

Algebra 2 Essentials

KEY:	Priority	Supporting	Additional
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	Chapter 1	Chapter 2	Chapter 3	Chapter 4	Chapter 5	Chapter 6	Chapter 7	Chapter 9	Chapter 11
	Linear Functions & Systems	Quadratic Functions & Equations	Polynomial Functions	Rational Functions	Rational Exponents & Radical Functions	Exponential & Logarithmic Functions	Trigonometric Functions	Conic Sections	Data Analysis and Statistics
Common Core State Standards for Mathematics	A.CED.A.1	N.CN.A.1	N.CN.C.9	A.SSE.A.2	N.RN.A.1	A.SSE.A.2	F.IF.B.4	A.SSE.A.2	S.ID.A.2
	A.CED.A.3	N.CN.A.2	A.APR.B.2	A.APR.D.6	N.RN.A.2	A.SSE.B.4	F.IF.C.9	G.GPE.A.1	S.ID.A.4
	F.IF.A.3	N.CN.C.7	A.APR.B.3	A.APR.D.7	A.SSE.A.2	A.CED.A.1	F.BF.B.3	G.GPE.A.2	S.IC.A.1
	F.IF.B.4	A.CED.A.2	A.APR.C.4	A.REI.A.2	A.CED.A.4	F.IF.A.3	F.TF.A.1	G.GPE.A.3	S.IC.A.2
	F.IF.B.5	A.REI.D.11	A.APR.C.5	F.IF.C.7	A.REI.A.2	F.IF.B.4	F.TF.A.2		S.IC.B.3
	F.IF.C.7	F.IF.B.4	A.APR.D.6	F.BF.B.3	F.IF.B.4	F.IF.B.5	F.TF.B.5		S.IC.B.4
	F.BF.A.1	A.SSE.A.2	F.IF.B.4		F.IF.C.7	F.IF.C.7	F.TF.C.8		S.IC.B.5
	F.BF.A.2		F.IF.C.7		F.BF.A.1	F.IF.C.8.b			S.IC.B.6
	F.BF.B.3		F.IF.C.9		F.BF.B.3	F.IF.C.9			
	F.LE.A.2		F.BF.A.1		F.BF.B.4	F.BF.A.1			
			F.BF.B.3			F.BF.A.2			
			A.SSE.A.2			F.BF.B.3			
						F.BF.B.4			
						F.BF.B.5			
						F.LE.A.2			
						F.LE.B.5			

2025-2026 School Year

Trimester 1:
53 Days + Finals Week

Trimester 2:
59 54 Days + Finals Week

Trimester 3:
51 56 Days + Finals Week

2024-2025 School Year

Trimester 1:
53 Days + Finals Week

Trimester 2:
59 Days + Finals Week

Trimester 3:
51 Days + Finals Week

Trimester A: Chapters 7, 1 (Parts 1 and 2), 2 (Part 1)			
Preview (Ch 7)	Topic:	Activity:	Days:
	Pythagorean theorem, reducing radicals, and labeling triangles		1
	Re-introduce SOH CAH TOA What is O, A, and H Write ratios Label triangles		1
			Total: 2 days
Chapter 7: Trigonometric Functions	7-1	Day 1: Trig Ratios: Ex. 1-2 Day 2: Ex. 3 - Solving for Sides/Angles Day 3: Ex. 5 - Special Right Triangles - CFA 7.1	3
	7-2	Day 1: Standard Position Chart Day 2: Finding Measures in Standard Position + Reference Angles Day 3: Radian Measure + 7.1-7.2 Review	3
	7-3	Day 1: More 7.1-7.2 Review + 7.3: Ex 1 and Evaluate Tri Functions given angle in degrees	1
	Test Review	Day 1: 7.1-7.2 Quiz + Test Review Day 2: Chapter 7 Review	2
	Test	Chapter 7 Test	1
			Total: 10 days

Preview (Ch 1 Part 1)	Topic:	Activity:	Days:
	Intervention/Reteach		1
	→ Graphing given a coordinate point → Finding points on calc → Calculate Slope given 2 points → Include graphs with different x and y scales		1
	Inequality Signs (open/closed circles, brackets/parentheses, words)		1
	Transformations of one point on a coordinate grid		1
			Total: 4 days
Chapter:	Section:	Examples:	Days:
Chapter 1 Part 1: Linear Functions and Systems	1-1	Day 1: Set Notation/Interval Notation + Ex.1 domain/range. Day 2: More Domain/Range + Ex 2: Intercepts - given graph or equation Day 3: Ex 3: Positive/Negative Day 4: Ex. 4: Increase/Decrease Day 5: Review Notation and Pos./Neg/Inc./Dec. Day 6: Ex 5: Average Rate of Change + CFA 1.1	6
	Review	1-1 Review	1
	1-2	Day 1: 1-1 Quiz + Parent Functions Day 2: Summary of Transformations and Compare (left,right,up,down,reflections). Ex 1-2	2
	Test Review	1.1-1.2 Review	1
		Chap 1 Part 1 Test	1

			Total: 11 days
Preview (Ch 1 Part 2)	Topic:	Activity:	Days:
	Intervention Day	Review any topics missed on test - Reteach	1
	Solving one variable equations and using substitution		1
			Total: 2 Days
Chapter:	Section:	Examples:	Days:
Chapter 1 Part 2: Linear Functions and Systems	1-4	Day 1: Arithmetic Sequence Chart + ID if Arithmetic seq. or not Day 2: Writing/interpreting Explicit Formula	2
	1-5	All (heavy calculator use)	1
	Review	1-4 & 1-5 Review	1
	1-6	Day 1: 1-4 & 1-5 Quiz & Solving systems -Substitution Day 2: Solving systems - Elimination	2
	Test Review	1.4-1.6 Review	1
		Chap 1 Part 2 Test	1
			Total: 8 days
Preview (Ch 2 Part 1)	Topic:	Activity:	Days:
	Intervention Day	Review any topics missed on test - Reteach	1
	Finding common factors + Perfect Square Review		1
	Solving equations for one variable (start for 3 and give		1

	them the value of 2)		
			Total: 3 Days
Chapter:	Section:	Examples:	Days:
Chapter 2 Part 1: Quadratic Functions and Equations	2-1	Day 1: Vertex Form (chart) - I.D. features from equations + Ex 1 key features on graph Day 2: Ex. 2 + 3 - Writing Equations in Vertex Form given vertex and point	2
	2-2	Day 1: Standard Form (chart) - Ex. 1-3	1
	Review	2.1-2.2 Review	1
	2-3	Day 1: 2.1-2.2 Quiz + GCF Day 2: Factoring when a = 1 (include perfect square tri.) Day 3: More practice + difference of squares Day 4: Factoring practice + Ex 4-5 (connection between zeros and x-int). Using calc to solve when 'a' does not = 1	4
	Review	Test Review Day (Ch 2 Pt 1)	1
		Chap 2 Part 1 Test	1
			Total: 10 days
End of Trimester A			Total: 47 Days + 6 Quiz Review/ Intervention Days

Trimester B: Chapters 2 (Part 2), 3, 4, 5 (Part 1)

Preview (Ch 2 Part 2)	Topic:	Activity:	Days:
	Simplifying Radicals/Complex Numbers		1
	Distributing, multiplying binomials		1
			Total: 2 Days
Chapter:	Section:	Examples:	Days:
Chapter 2 Part 2: Quadratic Functions and Equations	2-4	Day 1: Review Perfect squares + Intro to Imaginary and Complex Numbers + Solving Day 2: Ex. 3 - Add, Subtract, & Multiplying Day 3: Intro to Conjugates and Quotient Day 4: Practice on all operations with Complex Numbers	4
	2-5	Day 1: Ex. 1 -Solving Quadratic Equations Day 2: Ex. 2 & 3: Perfect Square Tri. + Rewrite by Completing the Square Day 3: Solving by Completing the Square - Ex 4 Day 4: Ex 5 - Writing Quad. in Vertex Form + Review 2.4-2.5	4
	2-6	Day 1: 2.4-2.5 Quiz + Standard Form, Quad Formula + Ex. 1 Day 2: Discriminant & Types of Roots- Ex. 3, 5, CFA	2
	Test Review	2.4-2.6 Review	2
		Chap 2 Part 2 Test	1
			Total: 13 days
Preview (Ch 3)	Topic:	Activity:	Days:
	Intervention/Reteach Day	Review any topics missed on test - Reteach	1

	Combining like terms with addition and subtraction Review Pos/Neg/Inc/Dec.		1
			Total: 2 days
Chapter:	Section:	Examples:	Days:
Chapter 3: Polynomial Functions	3-1	Day 1: Define Poly. & Examples Day 2: End Behavior: Ex 1 Day 3: A.R.C. + Turning Points Day 4: Use a graph to fill in pos/neg/inc/dec or write intervals	4
	3-2	Ex. 1-3: Add, sub, multi polynomials. Parent functions + examples of transformations	1
	Review	3.1 - 3.2	1
	3-4	Day 1: 3.1-3.2 Quiz + Intro to Synthetic Division Day 2: Ex 1 - Synthetic Division Day 3: Remainder Thrm - Ex. 3-5, CFA	3
	3-5	Day 1: Ex. 1 -3 Finding zeros + even and odd graphs Day 2: Real and Complex Zeros	2
	Review	3.4-3.5	1
	3-7	3.4-3.5 Quiz + Chapter 3 Test Review	1
	Test Review	Chapter 3 Review	1
		Chapter 3 Test	1
			Total: 15 days
Preview (Ch 4)	Topic:	Activity:	Days:
	Intervention/Reteach Day		1

	Factoring/LCM of polynomials + Simplifying Fractions and Add, subtract, multiply, divide fractions		1
			Total: 2 days
Chapter:	Section:	Examples:	Days:
Chapter 4: Rational Functions	4-1	Day 1: Inverse Variation: Chart + Ex 1-2 Day 2: Reciprocal Function Graphs w/Transformations: p.6-7	2
	4-2	Day 1: Definitions of Vertical/Horizontal Asym (chart)., Ex. 1, 2 + Practice (no factoring) Day 2: Graphing with Factoring Ex. 3-4	2
	Review	4.1-4.2	1
	4-3	Day 1: 4.1-4.2 Quiz + Simplifying Rational Expressions: Ex. 1 Day 2: Continue simplifying rational expressions Day 3: Multiply: Ex. 2-3, CFA	3
	4-4	Day 1: Ex. 1-2 - Adding with like denominators + LCM Practice	1
	Review	4.3-4.4 Review	1
	4-5	Day 1: 4.3-4.4 Quiz and Ex: 1, 2 Day 2: Solving with Extraneous Solutions. Ex. 3-4	2
	Test Review	Chapter 4 Test Review	2
	Test	Chapter 4 Test	1
			Total: 15 days
Preview (Ch 5 Part 1)	Topic:	Activity:	Days:
	Intervention/Reteach Day		1

			Total: 1 day
Chapter 5 Part 1: Rational Exponents and Radical Functions	5-1	Day 1: Evaluate expressions with rational exponents Day 2: Simplifying nth roots and solving	2
	5-2	Day 1: Properties of Exponents - all 5 rules Day 2: Properties of Radicals and Add/Sub. Radical Expressions Day 3: Mult. and Rationalize Binomial Denominator-do in 3rd tri	3
	Review	5.1-5.2	1
	5.1-5.2 Quiz	5.1-5.2 Quiz & Start exam review after	1
			Total: 7 days
End of Trimester B			Total: 50 Days + 7 Interventions Days

Trimester C: Chapters 5 (Part 2), 6, 9, and 11			
Chapter:	Section:	Examples:	Days:
Chapter 5 Part 2: Rational	5-3	Day 1: Parents graphs/transformations. Graphing + features	1

Exponents and Radical Functions		(transformations + D/R)	
	5-4	Day 1: Solving with 1 radical: Ex. 1 Day 2: Solving with Factoring/Extraneous Solutions: Ex 2. CFA	2
	Review	5.3-5.4 Day	1
	5-5	Day 1: 5.3-5.4 Quiz & Add/Sub./Mult/Divide with functions Day 2: Plugging in to functions Example: If $f(x)=$ ___ what is $f(3)$ Day 3: Rule for Composite Functions	3
	Test Review	Chapter 5 Review	1
	Test	Chapter 5 Test	1
			Total: 9 Days
Preview (Ch 6 Part 1)	Topic:	Activity:	Days:
	Intervention/Reteach Day		1
			Total: 1
Chapter 6: Exponential and Logarithmic Functions	6-1	Day 1: Ex 1: Key features and transformations Day 2: Exponential Functions - Growth/Decay Day 3: Writing and Solving Exponential Functions	3
	6-2	Day 1: Compound Interest/Compounded Continuously	1
	Review	6.1-6.2 Review	1
	6-3	Day 1: 6.1-6.2 Quiz & Ex. 1-2 Day 2: More practice with converting & Ex 3 on Calc Day 3: Ex. 5 - Solving with log	3
	6-4	Day 1: Given graph - Find Key Features	1
	6-5	Day 1: Properties of Logs + 6.3-6.5 Review Day 2: 6.3-6.5 Quiz and Geometric Sequence Intro (chart)	2

	6-7	Identifying Geometric Seq./Writing Explicit Formula	1
	Test Review	Chapter 6 Part 2 Review	2
	Test	Chapter 6 Part 2 Test	1
			Total: 15 days
Preview (Ch 9)	Topic:	Activity:	Days:
	Intervention/Reteach Day		1
			Total: 1 day
Chapter 9: Conic Sections (limited emphasis/time on deriving formulas)	9-1 Part 1	Day 1: Parabolas at (0,0): Chart + examples identifying F, D, V and C from equation and graph Day 2: Given key features, write the equation of the parabola	2
	9-2	Circles at (0,0) and not at (0,0)	1
	9-1 Part 2	Day 1: Examples identifying F, D, V and C from equation Day 2: Writing equations given key features of parabolas	2
	Test Review	Chapter 9 Review	2
	Test	Chapter 9 Test	1
			Total: 8 days
Preview (Ch 11)	Topic:	Activity:	Days:
	Intervention/Reteach Day		1
			Total: 1 day
Chapter 11: Statistics	11-1	Day 1: Statistical questions, categorical/qualitative variables Day 2: Population, sample, statistic, parameter	2

	11-2	Day 1: 11.1 Vocab to know chart, Ex. 1: Type of Study Day 2: Ex. 2: Types of Bias Day 3: ID a Sampling Method	3
	Review	11.1-11.2 Review	1
	11-3	Day 1: 11.1-11.2 Quiz + Ex. 1 A: Mean and SD (by hand) Day 2: Ex. 1 B (on calc) Ex. 2, 3	2
	11-4	Day 1: Ex. 1-2 Day 2: Ex. 3 and more practice of empirical rule and z score	2
	Test Review		1
	Test		1
			Total: 12 Days
End of Trimester C			Total: 44 Days + 3 Intervention Days

