

Worksheet 15

In D_{12} , let $H = \langle \sigma^3, \tau \rangle$.

1. Compute the equivalence classes for $\equiv \pmod{H}$.
2. Compute the equivalence classes for the relation defined by $\alpha \sim \beta$ if $\alpha\beta^{-1} \in H$.
3. Compute the product $(\sigma H)(\sigma H)$; that is, compute the set of all pairwise products.