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**AP Calculus AB/BC**

Congratulations on your decision to take AP Calculus AB/BC! All the hard work you have put into your mathematics learning over the past several years has finally culminated into this particular course.

Like some other AP classes, there is summer work that you need to complete. The purpose of this work is to prepare you better to hitting the ground running in Calculus on day one. The summer packet should serve as a refresher of the algebraic and trigonometric materials, as wells as the properties of functions, that you have learned along the way to getting to where you are today.

This packet will serve as a quick overview of the prior mathematical knowledge you will be using regularly during the next year of Calculus. Don’t worry if you have not previously learned some of the topics covered in the packet and instead, use this practice as an opportunity to grasp those concepts that are new to you. Part of the packet covers the Unit Circle. I highly recommend you learn/refresh your knowledge of the ENTIRE Unit Circle. There is a “fun” on-line resource you can use to achieve mastery of this material that can be found at: <https://www.mathwarehouse.com/unit-circle/unit-circle-game.php>

There are also problems that will assist you in learning more about the capabilities of your graphing calculator. I recommend the TI-84 generally, and for those who plan on going into engineering, I recommend the TI nspire. But please be aware that some national test do not allow you to use the CAS version of graphing calculator and the nspire does have such a version. You do not need to go out an buy one if you do not want to. The school offers loaner TI-84s for the semester. Those calculators are older and do not have some of the better and more helpful features that a newer model has. Finally, the AP exam provides you with Desmos for calculator active problems. However, I do not currently allow for the use of Desmos on in-school quizzes and exams.

You will need to obtain an 80 or better to receive a curve that will give you a 100 for your first quiz grade in the class. Don’t worry if you don’t get an 80 on your first attempt. I will give you an unlimited number of attempts to correct the problems you got wrong, but in this case, you will repeatedly make corrections until you get every question right.

Overall, you should not need to invest much more than 10-12 hours in total. I suggest also that you spread the work contained in this packet out over the course of the summer and not try and cram it in a day or two before school starts.

Please pass the word about the existence of this required summer work to anyone you know who is taking the class. Finally, don’t be concerned if for some reason you are not able to finish the work before the start of class. In this case, please see me at some time during the school day to discuss your particular situation and we will figure out a time as to when you will need to have it completed.