

Grades 11 and 12

Distance Learning Module 6: Week of May 11th – May 15th

Pre-College Algebra & Trigonometry (PCAT) - [Unit 4 Polynomials](#)

Targeted Goals from Stage 1: Desired Results

Content Knowledge: when a polynomial is completely factored the product of the first term of all those factors is the first term of the polynomial, when a polynomial is completely factored the product of the second term of all those factors is the last term of the polynomial, the degree of the polynomial tells you how many solutions the equation has (Fundamental Theorem of Algebra), the factors of the polynomial correspond to the x-intercept of the graph

Vocabulary: factor, term, trinomial, Greatest Common Factor, Long Division, Synthetic Division, Complex Number, Imaginary, End Behavior

Skills: factoring polynomials (trinomials, difference of squares, difference of cubes), division of polynomials, solving polynomial equations up to degree 4, solving equations by factoring, working with complex numbers, graphing polynomials of degree 2 and higher, estimating the value of a function at the ends of the graph, creating an equation from a given equation

Expectation:

Description of Task (s):	Resources and Materials: (all links are posted in Google classroom)	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday: Rational Root Theorem	Rational Root Theorem Video	Rational Root Theorem Google Form
Tuesday: Solving Polynomials	Solving Polynomials Day 1 Video	Solving Polynomials Day 1 Google Form Assignment
Wednesday: Solving Polynomials	Solving Polynomials Day 2 Video	Solving Polynomials Worksheet (students will upload a photo of their work): PDF Worksheet
Thursday: Solving Polynomials	Solving Polynomials Day 3 Video	Solving More Polynomials Worksheet (students will upload a photo of their work):

Description of Task (s):	Resources and Materials: (all links are posted in Google classroom)	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
		PDF Worksheet
Friday: Solving Polynomials	Optional Live Zoom Review	Mixed Solving Polynomials Google Form Check In

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

- Students will be able to use the rational root theorem when solving polynomials using synthetic division
- Students will be able to solve polynomials using synthetic division and all factoring methods

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

Extra Video on solving polynomials: Link to YouTube video posted in Google classroom