

Grades 11 and 12

Distance Learning Module 7: Week: May 18th – May 22nd

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:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Monday: Add/Subtract Complex Numbers	Khan Academy Video: Adding Complex Numbers Khan Academy Video: Subtracting Complex Numbers	Khan Academy Classroom Assignment: Adding/Subtracting Complex Numbers
Tuesday: Multiplying Complex Numbers	Khan Academy: Multiplying Complex Numbers Article Khan Academy: Multiplying Complex Numbers Video	Khan Academy Classroom Assignment: Basic Multiplying Complex Numbers Khan Academy Classroom Assignment: Advanced Multiplying Complex Numbers

Description of Task (s):	Resources and Materials:	Daily Checks (Return to Google Classroom or snapshots from a cell phone)
Wednesday: Solving Polynomials when there are complex solutions	Solving Polynomials with Complex Solutions Video	Solving Polynomials with Complex Solutions WS (students will upload a photo of their work): PDF Worksheet
Thursday: Solving Polynomials when there are complex solutions	Optional Live Google Meet Review	Solving Polynomials with Complex Solutions WS 2 (students will upload a photo of their work): PDF Worksheet
Friday: Wrap - Up	Optional Live Google Meet Review	End of Module 7 Google Form Check-In

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

- Students will be able to add, subtract and multiply complex numbers
- Students will be able to solve polynomial equations with complex solutions

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

Solving Quadratics with Complex Solutions Extra Video: (Khan Academy link posted in Google Classroom)

Solving Quadratics with Complex Solutions Extra Assignment: (Khan Academy link posted in Google Classroom)