18.701 Problem Set 1

This assignment is due Wednesday, September 11.
You are expected to prove your assertions.

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)

Please note these 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.
Put your name on each sheet.
Put your solutions into the appropriate slots by room 4-174.
You must turn in the assignments on time.