May 15, 2018

Dear Honors Algebra I Student,

   I am very excited about the upcoming school year and the new discoveries you will make along the way. In **Algebra I**, you will investigate the many uses of expressions and equations, including linear, quadratic, nonlinear, radical, and rational functions.
   You have been recommended for this course, because of your interest in pursuing the study of advanced mathematics and your reputation as an exceptional mathematics student.
   There are two parts to your work this summer as you prepare for Algebra I Honors.

PART I will allow you to keep your pre-algebra and arithmetic skills sharp over the summer break and start the school year with ease.

BOOK SECTION	MASTERY STATEMENTS	PRACTICE PROBLEMS
Section 0-2	I can classify numbers using the Real Number Sets. (Natural, Whole, Integer, Rational, Irrational) I can simplify perfect squares and fractions including perfect squares in the numerator or denominator. I can estimate a non-perfect square root to the nearest whole #	**Page P10 1-11 Odd 19-22 Odd 23 & 29**
Section 0-3	I can add, subtract, multiply, and divide integers without a calculator.	**Page P12 1-23 Odd**
Section 0-4	I can add and subtract rational numbers (fractions) with like and unlike denominators **without a calculator.**	**Page P16 1-5 Odd 11-25 Odd 27-41 Odd**
Section 0-5	I can multiply and divide rational numbers (fractions) with like and unlike denominators **without a calculator.**	**Page P19 1-47 Odd**
Section 0-6	I can express numbers in different forms fluently from decimals to percents to fractions. I can find a percent of a number.	**Page P21-22 1-31 Odd**
Section 0-7	I can find the perimeter of any 2-dimensional figure without being give a formula.	**Page P25 11-19 Odd**
Section 0-8	I can find the area of 2 dimensional figures, including those that are composite figures without being given a formula.	**Page P28 1-11 Odd 21 & 23**
Section 0-9	I can find the volume of rectangular prisms and cylinders without being given a formula.	**Page P30 7-19 Odd**
Section 0-10	I can find surface area of rectangular prisms (including cubes) and cylinders without being given a formula.	**Page P32 7,9,11,15,17**
Section 0-12	I can calculate mean, median, mode, range, lower extreme, lower quartile, upper quartile, and upper extreme given a set of data.	**Page P39 1-9 Odd, 15**

Section 0-13	I can read a stem and leaf plot, a box and whisker plot, a histogram, a bar graph, and a pie chart to compare and contrast data. I can construct a stem and leaf plot, a box and whisker plot, a histogram, a bar graph, and a pie chart based on a set of data.	**Page P44-45** **3-13 Odd**
Section 1-1	I can write verbal expressions for algebraic expressions and algebraic expressions for verbal expressions.	**Page 7-8** **11-37 Odd**
Section 2-2	I can solve one-step equations in one-variable with addition, subtraction, multiplication, and division without a calculator.	**Page 86-87** **31-41 Odd**
Section 2-3	I can solve multi-step equations in one-variable with addition, subtraction, multiplication, and division without a calculator.	**Page 94-95** **25-51 Odd**

Section 3-3	I can calculate the slope of a line given:
	    • Two points on the line
	    • The graph of the line
	    • A table of data
		Page 176-177
		17-45 Odd
		(Exclude 41)

Section 4-1	I can graph a line given its equation in slope-intercept form (y=mx+b).	**Page 218-219** **17-21 Odd** **39-45 Odd**

The answers are in the back of the book so you can check your work on each section. There are additional problems in each section if you want to give yourself more practice. These are prerequisite skills that you should be familiar with from 8th grade. You will be required to take a test on these skills within the first few days of school. You will need to be proficient to the point that you can do all of these skills **WITHOUT** a calculator. We are especially interested to see you work with fractions **WITHOUT** a calculator! You will turn in your summer work on the day of the test.

You will access the **on-line textbook** by following these steps:
Go to www.connected.mcgraw-hill.com
Redemption code: 43DO-DMR2-VG9Q
Book Title: Algebra 1 2012 – full student edition

Follow these steps:
1. Select "create a new account" button.
2. Enter the redemption code and click register.
3. Enter your first name and last initial then click finish.
4. **Write down your username and password**. We cannot retrieve your password and you will not see it again.

For additional help download the ConnectED Quick Start Guide at:
http://help.k12.mhedu.com/connected/
For technical assistance contact the McGraw-Hill Digital Technical Support Group at:
1-800-437-3715

Make sure you understand **ALL** of the highlighted terms. Read the examples, practice with the odd numbered exercises for each section. If some of these skills are new to you or you feel that you have not mastered them, you should use the resources in the online book (Personal Tutors of each example, etc.) or "Google" the name of the skill. YouTube and Kahn Academy have a wealth of videos and resources for you.

Remember, there will be a <u>TEST</u> on these skill areas during the <u>first week of school</u>. Be prepared for a Non-Calculator section.

PART II is to take advantage of the summer sales to purchase necessary materials.

Here's what you will need:
- CHS Agenda Book (available for purchase on first day of school)
- Graphing Calculator (TI-84 Plus silver edition, TI-84 CE, or similar graphing calculator allowed on the ACT / SAT)
  NOTE: This is not a mandatory purchase for Honors Algebra students. It is **highly recommended** because it is very helpful for some topics and you will become more proficient with it the more you use it, and it is helpful on the ACT / SAT. You can still use a regular scientific calculator and be capable of doing almost everything we need to do. This technology will be used through all 4 years of high school and beyond should you decide to buy one.

And the basics:
- Erasable pens or pencils
- Notebook or folder to be used only for Algebra I work.
- Notebook paper * - You'll need a lot!
- Graph Paper (QUAD-RULED)

My email address is included in case you have any problems or questions. I wish you the best as you prepare for an exciting and challenging 2018-19 school year.

Sincerely,
Lesli Allosso
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