Grade 9 - 11
Distance Learning Module 8: Week of: May 26th - May 29th
Exponential Functions

Algebra 2, Level 2 - *Modified from Unit 6- Exponential, Logarithmic and Additional Inverse Functions*

Targeted Goals from Stage 1: Desired Results

Content Knowledge: Graph exponential functions and understand the relationship between growth and decay, apply exponential function models to word problems and determine what information to solve for.

Vocabulary: exponential growth/decay, e, continuous, logarithm, common and natural logarithms, half-life

Skills:

- Graphing and understanding key elements of exponential functions
- solving problems related to growth, decay, compound interest
- identifying functions as models of exponential growth / decay

Expectation:

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday:	**Memorial Day**	**No School**
Tuesday:	Viceo: Zombie Apocalypse (up to 7:40) Video: Introduction to Exponential Functions slides unit F 41-44	Introduction to Graphing Exponential Functions worksheet
Wednesday:	Khan video: Exponential function graph Khan video: Graph of exponential growth	Khan practice: Graphs of exponential growth Complete the worksheet (this will be easier if

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
		you print it out and write directly on the printout): Graphing Exponential Functions worksheet
Thursday:	Video: Introduction to exponential growth and decay word problems Video: Exponential Growth Word Problems Video: Exponential Decay Word Problems slides unit F 47-54	Exponential Basic Growth andDecay Word Problems worksheet
Friday:	Video: What is compound interest? Video: Compound Interest Word Problems slides unit F 47-54	Complete 2, 6, 11, 12, 15, 16, 17 must show formula and all work. Exponential Compounding Word Problems

Week criteria for success (attach student checklists or rubrics):

Students will be able to:

1. Understand the difference between exponential growth and exponential decay
2. Understand the concept of compounding
3. Use exponential function formulas to solve real life applications

Supportive resources and tutorials for the week (plans for re-teaching):

1. Khan video: Exponential Growth and Decay Word Problems
2. Video: Compounding Continuously Word Problem Example
3. Video: Exponential Growth and Decay Word Problems & Functions - Algebra & Precalculus
4. Office Hours