

## MATHEMATICS 2270. Homework # 1.

1. Write the augmented matrix and find (using Gauss-Jordan elimination algorithm for matrices) all solutions of the linear system:

$$\begin{cases} x_1 + x_2 + x_3 - 2x_4 = 3 \\ 2x_1 + x_2 + 3x_3 + 2x_4 = 5 \\ 3x_1 + 2x_2 + 4x_3 = 8 \end{cases}$$

2. Problem 14, section 1.1.
3. Problem 18, section 1.2.
4. Problem 9, section 1.2.
5. Problem 2, section 1.3.
6. Problem 3, section 1.3.
7. Problem 18, section 1.3.