ALGEBRA 2 PACING

Lesson	Objective	Days	Level
Chapter 1: Tools of Algebra		**10**	
1-1/1-2	Properties of algebra/Simplifying algebraic expressions	1	M/A
1-3	Solve advanced linear equations	2	D/T
1-4	Solve advanced linear inequalities	2	D/T
1-5	Solving absolute equations and inequalities	2	I/D
Ch 1	Quizzes/Test/Review	3	
Chapter 2: Functions, Equations, and Graphs		**13**	
2-1	Identify functions	1	D
2-2	Graph a linear equation given any form	1	D/T
	Write a linear equation given any information	1	D/T
2-3	Write and interpret direct variation equations	1	D
2-4	Write linear equations that model real-world data	2	D
2-5/2-6	Graph absolute value parent function	2	D/T
2-7	Graph linear inequalities	1	D
Ch 2	Quizzes/Test/Review	4	
Chapter 3: Linear Systems		**11**	
3-1	Solve a linear system by graphing	2	D
3-2	Solve a system of linear equations using substitution or elimination	3	D/T
3-3	Solve a system of linear inequalities	1	I
3-5	Graph points in 3-dimensions	1	I
Ch 3	Quizzes/Test/Review	4	
Chapter 5: Quadratic Equations and Functions		**22**	
5-1	Identify quadratic functions and graphs	1	I/D
5-2/5-3	Graph a parabola	2	D/T
5-3	Use the vertex form of a quadratic function	2	D/T
5-7	Completing the square (only to rewrite in vertex form)	1	I/D
Ch 5 Part 1	Quiz/Test/Review	2	
5-4	Recognize special products and factoring of quadratics	3	D/T
p. 266	Algebra 1 Review: Square Roots and Radicals	1	D
5-5	Solve a quadratic equation by factoring	2	D/T
5-6	Define and perform basic operations with complex numbers	3	I/D
5-8	Solve a quadratic equation by using the quadratic formula	2	D/T
Ch 5 Part 2	Quizzes/Test/Review	3	

Chapter 6: Polynomials and Polynomial Functions		14	
6-1	Polynomial Functions	1	`D
6-2	Multiply to simplify polynomial expressions	2	D/T
6-3	Divide to simplify polynomial expressions	2	D/T
6-4	Solve polynomial functions by factoring Recognize special products and factoring of cubic polynomials	3	D/T
6-5	Rational Root Theorem (list possible roots and test)	2	I
6-6	Fundamental Theorem of Algebra (find number of possible complex roots) *Mention with another lesson*		I
Ch 6	Quizzes/Test/Review	4	
Chapter 13: Periodic Functions and Trigonometry		**10**	
13-1 and p. 717	Periodic Function terminology and Geometry Review: Special Right Triangles	1	D
13-2	Find exact sine/cosine values for 0º, 30º, 45º, 60º, and 90º	2	D/T
13-3	Radian measures	1	I/D
13-4/13-5	Graph sine and cosine parent graphs *Amplitude and period only for accountability*	2	D/T
End of Semester 1			
13-6	Graph tangent function *Include picture of graph with sine/cosine*		I
13-8	Define and evaluate reciprocal trigonometric functions	1	I
Ch 13	Quizzes/Test/Review	3	
Chapter 14: Trigonometric Identities and Equations		**7**	
14-1	Trigonometric Identities *Pythagorean Identity*	1	I
14-3	Right triangle trigonometric ratios (including reciprocal ratios)	1	I/D
14-4 14-5	Law of Sines *No ambiguous case – Don't worry about area* Law of Cosines	3	I/D
Ch 14	Test/Review	2	
Chapter 7: Radical Functions and Rational Exponents *Don't choose complicated problems*		**22**	
p. 368	Algebra 1 Review: Properties of Exponents	2	D
7-1 7-2	Simplify radical expressions Multiply and divide radical expressions	1 3	D/T
7-3	Binomial radical expression operations	2	I/D
7-4	Simplify expressions using the laws of exponents	2	D/T
7-5	Solving square root and radical equations	2	I/D
Ch 7 Part 1	Quiz/Test/Review	3	

7-6	Function operations	2	I/D
7-7	Inverse relations and functions *Switch x and y and solve*	1	I
7-8	Graphing square root and other radical functions *Vertical and horizontal translations only, no stretches*	1	I
	Graphing a cubic function		I/D
Ch 7 Part 2	Quizzes/Test/Review	3	

Chapter 8: Exponential and Logarithmic Functions		**15**	
8-1	Exploring exponential models	2	I/D
8-3	Logarithmic functions as inverses *No graphing- Just show graph*	2	I/D
8-4	Properties of logarithms	3	I/D
8-5	Exponential and logarithmic equations	2	I/D
8-6	Natural logarithms *Include definition of e and Pert from 8-2*	2	I/D
Ch 8	Quizzes/Test/Review	4	

Chapter 9: Rational Functions		**14**	
9-1	Inverse variation	1	I
9-3	Rational functions and their graphs *In factored form*	2	I/D
9-4	Simplify rational expressions *Keep factoring simple*	2	D/T
9-5	Adding and subtracting rational expressions *Keep factoring simple*	3	I/D
9-6	Solving rational equations	2	I
Ch 9	Quizzes/Test/Review	4	

Chapter 11: Sequences and Series		**12**	
11-1	Mathematical patterns	2	D
11-2	Arithmetic sequences	2	D
11-3	Geometric sequences	2	D
11-4	Arithmetic series	2	I/D
11-5	Geometric series	2	I/D
Ch 11	Quizzes/Test/Review	2	

Chapter 10: Conic Sections *if time*		**5**	
10-3	Circles **	1	D
10-4	Ellipses	1	I
10-5	Hyperbolas	1	I
Ch 10	Quizzes/Test/Review	2	