This assignment is due Wednesday, September 19.

1. Chapter 2, Exercise 5.6. *(The center of a group \( G \) is the set of elements \( z \) of \( G \) such that \( gz = zg \) for all \( g \) in \( G \)).*

2. Chapter 2, Exercise 7.6. *(equivalence relations on a set of 5)*

3. Chapter 2, Exercise 8.13. *(a partition of \( \mathbb{Z} \))*

4. Chapter 2, Exercise M.2. *(elements of order 2 and 3 etc.)*

5. Chapter 2, Exercise M.14. *(generators for \( SL_2(\mathbb{Z}) \))*