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ALGEBRA 2 & TRIGONOMETRY CURRICULUM MAP

UNIT 1 - Tools of Algebra

1-1 Properties of Real Numbers

1-2 Algebraic Expressions

1-3 Solving Equations

1-4 Solving Inequalities

1-5 Absolute Value Equations and Inequalities

1-6 Probability

UNIT 2 - Functions, Equations, and Graphs

2-1 Relations and Functions

2-2 Linear Equations

2-3 Direct Variation

2-4 Using Linear Models / Finding a Line of Best Fit

2-5 Absolute Value Functions and Graphs

2-6 Families of Functions

2-7 Two-Variable Inequalities

UNIT 3 - Linear Systems

3-1 Graphing Systems of Equations (Solving Systems of Linear Equations by Graphing and Tables)

3-2 Solving Systems of Equations Algebraically (Solving Systems of Equations by Substitution and Elimination)

3-3 Solving Systems of Linear Inequalities

3-4 Linear Programming

3-5 Graphs in Three Dimensions

3-6 Solving Linear Systems with Three Variables

UNIT 4 - Matrices

5 - Quadratic Equations and Functions

UNIT 6 - Polynomials and Polynomial Functions

UNIT 7 - Radical Functions and Rational Exponents

7-1 Roots and Radical Expressions

7-2 Multiplying and Dividing Radical Expressions

7-3 Binomial Radical Expressions

7-4 Rational Exponents

7-5 Solving Square Root and Other Radical Equations

7-6 Function Operations

7-7 Inverse Relations and Functions

7-8 Graphing Square Root and Other Radical Functions

UNIT 8 - Exponential and Logarithmic Functions

8-1 Exploring Exponential Models

8-2 Fitting Exponential Curves to Data

8-2R Properties of Exponential Functions

8-3 Logarithmic Functions as Inverses

8-4 Properties of Logarithms

8-5 Exponential and Logarithmic Equations

8-6 Natural Logarithms

UNIT 9 - Rational Functions

9-1 Inverse Variation

9-2 The Reciprocal Function Family

9-3 Rational Functions and Their Graphs

9-4 Rational Expressions

9-5 Adding and Subtracting Rational Expressions

9-6 Solving Rational Equations

9-6R Rational Inequalities

9-7 Probability of Multiple Events

UNIT 10 - Quadratic Relations and Conic Sections

10-1 Exploring Conic Sections

10-2 Parabolas

10-3 Circles

10-4 Ellipses

10-5 Hyperbolas

10-6 Translating Conic Sections

10-6R Solving Quadratic Systems

UNIT 11 - Sequences and Series

11-1 Mathematical Patterns

11-2 Arithmetic Sequences

11-3 Geometric Sequences

11-4 Arithmetic Series

11-5 Geometric Series

11-6 Area Under a Curve

11-7 Infinite Geometric Series

UNIT 12 - Probability and Statistics

12-1 Probability Distributions

12-2 Conditional Probability

12-3 Analyzing Data

12-4 Standard Deviation

12-5 Working with Samples

12-6 Binomial Distributions

12-7 Normal Distributions

UNIT 13 - Periodic Functions and Trigonometry

13-1 Exploring Periodic Data

13-2 Angles and the Unit Circle

13-3 Radian Measure

13-4 The Sine Function

13-5 The Cosine Function

13-6 The Tangent Function

13-7 Translating Sine and Cosine Functions

13-8 Reciprocal Trigonometric Functions

UNIT 14 - Trigonometric Identities and Equations

14-1 Trigonometric Identities

14-2 Solving Trigonometric Equations Using Inverses

14-3 Right Triangles and Trigonometric Ratios

14-4 Area and the Law of Sines

14-4R The Ambiguous Case

14-5 The Law of Cosines

14-6 Angle Identities

14-7 Double-Angle and Half-Angle Identities