

West Contra Costa Unified School District

Suggested Pacing Guide for High School Algebra II

Text: Discovering Advanced Algebra

Time/ # of days	Topics: Content & Assessment	CA Content Standards	Resources
6	Chapter 0: Problem Solving with Algebra		
2	Lesson 0.1: Pictures, Graphs, and Diagrams		
1	Lesson 0.2: Symbolic Representation		
1	Lesson 0.3: Organizing Information		
2	Review & Assessment		
14	Chapter 3: Linear Models and Systems		
1	Lesson 3.1: Linear Equations and Arithmetic Sequences	Alg. I	
2	Lesson 3.2: Revisiting Slope	Alg. I	Discovering Slope of a Line in Standard Form
1	Lesson 3.3: Fitting a Line to Data	Alg. I	
2	Quiz Lesson 3.4: The Median-Median Line		
2	Lesson 3.5: Prediction and Accuracy		
1	Quiz Lesson 3.6: Linear Systems	2.0	Systems of Equations — Multiple Methods
1	Quiz Lesson 3.7: Substitution and Elimination	2.0, 25.0	Solving a System by Substitution
4	Review (mixed review) & Assessment	2.0	
13	Chapter 4: Functions, Relations, and Transformations		
1	Lesson 4.1: Interpreting Graphs	Alg. I	Family of Functions — Graphing Calculator Lesson Family of Functions and Their Graphs
1	Lesson 4.2: Function Notation	Alg. I	

West Contra Costa Unified School District

Suggested Pacing Guide for High School Algebra II

Text: Discovering Advanced Algebra

Time/ # of days	Topics: Content & Assessment	CA Content Standards	Resources
1	Quiz Lesson 4.3: Lines in Motion	Alg. I	
2	Lesson 4.4: Translations and the Quadratic Family	9.0, 10.0	
1	Quiz Lesson 4.5: Reflection and the Square Root Family	9.0	
2	Lesson 4.6: Dilations and the Absolute-Value Family	1.0	Absolute Value Equations and Inequalities Connecting Graphing and Solving Absolute Value Equations and Functions
1	Lesson 4.7: Transformations and the Circle Family	17.0	
2	Lesson 4.8: Composition of Functions	24.0	
2	Review & Assessment		
13	Chapter 6: Matrices and Linear Systems		
1	Lesson 6.1: Matrix Representations	2.0	Systems of Equations — Multiple Methods
1	Lesson 6.2: Matrix Operations	2.0	
2	Quiz Lesson 6.3: Row Reduction Method	2.0	
1	Lesson 6.4: Solving Systems with Inverse Matrices	2.0	
2	Quiz Lesson 6.5: Systems of Linear Inequalities	2.0	
2	Lesson 6.6: Linear Programming	2.0	
4	Review & Assessment		

West Contra Costa Unified School District

Suggested Pacing Guide for High School Algebra II

Text: Discovering Advanced Algebra

Time/ # of days	Topics: Content & Assessment	CA Content Standards	Resources
13	Chapter 7: Quadratic and Other Polynomial Functions		
1	Lesson 7.1: Polynomial Degree and Finite Differences	8.0	
1	Lesson 7.2: Equivalent Quadratic Forms	3.0, 8.0, 10.0	Quadratics – Matching Game
2	Lesson 7.3: Completing the Square	3.0, 4.0, 8.0, 9.0, 10.0	Quadratics – Solving by Completing the Square, Factoring, Formula, and Graphically
1	Quiz Lesson 7.4: The Quadratic Formula	3.0, 4.0, 8.0, 10.0, 25.0	Derivation of Quadratic Formula
1	Lesson 7.5: Complex Numbers	5.0, 6.0, 8.0	
1	Quiz Lesson 7.6: Factoring Polynomials	3.0, 4.0	Factoring the Sum & Difference of Cubes
2	Lesson 7.7: Higher-Degree Polynomials		
2	Lesson 7.8: More About Finding Solutions	3.0, 4.0, 6.0	Investigating the Discriminant
2	Review & Assessment		Polynomial Division Solving Quadratic Equations – Alternative Methods
1	Benchmark 1 Assessment		
9	Chapter 1: Sequences		
1	Lesson 1.1: Recursively Defined Sequences	MA 8.0	Sequences – Arithmetic
1	Lesson 1.2: Modeling Growth and Decay		
1	Quiz Lesson 1.3: A First Look at Limits	MA 8.0	
2	Lesson 1.4: Graphing Sequences	MA 8.0	

West Contra Costa Unified School District

Suggested Pacing Guide for High School Algebra II

Text: Discovering Advanced Algebra

Time/ # of days	Topics: Content & Assessment	CA Content Standards	Resources
2	Lesson 1.5: Loans and Investments		
2	Review & Assessment		
13	Chapter 5: Exponential, Power, and Logarithmic Functions		
1	Lesson 5.1: Exponential Functions	12.0	
1	Lesson 5.2: Properties of Exponents and Power Functions	7.0, 15.0	Properties of Exponents Zero and Negative Exponents
1	Lesson 5.3: Rational Exponents and Roots	11.2, 12.0, 25.0	Roots and Fractional Exponents
1	Quiz Lesson 5.4: Applications of Exponential and Power Equations (Teach with 1.2 modeling Growth Decay)	24.0	
1	Lesson 5.5: Building Inverses of Functions	11.0, 24.0	
2	Quiz Lesson 5.6: Logarithmic Functions	11.1, 13.0, 14.0	
1	Lesson 5.7: Properties of Logarithms	11.1, 11.2, 13.0, 14.0	
2	Lesson 5.8: Applications of Logarithms	11.1, 14.0	
3	Review & Assessment		
14	Chapter 9: Conic Sections and Rational Functions [Ch. 8 in 2nd ed.]		
1	Lesson 9.1: Using the Distance Formula		Distance Formula Standard Form of Conics
1	Lesson 9.2: Circles and Ellipses	16.0	Derivation of Standard Form of an Ellipse
1	Lesson 9.3: Parabolas	10.0	

West Contra Costa Unified School District

Suggested Pacing Guide for High School Algebra II

Text: Discovering Advanced Algebra

Time/ # of days	Topics: Content & Assessment	CA Content Standards	Resources
2	Lesson 9.4: Hyperbolas	16.0	
2	Lesson 9.5: The General Quadratic	8.0, 9.0, 16.0, 17.0	
1	Benchmark 2 Assessment		
1	Lesson 9.6: Introduction to Rational Functions	7.0	Rational Functions
1	Lesson 9.7: Graphs of Rational Functions	7.0	
1	Lesson 9.8: Operations with Rational Expressions	7.0	
4	Review & Assessment		
6	Chapter 11: Series [Ch. 9 in 2nd ed.]		
1	Lesson 11.1: Arithmetic Series	22.0, 23.0	Arithmetic Series
1	Quiz Lesson 11.2: Infinite Geometric Series	22.0, 23.0	
1	Lesson 11.3: Partial Sums of Geometric Series	22.0, 23.0	
3	Review & Assessment	22.0, 23.0	
12	Chapter 12: Probability [Ch. 10 in 2nd ed.]		
1	Lesson 12.1: Randomness and Probability (Exploration)	PS 1.0, PS 2.0, PS 3.0	
2	Quiz Lesson 12.2: Counting Outcomes and Tree Diagrams	PS 8.0	
1	Lesson 12.3: Mutually Exclusive Events and Venn Diagrams	PS 1.0	
1	Quiz Lesson 12.4: Random Variables and Expected Values	PS 3.0	

West Contra Costa Unified School District

Suggested Pacing Guide for High School Algebra II

Text: Discovering Advanced Algebra

Time/ # of days	Topics: Content & Assessment	CA Content Standards	Resources
1	Lesson 12.5: Permutations and Probability	18.0, 19.0	
1	Quiz Lesson 12.6: Combinations and Probability	19.0	
1	Lesson 12.7: The Binomial Theorem and Pascal's Triangle	3.0, 20.0	
4	Review & Assessment		
1	Benchmark 3 Assessment		
11	Chapter 8: Parametric Equations and Trigonometry		
1	Lesson 8.1: Graphing Parametric Equations		
1	Lesson 8.2: Converting from Parametric to Nonparametric Equations		
2	Quiz Lesson 8.3: Right Triangle Trigonometry	Trig 12.0	
2	Lesson 8.4: Using Trigonometry to Set a Course	Trig 19.0	
1	Lesson 8.5: Projectile Motion	Trig 19.0	
1	Quiz Lesson 8.6: The Law of Sines	Trig 13.0	
1	Lesson 8.7: The Law of Cosines	Trig 13.0	The Parallelogram Law
2	Review & Assessment		
11	Chapter 10: Trigonometric Functions		
1	Lesson 10.1: Defining the Circular Function	Trig 1.0	
1	Lesson 10.2: Radian Measure and Arc Length	Trig 1.0	

West Contra Costa Unified School District

Suggested Pacing Guide for High School Algebra II

Text: Discovering Advanced Algebra

Time/ # of days	Topics: Content & Assessment	CA Content Standards	Resources
1	Quiz Lesson 10.3: Graphing Trigonometric Functions	Trig 2.0, 4.0, 5.0, 6.0	
1	Lesson 10.4: Inverses of Trigonometric Functions	Trig 8.0	
1	Lesson 10.5: Modeling with Trigonometric Equations	Trig 19.0	
1	Quiz Lesson 10.6: Fundamental Trigonometric Identities	Trig 3.0	
1	Lesson 10.7: Combining Trigonometric Functions	Trig 10.0	
4	Review & Assessment		
6	Chapter 2: Describing Data		
1	Lesson 2.1: Box Plots	PS 8.0	
1	Lesson 2.2: Measures of Spread	PS 8.0	
2	Quiz Lesson 2.3: Histograms and Percentile Ranks	PS 8.0	
2	Review & Assessment		
15 (including Final Exam)	Chapter 13: Applications of Statistics		
1	Lesson 13.1: Probability Distributions	PS 1.0, PS 2.0	
1	Lesson 13.2: Normal Distributions	PS 4.0	
1	Quiz Lesson 13.3: z-Values and Confidence Intervals	APPS 17.0	
2	Lesson 13.4: The Central Limit Theorem	APPS 9.0	
1	Quiz Lesson 13.5: Bivariate Data and Correlation	APPS 13.0	

West Contra Costa Unified School District
Suggested Pacing Guide for High School Algebra II
Text: Discovering Advanced Algebra

Time/ # of days	Topics: Content & Assessment	CA Content Standards	Resources
1	Lesson 13.6: The Least Squares Line	APPS 12.0	
2	Lesson 13.7: Nonlinear Regression		
6	Review & Assessment (including Final Exam)		