

ALGEBRA 2 FINAL EXAM STUDY CHECKLIST

TABLE OF CONTENTS	Self Rating	Vocabulary, Formulas, Rules, Pictures
UNIT 1 EQUATIONS, INEQUALITIES, FUNCTIONS		
Activity 1 Creating Equations—One to Two		
Activity 2 Graphing to Find Solutions—Choices		
Activity 3 Systems of Linear Equations—Monetary Systems Overload		
Activity 4 Piecewise-Defined Functions—Absolutely Piece-ful		
Activity 5 Function Composition and Operations—New from Old		
Activity 6 Inverse Functions—Old from New		
UNIT 2- QUADRATIC FUNCTIONS		
Activity 7 Applications of Quadratic Functions—Fences		
Activity 8 Introduction to Complex Numbers—Cardano’s Imaginary Numbers		
Activity 9- Solving $ax^2 + bx + c = 0$ —Deriving the Quadratic Formula		
Activity 10 Writing Quadratic Equations—What Goes Up Must Come Down		
Activity 11 Transformations of $y = x^2$ —Parent Parabola		
Activity 12 Graphing Quadratics and Quadratic Inequalities—Calendar Art		
Activity 13 Systems of Linear and Nonlinear Equations—Supply and Demand		
Unit 3 POLYNOMIALS		
Activity 14 Introduction to Polynomials—Postal Service		
Activity 15 Polynomial Operations—Polly’s Pasta		
Activity 16 Binomial Theorem—Pascal’s Triangle		
Activity 17 Factors of Polynomials How Many Roots		

Activity 18 Graphs of Polynomials—Getting to the End Behavior		
Unit 4 SERIES, EXPONENTIAL AND LOGARITHMIC FUNCTIONS		
Activity 19 Arithmetic Sequences and Series—Arithmetic Alkanes		
Activity 20 Geometric Sequences and Series—Squares with Patterns		
Activity 21 Exponential Functions and Graphs—Sizing Up the Situation		
Activity 22 Logarithms and Their Properties—Earthquakes and Richter Scale		
Activity 23 Inverse Functions: Exponential and Logarithmic Functions—Undoing It All		
Activity 24 Logarithmic and Exponential Equations and Inequalities—College Costs		
Unit 5 RADICAL AND RATIONAL FUNCTIONS		
Activity 25 Square Root and Cube Root Functions—Go, Boat, Go!		
Activity 26 Inverses: Roots, Squares, and Cubes—Swing, Swing, Swing		
Activity 27 Introduction to Rational Functions—Planning a Summer Camp		
Activity 28 Inverse Variation and Rational Functions—Stream Survival		
Activity 29 Simplifying Rational Expressions—It’s All Rational		
Activity 30 Rational Equations and Inequalities—A Rational Pastime		
Unit 6 TRIGONOMETRY		
Activity 31 Understanding Radian Measure—Revolving Restaurant		
Activity 32 Trigonometric Functions—Which Angle is Up?		
Activity 33 Trigonometric Identities: Pythagorean Connection—More Than Just Triangles		
Activity 34 Graphs of Trigonometric Functions—Creation of a Mural		
Activity 35 Choosing Functions to Model Periodic Phenomena—The Sky Wheel		

Unit 7 PROBABILITY AND STATISTICS		
Activity 36 Normal Distribution—Take Me Out to the Ballgame		
Activity 37 Random Sampling—Part-Time Jobs		
Activity 38 Simulations—Is Martin Improving?		
Activity 39 Margin of Error—Can't Get No Satisfaction		
Activity 40- Designing and Conducting Simulations-- Time Flies When You're Having Fun		