

Please print your name:

Problem 1. Consider the following system of linear equations:

$$\begin{array}{rcl} x_1 + 2x_2 - x_3 & = & 5 \\ x_1 + 3x_2 + 4x_3 & = & 1 \\ 3x_1 - 2x_2 + x_3 & = & 3 \end{array}$$

- (a) Write down the augmented matrix for the system.
- (b) Using Gaussian elimination, determine the RREF.

(Make sure to record all your row operations!)

(c) From the RREF, read off the solution to the linear system.