Students will be using Khan Academy (the 8th grade course) to prepare for Integrated Math 1. Here are the domains and lessons within each domain that students should cover. Prioritize the earlier units, specifically **Unit 1 and Unit 2.** Students should achieve an 80% proficiency on practice questions, quizzes (when stated), and unit tests (when stated).

https://www.khanacademy.org/math/cc-eighth-grade-math

#### Unit 1

#### Linear Equations

- > Graphing proportional relationships
- Solutions to Linear Equations
- > Slope
- ➤ Intro to Slope-Intercept Form
- Graphing Slope-Intercept Form
- Writing Slope-Intercept Equations

### Solving equations with one unknown

- ➤ All Lessons
  - Equations with Variables on Both Sides
  - Equations with Parentheses
  - Number of solutions to Equations
  - Equation Word Problems
  - Quiz #1-2

### Systems of Equations

- ➤ Intro to System of Equations
- Systems of Equations with graphing
- Solving Systems with Substitution

## Numbers and Operations

- Square roots and Cube roots
- ➤ Irrational Numbers
- Approximating Irrational Numbers
- Exponent Properties Intro
- Negative Exponents
- Exponent Properties (integer exponents)
- ➤ Quizzes 1-4

#### Unit 2

### Linear and Nonlinear Functions

- > Functions
- Comparing Linear Functions
- > Recognizing Functions
- ➤ Linear and Nonlinear Functions
- > Quiz #1, 3, and 4

#### Unit 3

# **❖** Data and Modeling

- > Introduction to Scatter Plots
- > Interpreting Scatter Plots
- ➤ Estimating Lines of Best Fit
- > Two-Way Tables
- ➤ Quiz #1-3
- ➤ Unit Test

### Unit 4

# **Geometric Transformations**

- > Transformations Intro
- > Translations
- > Rotations
- > Reflections
- > Properties and definitions of transformations
- Dilations
- Congruence and similarity
- ➤ Quiz #1-6
- ➤ Unit Test

### **Geometry**

- ➤ Angles between intersecting lines
- > Pythagorean Theorem (Low priority, will come up in IM 2)
- > Pythagorean Theorem and distance between points (Low priority, will come up in IM 2)
- Volume (Low priority, will come up in IM 2)
- ➤ Quiz 4