

AP Calculus Summer Assignment for (AB and BC)

AB and BC Calculus: ***You do not need a textbook.***

1. Go to [khanacademy.org](https://www.khanacademy.org).
2. Create an account (or log on if you already have an account)
3. Go to the section on Differential Calculus.
4. Watch the tutorials on:
 - a. Limits (AB and BC)
 - b. Estimating Limits from Graphs (AB and BC)
 - c. Finding Limits Algebraically (AB and BC)
 - d. Continuity Using Limits (AB and BC)
 - e. Limits and Infinity (AB and BC)
 - f. Squeeze Theorem (AB and BC)
 - g. Introduction to Differential Calculus (BC only)
 - h. Using secants to approximate Tangents (BC only)
 - i. Introduction to Derivatives (BC only)
 - i. (omit Derivatives 1 and Derivatives 2)
 - j. Visualizing Graphs of Functions and Their Derivatives (BC only)

You should start watching the videos in late July or early August. If you start in June, you will forget what you have learned before you even get to the first day of class. The 6 sections for both AB and BC should take less than 1 hour each. The 4 sections for BC only could take up to 90 minutes each to complete. AB students should be able to complete the assignment in approximately 6 hours. BC students should be able to complete the assignment in approximately 12 hours. Try not to wait until the last day, even I find 12 hours of non-stop Calculus boring.

You should utilize the practice problems to gain experience, but I will not be grading or collecting any data from Khan Academy. You will be responsible for knowing the information in the videos before you come to class. How much practice you do is up to you.

AB students will find that all of what they did over summer will be revisited in class in detail before they are tested on it. Students are expected to be familiar with the concepts, but mastery is not expected until it is covered in class.

BC students will cover all the concepts from the summer assignment in class as well, but in a very short period of time and in less detail than in the summer assignment. Being familiar with the concepts before school starts will make the first chapter test much easier.

If you have questions email me. jsvoboda@orangeusd.org

Thanks,
Mr. Svoboda