Grade 10-11

Distance Learning Module 2: Week of: April 6, 2020

**Mathematics:** Honors Pre-Calculus - *Modified from Unit E - Sequences and Series* 

## **Targeted Goals from Stage 1: Desired Results**

**Content Knowledge:** Recognizing arithmetic and geometric series, finding the sum of a finite series, finding the nth term of a series, finding the nth partial sum

Vocabulary: sequence, series, partial sum, recursion formula, explicit formula, factorial, summation, binomial expansion

Skills: Use sequence notation to write the terms of sequences, use factorial notation, use summation notation to write sums

## **Expectation:**

Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Khan Academy video; Explicit & recursive formulas for geometric sequences	Khan Academy practice: Recursive formulas for geometric sequences
Khan Academy video:Converting recursive & explicit forms of geometric sequences	Khan Academy practice: Recursive formulas for geometric sequences  Khan Academy practice: Sequences word problems  Khan Academy: Quiz 2  Textbook p.659, #1-49 eoo
	Khan Academy video; Explicit & recursive formulas for geometric sequences  Khan Academy video:Converting recursive & explicit

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Tuesday: Check-in	Google meet virtual class	The class will review homework and lessons. We will address any problems with material or technology.
Wednesday: Introduction to Geometric series	Khan Academy video:Geometric series introduction Khan Academy video:Geometric series intro Khan Academy video: Finite Geometric series formula	Khan Academy practice: Geometric series formula  Khan Academy practice: Finite geometric series word problems  Khan Academy: Quiz 3  Textbook p.660, #57-81 eoo, 83,87
Thursday: Check-in	Google meet virtual class	The class will review homework and lessons. We will address any problems with material or technology.

Week criteria for success (attach student checklists or rubrics): Students will be able to:

- Use recursive and explicit forms of geometric sequences
- Find the sum of a finite geometric series
- Solve word problems involving geometric sequences and series

Supportive resources and tutorials for the week (plans for re-teaching): Kahn Academy: Series , Precalculus with Limits by Larson and Hostetler,

Virtual class