AP CALCULUS AB
SUMMER 2018

The primary objective of AP Calculus summer work is to dig into the prerequisite mathematics by investigating topics algebraically, graphically, and numerically. Ongoing preparation for the free response section of the AP Exam requires that you take care to present solutions to even the most ordinary problem that contain these components by clearly demonstrating both your methods and conclusions. AP-style justification involves a specific response structure that we will develop and employ throughout the year—prepare for it by paying careful attention to the *form*/*structure* of your solution in addition to the strictly mathematical components.

Your graphing calculator is a powerful tool for exploration; use it to lead you to a deeper understanding and to check reasonableness of answers but realize that you must still provide a well-substantiated analytical answer that includes mathematical justification. In keeping with the current College Board rounding guidelines answers are required to be rounded correctly or truncated to the nearest thousandth. I suspect that most of you have been somewhat casual or uncertain about rounding rules—use your summer work as a way to get this new requirement dialed in to the 'second nature' elements of your mathematics practice.

In AP's immersive courses, you get to learn how things really work through the lens of Calculus. Learning means sharing your ideas and expressing yourself as part of a learning community. Be prepared to discuss your thinking in class; I expect and require this of you.

FUN, FUN, FUN: There are six problem sets each accompanied by a set of NOTES. Work steadily on strengthening throughout July and August.

Read through the notes to refresh your thinking. Create a compendium of thoughtful, organized, well-labeled, complete work—printed problem set or loose paper, your choice. Turn in your entire collection on the first day of school to receive a CFC (check for completion) score; no late work will be accepted. Make it your habit to work with justification on multiple-choice problems–they are designed to train you in AP-style presentation of work.

Express your solution completely using the multiple representations mentioned in the introduction. Contact me with questions/corrections…mathematical or procedural at jherro@marisths.org. You may collaborate…in fact, I encourage you to do so. Perhaps we should set up some sort of web-based study setting. Any ideas how we can do this now that Schoology is no longer available? Message if you have a suggestion.
STAY CONNECTED and let me know how your studies are going.