

Homework 6

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Question 1

Consider the group $G = D_8$. You are given that $H = \{e, r^4, s, sr^4\}$ is a subgroup of D_8 .

- a) Either show that H is a normal subgroup of D_8 , or show that it is not a normal subgroup.
- b) List all the left cosets of H .

Question 2

Give the composition table for the group $\text{Aut}(\mathbb{Z}_{24})$.