Mrs. Medlen
AP Calculus AB
Lesson Plans

CARROLL
HIGH SCHOOL

	Monday 8/28	**Tuesday 8/29**	**Wednesday 8/30**	**Thursday 8/31**	**Friday 9/1**
College Board Curriculum Framework Objectives:	*Use information from a table to estimate the instantaneous rate of change at a given time (2.1B1)* *Understand AROC vs IROC and express AROC as a difference quotient (2.1A1)* *The derivative of a function is a limit of the difference quotient as h approaches 0. (2.1A3)* *Know the different notations for derivative (dy/dx, f'(x), and y'). (2.1A4)* *The derivative is IROC and can be used to find rates of change. The derivative is the slope of the tangent line. (2.3)*				
Before:	*Quiz: Trig Values *Review AROC/IROC Homework Set *Complete AROC/IROC (ex 3, HW 4b)	*Review Homework Set	*Review Homework Set	*Review Homework Set	Teacher Work Day (Student Holiday)
During:	*Lesson: Finding derivatives using technology	*Lesson: Differentiation Techniques (Constant, Variable, Power Rule Ex 1-4)	*Lesson: Sum/Difference Techniques for Derivatives (Ex. 5)	*Stamp Activity: Techniques of Differentiation (Power Rule)	
After:	*Group Collaboration: Derivatives using Graphing Calculators	*Group Collaboration Set/HW Set	*Group Collaboration Set/HW Set (p37)	*Extra Practice on Techniques of Differentiation (HW Set if not completed)	
Desired Outcome:	Students will be able to find derivatives using a graphing calculator.	Students will be able to use techniques of differentiation to find derivatives.		Students will be able to use techniques of differentiation to find derivatives and write equations of tangent lines.	
Formative/ Summative:	Student questioning/quiz	Student questioning	Student questioning	Stamp Activity/student questioning	
Critical Questions:	*Explain the difference between AROC and IROC. Explain how to find a derivative using a graphing calculator.*	*Explain why the derivative of a constant is zero. How does this relate to the graph of a constant? Explain the power rule.*	*Explain the constant, power, variable rules for differentiation. How are the derivatives at x = c related to the graphs of the functions?*	*No new concepts taught.*	