

Algebra 2 — 2026–27 Day-by-Day Pacing Guide

Foundations / Algebra 1 Review

August 21–September 4

Date	Lesson	Objective / Practice
Fri 8/21	Diagnostic	Algebra 1 prerequisite assessment; identify skill gaps
Mon 8/24	Solving Linear Equations	Multi-step equations; distributive property
Tue 8/25	Linear Equations II	Variables on both sides; no/infinite solutions
Wed 8/26	Slope & Rate of Change	Calculate and interpret slope
Thu 8/27	Linear Functions	Graph from slope-intercept and point-slope form
Fri 8/28	Function Notation	Evaluate $f(x)$; inputs, outputs, domain/range
Mon 8/31	Exponent Rules	Product, quotient and power rules
Tue 9/1	Polynomials	Terms, degree, coefficients; operations review
Wed 9/2	Factoring	GCF and trinomial factoring
Thu 9/3	Quadratics	Graphs, zeros and factoring review
Fri 9/4	Foundations Check	Assessment + corrections/reteach

Mon 9/7 — Labor Day / No School

IM UNIT 1 — Sequences & Functions

September 8–October 2

Week 1

Date	Lesson	Objective / Practice
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Tue 9/8	Introduction to Sequences	Identify terms, patterns and sequence notation
Wed 9/9	Arithmetic Sequences	Determine common difference and generate terms
Thu 9/10	Arithmetic Practice	Find missing terms and identify arithmetic patterns
Fri 9/11	Geometric Sequences	Determine common ratio and generate terms

Week 2

Date	Lesson	Objective / Practice
Mon 9/14	Arithmetic vs. Geometric	Classify sequences from tables and lists
Tue 9/15	Sequences as Functions	Connect term number n with function input
Wed 9/16	Graphing Sequences	Represent sequences with tables and discrete graphs
Thu 9/17	Recursive Arithmetic	Write $a_n = a_{n-1} + d$
Fri 9/18	Recursive Geometric	Write $a_n = r(a_{n-1})$

Week 3

Date	Lesson	Objective / Practice
Mon 9/21	Explicit Arithmetic	Use $a_n = a_1 + (n-1)d$
Tue 9/22	Explicit Arithmetic Practice	Find specified terms and write equations
Wed 9/23	Explicit Geometric	Use $a_n = a_1 r^{n-1}$
Thu 9/24	Explicit Geometric Practice	Write and evaluate geometric formulas
Fri 9/25	Quiz 1	Arithmetic/geometric; explicit/recursive

Week 4

Date	Lesson	Objective / Practice
Mon 9/28	Quiz Corrections + Reteach	Address misconceptions
Tue 9/29	Recursive vs. Explicit	Move between representations

Wed 9/30	Sequence Applications	Model growth and repeated change
Thu 10/1	Unit Review	Mixed IM-aligned practice
Fri 10/2	Unit 1 Assessment	Sequences & functions

IM UNIT 2 — Polynomial Functions

October 5–November 6

Week 1

Date	Lesson
Mon 10/5	Polynomial vocabulary, degree and standard form
Tue 10/6	Adding & subtracting polynomials
Wed 10/7	Multiplying monomials and polynomials
Thu 10/8	Multiplying binomials
Fri 10/9	Special products

Week 2

Date	Lesson
Mon 10/12	Factoring using GCF
Tue 10/13	Factoring $x^2+bx+cx^2+bx+c$
Wed 10/14	Factoring $ax^2+bx+cax^2+bx+c$
Thu 10/15	Difference of squares/perfect squares
Fri 10/16	Polynomial Operations & Factoring Quiz

Week 3

Date	Lesson
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Mon 10/19	Polynomial functions & graphs
Tue 10/20	Zeros, roots and x-intercepts
Wed 10/21	Factored form → zeros
Thu 10/22	Multiplicity
Fri 10/23	End behavior

Week 4

Date	Lesson
Mon 10/26	Degree + leading coefficient
Tue 10/27	Sketch polynomial graphs
Wed 10/28	Write polynomial equations from zeros
Thu 10/29	Mixed graphing practice
Fri 10/30	Polynomial Functions Quiz

Week 5

Date	Lesson
Mon 11/2	Polynomial long division
Tue 11/3	Synthetic division
Wed 11/4	Remainder & Factor Theorems
Thu 11/5	Unit review
Fri 11/6	Unit 2 Assessment

IM UNIT 3 — Rational Functions & Equations

November 9–December 11

Week 1

Date	Lesson
Mon 11/9	Introduction to rational expressions
Tue 11/10	Domain restrictions
Wed 11/11	Veterans Day / potential school closure
Thu 11/12	Simplifying rational expressions
Fri 11/13	Simplifying practice

Week 2

Date	Lesson
Mon 11/16	Multiply rational expressions
Tue 11/17	Divide rational expressions
Wed 11/18	Add/subtract: same denominators
Thu 11/19	Add/subtract: unlike denominators
Fri 11/20	Rational Expressions Quiz

Thanksgiving Week

Use according to your school's actual calendar.

Week 3 — November 30

Date	Lesson
Mon 11/30	Rational functions and graphs
Tue 12/1	Vertical asymptotes
Wed 12/2	Horizontal asymptotes
Thu 12/3	Holes/discontinuities
Fri 12/4	Graphing rational functions

Week 4

Date	Lesson
Mon 12/7	Solving rational equations
Tue 12/8	Extraneous solutions
Wed 12/9	Rational equation applications
Thu 12/10	Unit review
Fri 12/11	Unit 3 Assessment

IM UNIT 4 — Rational Exponents, Radicals & Complex Numbers

December 14–January 29

Before Winter Break

Date	Lesson
Mon 12/14	Exponent rules review
Tue 12/15	Zero and negative exponents
Wed 12/16	Square roots & cube roots
Thu 12/17	Introduction to rational exponents
Fri 12/18	Rational exponent practice

After Winter Break

Date	Lesson
Mon 1/4	Radical $\leftrightarrow$ rational exponent form
Tue 1/5	Simplifying radicals
Wed 1/6	Adding/subtracting radicals

Thu 1/7	Multiplying radicals
Fri 1/8	Radicals Quiz
Mon 1/11	Solving radical equations
Tue 1/12	Radical equations continued
Wed 1/13	Extraneous solutions
Thu 1/14	Mixed radical equations
Fri 1/15	Review/reteach
Mon 1/18	MLK Day / No School
Tue 1/19	Introduction to $i = \sqrt{-1}$
Wed 1/20	Powers of i
Thu 1/21	Complex numbers
Fri 1/22	Add/subtract complex numbers
Mon 1/25	Multiply complex numbers
Tue 1/26	Quadratics with complex solutions
Wed 1/27	Quadratic formula & complex roots
Thu 1/28	Unit review
Fri 1/29	Unit 4 Assessment

IM UNIT 5 — Exponential & Logarithmic Functions

February 1–March 5

Date	Lesson
Mon 2/1	Review exponential functions
Tue 2/2	Exponential growth

Wed 2/3	Exponential decay
Thu 2/4	Graph exponential functions
Fri 2/5	Write exponential equations
Mon 2/8	Growth/decay factors
Tue 2/9	Percent growth and decay
Wed 2/10	Compound interest
Thu 2/11	Exponential modeling
Fri 2/12	Exponential Functions Quiz
Mon 2/15	Presidents' Day / No School
Tue 2/16	Introduction to logarithms
Wed 2/17	Exponential $\leftrightarrow$ logarithmic form
Thu 2/18	Evaluate logarithms
Fri 2/19	Common logarithms
Mon 2/22	Natural logarithms and e
Tue 2/23	Product property of logs
Wed 2/24	Quotient & power properties
Thu 2/25	Expand logarithms
Fri 2/26	Condense logarithms
Mon 3/1	Solve exponential equations
Tue 3/2	Solve logarithmic equations
Wed 3/3	Applications/modeling
Thu 3/4	Unit review
Fri 3/5	Unit 5 Assessment

IM UNIT 6 — Transformations of Functions

March 8–April 2

Date	Lesson
Mon 3/8	Parent functions review
Tue 3/9	Function notation/domain/range
Wed 3/10	Vertical translations
Thu 3/11	Horizontal translations
Fri 3/12	Translation practice
Mon 3/15	Reflections
Tue 3/16	Vertical stretch/compression
Wed 3/17	Horizontal stretch/compression
Thu 3/18	Combining transformations
Fri 3/19	Transformations Quiz
Mon 3/22	Write equations from graphs
Tue 3/23	Graph equations from transformations
Wed 3/24	Even functions
Thu 3/25	Odd functions
Fri 3/26	Symmetry
Mon 3/29	Quadratic transformations
Tue 3/30	Absolute value/radical transformations
Wed 3/31	Exponential transformations
Thu 4/1	Unit review
Fri 4/2	Unit 6 Assessment

IM UNIT 7 — Trigonometric Functions

April 5–May 7

This is a unit where I would keep the pace deliberately slower.

Date	Lesson
Mon 4/5	Right-triangle review
Tue 4/6	SOHCAHTOA
Wed 4/7	Finding missing sides
Thu 4/8	Finding missing angles
Fri 4/9	Right-triangle trig review/quiz
Mon 4/12	Degrees and angle measurement
Tue 4/13	Introduction to radians
Wed 4/14	Degrees $\rightarrow$ radians
Thu 4/15	Radians $\rightarrow$ degrees
Fri 4/16	Unit circle introduction
Mon 4/19	Quadrant I unit circle
Tue 4/20	Complete unit circle
Wed 4/21	Sine from unit circle
Thu 4/22	Cosine from unit circle
Fri 4/23	Unit Circle Quiz
Mon 4/26	Tangent
Tue 4/27	Pythagorean identity
Wed 4/28	Sine function
Thu 4/29	Cosine function

Fri 4/30	Periodic functions
Mon 5/3	Amplitude & midline
Tue 5/4	Period
Wed 5/5	Transformations of sine/cosine
Thu 5/6	Trigonometry review
Fri 5/7	Unit 7 Assessment

IM UNIT 8 — Statistical Inference

May 10–May 28

Date	Lesson
Mon 5/10	Populations vs. samples
Tue 5/11	Observational studies vs. experiments
Wed 5/12	Surveys and sampling
Thu 5/13	Random samples
Fri 5/14	Random assignment
Mon 5/17	Describing distributions
Tue 5/18	Normal distribution
Wed 5/19	Mean & standard deviation
Thu 5/20	Normal curve applications
Fri 5/21	Statistics Quiz
Mon 5/24	Sampling variability
Tue 5/25	Estimating population proportions
Wed 5/26	Estimating population means

Thu 5/27 Margin of error + review

Fri 5/28 **Unit 8 Assessment**

Final Week

June 1–4

Monday, May 31 — Memorial Day / No School

Date	Focus
Tue 6/1	Review 1: Sequences + polynomial functions
Wed 6/2	Review 2: Rational, radical, exponential & logarithmic functions
Thu 6/3	Review 3: Transformations + trigonometry + statistics
Fri 6/4	Cumulative Assessment / Final