

ALGEBRA 2		
Benchmark/ Target Month	Pass Standard/Content	Section
	<u>Standard 1: Number Systems and Algebraic Operations</u>	
March	1. Rational Exponents	Chapter 7
March	a. Convert expressions from radical notations to rational expressions and vice versa.	Chapter 7
February	b. Add, subtract, multiply, divide, and simplify radical expressions and ones with rational exponents.	Chapter 6
February	2. Polynomial and Rational Expressions	Chapter 6
January	a. Divide polynomial expressions by lower degree polynomials.	Chapter 5
January	b. Add, subtract, multiply, divide, and simplify rational expressions, including complex fractions.	Chapter 5
Sept	3. Complex Numbers	Chapters 2,5,6
Jan	a. Recognize that to solve certain problems and equations, number systems need to be extended from real numbers to complex numbers.	
Feb	b. Add, subtract, multiply, divide, and simplify expressions involving complex numbers.	
	<u>Standard 2: Relations and Functions</u>	
	1. Functions and Function Notation	
	a. Recognize the parent graphs of polynomial, exponential, radical, quadratic, and log functions and predict the effects of transformations on the parent graphs, using various methods and tools.	
	b. Add, subtract, multiply, and divide functions using function notation.	
	c. Combine functions by composition.	
	d. Use algebraic, interval, and set notations to specify the domain and range of functions.	
	e. Find and graph the inverse of a function, if it exists.	Chapters 3,4
	2. Systems of equations	
October	a. Model a situation that can be described by a system of equations or inequalities and use the model to answer questions about the situation.	
Nov	b. Solve systems of linear equations and inequalities using various methods and tools which may include substitution, elimination, matrices, graphing, and graphing calculators.	Chapter 5
January	3. Quadratic Equations and Functions	EOI Review
	a. Solve quadratic equations by graphing, factoring, and quadratic formula.	Chapter 8
April	b. Graph a quadratic function and identify the x and y intercepts and maximum or minimum value, using various methods and tools which may include a graphing calculator.	Chapter 6
April	4. Identify, graph, and write the equations of the conic sections (circle, ellipse, parabola, and hyperbola).	Chapter 7
	5. Exponential and Log Functions	
	a. Graph exponential and log functions.	
February	b. Apply the inverse relationship between exponential and log functions to convert from one form to another.	Chapter 6
	6. Polynomial Equations and Functions	
	a. Solve polynomial equations using various methods and tools which may include factoring and synthetic division.	
	b. Sketch the graph of a polynomial function.	
March	7. Rational Equations and Functions.	Chapter 7
	a. Solve rational equations and sketch their graphs.	
	b. Given the graph of a rational function, identify the x and y intercepts and model a situation.	
April	<u>Standard 3: Data Analysis and Statistics</u>	EOI Review
	1. Analysis of Collected Data Involving Two Variables	
	a. Interpret data on a scatter plot using a linear, exponential, or quadratic model/equation.	
	b. Identify whether the model/equation is a curve of best fit for the data, using various methods and tools which may include a graphing calculator.	
April	2. Measures of Central Tendency and Variability.	EOI Review
	a. Analyze and synthesize data from a sample using appropriate measures of central tendency (mean, median, mode, weighted average).	
	b. Analyze and synthesize data from a sample using appropriate measures of variability (range, variance, standard deviation).	
	c. Use the characteristics of the Gaussian normal distribution (bell-shaped curve) to solve problems.	
	d. Identify how given outliers affect representations of data.	
April	3. Identify and use arithmetic and geometric sequences and series to solve problems.	EOI Review

