

Table [

lhs = $R_{1,2} \bar{R}_{3,4}$ // $m_{1,3 \rightarrow 1}$ // $m_{2,4 \rightarrow 2}$;

rhs = $\eta_1 \eta_2$ // Expand; HL [**lhs** == **rhs**],

{**\$CIS**, ConjugacyClasses[\$G]}]