# **Acc Calculus Unit 2 Limits**

Content Area: Math

Course(s): Accelerated Calculus
Time Period: Marking Period 1

Length: **5 weeks** Status: **Published** 

#### **Unit Overview**

This unit explains what a limit is, shows how to find a limit of a function, and demonstrates how to prove limits exist using the definition of a limit. It also emphasizes continuity (and using limits to justify continuity), and finding horizontal and vertical asymptotes.

### **Enduring Understandings**

- The concept of a limit can be used to understand the behavior of functions.
- Continuity is a key property of functions that is defined using limits.

#### **Essential Questions**

- What is calculus?
- What is a limit and how can you determine the limit of a function as x approaches c?
- What algebraic techniques can you use to evaluate a limit?
- What is continuity and how does it apply to the Intermediate Value Theorem?
- What is an infinite limit?
- What is a limit at infinity?

## **New Jersey Student Learning Standards (No CCS)**

N/A

## **21st Century Themes/Careers**

CAEP.9.2.12.C.3

Identify transferable career skills and design alternate career plans.

## **Financial Literacy Integration**

PFL.9.1.12.C.1	Compare and contrast the financial benefits of different products and services offered by a variety of financial institutions.
PFL.9.1.12.C.2	Compare and compute interest and compound interest and develop an amortization table using business tools.
PFL.9.1.12.C.3	Compute and assess the accumulating effect of interest paid over time when using a variety of sources of credit.