

### Lab 7 Daily Evaluation (4 Marks)

Consider the following system of linear equations:

$$\begin{aligned}2x_1 + 3x_2 - x_3 &= 8 \\-x_1 + 2x_2 + 3x_3 &= 1 \\3x_1 + x_2 &= 9 - 2x_3\end{aligned}$$

(a) Represent this system as an augmented matrix.

(b) Use Gaussian Elimination to solve this linear system and find the values of  $x_1$ ,  $x_2$ , and  $x_3$ .

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c) Find the values of  $x_1$ ,  $x_2$  and  $x_3$  using the inverse matrix method. Did you get the same result in part b and c?