Unit #2: Limits

Content Area: **Mathematics**
Course(s): **PreCalc Trig A**
Time Period: **Semester 1**
Length: **3 weeks**
Status: **Published**

Standards

MA.K-12.6	Attend to precision.
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.

Enduring Understandings

Students will understand that limits determine the behavior of a graph, will determine when limits exist and when they do not exist, and will understand that it is directly connect to continuity of a graph.

Students will be able to differentiate between the limit as x approaches a and f(a).

Essential Questions

What is a limit?

When do limits exist or not exist?

Knowledge and Skills

- Find limits from graphs.
- Find limits from expressions
- Define continuity.
- Identify 3 requirements for a function to be continuous.
- Define bounded.
- Determine if a function is bounded above or below.
- Find greatest lower bound & least upper bound of functions.
- Use a graphing calculator as a tool to find GLB, LUB, max, min, and zeros.

Transfer Goals

Recognize and solve practical or theoretical problems involving mathematics, including those for which the solution approach is not obvious, by using mathematical reasoning and strategic thinking.

Resources

1. Pre-Calculus with Limits - Aufmann
2. Trigonometry 6th edition - Lial
3. Classkick
4. Khan Academy
5. PurpleMath
6. KutaSoftware
7. CK-12
8. Quizlet
9. Albert I/O
10. Desmos
11. Problem Attic