

Grade 12

Distance Learning Module 1

Week of: 03/30/20

## Mathematics: Introduction to Calculus Level 2 - *Modified from [Unit C - Derivatives](#)*

### Targeted Goals from Stage 1: Desired Results

**Content Knowledge:** Determining and applying the first derivative using the rules.

**Vocabulary:** Slope, tangent, velocity, and acceleration.

**Skills:** Determine the derivative of a function and use it to determine the slope and equation of a tangent line.

### Expectation:

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday: Review of the Power Rule	Class Notes - Power Rule P.Birdsall –Altervista <a href="#">The Power Rule</a>	Khan Academy Practice - Power Rule
Tuesday: Product and Quotient Rule	Class Notes - Product Rule P.Birdsall –Altervista The Product Rule Class Notes - Quotient Rule P.Birdsall –Altervista The Quotient Rule	Khan Academy Practice - Product & Quotient
Wednesday: Trigonometric Rules	Class Notes - Trigonometric Rules P.Birdsall –Altervista Trigonometric Rules	Khan Academy Practice - Trig Rules
Thursday: Exponential and Logarithmic Rules	Class Notes - Exponential Rules P.Birdsall –Altervista The Exponential Rules Class Notes - Logarithmic Rules P.Birdsall –Altervista Logarithmic Rules	Handout on Power, Product, Quotient, Trig, Log, and Exponential Rules
Friday: The Chain Rule	Class Notes - The Chain Rule P.Birdsall –Altervista The Chain Rule	Khan Academy Practice - The Chain Rule

**Week criteria for success** (attach student checklists or rubrics): By the end of this module students should be able to determine the equation of the tangent to a graph using explicit derivatives. Students should also be able to distinguish between position, velocity and acceleration and how they relate to each other in terms of being derivatives of each other.

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