

(AP Calculus AB) Distance Learning Activity, Day (3/19/20) (Mathematics)

Overview: Unit 6.6 [Enrichment]

The students will be able to understand the various ways to apply the Fundamental Theorem of Calculus (Part 2) to solve AP Free-Response Questions (Non-Calculator).

Estimated Time: Approximately [45 minutes]

Explanation:

- ⊙ What is the Fundamental Theorem of Calculus (FTOC – Part 2) and how is it applied in the various scenarios on the AP Exam?

Materials that are Needed:

OneNote / CBSD email

Things to know:

FTOC is regarded as one of the most important theorems in all of Calculus. This theorem serves as the link between Differentiation and Integration as inverse processes. This theorem will be represented in both the Algebraic & Graphing form integral that you will need to know/apply in the AP Calc AB curriculum. This lesson/activity requests you to review this relationship and asks you to extend your thinking by practicing some FRQ's from recent years (2016 & 2017).

I am available for questions regarding content through your CBSD email account. Please be specific about your question if referencing a problem so I may provide you meaningful feedback (For example, Unit 7.1 – WS, #3). I will be happy to follow-up with comments and feedback directly in your personal OneNote as needed. Good Luck!

Tasks:

1. Independent Practice Activity

Student will go to our Class OneNote and look to build on the enrichment activity from yesterday involving [FTOC – Pt 2]. Try the 2 Free-Response Non-Calculator questions listed in the OneNote from 2016-17 (ideally 15 minutes each). After completion, use the scoring guidelines to self-score your attempt. After self-scoring each question, make corrections/revisions using the Solutions provided. I have included a draft of my own to give extra detail where needed. Feel free to email me with follow-up questions.