

Dear AP Calculus AB Student (or parent):

[If you are a parent, I would greatly appreciate if you could make sure your child receives this email for me! Thanks in advance!!]

Congratulations and Welcome! You are receiving this letter because you are on the AP Calculus AB roster for 2023-2024. This is the year when all your many years of math finally come together: algebra, geometry, trigonometry and pre-calculus, and we can see the power of mathematics in action! This class is meant to prepare you to take the AP Calculus AB exam in May 2024, which can potentially qualify you for 1 semester of college calculus. If you believe you are getting this message in error, please send me a quick email so we can ensure you are in the right math class.

I am excited to be your AP Calculus AB teacher this year. Many of you I know already from your days in my Algebra 2 Honors class two years ago but for those that don't know me, let me introduce myself. I am Mr. Nyberg and this is my 17th year teaching at Valley Christian High School. While the majority of my time has been teaching Algebra 2 Honors, for 11 of those years I also taught AP Calculus AB. I have taught everything from Algebra 2 through AP Calculus BC, both the Honors/AP level and College Prep level, during my time here. I am married to my wonderful wife Andrea and we have two children: Chloe (7th grade this fall) and Elliott (4th grade this fall). I have a BA in Economics/Mathematics from the University of California, Santa Barbara and a Masters of Divinity from Gateway Seminary. I pray that my passion for God, students, and mathematics are evident in my classroom every day.

Your textbook for my class is **Calculus of a Single Variable, 11th Edition**, by Larson, Hostetler, and Edwards. We are offering the online version of the textbook through WebAssign (www.webassign.com). **Students should wait until after their first day of calculus class before purchasing their online textbook thru WebAssign.** For students who prefer a hardback textbook, you are certainly welcome to purchase or borrow a used hardcopy (make sure it's 11th edition), but you will still be required to purchase the WebAssign account for online submission of homework.

In addition to the lower fees for the digital textbook, WebAssign offers corresponding video tutorials that accompany each chapter. These videos will be especially helpful for topics you find particularly difficult, or for times when you may be absent. WebAssign also allows for online submission of homework assignments. While the majority of your homework will be submitted online, you will also complete some homework assignments straight from the digital textbook. You will need a homework notebook to show your work for your online homework and textbook homework assignments. These will be collected and graded periodically throughout the semesters as a part of your binder checks.

We will be using a graphing calculator in class. Any of the TI84+ family of calculators are acceptable (TI 84+, TI 84+ CE, TI 84+ SE, TI 84+ CSE). Please bring your calculator every day. If you have a different model, you will need to verify that it is an acceptable calculator for the AP exam. Feel free to check with me or the AP web page, www.collegeboard.com, for the list of acceptable calculators for AP Calculus.

Be aware that AP Calculus AB is a **college level course**. Although slower paced than AP Calculus BC course (covering only 1 college quarter or semester of calculus, as opposed to 2 for BC), it is still taught at the college level. If you are concerned whether you are ready for an AP math class,

please note that VCS also offers a regular calculus class. Feel free to contact your counselor if you are concerned whether you are in the right math class.

To help you review and prepare for success in AP Calculus AB, following is the **required** summer homework:

- Do the Summer Packet. **Due 1st day of class for your first homework grade.** (Do not wait for the last minute to do this packet, as it is a bit lengthy). To find summer homework online:
 1. Go to <https://learn.vcs.net/course/view.php?id=1112>
 2. Select the Math tab on the right side to see homework for AP Calculus AB/BC
- ** NOTE: You may want to check out the other departments as well while you are here to see if you have summer homework assignments for your other classes.
- If you do not have access to a printer (or if more convenient), stop by Valley Christian High School office and ask for a hardcopy of the AP Calculus AB/BC summer homework there. (Note that AB students have 1 packet summer homework, BC students have the same packet plus an additional supplementary packet not required for you).
- [optional] If pre-requisite skills are rusty, I highly recommend the following book, Stepping Stones to Calculus by Sharon Cade which covers important skills from fractions and exponents all the way to trigonometry and infinite series. You can find the Kindle Edition on Amazon. Skim over sections during the summer and work through topics that you need to relearn or review.
- Review the Unit Circle. This is included in the summer packet. Make copies of the Unit Circle Worksheet and practice repeatedly until you are very familiar with trig functions of these basic angles. **(Be prepared for a short no calculator quiz on trig functions of basic angles on the 2nd day of class).**

Answers for the summer homework packet have been posted for you to double-check your work. Of course, you will not get credit for summer homework if you show answers only, without showing the work! Make sure to only use the solutions to check your work not do the homework!

If you have questions about the class or the summer homework, feel free to email me at enyberg@vcs.net. I will be checking email throughout the summer until July 21st as I also serve as the High School Summer School Principal. Please indicate your email is regarding AP Calculus AB in the subject so I can make sure to catch it. I look forward to seeing each of you soon. I will be praying for each of you before our first class. Enjoy the rest of your summer!

Blessings,



AP Calculus AB teacher
Valley Christian High School