

# Quiz #1

*Please print your name:*

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**Problem 1.** Consider the following system of linear equations:

$$\begin{aligned}x_1 + 3x_2 - x_3 &= 5 \\x_1 + 4x_2 + 4x_3 &= -3 \\2x_1 + 7x_2 + x_3 &= 6\end{aligned}$$

- (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.