Distance Learning Module 9: Week of: 6/1/2020-6/5/2020

# Pre-College Algebra & Trigonometry - Modified from Unit 5 - Rationals

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

**Content Knowledge:** The only thing you can do to a fraction (and not change its value) is to multiply by ONE, Only FACTORs can divide out to one, Addition/Subtraction requires common denominator because different order of operation, Vertical asymptotes arise from domain restrictions, Other asymptotes arise from quotient of long division

Vocabulary: factor, term, cancel, complex fraction, extraneous solution, domain, asymptote

**Skills:** simplifying rational expressions, solving rational equations, finding the domain of a function, determining asymptotes of rational functions, graphing rational functions

#### **Expectation:**

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday: Simplifying Complex Rational Expressions	Simplifying Complex Rational Expressions Video	Simplifying Complex WS Odds (students will upload a photo of their work):  PDF Worksheet
Tuesday: Simplifying Complex Rational Expressions	Optional Live Google Meet Review	Simplifying Complex WS Evens (students will upload a photo of their work): PDF Worksheet
Wednesday: Solving Rational Equations	Khan Academy Video: Rational Equations Intro	Khan Academy Assignment: Rational Equations Intro
Thursday: Solving Rational Equations	Khan Academy Video: Equations with Rational Expressions  Khan Academy Video: Equations with Rational Expressions (Example 2)	Khan Academy Assignment: Rational Equations
Friday: Wrap-up Solving Rational Equations	Optional Live Google Meet Review	End of Module Google Form Check-In

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

- Students will be able to simplify complex rational expressions
- Students will be able to solve rational equations
- Students will be able to check for extraneous solutions

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

Simplifying Complex Rationals Extra Video

Solving Rational Equations Extra Video