July 2, 2012

Dear AB Calc Seniors,

Welcome to AB Calculus, a fascinating subject that has played a tremendous role in human progress in so many different fields! The review assignments and information described in this letter are intended to help you get your math year off to an easier and more successful start. It became clear in past years that a number of the AB students were hindered in their calculus progress because they did not recall all the necessary trigonometry and precalc concepts covered in junior year. Calculus study is very cumulative: if you survived past courses by last minute cramming for tests and then forgetting the material soon after each test, you must change your study plan. Work every day to really learn and understand calculus. Do not procrastinate on study and do not settle for rote memorization that never sticks with you. AB Calculus can actually be much easier than your Precalculus course (which covered many different math fields), IF you master each step along the way.

Is there summer homework for AB Calc?

The answer is NO ... and YES! There is no new calculus work you need to do, HOWEVER you need to review and refresh your Precalc skills. We will know whether you have the Precalc skills needed for Calculus because you will be taking three competency quizzes during the first weeks of school:

Functions/Transformations (Mon. 8/27)  Trigonometry (Fri 8/31)  Exponential Functions/Logarithms (Tues 9/4)

To prepare for the quizzes, before classes begin on Thursday, August 23, you are expected to use the review worksheet assignment posted online in each of these three areas. Go to the Calculus assignment page on Ms. Hardtke’s class website for links to the three review worksheets, solution guides & helpful review videos and resources. Don’t waste time writing out solutions for problem you are confident about. Spend your time using the review resources and practicing until all the problems are easy for you. Make a list of any remaining questions to bring to class. Link to class website: http://faculty.muhs.edu/hardtke

What materials do you need for AB Calc?

- TI-89 calculator – any model is fine, titanium, silver, etc.  
  (The TI-89 has many calculus features that the TI-84 does not have and it is helpful on the AP exam.)
- Notebook or separate section of a 3 ring binder exclusively for calc notes HW – you will not have to tear out your homework pages so a spiral-type notebook is fine if that is your preference.
- A pocket folder exclusively for calculus handouts, quizzes & tests – you need to stay organized in order to study for the cumulative AP exam in May.
  (Sufficient materials will be provided online and in class. If you know you learned best in previous math courses by reading the explanation and sample problems in the textbook, then you may want the book. Check the ISBN # to avoid the European metric only version.)

When you mark your Kairos retreat selection on your calendar, also make a note of the required 3:00-5:00pm calculus make-up session the Sunday BEFORE your Kairos departure. Because you cannot afford a 3-day gap in your learning, we do your calculus work together before you leave, not after you return. Likewise for any planned absence during the year, you must turn in work and take any quiz/test before you leave.

I will always expect your best effort. Earning 4 or 5 college calculus credits by doing well on the AP Exam in May is a bonus no student can ignore! More importantly, I think you will find calculus interesting and useful. If you have questions, send me an e-mail: hardtke@muhs.edu.

Have a great summer!

Ms. Hardtke

P.S: Here's a chance to earn 2 extra credit points before we even begin! Send me an e-mail by Wednesday of registration week explaining in a brief paragraph or two how the top & bottom borders of this letter apply to calculus.