Name: _____

MATH 101
Fall 2023
HW 17: Due 12/11

"Mathematics is a language."
–Josiah Willard Gibbs

Problem 1. (10pt) Showing all your work, factor the following quadratic expression:

$$12x^2 - x - 20$$

Problem 2. (10pt) Use the quadratic formula to factor the following polynomial:

$$1968x^2 - 18458x + 11495$$

Problem 3. (10pt) Find all the real zeros of the following polynomial:

$$x^6 - 16x^2$$

Problem 4. (10pt) Showing all your work, solve the following equation:

$$\frac{x+1}{x-3} = \frac{3x}{x+2}$$