

Grade 12

Distance Learning Module 9: Week of: 6/1/2020-6/5/2020

Introduction to Calculus - *Modified from [Unit D - Using Calculus to Sketch Curves](#)*

Targeted Goals from Stage 1: Desired Results

Content Knowledge: Optimization and the Derivative Tests

Vocabulary: Optimization, Local Extrema

Skills: Using the 1st Derivative test and the Number Line test Optimize a function.

Expectation:

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday: Optimization - Volume of a Box	Khan Academy Video - Box Volume	Text book problems
Tuesday: Optimization - Profit	Khan Academy Video - Profit	Text book problems
Wednesday: Optimization - Cost	Khan Academy Video - Cost	Khan Academy Quiz - Optimization
Thursday: Optimization - Area	Khan Academy Video - Area	Text book problems.
Friday: Optimization Wrap-Up	Google Classroom Notes - Strategies and steps to optimizing an application.	Optimization Worksheet

Week criteria for success (attach student checklists or rubrics): Students should be able to use the 1st and 2nd Derivative Tests and the number line test to determine the local extrema of a function. In determining the local extrema, students will be able to use them to optimize a function or an application.

Supportive resources and tutorials for the week (plans for re-teaching): Google Classroom notes, Khan Academy, worksheets, office hours