*Grades 11 and 12*
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):<br>PDF Worksheet |
| Tuesday: Simplifying Complex Rational Expressions | Optional Live Google Meet Review | Simplifying Complex WS Evens (students will upload a photo of their work):<br>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<br><br>Khan Academy Video: Equations with Rational Expressions (Example 2) | Khan Academy Assignment: Rational Equations |
| Friday: Wrap-up<br>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