18.701 Problem Set 1

This assignment is due Wednesday, September 14.

You are expected to prove your assertions in the problem sets.

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 $SL_n(\mathbb{R})$)} (turn in part (b))
5. \textit{(optional)} Chapter 2, Exercise M.16. \textit{(the homophonic group)}

\textbf{Reminder:} Please read the homework guidelines in the course description. Write the solution to each problem on a separate sheet of paper, name on each sheet. Put your solutions into the appropriate slots by room 4-174. You must hand in your assignments on time.