Graphing rational functions

Today's Standard

HSF.IF.C7d - (+) Graph rational functions, identifying zeros and asymptotes when suitable factorizations are available, and showing end behavior.

Cues	Notes
What is a rational function?	Rational functions are ratios of polynomial functions.
How do you identify zeros?	Zeros are the x-values where the function equals zero; they occur at the roots of the numerator.
What are vertical asymptotes?	Vertical asymptotes occur where the denominator is zero and the numerator is not zero at those points.
What is end behavior?	End behavior describes how the function behaves as x approaches positive or negative infinity.
How do you graph rational functions?	To graph rational functions, identify zeros, vertical asymptotes, and analyze end behavior.

Summary

Graphing rational functions involves identifying zeros, vertical asymptotes, and understanding end behavior. Mastery of these skills is essential for advanced mathematics and real-world applications.