## 18.701 Problem Set 1

This assignment is due Wednesday, September 15.

As a rule, 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 1, Exercise 4.8b. (generating  $SL_n(\mathbb{R})$ )
- 5. Chapter 2, Exercise 4.11b. (generating  $A_n$ )
- 6. (optional) Chapter 2, Exercise M.16. (the homophonic group)

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