Grade 12

Distance Learning Module 4: Week of: 04/20th -4/24th

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

| Description of Task (s): | Resources and Materials: | Daily Checks (Return to Google Classroom or snapshots from a cell phone) |
|--------------------------|-----------------------------|--|
| | 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