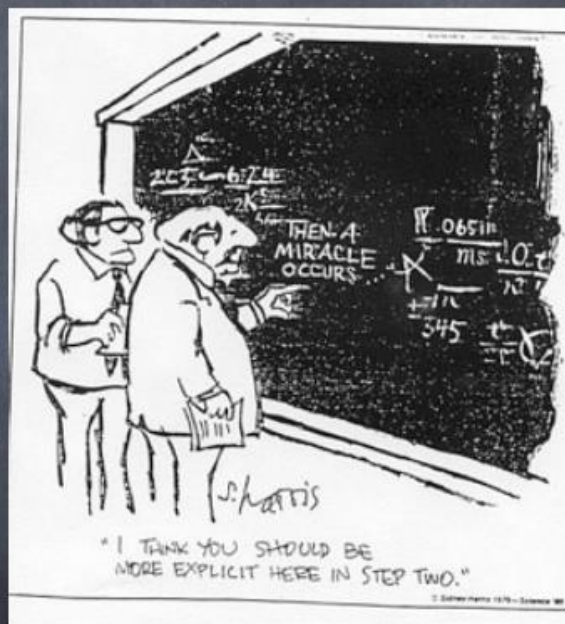**Welcome to AB Calculus**

Dear students,

Welcome to AP AB Calculus. I'm excited to be teaching Calculus again this year, seeing a few familiar faces that have been in past classes for Algebra II and Precalculus and meeting new students as well. This will be a fun, interesting and challenging course in which you will learn a lot of mathematics, however mastery of these topics will require hard work and preparation on your part. Be proactive with your learning. Do all of the assigned homework and really focus on understanding and mastery of the concepts. Show your work on all assignments to train yourself for the free response questions on the AP exam. You will be required to not only have an answer, but to also show your work and explain the concept that helps you arrive at your answer. Develop good habits in your work throughout the year. Ask lots of questions and come to tutoring if you are struggling with a concept. Don't be afraid to come to me for help as we work together to prepare for the AP exam in May.

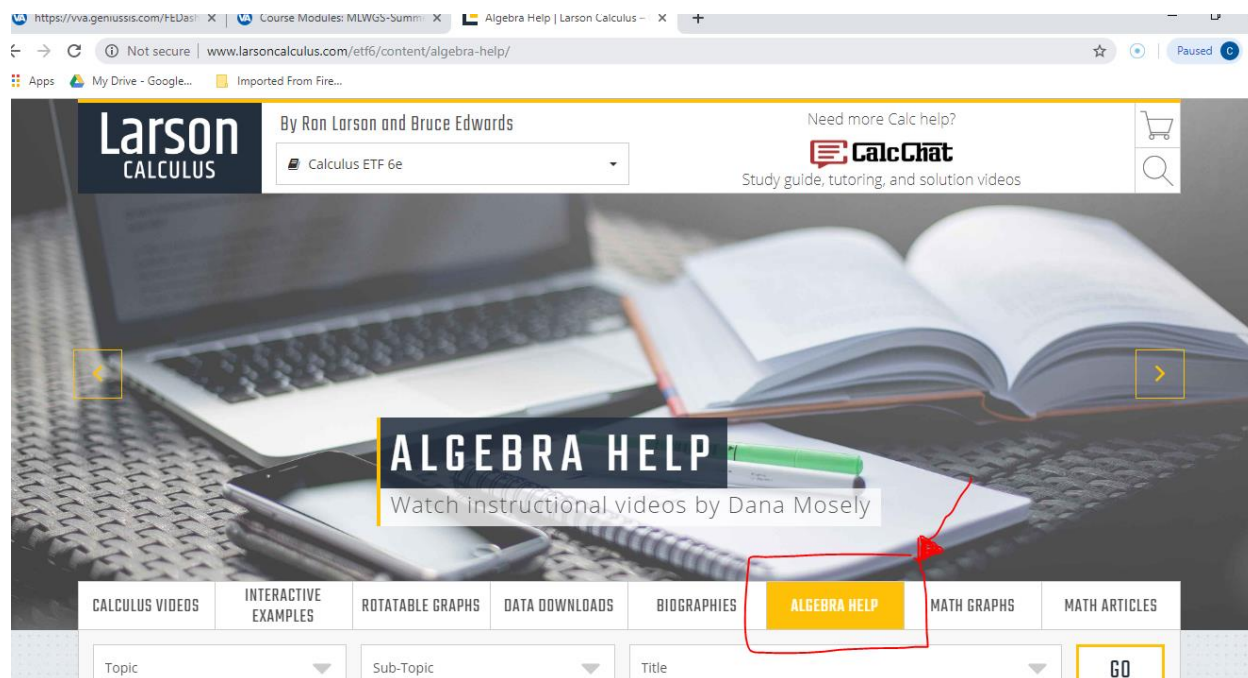It is important that you work through the summer assignment diligently and prepare for the course by making sure you are well versed in PRECALCULUS topics. We have prepared some review materials for you to revisit Algebra and Precalculus topics as needed.

Summer Assignment

Step 1: Visit the website for our textbook: http://www.larsoncalculus.com/etf6/ Click on the tab "Algebra Help".

This is an overview of Precalculus concepts that are the essential skills to be successful in calculus. I have always thought that students who struggle, struggle more with the past algebra skills than with the concepts covered in calculus. As Alfred Lord Tennyson stated, "*the past is prelude, the best is yet to come*". So use the review materials to help put you in the best position for future success in calculus. If you click on "Topics", you should focus your review to the topics listed below:

1. Functions and Graphs
2. Polynomial and Rational
3. Exponential and Logarithmic
4. Trigonometry
5. Analytic Trigonometry

Utilize the online resources to revisit any of these topics as needed. You may also use Khan Academy to review topics you feel that you need extra help with. Honors Precalculus students will need to review the last topic Analytic Trigonometry sub topics Sum/Difference Formulas and Multiple Angle Formulas since these formulas were not covered thoroughly in the Honors courses.

Step 2: Once you have completed reviewing the study guide materials, complete the "Progress Check 1" for each of these 5 topics. You will choose Progress Checks under the subtopic menu.

Show all of your work on a separate notebook paper. Once you have answered all questions on paper, showing clear work, enter your name online and submit your answers by clicking the link at bottom that says "Check Your Work".

Step 3: PRINT THE RESULTS PAGE and staple your separate scratch paper to the results. You will have 5 "Pretests" printed out with attached scratch paper of clearly organized work. You do not need a 100% correct. This is an assignment to determine your areas of weakness. You will be graded on work shown, not on % correct. However, this should give you an idea of what topics you will need to review before class starts in the Fall. Review additional topics as indicated by these pretests.

Step 4: Please bring completed pretests to school on the first day of class. The first test will cover the material in these topics.

Looking forward to a great year

Crista Hamilton