

BC CALCULUS SUMMER WORK: 2022 – 2023

Because of the cumulative nature of math, you have learned that you need to have mastered concepts before you can learn new ones. The problems you will be completing will help you to review material from Algebra I through Precalculus. I have chosen these problems because it is necessary that you not only understand how to do them but also handle them with a certain amount of ease, confidence, and speed.

Please follow these directions:

1. Show all work neatly, thoroughly, and in pencil. Careful documentation of your work is *extremely important!*
2. Follow directions for each problem CAREFULLY!
3. Round any decimals to THREE DECIMAL PLACES. I will *not* tell you again and will take off points if you don't!
4. Unless told otherwise, you may use your graphing calculator.

I anticipate that this assignment should take you anywhere from four to eight hours. I would suggest that you don't attempt to start it until August. (By then you might need a break from reading!) It is due on the first day of school. I will be available to answer individual questions during the second week of August. I will send you specific dates and times later this summer. You will have a test on this material and chapter 2 (limits) after three or four days of classes. You may work together on this assignment. However, you will be taking the assessment without the benefit of anyone else's expertise. Help each other but don't just copy someone's work. In the long run, that won't pay off.

Here are some words of advice from past students.

I think that the main thing that will help you out next year is to try and do the homework every night. If you do at least a small amount of it each night, it will save you the trouble of innumerable hours of studying before a particular test. You also need to do your best to pay close attention and participate in class. If you do this, you will find homework and tests to be much easier.

This is just as difficult and requires just as much work and concentration as Precal. However, a plus is that there is less busy work and more constructive evaluations which prepare the student for the AP exam. I'd make sure to attain an adequate amount of sleep before each test.

Focus really hard on beginning chapters because a lot of what you learn later branches off these units.

The class isn't like any math you've ever taken before. It is much more challenging and takes a lot more time to understand. The problems are much more conceptual than plugging in, like previous math classes.

BC Calculus is more conceptual than other math classes. Yes, there is plenty of work, but the difficulty comes from the concepts. It's not being able to do busy work that gets you through the course; it's the understanding and then applying concepts. Sometimes taking extra time to think through how problems are solved is more important than just doing the process.

Review or read, as necessary, section 1.1
p. 12 – 15 #10b,14,22,28

Review or read, as necessary, section 1.2
p. 24 – 26 #8,18,22,26,28

Review or read, as necessary, section 1.3
p. 36 – 39 #4,8,14,16,38,40,44,48,56,58,62,72

Review or read, as necessary, section 1.4
p. 48 – 51 #26,28,30

Review or read, as necessary, Appendix A on p.A1 – A11 in the back of the book. You need to have memorized:

- ✓ (6) on p. A3
- ✓ (7-10) on p. A5
- ✓ Table 3 on p. A6
- ✓ (11 – 13) on p. A6-A7
- ✓ (45-46) on p. A10

p. A11 – A13 #8,16b,16f,26,28,42

Review or read, as necessary, section 1.5
p. 62 – 65 #8,12,22,26,30,36,46

Review or read, as necessary, section 1.6
Make sure you know and understand p. 69 – 70
p. 74 – 75 #10,14,24,30,48

Review or read, as necessary, section 1.8
p. 93 – 95 #6,10,28

*I'm really looking forward to being back together next year!
Mrs. Morris*