Grade 6 End of Unit 3 Assessment Study Guide

Subject: Math
Date & Time of Test: Wednesday, February 19th , 2020
Duration of Test: 80 minutes
You are expected to study from: All materials mentioned

1. **Textbook/Workbooks:**

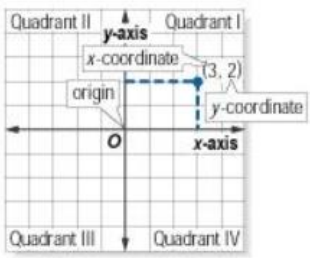
Chapters	Topic	Pages
5-1	**Integers and Graphing** Use integers to represent real-world situations	345 - 352
5-2	**Absolute Value** Find the absolute value of an integer	355 - 362
5-3	**Compare and Order Integers** Compare and Order Integers	363- 370
5-7	**Graph on the coordinate plane** Graph ordered pairs on the coordinate plane	403 - 410
6-1	**Powers and Exponents** Represent Numbers using exponents	433-440
6-2	**Numerical Expressions** Find the value of expression using order of operations.	441-448
6-3	**Algebra: Variables and Expressions** Evaluate algebraic expressions	449-456
6-4	**Algebra: Write Expressions** Write verbal phrases as simple algebraic expressions	461-468
6-5	**Algebra: Properties** Use properties to simplify expressions.	473-480
6-6	**The Distributive Property** Use the Distributive Property to compute multiplication problems mentally and to rewrite algebraic expressions.	485-492

2. **Types of Questions:** a. Word problems b. Multiple Choice c. Definitions (Matching or fill in the blank questions) d. Calculations e. Plotting	➢ **You are expected to:** ➢ Review mid-checks ➢ Review mid-unit assessments ➢ Review IXL homework ➢ Review worksheets ➢ Review students' notes and math textbook ➢ IXL: M.3, M.4, M.6, X.2, D.1, O.3, Y.4, Y.3

VOCABULARY: (Definitions should not be memorized it should be understood)

- **Integer -** The set of whole numbers and their opposites {. . .-2, -1, 0, 1, 2. . .}
- **Negative Integer-** Any integer that is less than zero.
- **Positive Integer-**Any integer that is greater than zero.
- **Absolute Value-** The absolute value of a number *a* is its distance from zero on a number line and is represented by $|a|$. Example: The absolute value of -2 is 2, or $|-2| = 2$.
- **Opposites-**Every positive integer and its negative pair.
- **Coordinate Plane-** A plane, also called a coordinate grid or coordinate system, in which a horizontal number line and a vertical number line intersect at their zero points.

- **Ordered Pair-**A pair of numbers used to locate a point in the coordinate plane or the solution of an equation in two variables. An ordered pair is written in the form (*x*-coordinate, *y*-coordinate).



- **Origin-** The point (0, 0) in a coordinate plane where the *x*-axis and the *y*-axis intersects.
- **Quadrant-**One of four regions into which the *x*- and *y*-axes separate the coordinate plane.
- **X- coordinate-**The first number in an ordered pair.
- **Y- coordinate-**The second number in an ordered pair
- **Reflection-**A transformation in which a figure is flipped over a line of symmetry.

- **Exponent-** A number that indicates how many times a number or expression is to be multiplied by itself. Example: In the expression 5^3, the exponent is 3.
- **Powers-**An expression of the form x^n, read *x* to the *n*th power. Example: 7^4 is 7 raised to the fourth power, or 7 x 7 x 7 x 7.
- **Numerical Expression-** A mathematical expression that has a combination of numbers and at least one operation. 4 + 2 x 3 is a numerical expression.

- **Order of operations-** 1. Evaluate expressions inside grouping symbols.
  2. Evaluate all powers.
  3. Do all multiplications and/or divisions from left to right.
  4. Do all additions and/or subtractions from left to right.
- **Variable-**A letter or other symbol used to represent an unspecified number or value.
- **Algebraic Expression-** An expression consisting of one or more numbers and variables along with one or more arithmetic operations.
- **Commutative Property-** The order in which two numbers are added or multiplied does not change their sum or product. For any numbers a and b, $a + b = b + a$ and $ab = ba$. Example: 2 + 3 = 3 + 2 or 2 x 3 = 3 x 2
- **Associative Property -** The way in which three numbers are grouped when they are added or multiplied does not change their sum or product. For any numbers a, b, and c, $(a + b) + c = a + (b + c)$, and $(ab)c = a(bc)$.
  Example:: (2 + 3) + 4 = 2 + (3 + 4) or (2 x 3) x 5 = 2 x (3 x 5).
- **Distributive Property-** To multiply a sum by a number, multiply each addend of the sum by the number outside the parentheses. For any numbers a, b, and c, a(b + c) = ab + ac and a(b - c) = ab - ac.
  Example: 2(5 + 3)=(2 x 5) + (2 x 3) and 2(5 - 3) = (2 x 5) - (2 x 3)
- **Identity Property -** The sum of an addend and zero is the addend. The product of a factor and one is the factor. Example: 5 + 0 = 5 and 5 x 1 = 5