Place a checkmark or the date when items are completed. For tests, record the score if preferred.

Lesson	Explore	Practice 1	Mastery Check	Practice 2	Targeted Review	Lesson Test
31 Operations with Functions						
32 Composite Functions						
33 Polynomial Functions and the Leading Coefficient Test						
34 Zeros and Multiplicity (of Polynomial Functions)						
35 The FUNdamental Theorem of Algebra						
36 Variation						

Unit 4 Test   Date: [   ]   Score: [   ]

Lesson Objectives

Check each objective that the student has mastered.

Lesson 31

☐ Evaluate a function.

☐ Determine the sum, difference, product, and/or quotient of functions.

☐ Name the excluded domain values, if any, for combinations of functions.

Lesson 32

☐ Write a composition of functions.

☐ Determine the domain for composite functions.

☐ Determine if functions are inverses using the composition of functions.

☐ Decompose a composition of functions.

Lesson 33

☐ Determine the type of function (polynomial, power, both, neither) represented by equations or graphs.

☐ Describe the end behavior using a graph or equation, including the domain and range.

Lesson 34

☐ State the possible number of real zeros that exist from the graph of a polynomial function.

☐ Sketch a graph using the roots and leading coefficient also considering the multiplicity (exact x-axis values only).

Lesson 35

☐ Determine the number of roots for a given polynomial function using the Fundamental Theorem of Algebra.

☐ Locate and estimate the relative minimum and relative maximum of a function (including the use of technology).

☐ Sketch a graph given turning points and real zeros (distinct and multiple roots).

☐ Name the increasing and decreasing intervals across a function.

Lesson 36

☐ Calculate the constant of variation or missing values given the type of variation.

☐ Determine the type of variation in words or symbols.

☐ Write and/or solve the variation equation.