

Matlab Group Assignment #1 (Part A)

Section #: _____

Names:

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1. Write the system of equations below in matrix form, then solve using matrix division in Matlab:

$$\begin{aligned}x + y + z + w &= 10 \\3x - 2y + z + 4w &= 18 \\2x + 3y - 5z - w &= -11 \\x + 4y - 2z + 3w &= 15\end{aligned}$$

2. Repeat for the following system of equations. In the space below, explain Matlab's warning and what is actually happening (if you are not sure, try using the **solve** command as well).

$$\begin{aligned}x + y + z &= 1 \\x + z &= 1 \\2x + y + 2z &= 0\end{aligned}$$

3. Repeat for the following system of equations. In the space below, explain Matlab's warning and what is actually happening.

$$\begin{aligned}x + y + z &= 3 \\2y + z &= 4 \\x - y &= -1\end{aligned}$$