

Grade 12

Distance Learning Module 5: Week of: April 27th– May 1st

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

Targeted Goals from Stage 1: Desired Results

Content Knowledge: Maximum vs Minimum Values

Vocabulary: Maximum, Minimum, Extrema, Relative, Absolute

Skills: Using the first derivative to determine the absolute and relative extrema of a function.

Expectation:

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday: Introduction to relative and absolute extrema	Class Notes - Relative Extrema Paul Birdsall Altvista The Power Rule	Khan Academy Practice - Relative Extrema (link posted in Google classroom)
Tuesday: Using the first derivative to determine the absolute and relative extrema	Class Notes - Absolute Extrema Paul Birdsall Altvista The Power Rule	Khan Academy Practice - Absolute Extrema (link posted in Google classroom)
Wednesday: What are critical values and how do I determine the critical values of a function.	Khan Academy Video - Critical Values Finding critical points (link posted in Google classroom)	Khan Academy Practice - Critical Values (link posted in Google classroom)
Thursday: Applications of relative and absolute extrema	YouTube Video - Extrema Applications (link posted in Google classroom)	Worksheet on Critical Values and Extrema (link posted in Google classroom)

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Friday: Wrap up module 5	Khan Academy Article "How do I find absolute minimum & maximum points with differential calculus?" (link posted in Google classroom)	Khan Academy Quiz - Wrap-up (link posted in Google classroom)

Week criteria for success (attach student checklists or rubrics): Students should be able to use the first derivative to determine the absolute and relative extrema of a function. Students should be able to apply the use of absolute and relative extrema to sketching of a graph.

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