Lumen OHM Math Placement Overview

Part 1

- Simplify expressions involving gathering/combining like-terms and using the distributive property.
- Solve linear equations involving one or two steps.
- Correctly use the order of operations to perform calculations.
- Evaluate algebraic expressions involving fractions and/or negatives.
- Identify the y-intercept, x-intercept, slope, and equation of a line from a graph.

Part 2

- Given the equation of a line in any form, identify the features of that line including points on the line or slope of the line.
- Find average rate of change (slope) between two points.
- Use function notation to solve problems symbolically, graphically, or numerically.
- Factor trinomials of the form ax^2+bx+c.
- Evaluate exponential functions.
- Match linear, quadratic, and exponential functions to their graphs when given their equations.
- Use rules of exponents to simplify exponential expressions.
- Solve a system of two linear equations.
- Solve a linear equation involving multiple steps.

Part 3

- Find equations of exponential functions.
- Solve exponential functions for the exact solution.
- Solve quadratic equations using the quadratic formula and/or the zero-product property.
- Find equations of lines given two points on the line.
- Find the domain of a function when given the equation of the function.
- Re-write expressions involving radicals in exponential form (and vice versa).
- Identify the sine, cosine, and/or tangent of a given angle from a right triangle.
- Find the exact angle measurements (in degrees) and/or the exact length of the sides of the "special" triangles (30-60-90 and 45-45-90).