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 2023-2024 school year.

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

June 2023

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 Steven Neff Supervisor 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. You are encouraged to read through the sections before doing the exercises. The packet is due the first day of class this coming September 2023. Good luck and I look forward to working with you this coming school year.

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

Section 1.1 Lines: Page 9; 6-24 even, 28-40 even, and all of 47-52.

Section 1.2 Functions and Graphs: Page 19; 2-20 even, 22-30 even, 34, 37-40, 44, 46, 53, 57-62.

Section 1.3 Exponential Functions: Page 26; 2-12 even, 13-18 all, 24, 30, 41-46 all.

Section 1.4 Parametric Equations: Page 34; 6, 10, 16, 18, 37-42 all.

Section 1.5 Functions and Logarithms: Page 44; 8-12 even, 14-24 even, 34, 36, 38, 40, 52-57 all.

Section 1.6 Trigonometric Functions: Page 52; 2, 4, 10, 12, 14, 32, 36, 38, 42.