



Algebra 2

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REVERSE CORRELATION

CHAPTER/LESSON TITLES	COURSE-LEVEL EXPECTATIONS
Unit 1 Linear Relations and Functions	
Chapter 1 Equations and Inequalities	
1-1 Expressions and Formulas	Number and Operations 2.A, 3.D
1-2 Properties of Real Numbers	Number and Operations 1.A, 2.C
1-3 Solving Equations	Number and Operations 1.B, 2.B Algebraic Relationships 1.D, 2.C
1-4 Solving Absolute Value Equations	Number and Operations 1.B, 2.B
1-5 Solving Inequalities	Number and Operations 1.B Algebraic Relationships 2.C
1-6 Solving Compound and Absolute Value Inequalities	Number and Operations 1.B

CHAPTER/LESSON TITLES	COURSE-LEVEL EXPECTATIONS
Chapter 2 Linear Relations and Functions	
2-1 Relations and Functions	Number and Operations 1.D Geometric and Spatial Relationships 1.A
2-2 Linear Relations and functions	Algebraic Relationships 1.D
2-3 Rate of Change and Slope	Measurement 2.E
2-4 Writing Linear Equations	Number and Operations 1.B, 2.B
2-5 Scatter Plots and Lines of Regression	Data and Probability 2.C
2-6 Special Functions	Algebraic Relationships 1.D
2-7 Parent Functions and Transformations	Algebraic Relationships 1.E Geometric and Spatial Relationships 3.B
2-8 Graphing Linear and Absolute Value Inequalities	Algebraic Relationships 2.C
Chapter 3 Systems of Equations and Inequalities	
3-1 Solving Systems of Equations by Graphing	Algebraic Relationships 2.D
3-2 Solving Systems of Equations Algebraically	Algebraic Relationships 2.D
3-3 Solving Systems of Inequalities by Graphing	Algebraic Relationships 2.D
3-4 Optimization with Linear Programming	Algebraic Relationships 2.D
3-5 Systems of Equations in Three Variables	There is no state-mandated Algebra 2 CLE for this topic.

CHAPTER/LESSON TITLES	COURSE-LEVEL EXPECTATIONS
Chapter 4 Matrices	
4-1 Introduction to Matrices	Number and Operations 2.D
4-2 Operations with Matrices	Number and Operations 2.D
4-3 Multiplying Matrices	Number and Operations 2.D
4-4 Transformations with Matrices	Geometry and Spatial Relationships 4.B
4-5 Determinants and Cramer's Rule	Algebraic Relationships 2.D
4-6 Inverse Matrices and Systems of Equations	Algebraic Relationships 2.D
Unit 2 Quadratic, Polynomial, and Radical Functions and Relations	
Chapter 5 Quadratic Functions and Relations	
5-1 Graphing Quadratic Functions	Geometric and Spatial Relationships 2.A
5-2 Solving Quadratic Equations by Graphing	Geometric and Spatial Relationships 2.A
5-3 Solving Quadratic Equations by Factoring	Number and Operations 3.C
5-4 Complex Numbers	Number and Operations 2.D
5-5 Completing the Square	Number and Operations 3.C
5-6 The Quadratic Formula and the Discriminant	Algebraic Relationships 2.A
5-7 Transformations with Quadratic Functions	Algebraic Relationships 1.E Geometric and Spatial Relationships 3.A
5-8 Quadratic Inequalities	Number and Operations 2.C

CHAPTER/LESSON TITLES	COURSE-LEVEL EXPECTATIONS
Chapter 6 Polynomials and Polynomial Functions	
6-1 Operations with Polynomials	Number and Operations 2.C
6-2 Dividing Polynomials	Number and Operations 2.C
6-3 Polynomial Functions	Number and Operations 2.C
6-4 Analyzing Graphs of Polynomial Functions	Geometric and Spatial Relationships 2.A
6-5 Solving Polynomial Equations	Geometric and Spatial Relationships 4.B
6-6 The Remainder and Factor Theorems	Algebraic Relationships 2.B
6-7 Roots and Zeros	Number and Operations 2.D Algebraic Relationships 2.A, 2.B
6-8 Rational Zero Theorem	Geometric and Spatial Relationships 4.B
Chapter 7 Inverses and Radical Functions and Relations	
7-1 Operations on Functions	Algebraic Relationships 2.B
7-2 Inverse Functions and Relations	Algebraic Relationships 2.B
7-3 Square Root Functions and Inequalities	Geometric and Spatial Relationships 2.A
7-4 n th Roots	Number and Operations 1.D
7-5 Operations with Radical Expressions	Number and Operations 2.C
7-6 Rational Exponents	Number and Operations 1.D
7-7 Solving Radical Equations and Inequalities	Number and Operations 1.A, 3.D

CHAPTER/LESSON TITLES	COURSE-LEVEL EXPECTATIONS
Chapter 8 Exponential and Logarithmic Functions and Relations	
8-1 Graphing Exponential Functions	Geometric and Spatial Relationships 2.A
8-2 Solving Exponential Equations and Inequalities	Algebraic Relationships 1.D, 2.A
8-3 Logarithms and Logarithmic Functions	Algebraic Relationships 2.A, 4.D
8-4 Solving Logarithmic Equations and Inequalities	Algebraic Relationships 1.D
8-5 Properties of Logarithms	Algebraic Relationships 1.D
8-6 Common Logarithms	Algebraic Relationships 1.A
8-7 Base e and Natural Logarithms	Algebraic Relationships 2.A
8-8 Using Exponential and Logarithmic Functions	Algebraic Relationships 1.A
Chapter 9 Rational Functions and Relations	
9-1 Multiplying and Dividing Rational Expressions	Number and Operations 2.A, 2.B
9-2 Adding and Subtracting Rational Expressions	Number and Operations 2.A, 2.B
9-3 Graphing Reciprocal Functions	Geometric and Spatial Relationships 2.A
9-4 Graphing Rational Functions	Geometric and Spatial Relationships 2.A
9-5 Variation Functions	Number and Operations 2.A, 2.B
9-6 Solving Rational Equations and Inequalities	Algebraic Relationships 1.D

CHAPTER/LESSON TITLES		COURSE-LEVEL EXPECTATIONS
Chapter 10 Conic Sections		
10-1 Midpoint and Distance Formulas		Algebraic Relationship 3.A
10-2 Parabolas		Number and Operations 2.A Geometric and Spatial Relationships 2.A
10-3 Circles		Number and Operations 2.A Geometric and Spatial Relationships 2.A
10-4 Ellipses		Number and Operations 2.A Geometric and Spatial Relationships 2.A
10-5 Hyperbolas		Number and Operations 2.A Geometric and Spatial Relationships 2.A
10-6 Identifying Conic Sections		Number and Operations 2.A Geometric and Spatial Relationships 2.A
10-7 Solving Quadratic Systems		Algebraic Relationships 2.D
Unit 4 Discrete Mathematics		
Chapter 11 Rational Functions and Equations		
11-1 Sequences as Functions		Algebraic Relationships 1.C Measurement 2.D
11-2 Arithmetic Sequences and Series		Algebraic Relationships 1.A
11-3 Geometric Sequences and Series		Algebraic Relationships 1.A

CHAPTER/LESSON TITLES	COURSE-LEVEL EXPECTATIONS
11-4 Infinite Geometric Series	Algebraic Relationships 1.A
11-5 Recursion and Iteration	Algebraic Relationships 1.B
11-6 The Binomial Theorem	Algebraic Relationships 1.C
11-7 Proof by Mathematical Induction	Algebraic Relationships 2.B, 2.C
Chapter 12 Probability and Statistics	
12-1 Experiments, Surveys, and Observational Studies	Data and Probability 1.A, 1.B
12-2 Statistical Analysis	Data and Probability 1.C
12-3 Conditional Probability	Data and Probability 4.C
12-4 Probability and Probability Distributions	Data and Probability 4.A
12-5 The Normal Distribution	Data and Probability 1.C, 4.A
12-6 Hypothesis Testing	Data and Probability 3.A
12-7 Binomial Distributions	Data and Probability 4.A
Unit 5 Trigonometry	
Chapter 13 Trigonometric Functions	
13-1 Trigonometric Functions in Right Triangles	Geometric and Spatial Relationships 1.A
13-2 Angles and Angle Measure	Measurement 2.B
13-3 Trigonometric Functions of General Angles	Geometric and Spatial Relationships 1.A Algebraic Relationships 3.A

CHAPTER/LESSON TITLES	COURSE-LEVEL EXPECTATIONS
13-4 Law of Sines	Number and Operations 3.E
13-5 Law of Cosines	Number and Operations 3.E
13-6 Circular Functions	Geometric and Spatial Relationships 1.A, 4.B
13-7 Graphing Trigonometric Functions	Geometric and Spatial Relationships 3.B
13-8 Translations of Trigonometric Graphs	Geometric and Spatial Relationships 3.B
13-9 Inverse Trigonometric Functions	Algebraic Relationships 2.B
Chapter 14 Trigonometric Identities and Equations	
14-1 Trigonometric Identities	Number and Operations 3.B
14-2 Verifying Trigonometric Identities	Number and Operations 3.B
14-3 Sum and Difference of Angles Identities	Number and Operations 3.B
14-4 Double-Angle and Half-Angle Identities	Number and Operations 3.B
14-5 Solving Trigonometric Equations	Number and Operations 1.B, 3.D