Pacing Guide 2010-2011
Subject Pacing Algebra 2Q1(10-09)
Grade Level 9-12
Revised 5/25/10

Grading Period August-October, 2010

Approximate Time for Teaching Standards	Standard	Core Instructional Materials	Strategic Supplementary Materials	Assessment	
				Mat'ls	**District**
2 Weeks Aug. 9 – 20	**1.0 Students solve equations and inequalities involving absolute value.** **2.0 Students solve systems of linear equations and inequalities(in two or three variables) by substitution, with graphs, or with matrices.**	**Chapter 1 – Foundations for Functions** Sections 1(Example 1 only), 2, 3, 4, 5, 6, Optional – Sections 8 and 9 *SAVE 1-7 for unit 4*	Resource Books, Textbook, Practice Workbook, Review for Mastery Workbook	Placement Test	
3 Weeks Aug. 23 – Sept. 10		**Chapter 2 – Linear Functions** Sections 1, 2, 3, 4, 5, *8 (std. 1.0)* Optional – Sections 6, 7, and 9			
3 Weeks Sept. 13 – Oct.1		**Chapter 3 – Linear Systems** Sections 1, 2, 3, 6 Optional – Sections 4 and 5 **Chapter 4 – Matrices** Optional – All sections		Cumulative Test	

Grading Period <u>October-December, 2009</u>

Approximate Time for Teaching Standards	Standard	Core Instructional Materials	Strategic Supplementary Materials	Assessment	
				Mat'ls	**District**
3 Weeks Oct. 4 – Oct. 22	**24.0 Students solve problems involving functional concepts, such as composition, difining the inverse function and performing arithmetic operations on functions.** **25.0 Students use properties from number systems to justify steps in combining and simplifying functions.**	**Unit 4 – Function Transformations, Operations and inverses** Sections 1-7, 1-8, 1-9, 6-7, 6-8, 9-4, and 9-5	Textbook, Resource materials, Practice Workbook, and Review for Mastery Workbook		
4 Weeks Oct. 25 – Nov. 17	**5.0 Students demonstrate knowledge of how real and complex numbers are related both arithmetically and graphically. In particular, they can plot complex numbers as points in the plane.** **6.0 Students add, subtract, multiply, and divide complex numbers.** **8.0 Students solve and graph quadratic equations by factoring, completing the square, or using the quadratic formula. Students apply**	**Chapter 5 – Quadratic Functions** Sections 1, 2, 3, 4, 5, 6, 9 Optional – Sections 7 and 8			

	techn iques in solving word problems. They also solve quadratic equations in the comples number system. **9.0 Students demonstrate and explain the effect that chaning a coefficient has on the graph of quadratc functions; that is, students can determine how the graph of a parabola changes as a, b, and c vary in the equation y = (x –b) + c.** **10.0 Students graph quadratic functions and determine the maxima, minima, and zeros of the function.** **3.0 Students are adept at operations on polynomials, including long division.**			
3 Weeks Nov. 18 – Dec. 10	**4.0 Students factor polynomials representing the difference of squares, perfect square trinomials, and the sum and differences of two cubes.** **20.0 Students know the binomial theorem and use it to expand binomial expressions that are raised to positive integer powers.**	**Chapter 6 – Polynomial Functions** Sections 1, 2, 3, 4 Optional – Sections 5, 6, and 9		

Pacing Guide 2009-2010
Subject Pacing <u>Algebra 2Q3(10-11)</u>
Grade Level <u>10-12</u>
Revised 5/25/10

Grading Period <u>January – March 2010</u>

Approximate Time for Teaching Standards	Standard	Core Instructional Materials	Strategic Supplementary Materials	Assessment	
				Mat'ls	District
3 weeks Jan. 10 – 28	**11.0 Students prove simple laws of logarithms.** **11.1 Students understand the inverse relationship between exponents and logarithms and use this relationship to solve problems involving logarithms and exponents.** **11.2 Students judge the validity of an argument according to whether the properties of real numbers, exponents, and logarithms have been applied correctly at each step.** **12.0 Students know the laws of fractional exponents, understand exponential functions, and use these functions in problems involving exponential growth and decay.** **13.0 Students use the definition of logarithms to translate between logarithms in any base.** **14.0 Students understand and use the properties of logarithms to simplify logarithmic numeric expressions and to identify their approximate values.**	**Chapter 7 – Exponential and Logarithmic Functions** Sections 1, 2, 3, 4, 5 (not inequalities), 6 Optional – Sections 7 and 8			

	15.0 Students determine whether a specific algebraic statement involving rational expressions, radical expressions, or logarithmic or exponential functions is sometimes true, always true, or never true.			
3 Weeks Jan. 31 – Jan. 16	**7.0 Students add, subtract, multiply, divide, reduce, and evaluate rational expressions with monomial and polynomial denominators and simplify complicated rational expressions, including those with negative exponents in the denominator.** **15.0 Students determine whether a specific algebraic statement involving rational expressions, radical expressions, or logarithmic or exponential functions is sometimes true, always true, and never true.**	**Chapter 8 – Rational and Radical Functions** Sections 2, 3, 6 Optional – Sections 1, 4, 5, 7 and 8		
4 Weeks Jan. 17 – Mar. 25	**18.0 Students use fundamental counting principles to compute combinations and premutations.** **19.0 Students use combinations and permutations to compute probabilities.** **20.0 Student know the binomial theorem and use it to expand binomial expressions that are raised to positive interger powers.**	**Chapter 11 – Probability and Statistics** Sections 1, 2, 3, 4, 5, 6		

Pacing Guide 2009-2010
Subject Pacing Algebra 2 Q4 (10-09)
Grade Level 9-12

Grading Period March - May 2010

Approximate Time for Teaching Standards	Standard	Core Instructional Materials	Strategic Supplementary Materials	Assessment	
				Mat'ls	**District**
3 Weeks	**21.0 Students apply the method of mathematical induction to prove general statements about positive integers.** **22.0 Students find the general term and the sums of arithmetic series and for both finite and infinite geometric series.** **23.0 Students derive the summation formulas for arithmetic series and for both finite and infinite geometric series.**	**Chapter 12 – Sequences and Series** Sections 1, 2, 3, 4, 5 (not mathematical induction)			