

NAME _____

MATH 3377 Homework Assignment

Consider the following homogeneous system of equations.

$$x_1 + 2x_3 + x_4 = 0$$

$$x_2 + x_3 - x_4 = 0$$

$$2x_1 + x_2 + 5x_3 + x_4 = 0$$

a. Find the reduced row echelon form of the augmented matrix of this system.

b. Using part a., find the solution set to the homogeneous system. Write your answer in parametric vector form.