTERM GRADES DUE Wednesday October 9 ; Fall Break Thursday October 10 Friday October 11		
Oct 14 -19	Factoring Review	Complete Pre-Class Assignment 2: Factoring	Select problems; Factor completely workbook; Kahn Academy challenge
	Simplify radical expressions	Complete Pre-Class Assignment 1: Radical expressions	Gateway practice problems
	Simplify radical expressions, rational exponents defined	Complete Pre-Class Assignment 2: Rational exponents	Gateway practice problems
	Rational exponents defined	Complete Pre-Class Assignment 3: Rational exponents	Gateway practice problems; **Quiz 7**
	Section 3.2 Solving quadratics; factoring techniques	Complete Pre-Class Assignment 1: section 3.2;Solving quadratics	Quadratic Applications: Factoring
Oct 21 -25	3.2 Solving quadratics; quadratic formula	Complete Pre-Class Assignment 2: section 3.2; Solving quadratics	Quadratic Functions; The Quadratics Lab
	Review		
	Exam: Unit 3: Review materials, chapter 3		
	4.1 Transformations	Complete Pre-Class Assignment 1: section 4.1; Transformations	Translations All, Transformation of functions
	4.1 Transformations	Complete Pre-Class Assignment 2: section 4.1; Transformations	Activity 30 and 49; **Quiz 8**
Oct 28 Nov 1	6.1 Characteristics higher order polynomials	Complete Pre-Class Assignment 1: section 6.1; Characteristics of higher order polynomials	Polynomial functions: End behavior
	6.1 Characteristics higher order polynomials	Complete Pre-Class Assignment 2: section 6.1; Characteristics of higher order polynomials	Even and odd multiplicity investigation
	6.2 Modeling with higher order polynomials	Complete Pre-Class Assignment: section 6.2; Modeling with higher order polynomials	Characteristics of polynomial functions; **Quiz 9**
	LAST DAY TO WITHDRAW WEDNESDAY OCTOBER 30@ MIDNIGHT		
	6.3 Solving polynomial equations by factoring	Complete Pre-Class Assignment: section 6.3; Solving polynomial equations by factoring	Understanding polynomial functions
	6.3 Solving polynomial equations by factoring		Constructing polynomial functions**;**
	6.4 Solving higher order polynomials using division	Complete Pre-Class Assignment: section 6.4; Solving polynomial equations using division	Polynomial division: practice problems
	6.4 Zeros of higher order polynomials		Finding real zeros pf polynomials; Polynomial function worksheet

Nov 4 - 8	4.4/6.6 Solving quadratic, higher order polynomial inequalities	Complete Pre-Class Assignment: section 4.4/6.6; Solving higher order polynomial inequalities	Solving polynomial inequalities; **Quiz 10**
	Review		Modeling with higher order polynomials, ch6: final activity
	Exam 4; 4.1, ch6, 4.4		
Nov 12 - 15			
	4.2 Combining functions	Pre-Class Assignment 1: section 4.2; Combining function	Applications of combining functions
	4.2 Function Compositions	Pre-Class Assignment 2 sections 4.2; function compositions	Composition of functions Part II
	4.3 Inverse functions	Pre-Class Assignment section 4.3; Inverse functions	Extra practice with inverses; Graphing inverse functions
	5.1 Exponential growth/decay	Pre-Class Assignment 1 section 5.1; Exponential growth/decay	Graphing exponential functions using transformations; **Quiz 11**
Nov 18 -22			
	5.1 Exponential functions; Growth factor vs % change	Pre-Class Assignment 2 section5.1; Exponential growth/decay	Exponential growth and decay; Caffeine in your body or MM's (decay)
	5.4 Exponential models	Pre-Class Assignment section 5.4; Exponential models	The Genie's offer (growth)
	5.5 Financial models	Pre-Class Assignment section 5.5; Financial models	Practice with exponential growth and decay applications; **Quiz 12**
	5.2 Introduction logarithms	Pre-Class Assignment 1 section 5.2; Introduction to logarithms	Log "war" game (cards in storeroom); Exploring the log button
	5.2 Properties of logs	Pre-Class Assignment 2 section 5.2; Properties of logarithms	Exponentials vs Logarithms; Finding inverse functions
Nov 25 - 26			
	5.2 Properties of logs		Logs in Life; **Quiz 13**
	5.2 Properties of logs		**Logs in Life brochure due**
Dec 2 - 6			
	5.3 Solving exponential and log equations	Pre-Class Assignment section 5.3; Solving exponential and log equations	More practice with logs; **Quiz 14**
	Review for exam 5		Practice problems
	Exam 5: 4.2, 4.3 Chapter 5		
	Review for final exam		
	Review for final exam		
Dec 10	**Comprehensive Final Exam Thursday December 13 3:15 – 5:30 location to be announced in class**		