

Dear AP Calculus BC student (or parent):

[If you are a parent, I would greatly appreciate if you could make sure your child receives this email from his calculus teacher! Thank you!!]

Congratulations and Welcome! You are receiving this letter because you are on the AP Calculus BC roster for 2019-2020. 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 will prepare you to take the AP Calculus BC exam in May 2020, which can potentially qualify you for 2 semesters 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 introduce myself as your AP Calculus BC teacher. I am Mrs. Diana Shak. I graduated from Stanford University, where I received a bachelor's degree in Math Sciences and a master's degree in Computer Science. I worked as a software database engineer and instructor at Tandem Computers for 10 years prior to transitioning to teaching. It's hard to believe that this will be my 15th year teaching AP Calculus BC at Valley Christian! I feel blessed to have a job where I'm able to share my love for God, students, and mathematics on a near daily basis! I am a mother of three: all VCS alums and AP Calculus BC graduates (1 Stanford graduate, 1 currently at Stanford, 1 at UCLA). I am a member of Christ Community Church in Milpitas.

Your textbook 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 (11th edition is what we're using this year, although older versions are fine for reading/studying purposes). Please note that everyone will still be required to purchase the WebAssign account for both ebook/homework submission to ensure we all have the same problems for homework submission.

In addition to the lower fees for the digital textbook, WebAssign offers corresponding video tutorials that accompany each chapter, and allows online submission of homework. These videos will be especially helpful for topics you find particularly difficult, or for times when you may be absent. 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 the TI84+ graphing calculator in class. 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.

AP Calculus BC is a challenging fast-paced course. You have qualified for this course only if you received good grades in Honors Trig BC or AP Calculus AB (or its equivalent), and with personal recommendation from your previous math teacher. If you are concerned whether you have met pre-requisites for this course, please note that we also offer AP Calculus AB. The difference between the 2 courses is the pacing: AP Calculus BC will cover 3 more chapters, compared to AP Calculus AB. See your counselor if you think you may be more suitable for the slower paced AP Calculus AB course. To help you review and prepare for Calculus BC, following is the **required** summer homework:

- Do both Summer Packets. **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>

2. Select "VCHS Summer Assignments" from left-side menu

3. Select "Math" 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 BC summer homework there.
- **Please note that AP Calculus BC students have 2 packets:** 1st packet reviews pre-requisite skills for both AB and BC students. 2nd packet reviews pre-requisite skills for just BC students. If you can, I suggest printing double-sided, as the 1st packet especially is quite lengthy.
- Review Unit Circle. This is included in the summer packet. Make copies of Unit Circle Worksheet and practice repeatedly until you are very familiar with trig functions of these basic angles. **(Be prepared for your Ch P test 2nd day of class, including a quiz on the unit circle).**
- Please note that for AP Calculus BC, I will be going over Calculus A topics very quickly. These topics include preparation for calculus (topics covered in summer packet), limits, and introduction to derivatives. These topics should have been covered in your honors trig or AP Calc AB course.
- **NOTE: For Students who just completed AP Calculus AB with Mr. Nyberg before coming into Calc BC:** the 1st summer packet will be optional for you, since you did this homework last summer before AP Calc AB. If you don't remember doing this packet, or would like to review your algebra/geometry/trig/precalculus during the summer, then do this again ... good way to keep your math skills sharp during the summer! **2nd packet is DEFINITELY REQUIRED** for you as it reviews skills you haven't seen in a long time.

Answers for the summer homework packet have been posted for you to doublecheck. 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 dshak@vcs.net. I will check email periodically throughout the summer. I look forward to getting to know each of you soon. I will be praying for each of you before our first class. Enjoy the rest of your summer!

Sincerely,

Mrs. Diana Shak

AP Calculus BC, Multivariable Calculus

Valley Christian High School