# Unit 01: Alg2Ac (Chapter 2): Functions, Equations, and Graphs

Content Area: Math

Course(s): Level 1 Engineering Drawing, Algebra 2 CP, Algebra 2 A, Algebra 2 H

Time Period: Marking Period 1

Length: 4 weeks
Status: Published

## **Unit Introduction**

## **Standards**

MA.F-IF.A.1	Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If $f$ is a function and $x$ is an element of its domain, then $f(x)$ denotes the output of $f$ corresponding to the input $x$ . The graph of $f$ is the graph of the equation $y = f(x)$ .
MA.F-IF.B.4	For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship.
MA.F-IF.B.6	Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.
MA.F-IF.C.7	Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases.
MA.F-LE.B.5	Interpret the parameters in a linear or exponential function in terms of a context.
MA.A-CED.A.2	Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.

# **Essential Questions**

- Does it matter which form of a linear equation you use?
- How can you model data with a linear function?

#### Content

- Sec 2.3 Linear Functions and Slope-Intercept Form (pg. 74)
- Sec 2.5 Linear Models (pg. 92)

### **Skills**

- Calculate slope (rate of change)
- Determine a line of best fit

- Graph a function given a table
- Solve equations for "y"