HW 6 Due: Tuesday, March 11

- A. Find a group presentation of $\mathbb{Z}/n\mathbb{Z}$. You do not have to prove your answer.
- B. Find a group presentation for U(7). You do not have to prove your answer.
- C. Find a group presentation for S_3 . You do not have to prove your answer.
- D. Let $a, b \in \mathbb{Z}$. Under what conditions is $\mathbb{Z} = \langle a, b \rangle$? Prove your answer.
- E. In D₅₀, compute $\tau \sigma^{15} \tau \sigma^{-1} \tau \sigma^{20}$.
- F. Prove that if G is a finite group, in the Cayley table for G, in any row or column, no two entries are the same.