

Name: Mrs. Woods		Grading Quarter: 2	Week Beginning: 10/16/23
School Year: 23-24		Subject: AP Calculus AB	
Monday	Notes:	No class	Academic Standards:
Tuesday	Notes:	Objective: Students will be able to find relative maximums and minimums of a function of a given interval. Lesson Overview: Notes – First derivative test (max and mins), Second derivative test (max and mins), Inflection points (critical points of second derivative), and concavity	Academic Standards: 5.4 Using the First Derivative Test to Determine Relative (Local) Extrema 3.D Apply an appropriate mathematical definition, theorem, or test. 5.6 Determining Concavity of Functions over Their Domains 2.E Describe the relationships among different representations of functions and their derivatives. 5.7 Using the Second Derivative Test to Determine Extrema 3.D Apply an appropriate mathematical definition, theorem, or test.
Wednesday	Notes:	Objective: Students will be able to use L'Hospital's rule to find indeterminate limits. Lesson Overview: Notes – Review indeterminate limits of the forms $0/0$ and $\inf/\inf$. Show how the rule is different from the quotient rule. Practice together as a class then individually on the large whiteboards.	Academic Standards: 4.7 Using L'Hospital's Rule for Determining Limits of Indeterminate Forms 3.D Apply an appropriate mathematical definition, theorem, or test.

Thursday	Notes:	Objective: Students will be able to analyze f' graphs to find relative extrema and intervals of increasing and decreasing functions. Lesson Overview: Notes – First derivative test (max and mins), Second derivative test (max and mins), Inflection points (critical points of second derivative), and concavity	Academic Standards: 5.8 Sketching Graphs of Functions and Their Derivatives 2.D Identify how mathematical characteristics or properties of functions are related in different representations. 5.9 Connecting a Function, Its First Derivative, and Its Second Derivative 2.D Identify how mathematical characteristics or properties of functions are related in different representations.
Friday	Notes:	Objective: Students will be able to analyze f' graphs to find relative extrema and intervals of increasing and decreasing functions. Lesson Overview: <i>Continuation of yesterday's lesson.</i> Calculator-active practice.	Academic Standards: 5.8 Sketching Graphs of Functions and Their Derivatives 2.D Identify how mathematical characteristics or properties of functions are related in different representations. 5.9 Connecting a Function, Its First Derivative, and Its Second Derivative 2.D Identify how mathematical characteristics or properties of functions are related in different representations.