Thinkwell's Homeschool Grade 7 Math | Course Lesson Plan: 36 weeks

Welcome to Thinkwell's Homeschool Grade 7 Math!

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 <u>let us know</u> if we can assist you with any of the material here. We're happy to be your partner in thinking well.

Weeks 1 – 4	Chapter 1: Algebraic Reasoning
Weeks 5 – 9	Chapter 2: Integers and Rational Numbers
Weeks 9 – 12	Chapter 3: Operations with Rational Numbers
Weeks 13 – 16	Chapter 4: Proportional Relationships
Weeks 16 – 20	Chapter 5: Graphs and Functions
Week 20	Midterm
Weeks 20 – 23	Chapter 6: Percents
Weeks 23 – 26	Chapter 7: Data
Weeks 26 – 30	Chapter 8: Geometric Figures
Weeks 30 – 33	Chapter 9: Measurement: Two-Dimensional Figures
Weeks 33 – 36	Chapter 10: Measurement: Three-Dimensional Figures
Week 36	Final Exam

Schedule Overview:

On the pages that follow is a week-by-week, day-by-day list of Grade 7 Math content for your student to complete in order to stay on track with Thinkwell's Grade 7 Math 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 Chapter 1: Algebraic Reasoning Assignments Week 1, Day 1 1.1.1 Numbers and Patterns (15:08)	 1) Video lessons 2) Lesson notes 3) Topic worksheet 4) Thinkwell exercise
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]	 Notes Topic Worksheet Topic Worksheet Answer Key
Watch Lecture - Example 4 54% Completed [04:08]	O 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 20 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: Algebraic Reasoning	
Assignments	Notes
Week 1, Day 1	
1.1.1 Numbers and Patterns (15:08)	
Week 1, Day 2	
1.1.2 Exponents (7:47)	
Week 1, Day 3	
1.1.3 Applying Exponents: Scientific Notation (9:34)	
Week 1, Day 4	
1.1.4 Order of Operations (9:06)	
Week 1, Day 5	
□ 1.1.5 Properties (11:01)	

Week 2	
Chapter 1: Algebraic Reasoning	
Assignments	Notes
<u>Week 2, Day 1</u>	
□ Subchapter 1.1 Worksheet: Patterns, Operations, and Properties,	
Part I	
Week 2, Day 2	
□ Subchapter 1.1 Worksheet: Patterns, Operations, and Properties,	
Part II	
Week 2, Day 3	
Subchapter 1.1 Quiz	
Week 2, Day 4	
1.2.1 Variables and Algebraic Expressions (8:53)	
Week 2, Day 5	
1.2.2 Translate Words into Math (9:59)	

Week 3	
Chapter 1: Algebraic Reasoning	
Assignments	Notes
<u>Week 3, Day 1</u>	
1.2.3 Simplifying Algebraic Expressions (14:27), day 1	
Week 3, Day 2	
1.2.3 Simplifying Algebraic Expressions (14:27), day 2	
Week 3, Day 3	
1.2.4 Equations and Their Solutions (12:21)	
Week 3, Day 4	
1.2.5 Addition and Subtraction Equations (9:06)	
Week 3, Day 5	
1.2.6 Multiplication and Division Equations (9:41)	

Week 4	
Chapter 1: Algebraic Reasoning	
Chapter 1 Test	
Assignments	Notes
<u>Week 4, Day 1</u>	
Subchapter 1.2 Worksheet: Algebraic Expressions and	
Equations, Part I	
Week 4, Day 2	
Subchapter 1.2 Worksheet: Algebraic Expressions and	
Equations, Part II	
Week 4, Day 3	
Subchapter 1.2 Quiz	
Week 4, Day 4	
Chapter 1 Practice Test	
Week 4, Day 5	Chapter 1 Test
Chapter 1 Test	Score:

Week 5	
Chapter 2: Integers and Rational Numbers	
Assignments	Notes
<u>Week 5, Day 1</u>	
2.1.1 Integers (6:52)	
Week 5, Day 2	
2.1.2 Adding Integers (10:04)	
Week 5, Day 3	
2.1.3 Subtracting Integers (8:39)	
Week 5, Day 4	
2.1.4 Multiplying and Dividing Integers (7:12)	
Week 5, Day 5	
2.1.5 Solving Equations Containing Integers (13:04)	

Week 6	
Chapter 2: Integers and Rational Numbers	
Assignments	Notes
Week 6, Day 1	
Subchapter 2.1 Worksheet: Integers, Part I	
Week 6, Day 2	
Subchapter 2.1 Worksheet: Integers, Part II	
Week 6, Day 3	
Subchapter 2.1 Quiz	
Week 6, Day 4	
2.2.1 Prime Factorization (11:13)	
Week 6, Day 5	
2.2.2 Greatest Common Factor (13:40)	

Week 7	
Chapter 2: Integers and Rational Numbers	
	Nata
Assignments	Notes
<u>Week 7, Day 1</u>	
2.2.3 Least Common Multiple (12:31)	
Week 7, Day 2	
Subchapter 2.2 Worksheet: Factors and Multiples	
Week 7, Day 3	
Subchapter 2.2 Quiz	
<u>Week 7, Day 4</u>	
2.3.1 Equivalent Fractions and Mixed Numbers (15:13), day 1	
Week 7, Day 5	
2.3.1 Equivalent Fractions and Mixed Numbers (15:13), day 2	

Week 8	
Chapter 2: Integers and Rational Numbers	
Assignments	Notes
Week 8, Day 1	
2.3.2 Equivalent Fractions and Decimals (13:49)	
Week 8, Day 2	
2.3.3 Comparing and Ordering Rational Numbers (11:02)	
Week 8, Day 3	
Subchapter 2.3 Worksheet: Rational Numbers, Part I	
Week 8, Day 4	
Subchapter 2.3 Worksheet: Rational Numbers, Part II	
Week 8, Day 5	
Subchapter 2.3 Quiz	

Week 9	
Chapter 2: Integers and Rational Numbers	
Chapter 2 Test	
Chapter 3: Operations with Rational Numbers	
Assignments	Notes
Week 9, Day 1	
Chapter 2 Practice Test	
Week 9, Day 2	Chapter 2 Test
Chapter 2 Test	Score:
Week 9, Day 3	
3.1.1 Rounding and Estimating Decimals (7:44)	
Week 9, Day 4	
3.1.2 Adding and Subtracting Decimals (10:48)	
Week 9, Day 5	
3.1.3 Multiplying Decimals (8:24)	

Week 10	
Chapter 3: Operations with Rational Numbers	
Assignments	Notes
<u>Week 10, Day 1</u>	
3.1.4 Dividing Decimals by Whole Numbers (8:47)	
Week 10, Day 2	
3.1.5 Dividing Decimals (8:58)	
Week 10, Day 3	
Subchapter 3.1 Worksheet: Operations with Decimals	
Week 10, Day 4	
Subchapter 3.1 Quiz	
Week 10, Day 5	
3.2.1 Estimating Fraction Sums and Differences (9:26)	

Week 11	
Chapter 3: Operations with Rational Numbers	
Assignments	Notes
<u>Week 11, Day 1</u>	
3.2.2 Multiplying Fractions and Mixed Numbers (15:09), day 1	
Week 11, Day 2	
3.2.2 Multiplying Fractions and Mixed Numbers (15:09), day 2	
Week 11, Day 3	
3.2.3 Dividing Fractions and Mixed Numbers (12:28)	
Week 11, Day 4	
3.2.4 Adding and Subtracting Fractions and Mixed Numbers (19:53), day 1	
Week 11, Day 5	
3.2.4 Adding and Subtracting Fractions and Mixed Numbers (19:53), day 2	

Week 12	
Chapter 3: Operations with Rational Numbers	
Chapter 3 Test	
Assignments	Notes
<u>Week 12, Day 1</u>	
3.2.5 Solving Equations with Rational Numbers (10:46)	
Week 12, Day 2	
Subchapter 3.2 Worksheet: Operations with Fractions	
Week 12, Day 3	
Subchapter 3.2 Quiz	
Week 12, Day 4	
Chapter 3 Practice Test	
Week 12, Day 5	Chapter 3 Test
Chapter 3 Test	Score:

Week 13	
Chapter 4: Proportional Relationships	
Assignments	Notes
<u>Week 13, Day 1</u>	
□ 4.1.1 Ratios (7:49)	
Week 13, Day 2	
□ 4.1.2 Rates (7:12)	
Week 13, Day 3	
4.1.3 Identifying and Writing Proportions (6:44)	
Week 13, Day 4	
4.1.4 Solving Proportions (4:27)	
Week 13, Day 5	
Subchapter 4.1 Worksheet: Ratios, Rates, and Proportions	

Γ	1
Week 14	
Chapter 4: Proportional Relationships	
Assignments	Notes
<u>Week 14, Day 1</u>	
Subchapter 4.1 Quiz	
Week 14, Day 2	
4.2.1 Customary Measurement (9:28)	
Week 14, Day 3	
4.2.2 Metric Measurements (13:00)	
Week 14, Day 4	
4.2.3 Dimensional Analysis (14:20), day 1	
Week 14, Day 5	
4.2.3 Dimensional Analysis (14:20), day 2	

Week 15	
Chapter 4: Proportional Relationships	
Assignments	Notes
<u>Week 15, Day 1</u>	
4.2.4 Similar Figures and Proportions (6:22)	
Week 15, Day 2	
4.2.5 Using Similar Figures (11:17)	
<u>Week 15, Day 3</u>	
4.2.6 Scale Drawings and Scale Models (8:18)	
<u>Week 15, Day 4</u>	
Subchapter 4.2 Worksheet: Measurement	
<u>Week 15, Day 5</u>	
Subchapter 4.2 Quiz	

Week 16	
Chapter 4: Proportional Relationships	
Chapter 4 Test	
Chapter 5: Graphs and 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 The Coordinate Plane (6:24)	
Week 16, Day 4	
5.1.2 Tables and Graphs (6:17)	
Week 16, Day 5	
5.1.3 Interpreting Graphs (7:02)	

Week 17	
Chapter 5: Graphs and Functions	
Assignments	Notes
<u>Week 17, Day 1</u>	
5.1.4 Functions, Tables, and Graphs (9:43)	
Week 17, Day 2	
5.1.5 Find the Pattern in Sequences (8:22)	
Week 17, Day 3	
Subchapter 5.1 Worksheet: Functions, Tables, and Graphs	
Week 17, Day 4	
Subchapter 5.1 Quiz	
Week 17, Day 5	
5.2.1 Graphing Linear Functions (9:59)	

Week 18	
Chapter 5: Graphs and Functions	
Assignments	Notes
<u>Week 18, Day 1</u>	
5.2.2 Slopes and Rates of Change (14:57), day 1	
<u>Week 18, Day 2</u>	
5.2.2 Slopes and Rates of Change (14:57), day 2	
<u>Week 18, Day 3</u>	
5.2.3 Slope-Intercept Form (18:41), day 1	
<u>Week 18, Day 4</u>	
5.2.3 Slope-Intercept Form (18:41), day 2	
<u>Week 18, Day 5</u>	
5.2.4 Direct Variation (20:53), day 1	

Week 19	
Chapter 5: Graphs and Functions	
Assignments	Notes
Week 19, Day 1	
5.2.4 Direct Variation (20:53), <i>day 2</i>	
Week 19, Day 2	
5.2.5 Inverse Variation (10:34)	
Week 19, Day 3	
Subchapter 5.2 Worksheet: Linear Functions	
Week 19, Day 4	
Subchapter 5.2 Quiz	
Week 19, Day 5	
Chapter 5 Practice Test	

Week 20	
Chapter 5 Test	
Midterm	
Chapter 6: Percents	
Assignments	Notes
<u>Week 20, Day 1</u>	Chapter 5 Test
Chapter 5 Test	Score:
Week 20, Day 2	
Midterm Practice Exam	
Week 20, Day 3	Midterm Exam
Midterm Exam	Score:
Week 20, Day 4	
□ 6.1.1 Percents (8:40)	
Week 20, Day 5	
6.1.2 Percents, Decimals, and Fractions (6:31)	

Week 21	
Chapter 6: Percents	
Assignments	Notes
<u>Week 21, Day 1</u>	
6.1.3 Estimating with Percents (5:42)	
Week 21, Day 2	
6.1.4 Finding Percents (8:12)	
Week 21, Day 3	
Subchapter 6.1 Worksheet: Proportions and Percents	
Week 21, Day 4	
Subchapter 6.1 Quiz	
Week 21, Day 5	
6.2.1 Finding a Number When the Percent is Known (7:40)	

Week 22	
Chapter 6: Percents	
Assignments	Notes
Week 22, Day 1	
6.2.2 Percent Increase and Decrease (12:36)	
Week 22, Day 2	
□ 6.2.3 Simple Interest (11:34)	
Week 22, Day 3	
Subchapter 6.2 Worksheet: Applying Percents	
Week 22, Day 4	
Subchapter 6.2 Quiz	
Week 22, Day 5	
Chapter 6 Practice Test	

Week 23	
Chapter 6 Test	
Chapter 7: Data	
Assignments	Notes
Week 23, Day 1	Chapter 6 Test
Chapter 6 Test	Score:
Week 23, Day 2	
7.1.1 Frequency Tables, Stem-and-Leaf Plots, and Line Plots (12:56)	
Week 23, Day 3	
7.1.2 Mean, Median, Mode, and Range (16:29), day 1	
Week 23, Day 4	
7.1.2 Mean, Median, Mode, and Range (16:29), day 2	
Week 23, Day 5	
7.1.3 Bar Graphs and Histograms (12:21)	

Week 24	
Chapter 7: Data	
Assignments	Notes
<u>Week 24, Day 1</u>	
7.1.4 Reading and Interpreting Circle Graphs (7:30)	
Week 24, Day 2	
7.1.5 Box-and-Whisker Plots (5:15)	
Week 24, Day 3	
Subchapter 7.1 Worksheet: Organizing and Displaying Data	
Week 24, Day 4	
Subchapter 7.1 Quiz	
Week 24, Day 5	
7.2.1 Line Graphs (10:21)	

Week 25	
Chapter 7: Data	
Assignments	Notes
<u>Week 25, Day 1</u>	
7.2.2 Choosing an Appropriate Display (5:30)	
Week 25, Day 2	
7.2.3 Populations and Samples (8:00)	
Week 25, Day 3	
7.2.4 Scatter Plots (7:37)	
Week 25, Day 4	
7.2.5 Misleading Graphs (5:58)	
Week 25, Day 5	
Subchapter 7.2 Worksheet: Representing and Analyzing Data	

Week 26	
VVEEK 20	
Chapter 7: Data	
Chapter 7 Test	
Chapter 8: Geometric Figures	
Assignments	Notes
<u>Week 26, Day 1</u>	
Subchapter 7.2 Quiz	
<u>Week 26, Day 2</u>	
Chapter 7 Practice Test	
Week 26, Day 3	Chapter 7 Test
Chapter 7 Test	Score:
<u>Week 26, Day 4</u>	
8.1.1 Points, Lines, and Planes (10:51)	
<u>Week 26, Day 5</u>	
8.1.2 Angles and Their Relationships (12:18)	

Week 27	
Chapter 8: Geometric Figures	
Assignments	Notes
Week 27, Day 1	
8.1.3 Geometric Relationships (2:58)	
Week 27, Day 2	
Subchapter 8.1 Worksheet: Lines and Angles	
Week 27, Day 3	
Subchapter 8.1 Quiz	
Week 27, Day 4	
8.2.1 Classifying Polygons (5:59)	
Week 27, Day 5	
8.2.2 Classifying Triangles (6:47)	

Week 28	
Chapter 8: Geometric Figures	
Assignments	Notes
<u>Week 28, Day 1</u>	
8.2.3 Classifying Quadrilaterals (4:45)	
Week 28, Day 2	
8.2.4 Angles in Polygons (7:37)	
Week 28, Day 3	
Subchapter 8.2 Worksheet: Circles and Polygons	
Week 28, Day 4	
Subchapter 8.2 Quiz	
Week 28, Day 5	
8.3.1 Congruent Figures (7:37)	

Week 29	
Chapter 8: Geometric Figures	
Assignments	Notes
<u>Week 29, Day 1</u>	
8.3.2 Translations, Reflections, and Rotations (13:22)	
Week 29, Day 2	
8.3.3 Dilations (8:53)	
Week 29, Day 3	
8.3.4 Symmetry (5:52)	
Week 29, Day 4	
Subchapter 8.3 Worksheet: Transformations	
Week 29, Day 5	
Subchapter 8.3 Quiz	

Week 30	
Chapter 8: Geometric Figures	
Chapter 8 Test	
Chapter 9: Measurement: Two-Dimensional Figures	
Assignments	Notes
Week 30 Day 1	
Chapter 8 Practice Test	
Week 30, Day 2	Chapter 8 Test
Chapter 8 Test	Score:
Week 30, Day 3	
9.1.1 Accuracy and Precision (4:20)	
Week 30, Day 4	
9.1.2 Perimeter and Circumference (5:44)	
Week 30, Day 5	
9.1.3 Area of Parallelograms (6:48)	

	1
Week 31	
Chapter 9: Measurement: Two-Dimensional Figures	
Assignments	Notes
<u>Week 31, Day 1</u>	
9.1.4 Area of Triangles and Trapezoids (7:32)	
Week 31, Day 2	
9.1.5 Area of Circles (7:16)	
Week 31, Day 3	
9.1.6 Area of Irregular Figures (6:43)	
Week 31, Day 4	
□ Subchapter 9.1 Worksheet: Perimeter, Circumference, and Area,	
Part I	
Week 31, Day 5	
□ Subchapter 9.1 Worksheet: Perimeter, Circumference, and Area,	
Part II	

Week 32	
Chapter 9: Measurement: Two-Dimensional Figures	
Assignments	Notes
<u>Week 32, Day 1</u>	
Subchapter 9.1 Quiz	
Week 32, Day 2	
9.2.1 Squares and Square Roots (9:48)	
Week 32, Day 3	
9.2.2 The Pythagorean Theorem (10:45)	
Week 32, Day 4	
Subchapter 9.2 Worksheet: Square Roots and the Pythagorean	
Theorem	
Week 32, Day 5	
Subchapter 9.2 Quiz	

Week 33	
Chapter 9: Measurement: Two-Dimensional Figures	
Chapter 9 Test	
Chapter 10: Measurement: Three-Dimensional Figures	
Assignments	Notes
<u>Week 33, Day 1</u>	
Chapter 9 Practice Test	
<u>Week 33, Day 2</u>	Chapter 9 Test
Chapter 9 Test	Score:
<u>Week 33, Day 3</u>	
10.1.1 Introduction to Three-Dimensional Figures (6:44)	
<u>Week 33, Day 4</u>	
10.1.2 Volume of Prisms and Cylinders (13:20), day 1	
Week 33, Day 5	
□ 10.1.2 Volume of Prisms and Cylinders (13:20), <i>day 2</i>	

Week 34	
Chapter 10: Measurement: Three-Dimensional Figures	
Assignments	Notes
Week 34, Day 1	
10.1.3 Volume of Pyramids and Cones (5:26)	
Week 34, Day 2	
Subchapter 10.1 Worksheet: Volume	
Week 34, Day 3	
Subchapter 10.1 Quiz	
Week 34, Day 4	
10.2.1 Surface Area of Prisms and Cylinders (23:01), day 1	
Week 34, Day 5	
□ 10.2.1 Surface Area of Prisms and Cylinders (23:01), <i>day 2</i>	

Week 35	
Chapter 10: Measurement: Three-Dimensional Figures	
Assignments	Notes
Week 35, Day 1	
10.2.2 Surface Area of Pyramids and Cones (8:13)	
Week 35, Day 2	
10.2.3 Changing Dimensions (9:16)	
Week 35, Day 3	
Subchapter 10.2 Worksheet: Surface Area	
Week 35, Day 4	
Subchapter 10.2 Quiz	
Week 35, Day 5	
Chapter 10 Practice Test	

Week 36	
Chapter 10 Test	
Final Exam	
Assignments	Notes
Week 36, Day 1	Chapter 10
Chapter 10 Test	Test Score:
<u>Week 36, Day 2</u>	
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: