Summer Work - Reveal Math - Course 3

This document outlines the IXL skill alignments for specific lessons from Modules 1, 2, 3, 4, and 5 of the McGraw Hill's Reveal Math curriculum, with direct hyperlinks to the IXL skills.

RISING 7TH & 8TH GRADE Summer Math

As you transition into 7th and 8th grade, it is essential to reinforce your foundational math skills and prepare for the exciting new concepts ahead. Maintaining a consistent practice routine over the summer will ensure a smooth start to the new academic year and set you up for continued success in more advanced mathematics.

Throughout your summer engagement with math, remember to utilize available resources to deepen your understanding. Tools like "Learn with an Example" and "Watch a Video" can be incredibly helpful when exploring new topics or revisiting challenging areas.

For your Math summer preparation, focus on strengthening your understanding of key concepts from the previous year and begin to familiarize yourself with introductory topics for the upcoming grade level. This proactive approach will build confidence and competence.

Please complete a SmartScore of at least 70

in each skill area

- You should strive to maintain a strong grasp of core mathematical principles.
- Your summer work is a crucial opportunity to review and preview skills, laying a solid groundwork for the demanding curriculum of 7th and 8th grade.

Suggested Additional Practice

- Review and practice fundamental operations with integers, fractions, and decimals.
- Explore introductory algebra concepts, such as expressions, equations, and inequalities.
- Familiarize yourself with basic geometry principles and concepts of probability and statistics.
- Engage with practice problems that encourage critical thinking and problem-solving.

Please reach out to Mr. Scott @ <u>t.scott@hrs-ken.org</u> if you have any questions as you work through your summer math preparation. Mr. Scott is travelling this summer, so please be patient with a response.

Module 1: Exponents and Scientific Notation

Lesson 1-4: Zero and Negative Exponents

- Understanding negative exponents 7ZJ
- Evaluate powers with negative or zero exponents 5MA
- Exponent rules: review LS9
- Also consider
 - Evaluate expressions using properties of exponents UTY
 - Identify equivalent expressions involving exponents I VLM
 - Identify equivalent expressions involving exponents II QDM

Module 2: Real Numbers

Lesson 2-1: Terminating and Repeating Decimals

- 2. Convert between repeating decimals and fractions WD6
- 3. Convert between decimals and fractions or mixed numbers 2RC

Lesson 2-2: Roots

- Positive and negative square roots ME5
- Solve equations using square roots NNA
- <u>Cube roots of positive and negative perfect cubes J7K</u>
- Solve equations using cube roots TQ5
- Also consider
 - Relationship between squares and square roots 8W2

Lesson 2-3: Real Numbers

- 2. Identify rational and irrational numbers NV6
- 3. Classify numbers VR7

Lesson 2-4: Estimate Irrational Numbers

- 3. Estimate positive square roots XWJ
- 4. Irrational numbers on number lines 83E
- 5. Estimate cube roots RLC

Lesson 2-5: Compare and Order Real Numbers

- Compare and order rational and irrational numbers VK2
- Also consider
 - Compare rational numbers MUK
 - Put rational numbers in order QP5

Checkpoint opportunity

- 3. Checkpoint: Square and cube roots UF5
- 4. Checkpoint: Rational and irrational numbers SNE
- 5. Checkpoint: Approximate irrational numbers JHR

Module 3: Solve Equations with Variables on Each Side

Lesson 3-1: Solve Equations with Variables on Each Side

- 2. Solve equations with variables on both sides ZYL
- 3. Solve equations with variables on both sides: fractional coefficients UEM

Lesson 3-2: Write and Solve Equations with Variables on Each Side

1. Solve equations with variables on both sides: word problems BRX

Lesson 3-3: Solve Multi-Step Equations

- Solve multi-step equations 55K
- Solve multi-step equations with fractional coefficients 2AZ
- Also consider
 - Solve equations with the distributive property 8RP
 - Solve multi-step equations: complete the solution PGH

Lesson 3-4: Write and Solve Multi-Step Equations

• No specific IXL skills listed in the provided text.

Lesson 3-5: Determine the Number of Solutions

- 2. Find the number of solutions XDE
- 3. Create equations with no solutions or infinitely many solutions 7TY

Checkpoint opportunity

1. Checkpoint: Solve linear equations BBZ

Module 4: Linear Relationships and Slope

Lesson 4-1: Proportional Relationships and Slope

- Find the constant of proportionality from tables and graphs G9B
- Graph proportional relationships and find the slope MQD
- <u>Compare proportional relationships represented in different ways LLL</u>
- Also consider
 - Identify proportional relationships 264
 - Interpret graphs of proportional relationships Q96

Lesson 4-2: Slope of a Line

- Find the slope from a graph D7M
- Find the slope from two points ZAC
- Find the slope from a table GSB
- Also consider
 - Find a missing coordinate using slope R5P
 - Graph a line using slope FSV

Lesson 4-3: Similar Triangles and Slope

1. Slopes of parallel and perpendicular lines 7KX

Lesson 4-4: Direct Variation

- Find the constant of variation XXT
- Write equations for proportional relationships from tables and graphs VXM
- Write and solve equations for proportional relationships HPM
- Also consider
 - Identify direct variation MWB
 - Write direct variation equations GXD
 - Write and solve direct variation equations ZHK

Lesson 4-5: Slope-Intercept Form

- Slope-intercept form: find the slope and y-intercept U55
- Write a linear equation from a slope and y-intercept WHP
- Write a linear equation from a graph WHM
- Write a linear function from a table UYY
- Also consider
 - Write a linear equation from a slope and a point VKP
 - Write a linear equation from two points 2R9

Lesson 4-6: Graph Linear Equations

- 2. Graph a line from an equation in slope-intercept form W5E
- 3. Graph a horizontal or vertical line ZWP

Checkpoint opportunity

- 2. Checkpoint: Proportional relationships 58H
- 3. Checkpoint: Slope and linear equations S7V

Module 5: Functions

Lesson 5-1: Identify Functions

- Identify functions JT2
- Identify functions: graphs AEB
- Also consider
 - Find values using function graphs 7N2
 - Complete a table for a function graph 7EK