



# Kinnelon High School Mathematics Department

## Summer Guide in Preparation for the 2025-2026 School Year

Dear Students and Families,

Please use the summer months to review and complete this Summer Guide regarding upcoming math courses for the 2025-2026 school year. All textbooks will be provided to students through the school in September. Mandatory course materials must be purchased, and mandatory assignments must be completed for credit. Suggested course materials/assignments are optional.

Sincerely,

*The KHS Math Department*

<b>Course Name</b>	AP Calculus AB
<b>Mandatory Course Materials</b>	<ul style="list-style-type: none"><li>● TI-84+ Calculator - This calculator plays an important role in this course. You will be able to use this calculator on the AP exam, so it is essential that you have one to use during practice, both in class and at home.</li><li>● Large notebook/binder</li><li>● Writing Utensils</li><li>● School-Issued Chromebook</li></ul>
<b>Course Description</b>	<p>This is a college-level calculus program. The concepts are studied in more depth than in Calculus Honors. Additional topics include volumes of revolutions, a continued study of limits, and various applications of derivatives and integrals. This course serves as preparation for the Advanced Placement Examination in Calculus AB administered by the College Entrance Examination Board, a course requirement. TI-84 Graphing calculators are essential tools.</p> <p><i>The dual enrollment application for this course will be available through William Paterson University in September.</i></p> <p><b>Units to be covered in AP Calculus AB</b></p> <ul style="list-style-type: none"><li>● Unit 1: Limits and Continuity</li><li>● Unit 2: Differentiation: Definition and Fundamental Properties</li><li>● Unit 3: Differentiation: Composite, Implicit, and Inverse Functions</li></ul>

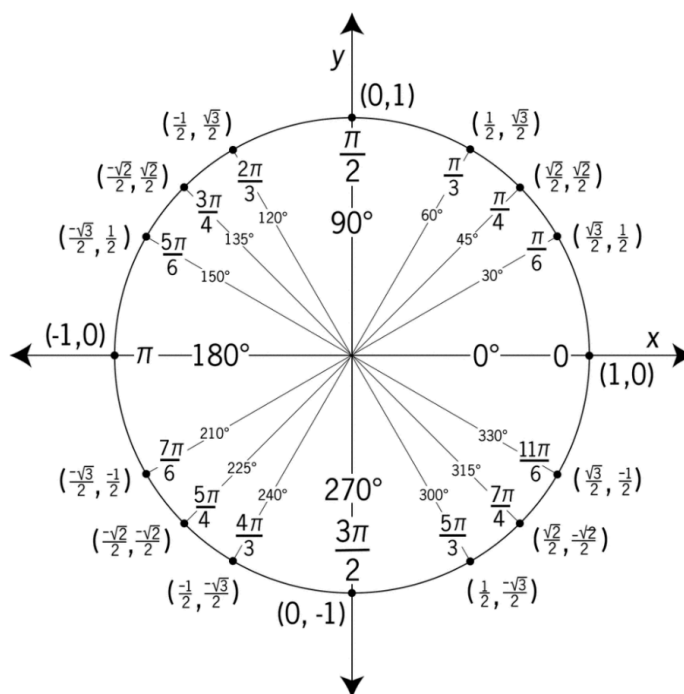


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- Unit 4: Contextual Applications of Differentiation
- Unit 5: Analytical Applications of Differentiation
- Unit 6: Integration and Accumulation of Change
- Unit 7: Differential Equations
- Unit 8: Applications of Integration

In addition, please review the Unit Circle



## Summer Assignment

[Digital Version](#) (Delta Math) | [Print Version](#)

This is a **REQUIRED** summer assignment to practice pre-requisite skills and preview course concepts prior to the start of the school year. This will be due on Friday, 8/29. This assignment is intended to provide me with some knowledge about your level of understanding of these skills. Therefore, this will be scored on **completion not accuracy** and will count toward your formative assessment grade for MP1.