

# WCPSS Scope and Sequence NC Math 1 2019-20

| Unit                                   | MVP Module       | Standards  | Number of Tasks | Days (Semester) | Days (Yearlong) |
|--|------------------|--|-----------------|-----------------|-----------------|
| Unit 1: Sequences                      | Math 1 Mod 1     | Representing arithmetic and geometric sequences with equations, tables, graphs, and story context; Finding constant differences or ratios between consecutive terms; Recursive and explicit arithmetic and geometric sequences; Finding missing terms in sequences.<br>A-SSE.1a,b, A-REI.3, F-BF.1a, F-BF.2, F-IF.7, F-LE.1, F-LE.5  | 11              | 12              | 21              |
| Unit 2: Linear & Exponential Functions | Math 1 Mod 2     | Comparing, interpreting, and solving linear and exponential functions in their various forms.<br>N-RN.2, A-SSE.1a,b, A-CED.2, A-REI.10, F-IF.3, F-IF.5, F-IF.6, F-IF.7, F-IF.8b, F-IF.9, F-BF.1a, F-BF.2, F-LE.1, F-LE.3, F-LE.5, 8.F.2, 8.F.3, 8.F.4  | 9               | 11              | 22              |
| Unit 3: Features of Functions          | Math 1 Mod 3     | Describing functions with equations, tables, graphs, and story context; Identifying features of functions; Interpreting functions; Determining if a relation is a function. A-REI.11, A-CED.3, F-IF.1, F-IF.2, F-IF.3, F-IF.4, F-IF.5, F-IF.7, F-BF.1b, 8.F.1, 8.F.5   | 7               | 8               | 17              |
| Unit 4: Equations & Inequalities       | Math 1 Mod 4     | Reasoning and solving equations and inequalities; Representing the solutions; Applying the properties of inequalities A-CED.4, A-REI.1, A-REI.3, 8.EE.7  | 9               | 8               | 15              |
| Unit 5: Connecting Algebra & Geometry  | Created by WCPSS | Use coordinates to find distances and determine the perimeter of geometric shapes. Prove slope criteria for parallel and perpendicular lines. Use coordinates to algebraically prove geometric theorems. Translating linear and exponential functions using multiple representations. G-GPE.4, G-GPE.5, G-GPE.6, 8.G.6, 8.G.7, 8.G.8 | 5               | 6               | 8               |

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| Total Days in Quarter/Semester              |                            |  |                 | 45              | 83<br>(7 Flex Days) |
|---|----------------------------|--|-----------------|-----------------|---------------------|
| Unit  | MVP Module                 | Standards  | Number of Tasks | Days (Semester) | Days (Yearlong)     |
| Unit 6: Systems of Equations & Inequalities | Math 1 Mod 5               | Writing, graphing, and solving systems of equations and inequalities A-CED.2, A-CED.3, A-CED.4, A-REI.5, A-REI.6, A-REI.12, F-BF.1b, 8.EE.8  | 10              | 11              | 22                  |
| Unit 7: Quadratic Functions Part A          | Created by CHCSS and WCPSS | Examining multiple representations of quadratic functions to compare and contrast rate of change, minimum and maximum values, and domain and range. Incorporating quadratics with the understanding of linear and exponential functions. A-SSE.1a,b, A-CED.1, A-CED.2, F-IF.4, F-IF.5, F-IF.6, F-IF.7, F-IF.8a, F-IF.9, F-BF.1a, F-LE.1, F-LE.3          | 8               | 9               | 18                  |
| Unit 8: Quadratic Functions Part B          | Created by CHCSS and WCPSS | Solving by square root and factoring & understand zeroes/operations with polynomials A.SSE.1, A.SSE.3, A-APR.3, A-REI.4, F-IF.8a, F-BF.1b, A.APR.1   | 9               | 10              | 20                  |
| Unit 9: Modeling Data                       | Math 1 Mod 9               | Describe data distributions and compare two or more data sets. Develop an understanding of and estimate correlation. Use linear models of data and interpret the slope and intercept. Use residual plots to analyze the strength of a linear model for data<br>S-ID.1, S-ID.2, S-ID.3, S-ID.6a,b, S-ID.7, S-ID.8, S-ID.9, 8.SP.1, 8.SP.2, 8.SP.3, 8.SP.4 | 12              | 10              | 20                  |