

Grade 12

Distance Learning Module 2: Week of: 04/06/20 – 4/10/20

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

### Targeted Goals from Stage 1: Desired Results

**Content Knowledge:** Explicit vs Implicit Differentiation

**Vocabulary:** Implicit, Explicit, slope, tangent, related rate

**Skills:** Using implicit differentiation to determine the slope and equation of tangent lines. Using implicit differentiation to solve related rate problems

### Expectation:

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday: Explicit vs Implicit, Derivative Notations	Class Notes - Implicit Differentiation Paul Birdsall - Altvista – The Power Rule	Khan Academy Practice - Implicit Link Posted in Google Classroom
Tuesday: Introduction to Implicit Differentiation	Class Notes - Implicit Differentiation Day 2 Paul Birdsall - Altvista – The Power Rule	Khan Academy Practice - Implicit Day 2 Link Posted in Google Classroom
Wednesday: Applying Implicit Differentiation	Class Notes - Implicit Differentiation Day 3 Paul Birdsall - Altvista – The Power Rule	Worksheet on Implicit Differentiation Link Posted in Google Classroom  Khan Academy Practice - Related Rates Posted in Google Classroom

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Thursday: Introduction to Related Rates	Class Notes -Related Rates Paul Birdsall - Altvista – The Power Rule	Khan Academy Practice - Related Rates Day 2 Link Posted in Google Classroom
Friday: No Class - Good Friday	No Class - Good Friday	No Class - Good Friday

**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 implicit derivatives. Students should also be able to apply implicit derivatives to related rate problems.

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