Grade 10 - 11
Distance Learning Module 4: Week of: 4/20/2020 - 4/24/2020
Operations with radical expressions and domains

Mathematics: Algebra 2 Level 2 - *Modified from Unit 5- Rational Expressions and Functions*

Targeted Goals from Stage 1: Desired Results

Content Knowledge: Rewrite simple rational expressions in different forms; write a(x)/b(x) in the form q(x) + r(x)/b(x), where a(x), b(x), q(x), and r(x) are polynomials with the degree of r(x) less than the degree of b(x), using inspection, long division, or, for the more complicated examples, a computer algebra system.

Vocabulary: Rational functions, simplifying, numerator, denominator.

Skills: Manipulating rational expressions (multiply/divide), simplifying rational expressions, finding the restrictions on the domain.

Expectation:

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday: Rational expressions: simplifying	Slides 1-5 Master Simplifying Radicals Video Khan academy video: simplifying rational expressions	Assigned Khan Academy practice problems: Simplifying rational expressions using monomial factoring Simplifying rational expressions using common binomials
Tuesday: Rational expressions: multiplying	Slides 6 - 12 Multiplying Rational Expressions Video Khan Academy video: Multiplying and Dividing rational expressions	Practice A 1, 4, 8, 9, 10, 12 - submit picture of work: 5.1, 5.2 Simplifying, Multiplying and Dividing rational expressions worksheet

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Wednesday: Rationals: dividing	Slides 13-17 Dividing Rational Expressions Video	Practice A: 15, 16, 17, Practice B: 18 - submit photo of your work. 5.1, 5.2 Simplifying, Multiplying and Dividing rational expressions worksheet
Thursday: rationals: domain restrictions	Domain Restrictions for Rational Functions	State the domain of each of the problems completed in Tuesday's and Wednesday's homework assignments.
Friday: Rationals: putting it all together	Live classroom meeting	Teacher to assign specific problems during live classroom session. Must show all work. Extra Practice - Multiplying and Dividing Rational Expressions Worksheet

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

- tell the difference between a rational expression and a rational equation and simplifying, versus solving
- manipulating rational expressions using multiplication and division
- determine domain along with restrictions

Supportive resources and tutorials for the week (plans for re-teaching): Khan Academy, Kuta Software worksheets, office hours

remediation material for rational expressions

5.1 Extra Practice - Simplifying Rational Expressions