

AP Calculus BC Summer Assignment 2023

In this summer assignment, you will graph the most common “parent” functions and record their important characteristics. You will also complete a set of exercises of pre-calculus concepts and skills. From the accompanying links on the school website, please find the two-page “Concepts Worksheet”, a 3-page file entitled “Gateway Tests 123”, and a file entitled “Gateway Answers”. All are in pdf format. Please print out this letter for reference!

I suggest you wait until early August to do the summer assignment. Also, I recommend that you do NOT complete the assignment all at once, instead spread the work out over a few days.

You are expected to:

1. Use pencil to do your work. Be very clear and neat in your presentation – **this assignment will be graded!** Write your name in the top right hand corner of each page of the assignment. Feel free to consult your precalculus notebook as needed!
2. Print out the two pages of the “Concepts Worksheet”. Do not use your calculator – you should know these basic parent functions! Use anchor points as needed. On the second page, the correct abbreviation for the set of integers is a bold, capital **Z**.
3. Print out the three “Gateway Tests”. Work all problems on your own lined paper (use loose-leaf lined or graph paper). Leave **at least 1 line** of white space between each problem. **Copy the problem as given, then SHOW ALL WORK or explain your reasoning in getting your answer.** You may use both sides of the paper if it is not too thin. (You don’t want your checking color to bleed through.) No calculator is needed. Warning: no credit will be given for “Answers Only.” For each test, staple the printed page to the top of your work.
4. After completing the Gateway Tests, print out the file entitled “Gateway Answers”. Check and Correct (C&C) your work using a red or blue pen (or other contrasting color pen or marker or pencil) as follows.
 - If your answer is correct: place a check mark (✓) in the left margin beside the number of the problem.
 - If your answer is incorrect: place an X in the margin, and then write the correct answer at the end of the problem. **You must try it again (on another page if you don’t have room next to the original).** If you still cannot get the right answer, place

a question mark (?) in the margin – we will go over all such questions!

- You should also place a star (★) in the margin for any problem that you believe is especially important (or if I emphasize the problem during class processing time).

5. Paperclip all your work into one packet. **This collection of problems will be the first graded assignment of the course and is due the first day of class.**

The summer assignment is an important first step in making sure you have a firm foundation for the study of calculus. Throughout the course, you will frequently utilize many important concepts and skills from algebra, trigonometry, and analytical geometry, especially trigonometric, exponential, and logarithmic functions. Your precalculus notebook will be a valuable resource throughout the coming school year!

In addition, if you are “rusty” on your basic unit circle facts, I highly recommend that you work on recommitting them to memory. **There will be a Unit Circle Fact check on the first day of class.**

Here’s to a great year of calculus!

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