

AP Calculus Summer Review BC 2017

Are you ready? YES YOU ARE!

Next year is going to be fun. It will also be challenging in a way that I cannot truly describe. You will need to experience it. The topics we will study all build upon every course you have taken up to this point. There will be times you'll be expected to remember how to find slope, the exact values for sine and cosine, or to solve for x in an exponential function. We will not spend time reviewing these topics covered in other courses. You are expected to be able to apply these skills to the new situations presented in AP Calculus BC.

Summer Assignments

What are these topics?

Lesson 1-1 Trig, Limits and Continuity Review

Lesson 1-2 More Limits, Continuity, Intermediate Value Theorem, and Graphing Adjustments Review

Lesson 1-3 Infinite Limits, Limits at Infinity, Curve Sketching Review

Lesson 1-4 Limits Definition of the Derivative, Alternate Form, Trig Review

Lesson 1-5 Differentiation Rules (shortcuts), Tangent Lines, Differentiability, Rates of Change

Each Lesson start with examples. Usually we will do these in class. The completed examples for Unit 1 can be found at the end of the packet. We have also included answers to selected exercises. We will give you the complete answer key when you get to school in the fall.

Assuming school starts Wednesday, Sept. 6, we will spend Wednesday, Thursday and Friday answering questions. You will need to have tried the problems first so that you know what questions you need answered. This homework will be due on Monday, Sept. 11. We will have a calculator test on Monday, and a non calculator test on Tuesday. Wednesday, Sept. 13 we will start unit 2.

You will be grading your own homework during the year and then turning it into me at the end of the chapter. I will look through it and determine if you have assigned yourself points accurately based on completion and effort.

THINGS to know about AP Calculus BC:

1. This class is difficult! It's challenging! And it will be NEW! The concepts are unlike anything you have studied before in mathematics. If you are truly going to stress over getting an A in this class, then this may not be correct place for you. Take this class because you want to learn more about where math might be used and in what context. You can retake tests once, after test corrections.
2. You WILL have to do the assignments. The practice is essential for mastering the skills taught. You cannot get away with winging it in calculus. If you do not have at least 30 minutes per day to spend on assignments, you will find yourself feeling lost and behind. Making good use of class time given to work can go a long way.
3. You will have to know your precalculus materials. These topics will NOT be reviewed or retaught. It is expected that you mastered these concepts as a prerequisite to this course.

(You must know things like the unit circle, graphs of functions like logs, sines, exponentials, and polynomials, how to solve most equations for x.)

4. If attendance is an issue, you should reconsider taking this course. If you miss more than 3-4 days in a semester, you will fall behind and become frustrated. The lessons we cover in class cannot be replicated in a simple study session after school. Please consider this when taking on other obligations requiring you to miss class (for school related activities, sport early releases, field trips, etc.)

5. You will feel like you have TRULY accomplished something by the end of the year. You will learn a lot; some will be about calculus and some will be about your ability to persevere and get the job done. You have done well in school and were recommended by your last teacher to take this course. You can do this!

6. I am here to HELP you be successful.

7. Online resources are plentiful- use them and me!

Note my schedule outside the classroom when school starts...I'm here most days before and after school to help you finish your assignments and answer questions. You will need to be assertive and ask for help! Unless you say something, it's hard to tell you're struggling. Usually, if you can get help early, it makes the rest of a unit less complicated. Advocate for yourself! 😊

If you need to, contact me Mrs. Karen Price at kprice2@everettsd.org I read email almost every day during the summer and will try to get back to you within 48 hours.