

Algebra 2 Pacing Guide – Revised for Fall 2020

Traditional	Integrated	Unit 1 – Functions and Equations		
Days 1-11	Days 1-22	Module 1 – Analyze Functions		
		1.1	Domain, Range, and End Behavior	CC.9-12.F.IF.7c
		1.2	Characteristics of Functions and Graphs	CC.9-12.F.IF.7c
		1.3	Transformations of Function Graphs	CC.9-12.F.IF.7c
		1.4	Transformations of Absolute Value and Quadratic Functions	CC.9-12.F.IF.7c
		1.5	Compare Functions Across Representations	CC.9-12.F.IF.7c
		Module 2 – Solve Quadratic Equations and Systems		
		2.1	Use Square Roots to Solve Quadratic Equations	CC.9-12.A.REI.4b
		2.2	Operations with Complex Numbers	CC.9-12.N.CN.2
		2.3	Derive and Apply the Quadratic Formula	CC.9-12.N.CN.7
		2.4	Solve Linear-Quadratic Systems	CC.9-12.A.REI.11
		Unit 2 – Polynomial Functions and Equations		
Days 12-20	Days 23-40	Module 3 – Polynomial Functions		
		3.1	Graph Polynomial Functions	CC.9-12.F.IF.7c
		3.2	Analyze Graphs of Polynomial Functions	CC.9-12.F.IF.7c
		Module 4 – Function Operations and Polynomials		
		4.1	Function Operations	CC.9-12.A.APR.1
		4.2	Add and Subtract Polynomials	CC.9-12.A.APR.1
		4.3	Multiply Polynomials	CC.9-12.A.APR.1
		4.4	Factor Polynomials	CC.9-12.A.SSE.2
		4.5	Divide Polynomials	CC.9-12.A.APR.1
		Module 5 – Polynomial Equations		
		5.1	Solve Polynomial Equations	CC.9-12.A.SSE.2
		5.2	The Fundamental Theorem of Algebra	CC.9-12.N.CN.9
Unit 3 – Rational Exponents and Radical Functions				
Days 21-28	Days 41-56	Module 6 – Rational Exponents and Radical Operations		
		6.1	Rational Exponents and nth Roots	CC.9-12.N.RN.1
		6.2	Properties of Rational Exponents and Radicals	CC.9-12.N.RN.2
		Module 7 – Radical Functions and Equations		
		7.1	Inverse Functions and Function Composition	CC.9-12.F.BF.4
		7.2	Inverses of Quadratic and Cubic Functions	CC.9-12.F.BF.4
		7.3	Graph Square Root Functions	CC.9-12.F.IF.7b
		7.4	Graph Cube Root Functions	CC.9-12.F.IF.7b
		7.5	Solve Radical Equations	CC.9-12.A.REI.2
		Unit 4 – Exponential and Logarithmic Functions and Equations		
Days 29-39	Days 57-78	Module 8 – Exponential Functions		
		8.1	Exponential Growth and Decay Functions	CC.9-12.F.IF.7e
		8.2	The Natural Base e	CC.9-12.F.IF.7e
		8.3	Compound Interest	CC.9-12.F.IF.7e
		Module 9 – Logarithmic Functions		
		9.1	Logarithms and Logarithmic Functions	CC.9-12.F.IF.7e
		9.2	Graph Logarithmic Functions	CC.9-12.F.IF.7e
		9.3	Create Exponential and Logarithmic Functions	CC.9-12.F.LE.2
		Module 10 – Exponential and Logarithmic Equations		
		10.1	Properties of Logarithms	CC.9-12.F.LE.4
10.2	Solve Exponential Equations	CC.9-12.F.BF.5		
10.3	Solve Logarithmic Equations	CC.9-12.F.LE.4		

Unit 5 – Rational Functions and Equations				
Days 40-47	Days 79-94	Module 11 – Rational Functions		
		11.1	Inverse Variation	CC.9-12.A.CED.2
		11.2	Graph Simple Rational Functions	CC.9-12.F.IF.7d
		11.3	Graph More Complicated Rational Functions	CC.9-12.F.IF.7d
		Module 12 – Rational Expressions and Equations		
		12.1	Multiply and Divide Rational Expressions	CC.9-12.A.APR.7
		12.2	Add and Subtract Rational Expressions	CC.9-12.A.APR.7
	12.3	Solve Rational Equations	CC.9-12.A.REI.2	
Unit 6 – Sequences and Series				
Days 48-54	Days 95-108	Module 13 – Explicit Formulas for Sequences and Series		
		13.1	Define Sequences and Series	CC.9-12.F.IF.3
		13.2	Arithmetic Sequences and Series	CC.9-12.F.BF.2
		13.3	Geometric Sequences and Series	CC.9-12.A.SSE.4
		Module 14 – Recursive Formulas for Sequences		
		14.1	Recursive Formulas for Arithmetic Sequences	CC.9-12.F.BF.2
	14.2	Recursive Formulas for Geometric Sequences	CC.9-12.F.BF.2	
Unit 7 – Trigonometric Functions and Identities				
Days 55-63	Days 109-126	Module 15 – Unit-Circle Definition of Trigonometric Functions		
		15.1	Angles of Rotation and Radian Measure	CC.9-12.F.TF.1
		15.2	Define and Evaluate the Basic Trigonometric Functions	CC.9-12.F.IF.4
		15.3	Use a Pythagorean Identity	CC.9-12.F.TF.8
		Module 16 – Graph Trigonometric Functions		
		16.1	Graph Sine and Cosine Functions	CC.9-12.F.IF.7e
		16.2	Graph Tangent Functions	CC.9-12.F.IF.7e
		16.3	Translations of Trigonometric Graphs	CC.9-12.F.TF.5
	16.4	Model Periodic Phenomena with Trigonometric Functions	CC.9-12.F.BF.1	
Unit 8 – Probability				
Days 64-71	Days 127-142	Module 17 – Probability of Compound Events		
		17.1	Theoretical and Experimental Probability	CC.9-12.S.CP.2
		17.2	Two-Way Tables and Probability	CC.9-12.S.CP.4
		17.3	Mutually Exclusive and Inclusive Events	CC.9-12.S.CP.6
		Module 18 – Probability and Decision Making		
		18.1	Conditional Probability	CC.9-12.S.CP.4
		18.2	Dependent and Independent Events	CC.9-12.S.CP.2
	18.3	Analyze Decisions	CC.9-12.S.CP.6	
Unit 9 – Statistics				
Days 72-79	Days 143-158	Module 19 – Data Distributions		
		19.1	Probability Distributions	CC.9-12.S.ID.4
		19.2	Normal Distributions	CC.9-12.S.MD.3
		19.3	Data-Gathering Techniques	CC.9-12.S.IC.3
		19.4	Sampling Distributions	CC.9-12.S.IC.3
		Module 20 – Make Inferences from Data		
		20.1	Confidence Intervals and Margins of Error	CC.9-12.S.IC.4
		20.2	Surveys, Experiments, and Observational Studies	CC.9-12.S.IC.3
	20.3	Make Inferences from Experimental Data	CC.9-12.S.IC.5	

Unit 1 (Curriculum) - Modules: 2, 6, 8, 9, 10, 13, 14

Unit 2 (Curriculum) - Modules: 1, 3, 4, 5, 7, 11, 12

Unit 3 (Curriculum) - Modules: 15, 16

Unit 4 (Curriculum) - Modules: 17, 18, 19, 20