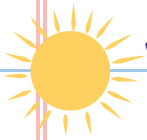




Algebra 2

The Thinkwell summer learning series takes an entire year's worth of learning materials and makes it available throughout the summer so that your kids can recall what they've learned, catch up on what they haven't, and get prepared for the year ahead.



WHAT YOU'LL GET AND HOW IT WORKS:

- Students get individual logins and work at their own pace.
- Lessons are presented in a sequential order, in small, manageable chunks.
- Students can skip through the content or repeat lessons as many times as they need.
- Practice exercises, quizzes, and tests are automatically graded with step-by-step answer feedback.
- The courses are entirely web-based – no software to download, no CDs and nothing more to purchase.

8-WEEK PLAN FOR ALGEBRA 2

- Week 1 - Foundations for Functions
- Week 2 - Linear Functions
- Week 3 - Linear Systems & Matrices
- Week 4 - Quadratic Functions
- Week 5 - Polynomial Functions
- Week 6 - Exponential and Logarithmic Functions
- Week 7 - Rational and Radical Functions
- Week 8 - Properties and Attributes of Functions

CONTINUED ON NEXT PAGE...

Algebra 2



8-WEEK SUMMER LESSON PLAN FOR ALGEBRA 2

WEEK 1 - CHAPTER 1 FOUNDATIONS FOR FUNCTIONS

Chapter 1 Pre-Test

FAST-TRACK IDEA!
TAKE THE PRE-TEST LIKE A
DIAGNOSTIC AND ONLY
VIEW THE TOPICS YOU NEED
TO BASED ON THE
QUESTIONS YOU MISSED!

1.1 Properties and Operations

- 1.1.1 Sets of Numbers
- 1.1.2 Properties of Real Numbers
- 1.1.3 Square Roots
- 1.1.4 Simplifying Algebraic Expressions
- 1.1.5 Properties of Exponents and Scientific Notation

1.2 Introduction to Functions

- 1.2.1 Relations and Functions
 - 1.2.2 Function Notation
 - 1.2.3 Exploring Transformations
 - 1.2.4 Introduction to Parent Functions
- Chapter 1 Test

WEEK 2 - CHAPTER 2 LINEAR FUNCTIONS

Chapter 2 Pre-Test

2.1 Linear Equations and Inequalities

- 2.1.1 Solving Linear Equations and Inequalities
- 2.1.2 Proportional Reasoning
- 2.1.3 Graphing Linear Functions
- 2.1.4 Writing Linear Functions
- 2.1.5 Linear Inequalities in Two Variables

2.2 Applying Linear Functions

- 2.2.1 Transforming Linear Functions
 - 2.2.2 Curve Fitting With Linear Models
 - 2.2.3 Solving Absolute-Value Equations and Inequalities
 - 2.2.4 Absolute-Value Functions
- Chapter 2 Test

WEEK 3 - CHAPTERS 3 LINEAR SYSTEMS & 4 MATRICES

Chapters 3 & 4 Pre-Test

3.1 Linear Systems in Two Dimensions

- 3.1.1 Using Graphs and Tables to Solve Linear Systems
- 3.1.2 Using Algebraic Methods to Solve Linear Systems
- 3.1.3 Solving Systems of Linear Inequalities
- 3.1.4 Linear Programming

4.1 Matrix Operations

- 4.1.1 Matrices and Data
 - 4.1.2 Multiplying Matrices
 - 4.1.3 Using Matrices to Transform Geometric Figures
- Chapter 3 & 4 Test

WEEK 4 - CHAPTER 5 QUADRATIC FUNCTIONS

Chapter 5 Pre-Test

5.1 Quadratic Functions and Complex Numbers

- 5.1.1 Using Transformations to Graph Quadratic Functions
- 5.1.2 Properties of Quadratic Functions in Standard Form
- 5.1.3 Solving Quadratic Equations by Graphing and Factoring
- 5.1.4 Completing the Square
- 5.1.5 Complex Numbers and Roots
- 5.1.6 The Quadratic Formula

5.2 Applying Quadratic Functions

- 5.2.1 Solving Quadratic Inequalities
 - 5.2.2 Curve Fitting with Quadratic Models
 - 5.2.3 Operations with Complex Numbers
- Chapter 5 Test

Practice Midterm & Midterm Exam

Algebra 2



8-WEEK SUMMER LESSON PLAN FOR ALGEBRA 2

WEEK 5: CHAPTER 6 POLYNOMIAL FUNCTIONS

Chapter 6 Pre-Test

6.1 Operations with Polynomials

- 6.1.1 Polynomials
- 6.1.2 Adding and Subtracting Polynomials
- 6.1.3 Multiplying Polynomials
- 6.1.4 Factoring Polynomials
- 6.1.5 Dividing Polynomials
- 6.1.6 Synthetic Division and the Remainder and Factor Theorems

6.2 Roots and Graphs of Polynomial Functions

- 6.2.1 Finding Real Roots of Polynomial Equations
 - 6.2.2 Fundamental Theorem of Algebra
 - 6.2.3 Investigating Graphs of Polynomial Functions
 - 6.2.4 Transforming Polynomial Functions
 - 6.2.5 Curve Fitting with Polynomial Models
- Chapter 6 Test

WEEK 6 - CHAPTER 7 EXPONENTIAL AND LOGARITHMIC FUNCTIONS

Chapter 7 Pre-Test

7.1 Exponential Functions and Logarithms

- 7.1.1 Exponential Functions, Growth, and Decay
- 7.1.2 Inverses of Relations and Functions
- 7.1.3 Logarithmic Functions
- 7.1.4 Properties of Logarithms

7.2 Applying Exponential and Logarithmic Functions

- 7.2.1 Exponential and Logarithmic Equations and Inequalities
 - 7.2.2 The Natural Base, e
 - 7.2.3 Transforming Exponential and Logarithmic Functions
 - 7.2.4 Curve Fitting With Exponential and Logarithmic Models
- Chapter 7 Test

WEEK 7 - CHAPTER 8 RATIONAL AND RADICAL FUNCTIONS

Chapter 8 Pre-Test

8.1 Rational Functions

- 8.1.1 Variation Functions
- 8.1.2 Multiplying and Dividing Rational Expressions
- 8.1.3 Adding and Subtracting Rational Expressions
- 8.1.4 Rational Functions
- 8.1.5 Solving Rational Equations and Inequalities

8.2 Radical Functions

- 8.2.1 Radical Expressions and Rational Exponents
 - 8.2.2 Radical Functions
 - 8.2.3 Solving Radical Equations and Inequalities
- Chapter 8 Test

WEEK 8 - CHAPTER 9 PROPERTIES AND ATTRIBUTES OF FUNCTIONS

Chapter 9 Pre-Test

9.1 Functions and Their Graphs

- 9.1.1 Multiple Representations of Functions
- 9.1.2 Piecewise Functions
- 9.1.3 Transforming Functions

9.2 Functional Relationships

- 9.2.1 Operations with Functions
 - 9.2.2 Functions and Their Inverses
 - 9.2.3 Modeling Real-World Data
- Chapter 9 Test

Practice Final & Final Exam



NEED HELP? That's what we're here for.

Call or email Thinkwell technical support at any time.
Support@thinkwell.com.