To be successful in AP Calculus AB, you will frequently need to use previous Algebra 2 and Precalculus skills. The following list contains Algebra 2 and Precalculus standards you need for success in AP Calculus:

- MGSE9-12.F.BF.1c Compose functions. For example, if T(y) is the temperature in the atmosphere as a function of height, and h(t) is the height of a weather balloon as a function of time, then T(h(t)) is the temperature at the location of the weather balloon as a function of time.
- MGSE9-12.F.BF.4 Find inverse functions.
- MGSE9-12.F.BF.5 Understand the inverse relationship between exponents and logarithms and use this relationship to solve problems involving logarithms and exponents.
- MGSE9-12.F.IF.7e Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude.
- MGSE9-12.F.TF.2 Explain how the unit circle in the coordinate plane enables the extension of trigonometric functions to all real numbers interpreted as radian measures of angles traversed counterclockwise around the unit circle.
- MGSE9-12.F.IF.7 Graph functions expressed algebraically and show key features of the graph both by hand and by using technology.

This is a required assignment and will count as one minor grade in your minor assignments category for the first semester. Choosing not to complete the summer work on time or at all will negatively affect your performance in the class. Read the instructions carefully to know exactly what you need to do.

AP Calculus AB Summer Work—to be completed no later than Tuesday, August 5, 2025

STEP 1: Register for summer work course via hyperlink https://www.khanacademy.org/join/B9XAPY2M OR

- Visit **www.khanacademy.org/join** and enter your class code **B9XAPY2M** to join the AP Calculus Summer Work 2025 Class,
- You may need to register with your email.
- Please be sure to use your full name as your username for identification purposes to receive credit for your work.

STEP 2:

- Complete the AP CALCULUS SUMMER WORK 2025 COURSE **MY MASTERY GOALS**.
- You may use your calculator and/or scratch paper, but not notes or computer websites while taking the quizzes/tests.
- Students are expected to adhere to the Honor Code:

On my honor, I pledge that I have not given nor received any unauthorized aid on this assignment.

STEP 3:

- Review the "DERIVATIVES AND INTEGRAL FORMULAS" file and begin memorizing those formulas.
    o Creating and studying flashcards would be a helpful strategy for retaining the information.
- A quiz will be given the end of the first full week of school over the first 16 derivative formulas.

Again, the due date for summer work is Tuesday, August 5, 2025.

When school starts for 2025-26, the expectation is that you have mastered the summer work concepts and can readily apply those concepts.

If you have questions, you are welcome to email me (jacksla1@boe.richmond.k12.ga.us). Please know that my school email will be checked periodically over the summer break.