18.701 Problem Set 1

This assignment is due Wednesday, September 13.

In these problem sets, you are expected to prove your assertions.

1. Chapter 1, Exercise 6.2. \textit{(invertible integer matrices)}

2. Chapter 1, Exercise M.8. \textit{(an exercise in logic)}

3. Chapter 1, Exercise M.11. \textit{(the discrete dirichlet problem)}

4. Chapter 2, Exercise 4.8. \textit{(generating }SL_n(\mathbb{R})\text{)} (turn in part (b))

5. \textit{(optional)} Chapter 2, Exercise M.16. \textit{(the homophonic group)}

\textbf{Reminder:} Please note the homework guidelines:
Consulting existing solutions is not permitted.
The solutions that you hand in must be written entirely by you.
List your collaborators at the top of your assignment.
Use a separate sheet of paper for each problem, and put your name on each sheet.
Put your solutions into the appropriate slots by room 4-174.
You must hand in your assignments on time.