NORTH HAVEN HIGH SCHOOL

SUMMER MATH ASSIGNMENT ALGEBRA 1 - LEVEL 2 AND LEVEL 3

All middle school students used the IXL website to practice a variety of math skills throughout the school year. Students will continue to have access to this website over the summer. Please see the second page of this document for a list of skills students entering 9th grade and taking Algebra I should work on over the summer. THIS ASSIGNMENT NEEDS TO BE COMPLETED BEFORE THE FIRST DAY OF SCHOOL.

Students are expected to practice the assigned skills until they reach a smart score of 80 or have worked a maximum of 30 minutes on each skill. (They have been asked to do this throughout the year so they should be familiar with where to find their score for each skill.) At the beginning of school, teachers will run a report that shows the skills each student worked on and if they reached a smart score of 80. This report also shows how long it took students to reach that score and how many problems he/she had to solve in order to reach that score. This is all valuable information that teachers will use at the start of the year (in addition to other formal and informal assessments) to get to know a student's strengths and weaknesses. Even though all of the skills that have been assigned are listed on IXL under Algebra I, the skills were chosen because they were taught throughout the 8th grade and are prerequisite skills that are necessary to master in order to understand the material in the Algebra I course. Students may have already worked on some of the assigned skills throughout the year. If that is the case, they should begin from the smart score they already have. (i.e. A student may have a smart score of 64 from October and over the summer will practice this skill again starting at 64 until he/she reaches a smart score of 80, or has worked an additional 30 minutes on that skill.) If a student has reached 80 during the school year, he/she needs to work an additional 30 minutes on the skill or reach a smart score of 100 to make sure that he/she has retained the skill from earlier in the year. If students have difficulty with any of the skills, the website will provide an explanation of how to do the problems. If a student is still having difficulty even after reading and working through the examples given, he/she may also want to try www.khanacademy.org for a video tutorial on the concept or skill.

To access the website go to: <u>www.ixl.com/signin/northhaven</u>. Students will then be asked to enter their username and password. This is the same username and password that they have used throughout the year.

If a student does not have access to a computer at home, he/she may access a computer at the town library.

The mathematics department thanks you for your support and wishes you and your family a happy and restful summer!

SUMMER MATH ASSIGNMENT ALGEBRA I – LEVEL 2 AND LEVEL 3

Students are expected to practice the following skills until they reach a smart score of 80 or higher, or have worked a total of 30 minutes on each skill. You are welcome to practice other skills from this course or previous courses once you have finished this assignment. If you already have a smart score, begin where you are and continue practicing until you reach 80, or have worked on the skill for 30 minutes. If you reached 80 during the school year, you should work an additional 30 minutes or reach 100 over the summer.

Fill out this sheet and turn it in to your teacher on the first day of school. This assignment will count as the first grade of the marking period. You may want to approach this assignment by practicing multiple skills for a few minutes each day throughout the summer until you reach your goal or you may want to practice one skill at a time and reach your goal before moving on to the next.

Level	Skill	Description	Date	Score	Time
			Completed		Practiced
					(# min)
A1	B3	Evaluate variable expressions involving			
		integers.			
A1	B7	Evaluate variable expressions involving rational			
		numbers.			
A1	H2	Distributive property			
A1	I1	Write variable expressions.			
A1	J9	Solve linear equations: mixed review			
A1	S2	Find the slope of a graph.			
A1	S 3	Find slope from two points.			
A1	U1	Is (x,y) a solution to the system of equations?			
A1	U2	Solve a system of equations by graphing.			

This assignment needs to be completed prior to the first day of school (August 26th).

(All of the A1 skills can be found on the A1 tab (Algebra I) on IXL.)

Students who are taking <u>Algebra I Level 3</u> need to solve the following problems in addition to practicing the skills listed above.

Solve each problem on a separate sheet of paper. Show your work and explain your reasoning. There is graph paper posted on the high school website where you found this assignment if you need it.

1. Which is the better deal?

You plan to join a gym and are comparing two options. Fabulous Fitness has a deal where you pay a \$99 membership fee and then \$2.99 a week. Gorilla Gym does not have a membership fee – you just pay \$19.99 a month. You want to know which is a better buy over the next year. Does it vary depending upon how many weeks you go? If so, be specific.

2. You pull the plug from the bathtub. After 40 seconds, there are 14 gallons of water left in the tub. After one minute (60 seconds), there are 10 gallons left. Assume that the water continues to <u>drain</u> at this constant

rate. How long will it take to completely drain the tub and how many gallons were in the tub originally?