Grade 12
Distance Learning Module 4: Week of: $04 / 20^{\text {th }}-4 / 24^{\text {th }}$

## Mathematics: Introduction to Calculus - Modified from Unit C - Derivatives

## Targeted Goals from Stage 1: Desired Results

Content Knowledge: Linear Approximation and L'Hopital's Rule
Vocabulary: Slope, tangent line, limit

Skills: Using Linear Approximation to determine the slope and equation of a tangent line. Using L'Hopital's Rule to determine the limit of complex functions.

## Expectation:

| Description of Task (s): | Resources and Materials: | Daily Checks <br> (Return to Google Classroom or snapshots from a cell phone) |
| :---: | :---: | :---: |
| Monday: Introduction to Linear Approximation | Class Notes - Linear Approximation <br> Paul Birdsall altervista - The Power Rule | Khan Academy Practice - Linear Approximation <br> (link posted in Google classroom) |
| Tuesday: Applying Linear Approximation | Class Notes - Linear Approximation <br> Paul Birdsall altervista - The Power Rule | Worksheet - Linear Approximation (posted in Google classroom) |
| Wednesday: Introduction to L'Hopital's Rule | Class Notes - L'Hopital's Rule <br> Paul Birdsall altervista - The Power Rule | Khan Academy Practice - L'Hopital's Rule (link posted in Google classroom) |
| Thursday: Applying L'Hopital's Rule | Class Notes - L'Hopital's Rule <br> Paul Birdsall altervista - The Power Rule | Worksheet - L'Hopital's Rule (posted in Google classroom) |
| Friday: Wrapping up Module 4 | Khan Academy Video <br> L'Hôpital's rule: limit at 0 example - (link | Khan Academy Quiz - L'Hopital's Rule (link posted in Google classroom) |


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| :--- | :--- | :--- |
|  | posted in Google classroom) |  |

Week criteria for success (attach student checklists or rubrics): Students will be able to use Linear Approximation to determine the slope and equation of a tangent line. Student will also be able to use L'Hopital's Rule to determine the limit of complex functions.

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

