

Integrated Alg2 PreCalc Unit 01: Functions, Equations, and Graphs

Content Area: **Math**
Course(s): **Integrated Algebra II & PreCalculus**
Time Period: **Semester 1**
Length: **2.5 cycles**
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

- Linear Functions and Slope-Intercept Form
- Linear Models

Skills

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

- Graph a function given a table
- Solve equations for “y”