

AP Calculus AB Summer Review Packet

Textbook: Finney, Demana, Waits, Kennedy Calculus: Graphing, Numerical, Algebraic 4th Edition

You will have a test on Chapter 1 on Friday, August 21st.

Welcome to AP Calculus AB. This packet is a set of problems that you should be able to do before entering this course. You are not required to do EVERY problem in this packet, but you are responsible for all content. I will not collect these problems, but you will be tested on these questions during the first week of school. I'll give you a few days to ask me questions and then you'll have a test on this background material. Make sure you circle any questions that you are unsure about so that you can get clarification during the Q & A period before the test is given.

There are numerous resources available to you on the web. I would also recommend reviewing instructional videos on any topics that you may find unclear. Search for online instructional videos such as Khan Academy and Wolfram Alpha. At the end of the problems, I've included an answer key for you to do some self-check. (You're the first group to use this packet, so if you find an error, please email me at LLOVELACE@orangeburgprep.com so that I can correct it.)

Probably the biggest difficulty for students is the limitations placed on the use of a calculator. Approximately **70% of the AP exam is without a calculator**, so that is the way the course is taught. Approximately **70% of your evaluations will be without a calculator**. (That includes a four function calculator, no calculator is allowed at all). When tested on this material, it will be without a calculator.

Finally, I cannot stress enough the importance of these background skills. Calculus is easy; **it's the algebra that is hard**. Most of the time, you'll understand the calculus concept being taught, but will struggle to get the correct answer because of your background skills. Please be diligent and figure out what you need help with so that I can clarify for you. A little extra work this summer will go a long way to help you succeed in the upcoming year.

I look forward to having you in class and working together to accomplish your goals. I think you'll find this course challenging but enjoyable at the same time. Should you have any questions throughout the summer, please feel free to contact me at LLOVELACE@orangeburgprep.com

Hope the rest of your summer is great!

TEXTBOOK ASSIGNMENT GUIDE

Exercises:

Lines – Section 1.1, pp. 7 - 8:

Quick Review, #1 - 10
#6 – 24 (even), 25, 26, 28 – 34 (even),
35 – 38, & 41 – 44

Functions & Graphs – Section 1.2, pp. 18 – 20:

Quick Review, #1 – 12
#2 – 34 (even), 42 – 48 (even), 49 – 53, & 56
(You may use your calculator for #56b.)

Exponential Functions - Section 1.3, pp. 26 – 27:

Quick Review, #9 & 10
#2 – 12 (even), 13 – 18, & 22 – 38 (even)

Parametric Equations – Section 1.4

Omit this section

Functions & Logarithms – Section 1.5, pp. 42 – 43:

Quick Review, #1 – 4 & 7 – 10
#8 – 24 (even) & 34 – 44
(You do not have to verify any problem.)

Trigonometric Functions – Section 1.6, pp. 51 – 52:

Quick Review, # 1 – 10
#1 – 14, 17 – 22, 25 – 42

Chapter 1 Review, pp. 55 – 56:

#2 – 28 (even), 39 – 44, 57, 59 – 61, & 64