2025 AP Calculus Summer Assignment

Dear Future AP Calculus Students,

Let's talk about your calculus course for next year - you will be taking an Advanced Placement Calculus course, so let's understand what these unusual names mean. The A.P. Calculus program started in 1956, and there was only one calculus exam given in these early years and it was called "Math." However, once the AP Calculus program gained momentum, the courses were split into AB and BC versions in 1969.

There are three general topics into which all math problems fall:

- ➔ A Topics: Precalculus concepts - they use no calculus but are considered necessary to understand and master before a student can master calculus.
- ➔ B Topics: Limits, Derivatives, and Integration - all of the calculus concepts taught in a first-year college Calculus I course, and a few topics from Calculus II.
- ➔ C Topics: Advanced Integration, Sequences and Series, Vectors and Polar topics - all taught in a second-year college calculus course.

So in a typical AB Calculus course, students will see problems including A topics and B topics. Before the year 2000, there were problems on the AB exam that were strictly A topics, but no calculus was required. That is no longer true. In reality, all 45 multiple-choice questions and 6 free response questions on the AB exam are B topic questions. They are designed to test calculus. So, although A topics are not specifically tested, students still need to understand them. You need to be able to solve equations, add algebraic fractions, find logarithms, and find trig functions of special angles. As with spelling, while students are not tested specifically on their spelling abilities by the time they get to high school, it is assumed that they know how to spell.

I am very excited about a new year of AP Calculus and look forward to helping you achieve your goal of mastering Calculus. If you have any questions about the review materials, please email me. I will be at school several days before school starts if you need any specific help on any of the topics from the summer assignment. The summer review assignments will be released after July 4th from **Khan Academy's "Get Ready for AP Calculus"** course online. These reviews should be done and completed before the first full day of school on Monday, August 7th, 2025.

Summary Assignment Activities	
AP Calculus Google Classroom **Code: i4fc4ghx** **Due: May 2025**	Make sure you have joined our google classroom for the summer, and that your **notifications** are turned on for messages. Link: https://classroom.google.com/c/Nzc4ODgyNDM0ODc3?cjc=i4fc4ghx
Khan Academy "Get Ready for AP Calculus" Review Course Class Code: **CSAXY936** **Due: July 5th, 2025**	Join our Khan Academy summer classroom for review assignments. You should use school gmail info to either sign-in, or create accounts. If you have a Khan account: Link: https://www.khanacademy.org/join/CSAXY936 If you need to create a Khan account: 1. Make sure you are signed into your school gmail account. 2. Go to **khanacademy.org/join** 3. Enter this class code, and press Add. Code: **CSAXY936** 4. If you do not have an account, press Create a new account, Enter date of birth, and sign up using Google school account. 5. Enter your grade level and course.
Khan Reviews - these will be assigned to complete. **Start: After 4th of July** **Due: August 7th, 2025**	1. Algebra and Trig review (28 questions) 2. Get Ready for Derivatives review (10 questions) 3. Inverse function review (11 Questions) 4. Modeling in Context review (9 Questions) 5. Function Analysis review (10 Questions) 6. Topics for integration techniques review (9 Questions) 7. Solving Equations review (10 Questions) 8. Parametric, Polar, and Vectors (10 Questions) 9. Sequences and Series (10 Questions)
Khan Review Instructions	1. You only need to work each review one time to get an idea of any specific areas where you may need additional review time. 2. Each review is for a completion grade, not for accuracy. You should be able to see step by step solutions after you submit the reviews for any problems that are missed. 3. To find the 9 reviews in Khan Academy after July 4th, click on your name in the top right corner after you login, Select Learner Home, and you

	should see the 9 review assignments listed in the **Active** category under **My assignments**. 4. A course review assignment is available to use as a final check to make sure you are ready.
HHS AP Calculus Course Website	https://sites.google.com/hartselletigers.org/hhsapcalculus/home

Each of the Khan “end of unit” reviews is between 30 and 60 minutes long, and will cover the topics you should have learned in Precalculus. Please review any problems you miss using the built in help features in Khan - video explanations and a step by step set of hints are provided for each problem. You can do any of the additional practice sets in the Khan course where you need extra practice after completing the reviews. You only need to do each review one time, but you are welcome to do them again for practice if you need additional practice. These reviews are considered completion scores and not for accuracy. They are meant to help you make sure you are ready for AP Calculus when we start school in August. You **must complete** the assignment in order to take AP Calculus AB next year at HHS.

What to expect next year: AP Calculus is an exciting and rigorous course that is equivalent to a college level Calculus I, and part of Calculus II course. We will cover new topics almost every day, and you will see a variety of concepts that are completely new compared to past mathematics courses. You will have homework assignments every day that review the key concepts that you must master to be successful. We will also have study sessions outside of class during the year that you must attend in order to be prepared for the AP Calculus exams. The formula for success in this course is fairly simple - you must (1) be willing to understand mathematical concepts at a deeper level, you must (2) have a great attitude about learning new and exciting concepts, and you must (3) be prepared to work hard throughout the year to be successful.

Success in Life = KAE - (Knowledge + Attitude + Effort)

Students that have been successful in passing the AP Calculus Exam over the past few years have taken the summer assignment seriously, and were ready on day one to move forward. **The Precal reviews have also helped many students improve their Math ACT scores if you plan to take the ACT as a senior.** I am looking forward to teaching and coaching each one of you through a successful year of AP Calculus. Please do not hesitate to email me with any questions. Coach Bucky