CARROLL HIGH SCHOOL

	Monday 2/12	Tuesday 2/13	Wednesday 2/14	Thursday 2/15	Friday 2/16
College Board Curriculum Framework Objectives:	In some cases, a definite integral can be evaluated by using geometry and the connection between the definite integral and area (3.2C1) The average value of a function f over an interval [a,b] is $\frac{1}{b-a}\int_a^b f(x)dx$. (3.4B1) If f is a continuous function on the interval [a,b], then $\frac{d}{dx}\left(\int_a^x f(t)dt\right) = f(x)$, where x is between a and b. (3.3A2) More general 2nd FTC $\frac{d}{dx}\int_a^{g(x)} f(t)dt = f(g(x))\,g'(x)$				
Before:	*Discuss Average Value vs Rates of Change (Examples 1-5)	*Homework Review	*Partner's Quiz (Definite Integration, Average Value, 2nd FTC)	*Check Notecards *Review Quiz	Student Holiday
During:	*Lesson: 2nd FTC (Examples 1-4)	*Hat Detective HOT Problems	*Test Review Packet #1	*Test Review Packet #2	
After:	*Group Collaboration Set/HW Set	*Homework: Notecard Update	*Homework: Notecard Update	(Test Tuesday)	
Desired Outcome:	Students will be able to calculate the average value of a function & the average rate of a function. Students will be able to distinguish between the two.	Students will be able to use the 2nd Fundamental Theorem of Calculus to solve problems.	Students will demonstrate their understanding of integration techniques and applications of integration.	Students will review concepts learned about integration and its applications.	
Formative/ Summative:	Student questioning throughout lesson Khan Academy Quiz	Student questioning throughout lesson Khan Academy Quiz	Quiz	n/a	
Critical Questions:	*Explain the difference between finding the average value of a function on an interval and the average rate of change.*	*Explain the 2nd Fundamental Theorem of Calculus.*	*n/a*	*n/a*	