

Bergenfield High School
Bergenfield, New Jersey

Mathematics Department

Summer Course Work

in preparation for

AP Calculus AB

Completion of this summer work
is required on the first day of the
2024-2025 school year.

Bergenfield Public Schools
Mathematics Department
80 South Prospect Avenue
Bergenfield, New Jersey
(201) 387-3850

June 2024

Dear Parents and Guardians:

Attached are the summer curriculum review materials for *AP Calculus AB*. This booklet was prepared by the Bergenfield High School Math department and contains topics that reflect content learned in prerequisite courses. These materials must be completed and brought to class on the first day of school in September.

Your child is required to complete this booklet over the summer. A test based on the material in the packet will be given to your child during the second week of school. It will count as the first test of the year and the grade will be determined as follows:

Completion of the packet on time will count 20% of the grade
Performance on the test will count 80% of the grade.

Thank you for your cooperation.

Sincerely,

Jim Fasano
Principal

Steve Neff
Director of Mathematics

Summer Packet for AP AB Calculus

You will need the textbook *Calculus* by Finney, Demana, and Waits that was given to you in June to complete this packet. Carefully read through the sections and examples before doing the exercises. The packet is due the first day of class this coming September 2024. You will have covered some of this material in precalculus, but some of it will be new, so feel free to email me (esteen@bergenfield.org) during the summer with any questions as you work through the packet.

Note, the following exercises are for the Section Exercises, **NOT** the Quick Review exercises.

Section 2.1 Rates of Change and Limits: Page 66: 1-4 all, 8-14 even, 19, 20, 35-37 all, 40-44 even, 49, 51, 56.

Section 2.2 Limits Involving Infinity: Page 76: 1-7 odd, 13-16 all, 28, 30, 34, 40-44 even, 45, 47, 53, 55.

Section 2.3 Continuity: Page 84: 2-10 even, 11-16 all, 19, 20, 25, 29, 48, 50.

Section 2.4 Rates of Change and Tangent Lines: Page 92: 2-6 even, 9-11 all (just do parts a, b, and d only).