Unit #4: Rational Functions

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

Standards

MA.K-12.1	Make sense of problems and persevere in solving them.
MA.F-IF.C.7d	Graph rational functions, identifying zeros and asymptotes when suitable factorizations are available, and showing end behavior.

Enduring Understandings

Student will have a comprehensive understanding of the characteristics and behaviors that impact the graph of a rational function.

Students will be able to describe discontinuities in a graph.

Essential Questions

What is a rational function?

What are the important attributes of a rational function?

How do you graph a rational function?

Can the graph of a function cross an asymptote?

Knowledge and Skills

- Graph Rational Functions
- Identify domain issues in rational functions.
- Identify symmetry issues in rational functions.
- Identify and have understanding of asymptotes in rational functions.
- Find the zeros of rational functions.

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