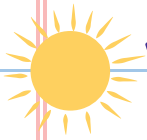




Prealgebra



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 PREALGEBRA

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|--|--|
| • Week 1 - Principles of Algebra | • Week 5 - Percents |
| • Week 2 - Rational Numbers & Introduction to Graphs, Functions, and Sequences | • Week 6 - Foundations of Geometry & Perimeter, Area, and Volume |
| • Week 3 - Exponents and Roots | • Week 7 - Data and Statistics & Probability |
| • Week 4 - Proportionality and Measurement | • Week 8 - Multi-Step Equations and Inequalities |

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8-WEEK SUMMER LESSON PLAN FOR PREALGEBRA



WEEK 1 - CHAPTER 1 PRINCIPLES OF ALGEBRA

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 Expressions and Properties of Numbers
 - 1.1.1 Introduction to Exponents
 - 1.1.2 Using the Order of Operations
 - 1.1.3 Variables and Algebraic Expressions
 - 1.1.4 Translate Words into Math
 - 1.1.5 Properties of Numbers

- 1.2 Operations with Integers
 - 1.2.1 Integers
 - 1.2.2 Adding Integers
 - 1.2.3 Subtracting Integers
 - 1.2.4 Multiplying and Dividing Integers
- 1.3 Equations and Inequalities
 - 1.3.1 Addition and Subtraction Equations
 - 1.3.2 Multiplication and Division Equations
 - 1.3.3 Introduction to Inequalities
- Chapter 1 Test

WEEK 2 - CHAPTERS 2 RATIONAL NUMBERS & 3 INTRODUCTION TO GRAPHS, FUNCTIONS, AND SEQUENCES

Chapter 2 Pre-Test

- 2.1 Operations with Rational Numbers
 - 2.1.1 Rational Numbers
 - 2.1.2 Comparing and Ordering Rational Numbers
 - 2.1.3 Adding and Subtracting Rational Numbers
 - 2.1.4 Multiplying Rational Numbers
 - 2.1.5 Dividing Rational Numbers
- 2.2 Equations with Rational Numbers
 - 2.2.1 Solving Equations with Rational Numbers
 - 2.2.2 Solving Two-Step Equations
- Chapter 2 Test

Chapter 3 Pre-Test

- 3.1 Tables and Graphs
 - 3.1.1 Ordered Pairs
 - 3.1.2 Graphing on a Coordinate Plane
 - 3.1.3 Interpreting Graphs and Tables
- 3.2 Introduction to Functions and Sequences
 - 3.2.1 Functions
 - 3.2.2 Equations, Tables, and Graphs
 - 3.2.3 Arithmetic Sequences
- Chapter 3 Test

WEEK 3 - CHAPTER 4 EXPONENTS AND ROOTS

Chapter 4 Pre-Test

- 4.1 Properties of Exponents
 - 4.1.1 Product and Power Properties of Exponents
 - 4.1.2 Integer Exponents
 - 4.1.3 Quotient Properties of Exponents
 - 4.1.4 An Application of Exponents: Scientific Notation
- 4.2 Square Roots and the Pythagorean Theorem
 - 4.2.1 Square Roots and Real Numbers
 - 4.2.2 Operations with Square Roots
 - 4.2.3 The Pythagorean Theorem and the Distance Formula
- Chapter 4 Test

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8-WEEK SUMMER LESSON PLAN FOR PREALGEBRA

WEEK 4 - CHAPTER 5 PROPORTIONALITY AND MEASUREMENT

Chapter 5 Pre-Test

5.1 Ratios, Rates, and Proportions

- 5.1.1 Ratios and Proportions
- 5.1.2 Ratios, Rates, and Unit Rates
- 5.1.3 Dimensional Analysis
- 5.1.4 Solving Proportions

5.2 Similarity, Scale, and Measurement

- 5.2.1 Similar Figures
- 5.2.2 Dilations
- 5.2.3 Indirect Measurement
- 5.2.4 Scale Drawings and Scale Models
- Chapter 5 Test

WEEK 5 - CHAPTER 6 PERCENTS

Chapter 6 Pre-Test

6.1 Proportions and Percents

- 6.1.1 Relating Decimals, Fractions, and Percents
- 6.1.2 Estimate with Percents
- 6.1.3 Finding Percents
- 6.1.4 Finding a Number When the Percent is Known

6.2 Applying Percents

- 6.2.1 Percent Increase and Decrease
- 6.2.2 Applications of Percents
- 6.2.3 Simple Interest
- Chapter 6 Test

Practice Midterm & Midterm Exam

WEEK 6 - CHAPTERS 7 FOUNDATIONS OF GEOMETRY & 8 PERIMETER, AREA, AND VOLUME

Chapter 7 Pre-Test

7.1 Points, Lines, and Angles

- 7.1.1 Points, Lines, and Planes
- 7.1.2 Angles and Their Relationships

7.2 Polygons

- 7.2.1 Triangles
- 7.2.2 Classifying Polygons
- 7.2.3 Coordinate Geometry
- 7.2.4 Congruence

7.3 Patterns in Geometry

- 7.3.1 Transformations
- 7.3.2 Symmetry
- 7.3.3 Tessellations

Chapter 7 Test

Chapter 8 Pre-Test

8.1 Perimeter and Area

- 8.1.1 Perimeter and Area of Rectangles and Parallelograms
- 8.1.2 Perimeter and Area of Triangles and Trapezoids
- 8.1.3 Circles

8.2 Three-Dimensional Geometry

- 8.2.1 Drawing Three-Dimensional Figures
- 8.2.2 Volume of Prisms and Cylinders
- 8.2.3 Volume of Pyramids and Cones
- 8.2.4 Surface Area of Prisms and Cylinders
- 8.2.5 Surface Area of Pyramids and Cones
- 8.2.6 Spheres
- 8.2.7 Scaling Three-Dimensional Figures
- 8.2.8 Converting Units of Measurement

Chapter 8 Test

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8-WEEK SUMMER LESSON PLAN FOR PREALGEBRA

WEEK 7 - CHAPTERS 9 DATA AND STATISTICS & 10 PROBABILITY

Chapter 9 Pre-Test

- 9.1 Collecting and Describing Data
 - 9.1.1 Samples and Surveys
 - 9.1.2 Identifying Sampling Errors and Bias
 - 9.1.3 Organizing Data
 - 9.1.4 Measures of Central Tendency
 - 9.1.5 Variability and Box-and-Whisker Plots
 - 9.2 Data Displays
 - 9.2.1 Displaying Data
 - 9.2.2 Analyzing Data Displays
 - 9.2.3 Misleading Graphs and Statistics
 - 9.2.4 Scatter Plots
 - 9.2.5 Choosing the Best Representation of Data
- Chapter 9 Test

Chapter 10 Pre-Test

- 10.1 Experimental Probability
 - 10.1.1 Probability
 - 10.1.2 Experimental Probability
 - 10.1.3 Use a Simulation
 - 10.2 Theoretical Probability and Counting
 - 10.2.1 Theoretical Probability
 - 10.2.2 Independent and Dependent Events
 - 10.2.3 Making Decisions and Predictions
 - 10.2.4 Odds
 - 10.2.5 Counting Principles
 - 10.2.6 Permutations and Combinations
- Chapter 10 Test

WEEK 8 - CHAPTER 11 MULTI-STEP EQUATIONS AND INEQUALITIES

Chapter 11 Pre-Test

- 11.1 Solving Equations
 - 11.1.1 Simplifying Algebraic Expressions
 - 11.1.2 Solving Multi-Step Equations
 - 11.1.3 Solving Equations with Variables on Both Sides
 - 11.1.4 Solving Literal Equations
 - 11.2 Solving Inequalities and Systems of Equations
 - 11.2.1 Solving Inequalities by Multiplying or Dividing
 - 11.2.2 Solving Multi-Step Inequalities
 - 11.2.3 Systems of Equations
- Chapter 11 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