

MATH 701 – FALL 2023
HOMEWORK 3
DUE MONDAY, OCTOBER 2 BY THE BEGINNING OF CLASS.

7. Use the ideas in the proof of Cayley's Theorem to find permutations $a, b \in S_8$ which satisfy:
 $a^4 = 1, b^2 = a^2, ba = a^3b$, and the permutations $a^i b^j$, with $0 \leq i \leq 3$ and $0 \leq j \leq 1$, are distinct.