

Thinkwell's Homeschool Grade 8 Math (Prealgebra) | Course Lesson Plan: 36 weeks

Welcome to Thinkwell's Homeschool Grade 8 Math (Prealgebra)!

Thank you for making us part of your homeschool curriculum. This 36-week lesson plan is meant to be a guide for you and your homeschool student. Feel free to modify this plan to suit your individual needs.

As described below, each day your student will study a different topic and all the materials associated with that topic, such as video lectures, exercises, and worksheets. Expect to spend about an hour to an hour and a half per day on the content suggested here.

If you follow our day-by-day schedule, you'll complete the full curriculum for the course in 36 weeks. Please [let us know](#) if we can assist you with any of the material here. We're happy to be your partner in thinking well.

Schedule Overview:

Weeks 1 – 4	Chapter 1: Principles of Algebra
Weeks 5 – 7	Chapter 2: Rational Numbers
Weeks 8 – 10	Chapter 3: Introduction to Graphs, Functions, and Sequences
Weeks 10 – 13	Chapter 4: Exponents and Roots
Weeks 13 – 16	Chapter 5: Proportionality and Measurement
Weeks 16 – 19	Chapter 6: Percents
Week 19	Midterm
Weeks 19 – 23	Chapter 7: Foundations of Geometry
Weeks 23 – 26	Chapter 8: Perimeter, Area, and Volume
Weeks 26 – 30	Chapter 9: Data and Statistics
Weeks 30 – 33	Chapter 10: Probability
Weeks 33 – 36	Chapter 11: Multi-Step Equations and Inequalities
Week 36	Final Exam

On the pages that follow is a week-by-week, day-by-day list of Grade 8 Math (Prealgebra) content for your student to complete in order to stay on track with Thinkwell's Grade 8 Math (Prealgebra) coursework. Under each week's header you'll see what chapter your student will be working on, along with the daily assignments for that chapter.

On a given day, your student may have one or more topics to complete. The online content for that topic will typically include one or more video lessons for your student to watch. The total time for the video lessons is noted in parentheses next to the topic name.

Each topic listed in this lesson plan will have a core set of content for your student to view and complete:

Week 1	1) Video lessons
Chapter 1: Principles of Algebra	2) Lesson notes
Assignments	3) Topic worksheet
Week 1, Day 1	4) Thinkwell exercise
1.1.1 Introduction to Exponents (4:01)	

Core materials for this topic:

-  **Watch Lecture - Example 1** | 100% Completed
[03:05]
-  **Watch Lecture - Example 2** | 100% Completed
[02:37]
-  **Watch Lecture - Example 3** | 25% Completed
[02:06]
-  **Watch Lecture - Example 4** | 54% Completed
[04:08]

-  **Notes**
-  **Topic Worksheet**
-  **Topic Worksheet Answer Key**
-  **Thinkwell Exercise** (9 questions)

We suggest that your student first open the notes for that topic. Notes will include key terms, definitions, formulas and illustrations. You may want to print the notes so that your student can take notes on the lesson content as they view the videos. Printed notes are available to purchase as a book if you choose.

Next, we suggest that your student view the video lessons in their entirety.

Finally, students can complete the topic worksheet or they can do the Thinkwell online exercise to demonstrate that they've successfully understood the concepts presented in the lesson. Worksheets and exercises are for practice only and will not count towards the course grade.

After your student has completed a section of topics, they will take a section quiz. Quizzes are available on the Assessments page, and are available to take once for a grade. Practice and Chapter Tests will be scheduled at the end of each chapter. Midterm and Final Exams are also available and are scheduled for weeks 19 and 36, respectively.

As always, feel free to modify this plan to best suit your student's needs. If at any time you require assistance with your course, please reach out to us at support@thinkwell.com.

We're happy to be your partner in thinking well.

Week 1	
Chapter 1: Principles of Algebra	
<i>Assignments</i>	<i>Notes</i>
<u>Week 1, Day 1</u>	
☐ 1.1.1 Introduction to Exponents (4:01)	
<u>Week 1, Day 2</u>	
☐ 1.1.2 Using the Order of Operations (6:53)	
<u>Week 1, Day 3</u>	
☐ 1.1.3 Variables and Algebraic Expressions (8:53)	
<u>Week 1, Day 4</u>	
☐ 1.1.4 Translate Words into Math (9:59)	
<u>Week 1, Day 5</u>	
☐ 1.1.5 Properties of Numbers (7:50)	

Week 2	
Chapter 1: Principles of Algebra	
<i>Assignments</i>	<i>Notes</i>
<u>Week 2, Day 1</u>	
☐ Subchapter 1.1 Worksheet: Expressions and Properties of Numbers	
<u>Week 2, Day 2</u>	
☐ Subchapter 1.1 Quiz	
<u>Week 2, Day 3</u>	
☐ 1.2.1 Integers (6:52)	
<u>Week 2, Day 4</u>	
☐ 1.2.2 Adding Integers (10:05)	
<u>Week 2, Day 5</u>	
☐ 1.2.3 Subtracting Integers (8:39)	

Week 3	
Chapter 1: Principles of Algebra	
<i>Assignments</i>	<i>Notes</i>
<u>Week 3, Day 1</u>	
☐ 1.2.4 Multiplying and Dividing Integers (6:24)	
<u>Week 3, Day 2</u>	
☐ Subchapter 1.2 Worksheet: Operations with Integers	
<u>Week 3, Day 3</u>	
☐ Subchapter 1.2 Quiz	
<u>Week 3, Day 4</u>	
☐ 1.3.1 Addition and Subtraction Equations (9:06)	
<u>Week 3, Day 5</u>	
☐ 1.3.2 Multiplication and Division Equations (9:41)	

Week 4 Chapter 1: Principles of Algebra Chapter 1 Test	
<i>Assignments</i>	<i>Notes</i>
Week 4, Day 1 ☐ 1.3.3 Introduction to Inequalities (10:29)	
Week 4, Day 2 ☐ Subchapter 1.3 Worksheet: Equations and Inequalities	
Week 4, Day 3 ☐ Subchapter 1.3 Quiz	
Week 4, Day 4 ☐ Chapter 1 Practice Test	
Week 4, Day 5 ☐ Chapter 1 Test	Chapter 1 Test Score: _____

Week 5 Chapter 2: Rational Numbers	
<i>Assignments</i>	<i>Notes</i>
Week 5, Day 1 ☐ 2.1.1 Rational Numbers (10:30)	
Week 5, Day 2 ☐ 2.1.2 Comparing and Ordering Rational Numbers (10:45)	
Week 5, Day 3 ☐ 2.1.3 Adding and Subtracting Rational Numbers (25:12), <i>day 1</i>	
Week 5, Day 4 ☐ 2.1.3 Adding and Subtracting Rational Numbers (25:12), <i>day 2</i>	
Week 5, Day 5 ☐ 2.1.4 Multiplying Rational Numbers (10:24)	

Week 6 Chapter 2: Rational Numbers	
<i>Assignments</i>	<i>Notes</i>
Week 6, Day 1 ☐ 2.1.5 Dividing Rational Numbers (13:11)	
Week 6, Day 2 ☐ Subchapter 2.1 Worksheet: Operations with Rational Numbers, Part I	
Week 6, Day 3 ☐ Subchapter 2.1 Worksheet: Operations with Rational Numbers, Part II	
Week 6, Day 4 ☐ Subchapter 2.1 Quiz	
Week 6, Day 5 ☐ 2.2.1 Solving Equations with Rational Numbers (10:46)	

Week 7 Chapter 2: Rational Numbers Chapter 2 Test	
<i>Assignments</i>	<i>Notes</i>
Week 7, Day 1 ☐ 2.2.2 Solving Two-Step Equations (9:10)	
Week 7, Day 2 ☐ Subchapter 2.2 Worksheet: Equations with Rational Numbers	
Week 7, Day 3 ☐ Subchapter 2.2 Quiz	
Week 7, Day 4 ☐ Chapter 2 Practice Test	
Week 7, Day 5 ☐ Chapter 2 Test	Chapter 2 Test Score: ____

Week 8 Chapter 3: Introduction to Graphs, Functions, and Sequences	
<i>Assignments</i>	<i>Notes</i>
Week 8, Day 1 ☐ 3.1.1 Ordered Pairs (7:48)	
Week 8, Day 2 ☐ 3.1.2 Graphing on a Coordinate Plane (11:04)	
Week 8, Day 3 ☐ 3.1.3 Interpreting Graphs and Tables (13:08)	
Week 8, Day 4 ☐ Subchapter 3.1 Worksheet: Tables and Graphs	
Week 8, Day 5 ☐ Subchapter 3.1 Quiz	

Week 9 Chapter 3: Introduction to Graphs, Functions, and Sequences	
<i>Assignments</i>	<i>Notes</i>
Week 9, Day 1 ☐ 3.2.1 Functions (15:41)	
Week 9, Day 2 ☐ 3.2.2 Equations, Tables, and Graphs (9:06)	
Week 9, Day 3 ☐ 3.2.3 Arithmetic Sequences (10:47)	
Week 9, Day 4 ☐ Subchapter 3.2 Worksheet: Introduction to Functions and Sequences	
Week 9, Day 5 ☐ Subchapter 3.2 Quiz	

Week 10 Chapter 3: Introduction to Graphs, Functions, and Sequences Chapter 3 Test Chapter 4: Exponents and Roots	
<i>Assignments</i>	<i>Notes</i>
Week 10, Day 1 ☐ Chapter 3 Practice Test	
Week 10, Day 2 ☐ Chapter 3 Test	Chapter 3 Test Score: _____
Week 10, Day 3 ☐ 4.1.1 Product and Power Properties of Exponents (18:23), day 1	
Week 10, Day 4 ☐ 4.1.1 Product and Power Properties of Exponents (18:23), day 2	
Week 10, Day 5 ☐ 4.1.2 Integer Exponents (8:32)	

Week 11 Chapter 4: Exponents and Roots	
<i>Assignments</i>	<i>Notes</i>
Week 11, Day 1 ☐ 4.1.3 Quotient Properties of Exponents (15:16)	
Week 11, Day 2 ☐ 4.1.4 An Application of Exponents: Scientific Notation (16:55), day 1	
Week 11, Day 3 ☐ 4.1.4 An Application of Exponents: Scientific Notation (16:55), day 2	
Week 11, Day 4 ☐ Subchapter 4.1 Worksheet: Properties of Exponents, Part I	
Week 11, Day 5 ☐ Subchapter 4.1 Worksheet: Properties of Exponents, Part II	

Week 12 Chapter 4: Exponents and Roots	
<i>Assignments</i>	<i>Notes</i>
Week 12, Day 1 ☐ Subchapter 4.1 Quiz	
Week 12, Day 2 ☐ 4.2.1 Square Roots and Real Numbers (11:06)	
Week 12, Day 3 ☐ 4.2.2 Operations with Square Roots (16:38)	
Week 12, Day 4 ☐ 4.2.3 The Pythagorean Theorem and the Distance Formula (19:23)	
Week 12, Day 5 ☐ Subchapter 4.2 Worksheet: Square Roots and the Pythagorean Theorem	

Week 13 Chapter 4: Exponents and Roots Chapter 4 Test Chapter 5: Proportionality and Measurement	
<i>Assignments</i>	<i>Notes</i>
Week 13, Day 1 ☐ Subchapter 4.2 Quiz	
Week 13, Day 2 ☐ Chapter 4 Practice Test	
Week 13, Day 3 ☐ Chapter 4 Test	Chapter 4 Test Score: _____
Week 13, Day 4 ☐ 5.1.1 Ratios and Proportions (6:34)	
Week 13, Day 5 ☐ 5.1.2 Ratios, Rates, and Unit Rates (14:44), day 1	

Week 14 Chapter 5: Proportionality and Measurement	
<i>Assignments</i>	<i>Notes</i>
Week 14, Day 1 ☐ 5.1.2 Ratios, Rates, and Unit Rates (14:44), day 2	
Week 14, Day 2 ☐ 5.1.3 Dimensional Analysis (14:30), day 1	
Week 14, Day 3 ☐ 5.1.3 Dimensional Analysis (14:30), day 2	
Week 14, Day 4 ☐ 5.1.4 Solving Proportions (8:04)	
Week 14, Day 5 ☐ Subchapter 5.1 Worksheet: Ratios, Rates, and Proportions	

Week 15 Chapter 5: Proportionality and Measurement	
<i>Assignments</i>	<i>Notes</i>
Week 15, Day 1 ☐ Subchapter 5.1 Quiz	
Week 15, Day 2 ☐ 5.2.1 Similar Figures (9:59)	
Week 15, Day 3 ☐ 5.2.2 Dilations (9:57)	
Week 15, Day 4 ☐ 5.2.3 Indirect Measurement (7:05)	
Week 15, Day 5 ☐ 5.2.4 Scale Drawings and Scale Models (7:35)	

Week 16 Chapter 5: Proportionality and Measurement Chapter 5 Test Chapter 6: Percents	
<i>Assignments</i>	<i>Notes</i>
Week 16, Day 1 ☐ Subchapter 5.2 Worksheet: Similarity, Scale, and Measurement	
Week 16, Day 2 ☐ Subchapter 5.2 Quiz	
Week 16, Day 3 ☐ Chapter 5 Practice Test	
Week 16, Day 4 ☐ Chapter 5 Test	Chapter 5 Test Score: ____
Week 16, Day 5 ☐ 6.1.1 Relating Decimals, Fractions, and Percents (8:26)	

Week 17 Chapter 6: Percents	
<i>Assignments</i>	<i>Notes</i>
Week 17, Day 1 ☐ 6.1.2 Estimate with Percents (5:42)	
Week 17, Day 2 ☐ 6.1.3 Finding Percents (8:12)	
Week 17, Day 3 ☐ 6.1.4 Finding a Number When the Percent is Known (7:40)	
Week 17, Day 4 ☐ Subchapter 6.1 Worksheet: Proportions and Percents	
Week 17, Day 5 ☐ Subchapter 6.1 Quiz	

Week 18 Chapter 6: Percents	
<i>Assignments</i>	<i>Notes</i>
Week 18, Day 1 ☐ 6.2.1 Percent Increase and Decrease (12:36)	
Week 18, Day 2 ☐ 6.2.2 Applications of Percents (9:34)	
Week 18, Day 3 ☐ 6.2.3 Simple Interest (11:34)	
Week 18, Day 4 ☐ Subchapter 6.2 Worksheet: Applying Percents	
Week 18, Day 5 ☐ Subchapter 6.2 Quiz	

Week 19 Chapter 6: Percents Chapter 6 Test Midterm Chapter 7: Foundations of Geometry	
<i>Assignments</i>	<i>Notes</i>
Week 19, Day 1 ☐ Chapter 6 Practice Test	
Week 19, Day 2 ☐ Chapter 6 Test	Chapter 6 Test Score: ____
Week 19, Day 3 ☐ Midterm Practice Exam	
Week 19, Day 4 ☐ Midterm Exam	Midterm Exam Score: ____
Week 19, Day 5 ☐ 7.1.1 Points, Lines, and Planes (10:51)	

Week 20 Chapter 7: Foundations of Geometry	
<i>Assignments</i>	<i>Notes</i>
Week 20, Day 1 ☐ 7.1.2 Angles and Their Relationships (12:18)	
Week 20, Day 2 ☐ Subchapter 7.1 Worksheet: Points, Lines, and Angles	
Week 20, Day 3 ☐ Subchapter 7.1 Quiz	
Week 20, Day 4 ☐ 7.2.1 Triangles (19:07)	
Week 20, Day 5 ☐ 7.2.2 Classifying Polygons (10:51)	

Week 21 Chapter 7: Foundations of Geometry	
<i>Assignments</i>	<i>Notes</i>
Week 21, Day 1 ☐ 7.2.3 Coordinate Geometry (19:18)	
Week 21, Day 2 ☐ 7.2.4 Congruence (6:04)	
Week 21, Day 3 ☐ Subchapter 7.2 Worksheet: Polygons	
Week 21, Day 4 ☐ Subchapter 7.2 Quiz	
Week 21, Day 5 ☐ 7.3.1 Transformations (13:43)	

Week 22 Chapter 7: Foundations of Geometry	
<i>Assignments</i>	<i>Notes</i>
Week 22, Day 1 ☐ 7.3.2 Symmetry (5:52)	
Week 22, Day 2 ☐ 7.3.3 Tessellations (7:18)	
Week 22, Day 3 ☐ Subchapter 7.3 Worksheet: Patterns in Geometry	
Week 22, Day 4 ☐ Subchapter 7.3 Quiz	
Week 22, Day 5 ☐ Chapter 7 Practice Test	

Week 23 Chapter 7 Test Chapter 8: Perimeter, Area, and Volume	
<i>Assignments</i>	<i>Notes</i>
Week 23, Day 1 ☐ Chapter 7 Test	Chapter 7 Test Score: _____
Week 23, Day 2 ☐ 8.1.1 Perimeter and Area of Rectangles and Parallelograms (15:06)	
Week 23, Day 3 ☐ 8.1.2 Perimeter and Area of Triangles and Trapezoids (15:19)	
Week 23, Day 4 ☐ 8.1.3 Circles (17:07)	
Week 23, Day 5 ☐ Subchapter 8.1 Worksheet: Perimeter and Area	

Week 24 Chapter 8: Perimeter, Area, and Volume	
<i>Assignments</i>	<i>Notes</i>
Week 24, Day 1 ☐ Subchapter 8.1 Quiz	
Week 24, Day 2 ☐ 8.2.1 Drawing Three-Dimensional Figures (10:04)	
Week 24, Day 3 ☐ 8.2.2 Volume of Prisms and Cylinders (16:11)	
Week 24, Day 4 ☐ 8.2.3 Volume of Pyramids and Cones (16:05)	
Week 24, Day 5 ☐ 8.2.4 Surface Area of Prisms and Cylinders (13:56)	

Week 25	
Chapter 8: Perimeter, Area, and Volume	
<i>Assignments</i>	<i>Notes</i>
Week 25, Day 1 ☐ 8.2.5 Surface Area of Pyramids and Cones (15:48)	
Week 25, Day 2 ☐ 8.2.6 Spheres (11:45)	
Week 25, Day 3 ☐ 8.2.7 Scaling Three-Dimensional Figures (11:12)	
Week 25, Day 4 ☐ 8.2.8 Converting Units of Measurement (10:32)	
Week 25, Day 5 ☐ Subchapter 8.2 Worksheet: Three-Dimensional Geometry	

Week 26	
Chapter 8: Perimeter, Area, and Volume	
Chapter 8 Test	
Chapter 9: Data and Statistics	
<i>Assignments</i>	<i>Notes</i>
Week 26, Day 1 ☐ Subchapter 8.2 Quiz	
Week 26, Day 2 ☐ Chapter 8 Practice Test	
Week 26, Day 3 ☐ Chapter 8 Test	Chapter 8 Test Score: _____
Week 26, Day 4 ☐ 9.1.1 Samples and Surveys (8:16)	
Week 26, Day 5 ☐ 9.1.2 Identifying Sampling Errors and Bias (5:17)	

Week 27	
Chapter 9: Data and Statistics	
<i>Assignments</i>	<i>Notes</i>
Week 27, Day 1 ☐ 9.1.3 Organizing Data (18:15)	
Week 27, Day 2 ☐ 9.1.4 Measures of Central Tendency (26:11), day 1	
Week 27, Day 3 ☐ 9.1.4 Measures of Central Tendency (26:11), day 2	
Week 27, Day 4 ☐ 9.1.5 Variability and Box-and-Whisker Plots (23:13), day 1	
Week 27, Day 5 ☐ 9.1.5 Variability and Box-and-Whisker Plots (23:13), day 2	

Week 28	
Chapter 9: Data and Statistics	
<i>Assignments</i>	<i>Notes</i>
<u>Week 28, Day 1</u>	
☐ Subchapter 9.1 Worksheet: Collecting and Describing Data	
<u>Week 28, Day 2</u>	
☐ Subchapter 9.1 Quiz	
<u>Week 28, Day 3</u>	
☐ 9.2.1 Displaying Data (15:08)	
<u>Week 28, Day 4</u>	
☐ 9.2.2 Analyzing Data Displays (10:03)	
<u>Week 28, Day 5</u>	
☐ 9.2.3 Misleading Graphs and Statistics (9:27)	

Week 29	
Chapter 9: Data and Statistics	
<i>Assignments</i>	<i>Notes</i>
<u>Week 29, Day 1</u>	
☐ 9.2.4 Scatter Plots (7:29)	
<u>Week 29, Day 2</u>	
☐ 9.2.5 Choosing the Best Representation of Data (6:39)	
<u>Week 29, Day 3</u>	
☐ Subchapter 9.2 Worksheet: Data Displays	
<u>Week 29, Day 4</u>	
☐ Subchapter 9.2 Quiz	
<u>Week 29, Day 5</u>	
☐ Chapter 9 Practice Test	

Week 30	
Chapter 9 Test	
Chapter 10: Probability	
<i>Assignments</i>	<i>Notes</i>
<u>Week 30 Day 1</u>	Chapter 9 Test Score: _____
☐ Chapter 9 Test	
<u>Week 30, Day 2</u>	
☐ 10.1.1 Probability (18:04)	
<u>Week 30, Day 3</u>	
☐ 10.1.2 Experimental Probability (17:30)	
<u>Week 30, Day 4</u>	
☐ 10.1.3 Use a Simulation (8:32)	
<u>Week 30, Day 5</u>	
☐ Subchapter 10.1 Worksheet: Experimental Probability	

Week 31	
Chapter 10: Probability	
Assignments	Notes
Week 31, Day 1 ☐ Subchapter 10.1 Quiz	
Week 31, Day 2 ☐ 10.2.1 Theoretical Probability (17:59), <i>day 1</i>	
Week 31, Day 3 ☐ 10.2.1 Theoretical Probability (17:59), <i>day 2</i>	
Week 31, Day 4 ☐ 10.2.2 Independent and Dependent Events (14:47)	
Week 31, Day 5 ☐ 10.2.3 Making Decisions and Predictions (8:49)	

Week 32	
Chapter 10: Probability	
Assignments	Notes
Week 32, Day 1 ☐ 10.2.4 Odds (9:39)	
Week 32, Day 2 ☐ 10.2.5 Counting Principles (17:37)	
Week 32, Day 3 ☐ 10.2.6 Permutations and Combinations (12:49)	
Week 32, Day 4 ☐ Subchapter 10.2 Worksheet: Theoretical Probability and Counting	
Week 32, Day 5 ☐ Subchapter 10.2 Quiz	

Week 33	
Chapter 10: Probability	
Chapter 10 Test	
Chapter 11: Multi-Step Equations and Inequalities	
Assignments	Notes
Week 33, Day 1 ☐ Chapter 10 Practice Test	
Week 33, Day 2 ☐ Chapter 10 Test	Chapter 10 Test Score: _____
Week 33, Day 3 ☐ 11.1.1 Simplifying Algebraic Expressions (7:07)	
Week 33, Day 4 ☐ 11.1.2 Solving Multi-Step Equations (19:35)	
Week 33, Day 5 ☐ 11.1.3 Solving Equations with Variables on Both Sides (21:11)	

Week 34	
Chapter 11: Multi-Step Equations and Inequalities	
<i>Assignments</i>	<i>Notes</i>
Week 34, Day 1 ☐ 11.1.4 Solving Literal Equations (10:52)	
Week 34, Day 2 ☐ Subchapter 11.1 Worksheet: Solving Equations, Part I	
Week 34, Day 3 ☐ Subchapter 11.1 Worksheet: Solving Equations, Part II	
Week 34, Day 4 ☐ Subchapter 11.1 Quiz	
Week 34, Day 5 ☐ 11.2.1 Solving Inequalities by Multiplying or Dividing (9:02)	

Week 35	
Chapter 11: Multi-Step Equations and Inequalities	
<i>Assignments</i>	<i>Notes</i>
Week 35, Day 1 ☐ 11.2.2 Solving Multi-Step Inequalities (19:28)	
Week 35, Day 2 ☐ 11.2.3 Systems of Equations (10:35)	
Week 35, Day 3 ☐ Subchapter 11.2 Worksheet: Solving Inequalities and Systems of Equations	
Week 35, Day 4 ☐ Subchapter 11.2 Quiz	
Week 35, Day 5 ☐ Chapter 11 Practice Test	

Week 36	
Chapter 11 Test	
Final Exam	
<i>Assignments</i>	<i>Notes</i>
Week 36, Day 1 ☐ Chapter 11 Test	Chapter 11 Test Score: _____
Week 36, Day 2 ☐ Study for Final Exam	
Week 36, Day 3 ☐ Study for Final Exam	
Week 36, Day 4 ☐ Practice Final Exam	
Week 36, Day 5 ☐ Final Exam	Final Exam Test Score: _____