

*Grades 11 and 12 Pre-College Algebra & Trigonometry*

Distance Learning Module 2: Week: April 6 (4 days long this week)

**Mathematics: PCAT - [Unit 3 Functions](#)**

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

**Content Knowledge:** functions can be used for making predictions in math, the domain of a function are the possible inputs for which outputs exist, inverses swap inputs and outputs, how the parameters of a function change the parent function graph

**Vocabulary:** function, inverse function, piecewise function, transformation, interval notation, function notation, symmetry, continuous, domain, range, intercept, inequality, input, output, composition, composite function, parent functions, inverse, reflection, shift, parameter

**Skills:** using interval notation, reading and representing function notation, interpreting characteristics of graphs, graphing and evaluating piecewise functions, graphing inverse functions, find and verify inverse functions, function composition, function transformations

**Expectation:**

| Description of Task (s):                              | Resources and Materials:                                                                                            | Daily Checks<br>(Return to Google Classroom or snapshots<br>from a cell phone)                               |
|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Monday: Composition of Functions                      | Khan Academy Video: Evaluating Composite Functions                                                                  | Khan Academy Classroom Assignment:<br>Evaluating Composite Functions                                         |
| Tuesday: Composition of Functions                     | Khan Academy Reading & Practice<br>Optional live Zoom Review                                                        | Evaluating Composite Functions Worksheet<br>(students will upload a photo of their work):<br>(PDF Worksheet) |
| Wednesday: Verifying functions through<br>composition | Khan Academy Video: Verifying inverse<br>functions<br><br>Khan Academy Video: Verifying inverse<br>functions Part 2 | Khan Academy Classroom Assignment:<br>Verifying Inverse Functions                                            |
| Thursday: Finding the inverse a function              | Finding an Inverse Video                                                                                            | Finding an Inverse Function Worksheet                                                                        |

| Description of Task (s): | Resources and Materials: | Daily Checks<br>(Return to Google Classroom or snapshots from a cell phone) |
|--------------------------|--------------------------|-----------------------------------------------------------------------------|
|                          |                          | (students will upload a photo of their work):<br>(PDF Worksheet)            |

Friday – Good Friday - No School

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

- Evaluating Composite Functions
- Verifying functions are inverses by using function composition
- Finding an inverse of a function

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

YouTube Video on evaluating composite functions: (link to video posted in Google classroom)

Khan Academy Reading and Practice on finding inverse functions: (link posted in Google classroom)