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. Write down three names of notations in which a permutation can be written or encoded.

2. (True/False) Two permutations commute.

3. (True/False) Two cycles which have no numbers in common commute.

4. How is the order of a permutation obtained from its disjoint cycle form?

5. How can we split the set of permutations (on, say, \{1, \ldots, n\} for \( n \geq 2 \)) into two subsets of equal size?