MATH 104
Spring 2023
HW 10: Due 05/04

"If I were again beginning my studies, I would follow the advice of Plato and start with mathematics."
−Galileo Galilei

Problem 1. (10pt) Simplify the following expression as completely as possible:

$$\frac{\dfrac{x^2 + 2x - 3}{x^2 - x - 20}}{\dfrac{x^2 + 5x + 6}{x^2 - 6x + 5}}$$

Problem 2. (10pt) Find the zeros, vertical asymptotes, horizontal asymptotes, and slant asymptotes for the following:

$$\frac{(x-1)(x+8)(x-9)}{x(x-9)}$$