Algebra II Honors PLUS
Summer Assignment

This assignment will be collected at FRESHMAN ORIENTATION for 9th grade students, upperclassmen will turn in on the first day of class..

Overview

Algebra II Honors PLUS is a course designed to eventually prepare you for AP BC Calculus by creating a strong foundation in algebraic skills and concepts as well as encouraging problem solving and analysis skills. A strong foundation in both Algebra and Geometry is necessary, along with a positive work ethic. You will be expected to not only be proficient with your Algebra skills but to also be efficient as well. A thorough understanding of the material means you can not only solve the problem but that you can solve it quickly. Your work and solutions should also demonstrate that you have a clear grasp of the mathematical language and you should be using correct mathematical notations.

The following assignment will help you review some essential algebraic skills you will need at the beginning of the year and help you review critical algebra I skills. If you have difficulty with this assignment, be proactive by utilizing a mathematics tutor, study group, or tutorials on the internet to help you prepare for the course. This is especially important for incoming freshmen. You need to determine if you have a weakness in any of the topics covered and try to remedy these weaknesses before the start of the school year. If you are struggling with this assignment that may be an indication that the plus class is not the best fit for your mathematical proficiency and we strongly suggest you consider the Algebra II Honors class instead. The Algebra II Plus course will be taught in a different sequence than the Algebra II Honors course so students will only have until the end of the first week of school to switch courses. It is required that freshmen complete this summer assignment BEFORE freshman orientation so we can determine a recommendation about course placement before school starts.

Learn algebra well, and you will do well in all mathematics courses that follow.

Part I: Algebra Review

Complete the following set of problems. If needed please review your algebra skills using old notes, algebra textbooks, a tutor or any algebra review website.

Do your work in pencil,

Write legibly (suitably large and suitably dark); if the grader can't read your answer, it's wrong.

Show your work as appropriate. This means showing your steps, not just copying the question from the assignment, and then writing an answer. Not every question requires work but if you are doing calculations in your head, write them down. Show everything in between the question and the answer. Use complete English sentences if the meaning of the mathematical sentences is not otherwise clear. For your work to be complete, you need to **explain your reasoning** and make your computations clear.

Do not invent your own notation and abbreviations, and then expect the grader to figure out what you meant. For instance, do not use "#" in your sentence if you mean "pounds" or "numbers". Do not use the "equals" sign ("=") to mean "indicates", "is", "leads to", "is related to", or anything else in a sentence; use actual words. **The equals sign should be used only in equations**, and only to mean "is equal to".

Do not do magic. Plus/minus signs, "= 0", radicals, and denominators should not disappear in the middle of your calculations, only to mysteriously reappear at the end. Each step should be complete.

Remember to **put your final answer at the end** of your work, and mark it clearly by, for example, underlining it or circling it. Label your answer appropriately; if the question asks for measured units, make sure to put appropriate units on the answer. **If the question is a word problem, the answer should be in words.**

Part 2: Check answers

Using the answer key, check your summer assignment. Count the number of missed items. Students who miss more than 15 items, should switch to the Honors Course.