Math 54: Quiz #1

January 25

GSI: M. Lindsey

Name: _____

Please give neat and organized answers. Whenever applicable (especially for computational questions), make it clear what strategy you are using.

Problem 1

For what values of h is $\begin{bmatrix} 1 & h & -3 \\ -2 & 4 & 8 \end{bmatrix}$ the augmented matrix of a consistent linear system?

Problem 2

Solve the following linear system:

$$\begin{cases} 4x_1 + 3x_2 + 2x_3 + x_4 = 0 \\ 9x_1 + 8x_2 + 7x_3 + 6x_4 = 5 \\ 5x_1 + 3x_2 + 2x_3 + x_4 = 0 \end{cases}$$