



	Monday 10/16	Tuesday 10/17	Wednesday 10/18	Thursday 10/19	Friday 10/20
College Board Curriculum Framework Objectives:	<p><i>The derivative can be used to solve rectilinear motion problems involving position, speed, velocity, and acceleration (2.3C1)</i></p> <p>First and second derivatives of a function can provide information about the function and its graph including intervals of increase or decrease, local (relative) and global (absolute) extrema, intervals of upward or downwards concavity, and points of inflection. (2.2A1)</p> <p>Key features of functions and their derivatives can be identified and related to their graphical, numerical, and analytical representations. (2.2A2)</p>				
Before:	*Review Homework Set (Graphs 1-3)	*Homework Discussion/Review	*Homework Discussion/Review	*Homework Discussion/Review	<i>Homecoming Festivities</i>
During:	*Lesson: Function Analysis (Examples 1, 2, 3, 4, 9)	*Lesson: Function Analysis, cont'd (Examples 7, 8, 11, and HW Set 4, 6, 11)	*Lesson: Second Derivative Test (Examples 12-14)	*Lesson: Sketching $f'(x)$ given $f(x)$	*Finish AP FRQ's
After:	*Group Collaboration (HW Set, if not finished in class) p2, #5,6 p3, #10 p4, #1,2 p5, #9,10	*Group Collaboration (HW Set, if not finished in class) p4, #3, 5, 7 p, #13, 14	*Group Collaboration Activity (Example 15 Chart Analysis) *HW Set (2 nd Derivative Test and Chart Analysis)	*Group Collaboration Set: AP FRQ (Function Analysis)	*Work on Khan Academy Quizzes
Desired Outcome:	Students will be able to use a number line analysis to find where a function is increasing and decreasing. Students will be able to find the relative extrema of a function and also determine concavity.		Students will be able to use the second derivative to discuss extrema.	Students will be able to sketch the first derivative of a function.	Students will be able to analyze the behavior of a function using its first and second derivative.
Formative/ Summative:	Student questioning during lesson and collaboration	Student questioning during lesson and collaboration	Student questioning during lesson and collaboration	Student questioning during lesson and collaboration	Quiz
Critical Questions:	<i>Explain how the first derivative can be used to discuss whether a function is increasing or decreasing. Explain how to find relative extrema and concavity of a function.</i>		<i>Explain the 2nd Derivative Test and what it can be used for</i>	<i>Explain how to sketch $f'(x)$ given the graph of $f(x)$.</i>	