NC Math 3 Course Overview B – Inverse Functions, Exponential & Logarithmic

09/28 - 10/30

This section of Math 3 will cover the following standards...

NC.M3.A-CED.1 Create equations and inequalities in one variable that represent absolute value, polynomial, exponential, and rational relationships and use them to solve problems algebraically and graphically.

NC.M3.A-CED.2 Create and graph equations in two variables to represent absolute value, polynomial, exponential and rational relationships between quantities.

NC.M3.A-SSE.3c Write an equivalent form of an exponential expression by using the properties of exponents to transform expressions to reveal rates based on different intervals of the domain.

NC.M3.F-IF.4 Interpret key features of graphs, tables, and verbal descriptions in context to describe functions that arise in applications relating two quantities to include periodicity and discontinuities.

NC.M3.F-BF.1a Build polynomial and exponential functions with real solution(s) given a graph, a description of a relationship, or ordered pairs (include reading these from a table).

NC.M3.F-BF.4 Find an inverse function.

a. Understand the inverse relationship between exponential and logarithmic, quadratic and square root, and linear to linear functions and use this relationship to solve problems using tables, graphs, and equations.

b. Determine if an inverse function exists by analyzing tables, graphs, and equations.

c. If an inverse function exists for a linear, quadratic and/or exponential function, f, represent the inverse function, f^{-1} , with a table, graph, or equation and use it to solve problems in terms of a context.

NC.M3.F-LE.4 Use logarithms to express the solution to $ab^{ct} = d$ where a, c, and d are numbers and evaluate the logarithm using technology.

Tentative Date for Quiz B: Tuesday, October 30, 2018

| Date | I can | A# | Assignment | Follow Up? |
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| | Review for Unit B Test | | | |