# Grade 7 Study Guide Math Mid-Year Exam

Date: Sunday, December 10<sup>th</sup>, 2023.

**Time:** 8:00 to 9:30.

**Duration:** 1 hour and 30 minutes.

Study from: Math Reveal Textbook, Math notebook, IXL, ALEKS.

| Lesson | Topic                          | Pages   |
|--------|--------------------------------|---------|
| 3-1    | Add Integers                   | 127-137 |
| 3-2    | Subtract Integers              | 139-147 |
| 3-3    | Multiply Integers              | 149-158 |
| 3-4    | Divide Integers                | 159-166 |
| 4-1    | Rational Numbers               | 177-184 |
| 4-2    | Add Rational Numbers           | 185-198 |
| 4-3    | Subtract Rational Numbers      | 197-202 |
| 4-4    | Multiply Rational Number       | 203-212 |
| 4-5    | Divide Rational Numbers        | 213-220 |
| 5-1    | Simplify Algebraic Expressions | 233-241 |

**Types of Questions to expect:** 

Multiple Choice, calculations, and word problems.

Keywords: (To be understood, not memorized)

## **Integers:**

A whole number that can be positive, negative or zero.

#### Sum:

The answer to an addition problem.

#### Difference:

The answer to a subtraction problem.

#### **Product:**

The answer to a multiplication problem.

## **Whole Number:**

A natural positive counting number, including zero.

#### Fractions

A numerical quantity that is not a whole number. It consists of a numerator and denominator.

#### **Mixed Number:**

Mixed numbers consist of a whole number and a proper fraction.

#### **Rational Number:**

A number that can be expressed as a fraction or part of a whole number.

#### **Quotient:**

The answer to a division problem.

#### **Dividend:**

A number to be divided by another number.

#### **Divisor:**

A number that divides into another number.

# **Algebraic expressions:**

Is a combination of numbers, variables, and mathematical operations.

#### Like terms:

Terms contains the same variables to the same power.

# Coefficient:

The numerical factor of a term that contains a variable.

# Constant:

A term without a variable.

# **Linear expression:**

Is an algebraic expression in which each term is a constant or coefficient and a variable raised to the first power.

Kindly note that calculators are NOT allowed to be used and smart watches should NOT be worn during an exam.