P1: Use the proof of Cayley’s Theorem from class to find a subgroup $H$ of $S_6$ isomorphic to $Z_6$. (Recall that the lines of the “multiplication” table of $Z_6$ give you this isomorphism.) Write down the cycle index of $H$.

P2. Repeat P1 for $Z_5$ instead of $Z_6$.

P3. Section 27.1, #4. (No credit for writing down the answer in the back of the book without any explanation.)