Instructions.   Write all answers clearly on one piece of paper, and put all group members' names on the top of the paper. If you talk, you must do so **very quietly**!

1. How is a cyclic subgroup of a group obtained?

2. (True/False) The nonzero rationals $\mathbb{Q}^*$ are a cyclic subgroup of $\mathbb{R}^*$ under multiplication.

3. What elements comprise the center of a group?

4. How is the center of a group different from a centralizer?