Class Discussion

Unit 2 Topic 7 Part 2 Graph rational functions

Objective: Graph rational functions when $\deg(N(x)) > \deg(D(x))$

Characteristics:

1. No H.A. asymptotes

2. if $\deg(N(x)) = \deg(D(x)) + 1$, then the asymptote is a straight line. (slant asymptotes)

Ex 1: Graph $f(x) = \dfrac{x^3 - x}{x^2 + x - 2}$, identify holes, x-intercept, y-intercept and its domain and asymptotes.

(Extension) Ex 2: Graph $f(x) = \dfrac{x^3 - 2x + 3}{x + 1}$,