Unit 02: Limits

Content Area: **Mathematics**
Course(s): **PreCalc Trig H**
Time Period: **Semester 1**
Length: **1 week**
Status: **Published**

Standards - NJCCS/CCSS

CCSS.Math.Content.HSF-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.
CCSS.Math.Content.HSF-IF.B.5	Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes.
CCSS.Math.Content.HSF-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.
CCSS.Math.Content.HSF-IF.C.7.b	Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions.
CCSS.Math.Content.HSF-IF.C.7.c	Graph polynomial functions, identifying zeros when suitable factorizations are available, and showing end behavior.

Enduring Understandings

A graph can be analyzed by looking at key features including continuity and end behavior.

Essential Questions

What is a limit?
How do you find the limit of a function?
What criteria must a function meet in order to be continuous?
How do you identify if a function is bounded?

Knowledge and Skills

SWBAT define limit.
SWBAT find limits approaching infinity.
SWBAT find limits approaching constants.
SWBAT define continuity.
SWBAT identify and fix removable discontinuities.
SWBAT identify the boundedness of a function.
SWBAT use the graphing calculator to find the minimum, maximum, and zeros of a function.

Resources

Precalculus with Limits

Authors: Aufmann, Barker, Nation

Graphing Calculator

www.desmos.com

www.flipgrid.com

www.graphfree.com