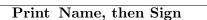
Proof SLE-2

Accepted

Not Accepted

I affirm this work abides by the university's Academic Honesty Policy.



- First due date Thursday, September 23
- Turn in your work on a separate sheet of paper with this page stapled in front.
- Do not include scratch work in your submission.
- There is to be **no collaboration** on any aspect of developing and presenting your proof. Your only resources are: you, the course textbook, me, and pertinent discussions that occur **during class**.
- Follow the Writing Guidelines of the Grading Rubric in the course information sheet.
- Retry: Only use material from the relevant section of the text or earlier.
- Retry: Start over using a new sheet of paper.
- Retry: Restaple with new attempts first and this page on top.

"It is by logic that we prove but by intuition that we discover." (Henri Poincaré)

SLE-2 (Section HSE) Give an example of an homogeneous system of three linear equations in the three variables x, y, and z for which the null space of the coefficient matrix is the set

$$T = \left\{ \left[\begin{array}{c} 3y \\ y \\ 2y \end{array} \right] : y \in \mathbf{C} \right\}.$$

[This set is not written in the form that occurs when using the solution technique in the text. So part of this problem is to show that the solution set, S, of your system of equations equals T.]