GRADE 7 MATH PREREQUISITE SKILLS

Leaving Grade 6 Students Being Able to Do

(*with Understanding*)

Ways to use this list:

- Assess Grade 6 students during the course of the school year and at the end of the school year to track progress towards being able to do these skills at a Stage 3 or Stage 4 level of fluency. Share that information with the Grade 7 teachers.
- Assess incoming Grade 7 students at the beginning of the school year to measure for summer loss/retention. Design math centers and fluency routines to support student progress for the first two months of school.

#	Skill *Can the student...*	Stage of Fluency	Grade 6 Standard(s)
1	Evaluate numerical expressions involving substitution of numbers for variables with a variety of number forms (e.g., whole numbers, whole number exponents, fractions, decimals) by applying the order of operations and the Properties of Operations.	3	6.EE.1 6.EE.2 6.EE.3 (*5.OA.1*)
2	Write numerical expressions to describe real-world situations.	3	6.EE.6 6.EE.7
3	Transform (manipulate) equations and inequalities using inverse operations (e.g., a + b = c then c - b = a) and converse relationships (e.g., c > a then a < c).	4	6.EE.7
4	Divide multi-digit numbers using a standard algorithm.	3	6.NS.2
5	Add and subtract multi-digit decimals using a standard algorithm for each operation.	3	6.NS.3
6	Multiply and divide multi-digit decimals using a standard algorithm for each operation.	3	6.NS.3
7	Interpret quotients when dividing fractions and explain in the context of real-world and word problems.	3	6.NS.1
8	Apply and explain positive and negative numbers to describe/model real-world situations.	3 - 4	6.NS.5 6.NS.6
9	Locate rational numbers in vertical and horizontal number lines, including the coordinate plane.	4	6.NS.6 6.NS.7
10	Order and do calculations where absolute value is involved.	4	6.NS.7
11	Interpret comparison statements (inequalities) involving rational numbers in various contexts (e.g., real-world, computations without context)	3 - 4	6.NS.7
12	Graph coordinate points in all quadrants.	4	6.NS.6
13	Apply understanding of absolute value, coordinate plane, and rational numbers to solve real-world problems.	3	6.NS.8
14	Explain and recognize ratio and rates in various forms and situations.	3 - 4	6.RP.1 6.RP.2
15	Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.	3	6.RP.3
16	Convert measurement units by applying ratio concepts and strategies.	3	6.RP.3

17	Regcognize 10% and 1% of any amount.	4	6.RP.3
18	Find any whole number percent of any amount.	3	6.RP.3
19	Apply methods/strategies for collecting statistical data, including using measures of central tendencies (i.e., mean, mode, median)	3	6.SP.2 6.SP.3
20	Interpret the results of statistical data.	3	6.SP.1 6.SP.2 6.SP.3
21	Recognize and pose statistical questions.	3 - 4	6.SP.1
22	Interpret and determine how to display statistical data.	3	6.SP. *(7.SP.3)*