Thnkwell's Homeschool Precalculus
Course Lesson Plan: 36 weeks

Welcome to Thinkwell's Homeschool Precalculus! We're thrilled that you've decided to make us part of your homeschool curriculum. This lesson plan is meant to be a guide for you and your homeschool student. Each day, you'll tackle a different topic and all the materials associated with that topic, such as video lectures, exercises, and notes. If you follow our day-by-day schedule, you'll complete the full curriculum for the course in 36 weeks. Feel free to modify and amend the plan as it best works for you. And, as always, please let us know what we can do to help get you up and running with Thinkwell's Precalculus!

Week 1 Chapter 1: Basic Algebra Review	
Assignments	Notes
Week 1, Day 1 ☐ 1.1.1 The Top Ten List of Mistakes ☐ 1.2.1 Concepts of Inequality	
Week 1, Day 2 ☐ 1.2.2 Inequalities and Interval Notation ☐ 1.3.1 Properties of Absolute Value	
Week 1, Day 3 ☐ 1.3.2 Evaluating Absolute Value Expressions ☐ 1.4.1 An Introduction to Exponents ☐ 1.4.2 Evaluating Exponential Expressions	
Week 1, Day 4 ☐ 1.4.3 Applying the Rules of Exponents ☐ 1.4.4 Evaluating Expressions with Negative Exponents	
Week 1, Day 5 ☐ 1.5.1 Converting between Decimal and Scientific Notation ☐ 1.5.2 Converting Rational Exponents and Radicals	

Week 2 Chapter 1: Basic Algebra Review	
Assignments	Notes
Week 2, Day 1 ☐ 1.6.1 Simplifying Radical Expressions ☐ 1.6.2 Simplifying Radical Expressions with Variables ☐ 1.6.3 Rationalizing Denominators	
Week 2, Day 2 ☐ 1.7.1 Determining Components and Degree ☐ 1.7.2 Adding, Subtracting, and Multiplying Polynomials	
Week 2, Day 3 ☐ 1.7.3 Multiplying Big Products ☐ 1.7.4 Using Special Products	

Week 2, Day 4 ☐ 1.8.1 Factoring Using the Greatest Common Factor ☐ 1.8.2 Factoring by Grouping ☐ 1.8.3 Factoring Trinomials Completely	
Week 2, Day 5 ☐ 1.9.1 Factoring Perfect Square Trinomials ☐ 1.9.2 Factoring the Difference of Two Squares	

Week 3 Chapter 1: Basic Algebra Review	
Assignments	Notes
Week 3, Day 1 ☐ 1.9.3 Factoring the Sums and Differences of Cubes ☐ 1.9.4 Factoring by Any Method	
Week 3, Day 2 ☐ 1.10.1 Rational Expressions and Domain ☐ 1.10.2 Working with Fractions ☐ 1.10.3 Writing Rational Expressions in Lowest Terms	
Week 3, Day 3 ☐ 1.11.1 Multiplying and Dividing Rational Expressions ☐ 1.11.2 Adding and Subtracting Rational Expressions ☐ 1.11.3 Rewriting Complex Fractions	
Week 3, Day 4 ☐ 1.12.1 Introducing and Writing Complex Numbers ☐ 1.12.2 Rewriting Powers of i ☐ 1.12.3 Adding and Subtracting Complex Numbers	
Week 3, Day 5 ☐ 1.12.4 Multiplying Complex Numbers ☐ 1.12.5 Dividing Complex Numbers	

Week 4 Chapter 1 Test Chapter 2: Equations and Inequalities	
Assignments	Notes
Week 4, Day 1 ☐ Chapter 1 Practice Test	
Week 4, Day 2 ☐ Chapter 1 Test	Chapter 1 Test Score: _____
Week 4, Day 3 ☐ 2.1.1 An Introduction to Solving Equations ☐ 2.1.2 Solving a Linear Equation	
Week 4, Day 4 ☐ 2.1.3 Solving a Linear Equation with Rationals ☐ 2.1.4 Solving a Linear Equation That Has Restrictions	

Week 4, Day 5 ☐ 2.2.1 An Introduction to Solving Word Problems ☐ 2.2.2 Solving for Perimeter ☐ 2.2.3 Solving a Linear Geometry Problem	

Week 5 Chapter 2: Equations and Inequalities	
Assignments	Notes
Week 5, Day 1 ☐ 2.2.4 Solving for Consecutive Numbers ☐ 2.2.5 Solving to Find the Average	
Week 5, Day 2 ☐ 2.3.1 Solving for Constant Velocity ☐ 2.3.2 Solving a Problem about Work ☐ 2.3.3 Solving a Mixture Problem	
Week 5, Day 3 ☐ 2.3.4 Solving an Investment Problem ☐ 2.3.5 Solving Business Problems	
Week 5, Day 4 ☐ 2.4.1 Solving Quadratics by Factoring ☐ 2.4.2 Solving Quadratics by Completing the Square ☐ 2.4.3 Completing the Square: Another Example	
Week 5, Day 5 ☐ 2.5.1 Proving the Quadratic Formula ☐ 2.5.2 Using the Quadratic Formula ☐ 2.5.3 Predicting the Type of Solutions Using the Discriminant	

Week 6 Chapter 2: Equations and Inequalities	
Assignments	Notes
Week 6, Day 1 ☐ 2.6.1 Solving for a Squared Variable ☐ 2.6.2 Finding Real Number Restrictions ☐ 2.6.3 Solving Fancy Quadratics	
Week 6, Day 2 ☐ 2.7.1 An Introduction to Word Problems with Quadratics ☐ 2.7.2 Solving a Quadratic Geometry Problem ☐ 2.7.3 Solving with the Pythagorean Theorem	
Week 6, Day 3 ☐ 2.8.1 Solving a Motion Problem ☐ 2.8.2 Solving a Projectile Problem ☐ 2.8.3 Solving Other Problems	
Week 6, Day 4	

☐ 2.9.1 Determining Extraneous Roots ☐ 2.9.2 Solving an Equation Containing a Radical	
Week 6, Day 5 ☐ 2.9.3 Solving an Equation with Two Radicals ☐ 2.9.4 Solving an Equation with Rational Exponents	

Week 7 Chapter 2: Equations and Inequalities	
Assignments	Notes
Week 7, Day 1 ☐ 2.10.1 An Introduction to Variation ☐ 2.10.2 Direct Proportion ☐ 2.10.3 Inverse Proportion	
Week 7, Day 2 ☐ 2.11.1 An Introduction to Solving Inequalities ☐ 2.11.2 Solving Compound Inequalities	
Week 7, Day 3 ☐ 2.11.3 More on Compound Inequalities ☐ 2.11.4 Solving Word Problems Involving Inequalities	
Week 7, Day 4 ☐ 2.12.1 Solving Quadratic Inequalities ☐ 2.12.2 Solving Quadratic Inequalities: Another Example	
Week 7, Day 5 ☐ 2.13.1 Solving Rational Inequalities ☐ 2.13.2 Solving Rational Inequalities: Another Example ☐ 2.13.3 Determining the Domains of Expressions with Radicals	

Week 8 Chapter 2: Equations and Inequalities Chapter 2 Test Chapter 3: Relations and Functions	
Assignments	Notes
Week 8, Day 1 ☐ 2.14.1 Matching Number Lines with Absolute Values ☐ 2.14.2 Solving Absolute Value Equations ☐ 2.14.3 Solving Equations with Two Absolute Value Expressions	
Week 8, Day 2 ☐ 2.14.4 Solving Absolute Value Inequalities ☐ 2.14.5 Solving Absolute Value Inequalities: More Examples	
Week 8, Day 3 ☐ Chapter 2 Practice Test	
Week 8, Day 4 ☐ Chapter 2 Test	Chapter 2 Test Score: _____
Week 8, Day 5	

☐ 3.1.1 Using the Cartesian System ☐ 3.1.2 Thinking Visually	

Week 9 Chapter 3: Relations and Functions	
Assignments	Notes
Week 9, Day 1 ☐ 3.2.1 Finding the Distance between Two Points ☐ 3.2.2 Finding the Second Endpoint of a Segment ☐ 3.3.1 Collinearity and Distance	
Week 9, Day 2 ☐ 3.3.2 Triangles ☐ 3.4.1 Finding the Center-Radius Form of the Equation of a Circle ☐ 3.4.2 Finding the Center and Radius of a Circle	
Week 9, Day 3 ☐ 3.4.3 Decoding the Circle Formula ☐ 3.4.4 Solving Word Problems Involving Circles	
Week 9, Day 4 ☐ 3.5.1 Graphing Equations by Locating Points ☐ 3.5.2 Finding the *x*- and *y*-Intercepts of an Equation	
Week 9, Day 5 ☐ 3.6.1 Functions and the Vertical Line Test ☐ 3.6.2 Identifying Functions ☐ 3.6.3 Function Notation and Finding Function Values	

Week 10 Chapter 3: Relations and Functions	
Assignments	Notes
Week 10, Day 1 ☐ 3.7.1 Determining Intervals Over Which a Function Is Increasing ☐ 3.7.2 Evaluating Piecewise-Defined Functions for Given Values ☐ 3.7.3 Solving Word Problems Involving Functions	
Week 10, Day 2 ☐ 3.8.1 Finding the Domain and Range of a Function ☐ 3.8.2 Domain and Range: One Explicit Example ☐ 3.8.3 Satisfying the Domain of a Function	
Week 10, Day 3 ☐ 3.9.1 An Introduction to Slope ☐ 3.9.2 Finding the Slope of a Line Given Two Points	
Week 10, Day 4 ☐ 3.9.3 Interpreting Slope from a Graph ☐ 3.9.4 Graphing a Line Using Point and Slope	
Week 10, Day 5	

☐ 3.10.1 Writing an Equation in Slope-Intercept Form ☐ 3.10.2 Writing an Equation Given Two Points ☐ 3.10.3 Writing an Equation in Point-Slope Form	

Week 11 Chapter 3: Relations and Functions	
Assignments	Notes
Week 11, Day 1 ☐ 3.10.4 Matching a Slope-Intercept Equation with Its Graph ☐ 3.10.5 Slope for Parallel and Perpendicular Lines	
Week 11, Day 2 ☐ 3.11.1 Constructing Linear Function Models of Data ☐ 3.11.2 Linear Cost and Revenue Functions	
Week 11, Day 3 ☐ 3.12.1 Graphing Some Important Functions ☐ 3.12.2 Graphing Piecewise-Defined Functions ☐ 3.12.3 Matching Equations with Their Graphs	
Week 11, Day 4 ☐ 3.13.1 The Greatest Integer Function ☐ 3.13.2 Graphing the Greatest Integer Function ☐ 3.14.1 Deconstructing the Graph of a Quadratic Function	
Week 11, Day 5 ☐ 3.14.2 Nice-Looking Parabolas ☐ 3.14.3 Using Discriminants to Graph Parabolas ☐ 3.14.4 Maximum Height in the Real World	

Week 12 Chapter 3: Relations and Functions	
Assignments	Notes
Week 12, Day 1 ☐ 3.15.1 Finding the Vertex by Completing the Square ☐ 3.15.2 Using the Vertex to Write the Quadratic Equation ☐ 3.15.3 Finding the Maximum or Minimum of a Quadratic ☐ 3.15.4 Graphing Parabolas	
Week 12, Day 2 ☐ 3.16.1 Shifting Curves along Axes ☐ 3.16.2 Shifting or Translating Curves along Axes ☐ 3.16.3 Stretching a Graph ☐ 3.16.4 Graphing Quadratics Using Patterns	
Week 12, Day 3 ☐ 3.17.1 Determining Symmetry ☐ 3.17.2 Reflections ☐ 3.17.3 Reflecting Specific Functions	
Week 12, Day 4	

☐ 3.18.1 Using Operations on Functions ☐ 3.18.2 Composite Functions ☐ 3.18.3 Components of Composite Functions	
Week 12, Day 5 ☐ 3.18.4 Finding Functions That Form a Given Composite ☐ 3.18.5 Finding the Difference Quotient of a Function	

Week 13 Chapter 3 Test Chapter 4: Polynomial and Rational Functions	
Assignments	Notes
Week 13, Day 1 ☐ Chapter 3 Practice Test	
Week 13, Day 2 ☐ Chapter 3 Test	Chapter 3 Test Score: _____
Week 13, Day 3 ☐ 4.1.1 Using Long Division with Polynomials ☐ 4.1.2 Long Division: Another Example	
Week 13, Day 4 ☐ 4.2.1 Using Synthetic Division with Polynomials ☐ 4.2.2 More Synthetic Division	
Week 13, Day 5 ☐ 4.3.1 The Remainder Theorem ☐ 4.3.2 More on the Remainder Theorem	

Week 14 Chapter 4: Polynomial and Rational Functions	
Assignments	Notes
Week 14, Day 1 ☐ 4.4.1 The Factor Theorem and Its Uses ☐ 4.4.2 Factoring a Polynomial Given a Zero	
Week 14, Day 2 ☐ 4.5.1 Presenting the Rational Zero Theorem	
Week 14, Day 3 ☐ 4.5.2 Considering Possible Solutions ☐ 4.6.1 Finding Polynomials Given Zeros, Degree, and One Point	
Week 14, Day 4 ☐ 4.6.2 Finding all Zeros and Multiplicities of a Polynomial ☐ 4.6.3 Finding the Real Zeros for a Polynomial	
Week 14, Day 5 ☐ 4.6.4 Using Descartes' Rule of Signs ☐ 4.6.5 Finding the Zeros of a Polynomial from Start to Finish	

Week 15 Chapter 4: Polynomial and Rational Functions	
Assignments	Notes
Week 15, Day 1 ☐ 4.7.1 Matching Graphs to Polynomial Functions ☐ 4.7.2 Sketching the Graphs of Basic Polynomial Functions	
Week 15, Day 2 ☐ 4.8.1 Understanding Rational Functions ☐ 4.8.2 Basic Rational Functions	
Week 15, Day 3 ☐ 4.9.1 Vertical Asymptotes ☐ 4.9.2 Horizontal Asymptotes	
Week 15, Day 4 ☐ 4.9.3 Graphing Rational Functions ☐ 4.9.4 Graphing Rational Functions: More Examples	
Week 15, Day 5 ☐ 4.9.5 Oblique Asymptotes ☐ 4.9.6 Oblique Asymptotes: Another Example	

Week 16 Chapter 4 Test Chapter 5: Exponential and Logarithmic Functions	
Assignments	Notes
Week 16, Day 1 ☐ Chapter 4 Practice Test	
Week 16, Day 2 ☐ Chapter 4 Test	Chapter 4 Test Score: _____
Week 16, Day 3 ☐ 5.1.1 Understanding Inverse Functions ☐ 5.1.2 The Horizontal Line Test	
Week 16, Day 4 ☐ 5.1.3 Are Two Functions Inverses of Each Other? ☐ 5.1.4 Graphing the Inverse	
Week 16, Day 5 ☐ 5.2.1 Finding the Inverse of a Function ☐ 5.2.2 Finding the Inverse of a Function with Higher Powers	

Week 17 Chapter 5: Exponential and Logarithmic Functions	
Assignments	Notes
Week 17, Day 1 ☐ 5.3.1 An Introduction to Exponential Functions ☐ 5.3.2 Graphing Exponential Functions: Useful Patterns	
Week 17, Day 2	

☐ 5.3.3 Graphing Exponential Functions: More Examples ☐ 5.4.1 Using Properties of Exponents to Solve Exponential Equations	
Week 17, Day 3 ☐ 5.4.2 Finding Present Value and Future Value ☐ 5.4.3 Finding an Interest Rate to Match Given Goals	
Week 17, Day 4 ☐ 5.5.1 *e* ☐ 5.5.2 Applying Exponential Functions	
Week 17, Day 5 ☐ 5.6.1 An Introduction to Logarithmic Functions ☐ 5.6.2 Converting between Exponential and Logarithmic Functions	

Week 18 Chapter 5: Exponential and Logarithmic Functions	
Assignments	Notes
Week 18, Day 1 ☐ 5.7.1 Finding the Value of a Logarithmic Function ☐ 5.7.2 Solving for *x* in Logarithmic Equations	
Week 18, Day 2 ☐ 5.7.3 Graphing Logarithmic Functions ☐ 5.7.4 Matching Logarithmic Functions with Their Graphs	
Week 18, Day 3 ☐ 5.8.1 Properties of Logarithms ☐ 5.8.2 Expanding a Logarithmic Expression Using Properties	
Week 18, Day 4 ☐ 5.8.3 Combining Logarithmic Expressions ☐ 5.9.1 Evaluating Logarithmic Functions Using a Calculator	
Week 18, Day 5 ☐ 5.9.2 Using the Change of Base Formula ☐ 5.10.1 The Richter Scale	

Week 19 Chapter 5: Exponential and Logarithmic Functions	
Assignments	Notes
Week 19, Day 1 ☐ 5.10.2 The Distance Modulus Formula ☐ 5.11.1 Solving Exponential Equations	
Week 19, Day 2 ☐ 5.11.2 Solving Logarithmic Equations ☐ 5.11.3 Solving Equations with Logarithmic Exponents	
Week 19, Day 3	

☐ 5.12.1 Compound Interest ☐ 5.12.2 Predicting Change	
Week 19, Day 4 ☐ 5.13.1 An Introduction to Exponential Growth and Decay ☐ 5.13.2 Half-Life	
Week 19, Day 5 ☐ 5.13.3 Newton's Law of Cooling ☐ 5.13.4 Continuously Compounded Interest	

Week 20 Chapter 5 Test Midterm Exam	
Assignments	Notes
Week 20, Day 1 ☐ Chapter 5 Practice Test	
Week 20, Day 2 ☐ Chapter 5 Test	Chapter 5 Test Score: _____
Week 20, Day 3 ☐ Study for Midterm Exam	
Week 20, Day 4 ☐ Practice Midterm Exam	
Week 20, Day 5 ☐ Midterm Exam	Midterm Exam Score: _____

Week 21 Chapter 6: The Trigonometric Functions	
Assignments	Notes
Week 21, Day 1 ☐ 6.1.1 Finding the Quadrant in Which an Angle Lies	
Week 21, Day 2 ☐ 6.1.2 Finding Coterminal Angles ☐ 6.1.3 Finding the Complement and Supplement of an Angle	
Week 21, Day 3 ☐ 6.1.4 Converting between Degrees and Radians ☐ 6.1.5 Using the Arc Length Formula	
Week 21, Day 4 ☐ 6.2.1 An Introduction to the Trigonometric Functions	
Week 21, Day 5 ☐ 6.2.2 Evaluating Trigonometric Functions for an Angle in a Right Triangle ☐ 6.2.3 Finding an Angle Given the Value of a Trigonometric Function	

Week 22 Chapter 6: The Trigonometric Functions	
Assignments	Notes
Week 22, Day 1 ☐ 6.2.4 Using Trigonometric Functions to Find Unknown Sides of Right Triangles ☐ 6.2.5 Finding the Height of a Building	
Week 22, Day 2 ☐ 6.3.1 Evaluating Trigonometric Functions for an Angle in the Coordinate Plane ☐ 6.3.2 Evaluating Trigonometric Functions Using the Reference Angle	
Week 22, Day 3 ☐ 6.3.3 Finding the Value of Trigonometric Functions Given Information about the Values of Other Trigonometric Functions ☐ 6.3.4 Trigonometric Functions of Important Angles	
Week 22, Day 4 ☐ 6.4.1 An Introduction to the Graphs of Sine and Cosine Functions ☐ 6.4.2 Graphing Sine or Cosine Functions with Different Coefficients	
Week 22, Day 5 ☐ 6.4.3 Finding Maximum and Minimum Values and Zeros of Sine and Cosine ☐ 6.4.4 Solving Word Problems Involving Sine or Cosine Functions	

Week 23 Chapter 6: The Trigonometric Functions	
Assignments	Notes
Week 23, Day 1 ☐ 6.5.1 Graphing Sine and Cosine Functions with Phase Shifts ☐ 6.5.2 Fancy Graphing: Changes in Period, Amplitude, Vertical Shift, and Phase Shift	
Week 23, Day 2 ☐ 6.6.1 Graphing the Tangent, Secant, Cosecant, and Cotangent Functions ☐ 6.6.2 Fancy Graphing: Tangent, Secant, Cosecant, and Cotangent	
Week 23, Day 3 ☐ 6.6.3 Identifying a Trigonometric Function from its Graph ☐ 6.7.1 An Introduction to Inverse Trigonometric Functions	
Week 23, Day 4 ☐ 6.7.2 Evaluating Inverse Trigonometric Functions ☐ 6.7.3 Solving an Equation Involving an Inverse Trigonometric Function	

Week 23, Day 5 ☐ 6.7.4 Evaluating the Composition of a Trigonometric Function and Its Inverse ☐ 6.7.5 Applying Trigonometric Functions: Is He Speeding?	

Week 24 Chapter 6 Test Chapter 7: Trigonometric Identities	
Assignments	Notes
Week 24, Day 1 ☐ Chapter 6 Practice Test	
Week 24, Day 2 ☐ Chapter 6 Test	Chapter 6 Test Score: _____
Week 24, Day 3 ☐ 7.1.1 Fundamental Trigonometric Identities ☐ 7.1.2 Finding All Function Values	
Week 24, Day 4 ☐ 7.2.1 Simplifying a Trigonometric Expression Using Trigonometric Identities ☐ 7.2.2 Simplifying Trigonometric Expressions Involving Fractions ☐ 7.2.3 Simplifying Products of Binomials Involving Trigonometric Functions	
Week 24, Day 5 ☐ 7.2.4 Factoring Trigonometric Expressions ☐ 7.2.5 Determining Whether a Trigonometric Function Is Odd, Even, or Neither	

Week 25 Chapter 7: Trigonometric Identities	
Assignments	Notes
Week 25, Day 1 ☐ 7.3.1 Proving an Identity ☐ 7.3.2 Proving an Identity: Other Examples	
Week 25, Day 2 ☐ 7.4.1 Solving Trigonometric Equations ☐ 7.4.2 Solving Trigonometric Equations by Factoring	
Week 25, Day 3 ☐ 7.4.3 Solving Trigonometric Equations with Coefficients in the Argument ☐ 7.4.4 Solving Trigonometric Equations Using the Quadratic Formula	
Week 25, Day 4 ☐ 7.4.5 Solving Word Problems Involving Trigonometric Equations ☐ 7.5.1 Identities for Sums and Differences of Angles	

Week 25, Day 5 ☐ 7.5.2 Using Sum and Difference Identities ☐ 7.5.3 Using Sum and Difference Identities to Simplify an Expression	

Week 26 Chapter 7: Trigonometric Identities Chapter 7 Test	
Assignments	Notes
Week 26, Day 1 ☐ 7.6.1 Confirming a Double-Angle Identity ☐ 7.6.2 Using Double-Angle Identities	
Week 26, Day 2 ☐ 7.6.3 Solving Word Problems Involving Multiple-Angle Identities ☐ 7.7.1 Using a Cofunction Identity	
Week 26, Day 3 ☐ 7.7.2 Using a Power-Reducing Identity ☐ 7.7.3 Using Half-Angle Identities to Solve a Trigonometric Equation	
Week 26, Day 4 ☐ Chapter 7 Practice Test	
Week 26, Day 5 ☐ Chapter 7 Test	Chapter 7 Test Score: _____

Week 27 Chapter 8: Applications of Trigonometry	
Assignments	Notes
Week 27, Day 1 ☐ 8.1.1 The Law of Sines ☐ 8.1.2 Solving a Triangle Given Two Sides and One Angle	
Week 27, Day 2 ☐ 8.1.3 Solving a Triangle (SAS): Another Example ☐ 8.1.4 The Law of Sines: An Application	
Week 27, Day 3 ☐ 8.2.1 The Law of Cosines ☐ 8.2.2 The Law of Cosines (SSS)	
Week 27, Day 4 ☐ 8.2.3 The Law of Cosines (SAS): An Application ☐ 8.2.4 Heron's Formula	
Week 27, Day 5 ☐ 8.3.1 An Introduction to Vectors ☐ 8.3.2 Finding the Magnitude and Direction of a Vector ☐ 8.3.3 Vector Addition and Scalar Multiplication	

Week 28 Chapter 8: Applications of Trigonometry	
Assignments	Notes
Week 28, Day 1 ☐ 8.4.1 Finding the Components of a Vector ☐ 8.4.2 Finding a Unit Vector	
Week 28, Day 2 ☐ 8.4.3 Solving Word Problems Involving Velocity or Forces ☐ 8.5.1 Graphing a Complex Number and Finding Its Absolute Value	
Week 28, Day 3 ☐ 8.5.2 Expressing a Complex Number in Trigonometric or Polar Form ☐ 8.5.3 Multiplying and Dividing Complex Numbers in Trigonometric or Polar Form	
Week 28, Day 4 ☐ 8.6.1 Using DeMoivre's Theorem to Raise a Complex Number to a Power ☐ 8.6.2 Roots of Complex Numbers	
Week 28, Day 5 ☐ 8.6.3 More Roots of Complex Numbers ☐ 8.6.4 Roots of Unity	

Week 29 Chapter 8: Applications of Trigonometry Chapter 8 Test	
Assignments	Notes
Week 29, Day 1 ☐ 8.7.1 An Introduction to Polar Coordinates ☐ 8.7.2 Converting between Polar and Rectangular Coordinates	
Week 29, Day 2 ☐ 8.7.3 Converting between Polar and Rectangular Equations	
Week 29, Day 3 ☐ 8.7.4 Graphing Simple Polar Equations ☐ 8.7.5 Graphing Special Polar Equations	
Week 29, Day 4 ☐ Chapter 8 Practice Test	
Week 29, Day 5 ☐ Chapter 8 Test	Chapter 8 Test Score: _____

Week 30 Chapter 9: Systems of Equations and Matrices	
Assignments	Notes

Week 30, Day 1 ☐ 9.1.1 An Introduction to Linear Systems ☐ 9.1.2 Solving a System by Substitution	
Week 30, Day 2 ☐ 9.1.3 Solving a System by Elimination ☐ 9.2.1 An Introduction to Linear Systems in Three Variables	
Week 30, Day 3 ☐ 9.2.2 Solving Linear Systems in Three Variables ☐ 9.2.3 Solving Inconsistent Systems	
Week 30, Day 4 ☐ 9.2.4 Solving Dependent Systems ☐ 9.2.5 Solving Systems with Two Equations	
Week 30, Day 5 ☐ 9.3.1 Investments ☐ 9.3.2 Solving with Partial Fractions	

Week 31 Chapter 9: Systems of Equations and Matrices	
Assignments	Notes
Week 31, Day 1 ☐ 9.4.1 Solving Nonlinear Systems Using Elimination 9.4.2 Solving Nonlinear Systems by Substitution	
Week 31, Day 2 ☐ 9.5.1 An Introduction to Matrices ☐ 9.5.2 The Arithmetic of Matrices	
Week 31, Day 3 ☐ 9.5.3 Multiplying Matrices by a Scalar ☐ 9.5.4 Multiplying Matrices	
Week 31, Day 4 ☐ 9.6.1 Using the Gauss-Jordan Method ☐ 9.6.2 Using Gauss-Jordan: Another Example	
Week 31, Day 5 ☐ 9.7.1 Evaluating 2 x 2 Determinants ☐ 9.7.2 Evaluating *n* x *n* Determinants	

Week 32 Chapter 9: Systems of Equations and Matrices	
Assignments	Notes
Week 32, Day 1 ☐ 9.7.3 Finding a Determinant using Expanding by Cofactors ☐ 9.7.4 Applying Determinants	
Week 32, Day 2 ☐ 9.8.1 Using Cramer's Rule ☐ 9.8.2 Using Cramer's Rule in a 3x3 Matrix	

Week 32, Day 3 ☐ 9.9.1 An Introduction to Inverses ☐ 9.9.2 Inverses: 2 x 2 Matrices ☐ 9.9.3 Another Look at 2 x 2 Inverses	
Week 32, Day 4 ☐ 9.9.4 Inverses: 3 x 3 Matrices ☐ 9.9.5 Solving a System of Equations with Inverses	
Week 32, Day 5 ☐ 9.10.1 An Introduction to Graphing Linear Inequalities ☐ 9.10.2 Graphing Linear and Nonlinear Inequalities ☐ 9.10.3 Graphing the Solution Set of a System of Inequalities	

Week 33 Chapter 9: Systems of Equations and Matrices Chapter 9 Test Chapter 10: Special Topics	
Assignments	Notes
Week 33, Day 1 ☐ 9.11.1 Solving for Maxima-Minima ☐ 9.11.2 Applying Linear Programming	
Week 33, Day 2 ☐ Chapter 9 Practice Test	
Week 33, Day 3 ☐ Chapter 9 Test	Chapter 9 Test Score: _____
Week 33, Day 4 ☐ 10.1.1 An Introduction to Conic Sections ☐ 10.1.2 An Introduction to Parabolas	
Week 33, Day 5 ☐ 10.1.3 Determining Information about a Parabola from Its Equation ☐ 10.1.4 Writing an Equation for a Parabola	

Week 34 Chapter 10: Special Topics	
Assignments	Notes
Week 34, Day 1 ☐ 10.2.1 An Introduction to Ellipses ☐ 10.2.2 Finding the Equation for an Ellipse	
Week 34, Day 2 ☐ 10.2.3 Applying Ellipses: Satellites ☐ 10.3.1 An Introduction to Hyperbolas	
Week 34, Day 3 ☐ 10.3.2 Finding the Equation for a Hyperbola ☐ 10.3.3 Applying Hyperbolas: Navigation	

Week 34, Day 4 ☐ 10.4.1 Identifying a Conic ☐ 10.4.2 Name That Conic	
Week 34, Day 5 ☐ 10.4.3 Rotation of Axes ☐ 10.4.4 Rotating Conics	

Week 35 Chapter 10: Special Topics	
Assignments	Notes
Week 35, Day 1 ☐ 10.5.1 Using the Binomial Theorem ☐ 10.5.2 Binomial Coefficients ☐ 10.5.3 Finding a Term of a Binomial Expansion	
Week 35, Day 2 ☐ 10.6.1 Understanding Sequence Problems ☐ 10.6.2 Solving Problems Involving Arithmetic Sequences ☐ 10.6.3 Solving Problems Involving Geometric Sequences	
Week 35, Day 3 ☐ 10.7.1 Proving Formulas Using Mathematical Induction ☐ 10.7.2 Examples of Induction	
Week 35, Day 4 ☐ 10.8.1 Solving Problems Involving Permutations ☐ 10.8.2 Solving Problems Involving Combinations	
Week 35, Day 5 ☐ 10.8.3 Independent Events ☐ 10.8.4 Inclusive and Exclusive Events	

Week 36 Chapter 10 Test Final Exam	
Assignments	Notes
Week 36, Day 1 ☐ Chapter 10 Practice Test	
Week 36, Day 2 ☐ Chapter 10 Test	Chapter 10 Test Score: _____
Week 36, Day 3 ☐ Study for Final Exam	
Week 36, Day 4 ☐ Practice Final Exam	
Week 36, Day 5 ☐ Final Exam	Final Exam Score: _____