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 1**

- Week 1 - Foundations for Algebra
- Week 2 - Equations, Proportions, & Percent
- Week 3 - Inequalities & Functions
- Week 4 - Linear Functions & Midterm
- Week 5 - Systems of Equations and Inequalities & Exponents
- Week 6 - Polynomials & Factoring Polynomials
- Week 7 - Quadratic Functions and Equations
- Week 8 - Data Analysis and Probability & Final Exam

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Algebra 1

8-WEEK SUMMER LESSON PLAN FOR ALGEBRA 1

WEEK 1 - CHAPTER 1 FOUNDATIONS FOR ALGEBRA

1.1 The Language of Algebra
   1.1.1 Variables and Expressions
   1.1.2 Adding and Subtracting Real Numbers
   1.1.3 Multiplying and Dividing Real Numbers
   1.1.4 Powers and Exponents
   1.1.5 Square Roots and Real Numbers
   Review 1.1 Worksheet, Part 1
   Review 1.1 Worksheet, Part 2
   Quiz 1.1

1.2 Tools of Algebra
   1.2.1 Set Theory
   1.2.2 Order of Operations
   1.2.3 Simplifying Expressions
   1.2.4 Introduction to Functions
   Review 1.2 Worksheet, Part 1
   Review 1.2 Worksheet, Part 2
   Quiz 1.2

   Chapter 1 Practice Test
   Chapter 1 Test

WEEK 2 - CHAPTER 2 EQUATIONS, PROPORTIONS, AND PERCENT

2.1 Solving Equations
   2.1.1 Addition and Subtraction Equations
   2.1.2 Multiplication and Division Equations
   2.1.3 Solving Two-Step Equations
   2.1.4 Solving Multi-Step Equations
   2.1.5 Solving Equations w/ Variables on Both Sides
   Review 2.1 Worksheet, Part 1
   Review 2.1 Worksheet, Part 2
   Quiz 2.1

2.2 Proportion and Percent
   2.2.1 Rates, Ratios, and Proportions
   2.2.2 Applications of Proportion
   2.2.3 Percents
   2.2.4 Applications of Percent
   2.2.5 Percent Increase and Decrease
   Review 2.2 Worksheet, Part 1
   Review 2.2 Worksheet, Part 2
   Quiz 2.2

   Chapter 2 Practice Test
   Chapter 2 Test

WEEK 3 - CHAPTER 3 INEQUALITIES & CHAPTER 4 FUNCTIONS

3.1 Introduction to Inequalities
   3.1.1 Graphing and Writing Inequalities
   3.1.2 Solving Inequalities by Adding or Subtracting
   3.1.3 Solving Inequalities by Multiplying or Dividing
   Review 3.1 Worksheet
   Quiz 3.1

3.2 Multi-Step and Compound Inequalities
   3.2.1 Solving Two-Step and Multi-Step Inequalities
   3.2.2 Solving Inequalities w/ Variables on Both Sides
   3.2.3 Solving Compound Inequalities
   Review 3.2 Worksheet, Part 1
   Review 3.2 Worksheet, Part 2
   Quiz 3.2

   Chapter 3 Practice Test
   Chapter 3 Test

4.1 Introduction to Functions
   4.1.1 Graphing Relationships
   4.1.2 Relations and Functions
   4.1.3 Writing Function Rules
   Review 4.1 Worksheet
   Quiz 4.1

4.2 Applying Functions
   4.2.1 Graphing Functions
   4.2.2 Scatter Plots and Trend Lines
   Review 4.2 Worksheet
   Quiz 4.2

   Chapter 4 Practice Test
   Chapter 4 Test

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WEEK 4: CHAPTER 5 LINEAR FUNCTIONS & MIDTERM

5.1 Characteristics of Linear Functions
   5.1.1 Identifying Linear Functions
   5.1.2 Using Intercepts
   5.1.3 Rate of Change and Slope
   5.1.4 The Slope Formula
   Review 5.1 Worksheet, Part 1
   Review 5.1 Worksheet, Part 2
   Quiz 5.1

5.2 Using Linear Functions
   5.2.1 Slope-Intercept Form
   5.2.2 Point-Slope Form
   5.2.3 Slopes of Parallel and Perpendicular Lines
   Review 5.2 Worksheet
   Quiz 5.2
   Chapter 5 Practice Test
   Chapter 5 Test
   Practice Midterm & Midterm

WEEK 5 - CHAPTER 6 SYSTEMS OF EQUATIONS AND INEQUALITIES & 7.1 EXPONENTS

6.1 Systems of Linear Equations
   6.1.1 Solving Systems by Graphing
   6.1.2 Solving Systems by Substitution
   6.1.3 Solving Systems by Elimination
   6.1.4 Solving Special Systems
   6.1.5 Applying Systems
   Review 6.1 Worksheet
   Quiz 6.1

6.2 Linear Inequalities
   6.2.1 Graphing Linear Inequalities
   6.2.2 Solving Systems of Linear Inequalities
   Review 6.2 Worksheet

7.1 Exponents
   7.1.1 Product & Power Properties of Exponents
   7.1.2 Integer Exponents
   7.1.3 Quotient Properties of Exponents
   7.1.4 An Application of Exponents: Scientific Notation
   Review 7.1 Worksheet, Part 1
   Review 7.1 Worksheet, Part 2
   Quiz 7.1

WEEK 6 - SUBCHAPTER 7.2 POLYNOMIALS & CHAPTER 8 FACTORING POLYNOMIALS

7.2 Polynomials
   7.2.1 Polynomials
   7.2.2 Adding and Subtracting Polynomials
   7.2.3 Multiplying Polynomials by Monomials
   7.2.4 Multiplying Binomials
   Review 7.2 Worksheet, Part 1
   Review 7.2 Worksheet, Part 2
   Quiz 7.2
   Chapter 7 Practice Test
   Chapter 7 Test

8.1 Factoring Methods
   8.1.1 Factors and Greatest Common Factors
   8.1.2 Factoring by GCF
   8.1.3 Factoring $x^2 + bx + c$

8.2 Applying Factoring Methods
   8.2.1 Factoring Special Products
   8.2.2 Choosing a Factoring Method
   Review 8.2 Worksheet
   Quiz 8.2
   Chapter 8 Practice Test
   Chapter 8 Test

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### WEEK 7 - CHAPTER 9 QUADRATIC FUNCTIONS AND EQUATIONS

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### WEEK 8 - CHAPTER 10 DATA ANALYSIS AND PROBABILITY & FINAL EXAM

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**FAST-TRACK IDEA!**

**TAKE THE TESTS LIKE A DIAGNOSTIC!**

**GET CUSTOM FEEDBACK ON THE QUESTIONS YOU MISSED AND THE LESSONS YOU NEED TO REVIEW.**

**ONLY DO THE TOPICS YOU NEED TO BASED ON THE QUESTIONS YOU MISSED!**

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