The group G is isomorphic to the group labelled by [32, 26] in the Small Groups library.
Ordinary character table of $G \cong$ C4 x Q8:

	$1a$	$4a$	$4b$	$4c$	$2a$	$2b$	$4d$	$4e$	$4f$	$4g$	$4h$	$4i$	$4j$	$2c$	$4k$	$4l$	$4m$	$4n$	$4o$	$4p$
χ_1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
χ_2	1	-1	-1	-1	1	1	1	1	-1	1	-1	-1	-1	1	-1	1	1	1	-1	-1
χ_3	1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	1	1
χ_4	1	-1	1	-1	1	1	-1	1	-1	-1	1	-1	-1	1	1	-1	1	-1	-1	1
χ_5	1	-1	1	1	1	1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	1	1	-1
χ_6	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	1	1	-1	-1	1	-1	1
χ_7	1	1	-1	1	1	1	-1	1	1	-1	-1	1	1	1	-1	-1	1	-1	1	-1
χ_8	1	1	1	-1	1	1	1	-1	1	-1	1	-1	-1	1	-1	1	-1	-1	-1	-1
χ_9	1	$-E(4)$	-1	$-E(4)$	1	-1	$E(4)$	-1	$E(4)$	$E(4)$	1	$-E(4)$	$E(4)$	-1	1	$-E(4)$	1	$-E(4)$	$E(4)$	-1
χ_{10}	1	$E(4)$	-1	$E(4)$	1	-1	$-E(4)$	-1	$-E(4)$	$-E(4)$	1	$E(4)$	$-E(4)$	-1	1	$E(4)$	1	$E(4)$	$-E(4)$	-1
χ_{11}	1	$-E(4)$	-1	$E(4)$	1	-1	$E(4)$	1	$E(4)$	$-E(4)$	1	$E(4)$	$-E(4)$	-1	-1	$-E(4)$	-1	$E(4)$	$-E(4)$	1
χ_{12}	1	$E(4)$	-1	$-E(4)$	1	-1	$-E(4)$	1	$-E(4)$	$E(4)$	1	$-E(4)$	$E(4)$	-1	-1	$E(4)$	-1	$-E(4)$	$E(4)$	1
χ_{13}	1	$-E(4)$	1	$-E(4)$	1	-1	$-E(4)$	-1	$E(4)$	$-E(4)$	-1	$-E(4)$	$E(4)$	-1	-1	$E(4)$	1	$E(4)$	$E(4)$	1
χ_{14}	1	$E(4)$	1	$E(4)$	1	-1	$E(4)$	-1	$-E(4)$	$E(4)$	-1	$E(4)$	$-E(4)$	-1	-1	$-E(4)$	1	$-E(4)$	$-E(4)$	1
χ_{15}	1	$-E(4)$	1	$E(4)$	1	-1	$-E(4)$	1	$E(4)$	$E(4)$	-1	$E(4)$	$-E(4)$	-1	1	$E(4)$	-1	$-E(4)$	$-E(4)$	-1
χ_{16}	1	$E(4)$	1	$-E(4)$	1	-1	$E(4)$	1	$-E(4)$	$-E(4)$	-1	$-E(4)$	$E(4)$	-1	1	$-E(4)$	-1	$E(4)$	$E(4)$	-1
χ_{17}	2	0	0	-2	-2	-2	0	0	0	0	0	2	2	2	0	0	0	0	-2	0
χ_{18}	2	0	0	2	-2	-2	0	0	0	0	0	-2	-2	2	0	0	0	0	2	0
χ_{19}	2	0	0	$-2 * E(4)$	-2	2	0	0	0	0	0	$2 * E(4)$	$-2 * E(4)$	-2	0	0	0	0	$2 * E(4)$	0
χ_{20}	2	0	0	$2 * E(4)$	-2	2	0	0	0	0	0	$-2 * E(4)$	$2 * E(4)$	-2	0	0	0	0	$-2 * E(4)$	0

Trivial source character table of $G \cong$ C4 x Q8 at $p = 2$:

Normalisers N_i	N_1	N_2	N_3	N_4	N_5	N_6	N_7	N_8	N_9	N_{10}	N_{11}	N_{12}	N_{13}	N_{14}	N_{15}	N_{16}	N_{17}	N_{18}	N_{19}	N_{20}	N_{21}	N_{22}	N_{23}	N_{24}	N_{25}	N_{26}	N_{27}	N_{28}	N_{29}	N_{30}	N_{31}	N_{32}	N_{33}	N_{34}	N_{35}
p-subgroups of G up to conjugacy in G	P_1	P_2	P_3	P_4	P_5	P_6	P_7	P_8	P_9	P_{10}	P_{11}	P_{12}	P_{13}	P_{14}	P_{15}	P_{16}	P_{17}	P_{18}	P_{19}	P_{20}	P_{21}	P_{22}	P_{23}	P_{24}	P_{25}	P_{26}	P_{27}	P_{28}	P_{29}	P_{30}	P_{31}	P_{32}	P_{33}	P_{34}	P_{35}
Representatives $n_j \in N_i$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16} + 2 \cdot \chi_{17} + 2 \cdot \chi_{18} + 2 \cdot \chi_{19} + 2 \cdot \chi_{20}$	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 2 \cdot \chi_{19} + 2 \cdot \chi_{20}$	16	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 2 \cdot \chi_{17} + 2 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	16	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	16	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	8	8	8	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	8	0	0	8	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 2 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	8	0	8	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 2 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	8	0	8	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	8	0	0	8	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	8	0	0	8	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	8	0	0	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 1 \cdot \chi_{19} + 1 \cdot \chi_{20}$	8	8	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 1 \cdot \chi_{19} + 1 \cdot \chi_{20}$	8	8	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	8	0	0	8	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 1 \cdot \chi_{19} + 1 \cdot \chi_{20}$	8	8	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	4	4	4	4	4	0	0	0	0	0	0	0	0	4	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	4	4	4	4	4	0	0	0	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	4	4	4	4	4	0	0	0	0	0	0	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	4	4	4	4	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	4	4	4	4	4	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	4	4	4	4	4	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	4	4	4	4	4	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	4	0	0	4	0	0	0	0	4	4	0	0	0	0	0	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	4	0	0	4	0	4	0	0	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	4	0	0	4	0	4	0	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	4	0	0	4	0	0	0	0	4	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	2	2	2	2	2	0	0	0	0	2	2	2	0	0	2	0	0	2	2	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	2	2	2	2	2	0	2	2	0	0	0	0	0	2	2	2	2	2	0	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	2	2	2	2	2	2	0	0	2	0	0	0	2	0	2	0	0	2	0	2	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	2	2	2	2	2	0	2	2	0	2	2	0	2	0	0	0	0	0	0	2	0	2	2	0	0	0	0	0	0	0	2	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	2	2	2	2	2	2	0	0	2	2	2	0	0	2	0	2	2	0	0	0	2	2	0	2	2	2	2	0	0	0	0	2	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	2	2	2	2	2	2	2	2	2	0	0	2	0	0	0	0	0	0	2	0	2	0	2	0	0	0	0	0	0	0	0	0	2	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	2	2	2	2	2	0	0	0	0	0	0	2	2	2	0	2	2	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

$P_1 = Group([()]) \cong$ 1

$P_2 = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32)]) \cong$ C2

$P_3 = Group([(1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28)]) \cong$ C2

$P_4 = Group([(1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32)]) \cong$ C2

$P_5 = Group([(1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32)]) \cong$ C2 x C2

$P_6 = Group([(1,32,5,28)(2,23,9,11)(3,30,12,21)(4,7,14,18)(6,27,16,17)(8,13,20,25)(10,31,22,24)(15,19,26,29), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32)]) \cong$ C4

$P_7 = Group([(1,4,16,26)(2,8,22,30)(3,11,25,31)(5,14,6,15)(7,17,29,32)(9,20,10,21)(12,23,13,24)(18,27,19,28), (1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28)]) \cong$ C4

$P_8 = Group([(1,15,16,14)(2,21,22,20)(3,24,25,23)(4,5,26,6)(7,28,29,27)(8,9,30,10)(11,12,31,13)(17,18,32,19), (1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28)]) \cong$ C4

$P_9 = Group([(1,27,5,17)(2,31,9,24)(3,20,12,8)(4,19,14,29)(6,32,16,28)(7,26,18,15)(10,23,22,11)(13,30,25,21), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32)]) \cong$ C4

$P_{10} = Group([(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32)]) \cong$ C4

$P_{11} = Group([(1,13,5,25)(2,19,9,29)(3,16,12,6)(4,24,14,31)(7,22,18,10)(8,28,20,32)(11,26,23,15)(17,30,27,21), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32)]) \cong$ C4

$P_{12} = Group([(1,18,6,29)(2,25,10,12)(3,9,13,22)(4,27,15,32)(5,7,16,19)(8,31,21,23)(11,20,24,30)(14,17,26,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32)]) \cong$ C4

$P_{13} = Group([(1,11,6,24)(2,17,10,28)(3,14,13,26)(4,25,15,12)(5,23,16,31)(7,20,19,30)(8,29,21,18)(9,27,22,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32)]) \cong$ C4

$P_{14} = Group([(1,21,5,30)(2,4,9,14)(3,32,12,28)(6,8,16,20)(7,23,18,11)(10,15,22,26)(13,27,25,17)(19,31,29,24), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32)]) \cong$ C4

$P_{15} = Group([(1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32)]) \cong$ C4

$P_{16} = Group([(1,8,5,20)(2,15,9,26)(3,27,12,17)(4,22,14,10)(6,21,16,30)(7,31,18,24)(11,19,23,29)(13,32,25,28), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32)]) \cong$ C4

$P_{17} = Group([(1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,8,5,20)(2,15,9,26)(3,27,12,17)(4,22,14,10)(6,21,16,30)(7,31,18,24)(11,19,23,29)(13,32,25,28)]) \cong$ C4 x C2

$P_{18} = Group([(1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23)]) \cong$ C4 x C2

$P_{19} = Group([(1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,18,6,29)(2,25,10,12)(3,9,13,22)(4,27,15,32)(5,7,16,19)(8,31,21,23)(11,20,24,30)(14,17,26,28)]) \cong$ C4 x C2

$P_{20} = Group([(1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,11,6,24)(2,17,10,28)(3,14,13,26)(4,25,15,12)(5,23,16,31)(7,20,19,30)(8,29,21,18)(9,27,22,32)]) \cong$ C4 x C2

$P_{21} = Group([(1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,27,5,17)(2,31,9,24)(3,20,12,8)(4,19,14,29)(6,32,16,28)(7,26,18,15)(10,23,22,11)(13,30,25,21)]) \cong$ C4 x C2

$P_{22} = Group([(1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \cong$ C4 x C2

$P_{23} = Group([(1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,4,16,26)(2,8,22,30)(3,11,25,31)(5,14,6,15)(7,17,29,32)(9,20,10,21)(12,23,13,24)(18,27,19,28)]) \cong$ C4 x C2

$P_{24} = Group([(1,8,5,20)(2,15,9,26)(3,27,12,17)(4,22,14,10)(6,21,16,30)(7,31,18,24)(11,19,23,29)(13,32,25,28), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32)]) \cong$ Q8

$P_{25} = Group([(1,8,5,20)(2,15,9,26)(3,27,12,17)(4,22,14,10)(6,21,16,30)(7,31,18,24)(11,19,23,29)(13,32,25,28), (1,13,5,25)(2,19,9,29)(3,16,12,6)(4,24,14,31)(7,22,18,10)(8,28,20,32)(11,26,23,15)(17,30,27,21), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32)]) \cong$ Q8

$P_{26} = Group([(1,21,5,30)(2,4,9,14)(3,32,12,28)(6,8,16,20)(7,23,18,11)(10,15,22,26)(13,27,25,17)(19,31,29,24), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32)]) \cong$ Q8

$P_{27} = Group([(1,21,5,30)(2,4,9,14)(3,32,12,28)(6,8,16,20)(7,23,18,11)(10,15,22,26)(13,27,25,17)(19,31,29,24), (1,13,5,25)(2,19,9,29)(3,16,12,6)(4,24,14,31)(7,22,18,10)(8,28,20,32)(11,26,23,15)(17,30,27,21), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32)]) \cong$ Q8

$P_{28} = Group([(1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23)]) \cong$ C4 : C4

$P_{29} = Group([(1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,4,16,26)(2,8,22,30)(3,11,25,31)(5,14,6,15)(7,17,29,32)(9,20,10,21)(12,23,13,24)(18,27,19,28), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23)]) \cong$ C4 x C4

$P_{30} = Group([(1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,11,6,24)(2,17,10,28)(3,14,13,26)(4,25,15,12)(5,23,16,31)(7,20,19,30)(8,29,21,18)(9,27,22,32), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23)]) \cong$ C4 : C4

$P_{31} = Group([(1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,4,16,26)(2,8,22,30)(3,11,25,31)(5,14,6,15)(7,17,29,32)(9,20,10,21)(12,23,13,24)(18,27,19,28), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \cong$ C4 x C4

$P_{32} = Group([(1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,8,5,20)(2,15,9,26)(3,27,12,17)(4,22,14,10)(6,21,16,30)(7,31,18,24)(11,19,23,29)(13,32,25,28)]) \cong$ C2 x Q8

$P_{33} = Group([(1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,4,16,26)(2,8,22,30)(3,11,25,31)(5,14,6,15)(7,17,29,32)(9,20,10,21)(12,23,13,24)(18,27,19,28), (1,18,6,29)(2,25,10,12)(3,9,13,22)(4,27,15,32)(5,7,16,19)(8,31,21,23)(11,20,24,30)(14,17,26,28)]) \cong$ C4 x C4

$P_{34} = Group([(1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,11,6,24)(2,17,10,28)(3,14,13,26)(4,25,15,12)(5,23,16,31)(7,20,19,30)(8,29,21,18)(9,27,22,32), (1,8,5,20)(2,15,9,26)(3,27,12,17)(4,22,14,10)(6,21,16,30)(7,31,18,24)(11,19,23,29)(13,32,25,28)]) \cong$ C4 : C4

$P_{35} = Group([(1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,4,16,26)(2,8,22,30)(3,11,25,31)(5,14,6,15)(7,17,29,32)(9,20,10,21)(12,23,13,24)(18,27,19,28), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23)]) \cong$ C4 x Q8

$N_1 = Group([(1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,4,16,26)(2,8,22,30)(3,11,25,31)(5,14,6,15)(7,17,29,32)(9,20,10,21)(12,23,13,24)(18,27,19,28), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32)]) \cong$ C4 x Q8

$N_2 = Group([(1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,4,16,26)(2,8,22,30)(3,11,25,31)(5,14,6,15)(7,17,29,32)(9,20,10,21)(12,23,13,24)(18,27,19,28), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32)]) \cong$ C4 x Q8

$N_3 = Group([(1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,4,16,26)(2,8,22,30)(3,11,25,31)(5,14,6,15)(7,17,29,32)(9,20,10,21)(12,23,13,24)(18,27,19,28), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32)]) \cong$ C4 x Q8

$N_4 = Group([(1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,4,16,26)(2,8,22,30)(3,11,25,31)(5,14,6,15)(7,17,29,32)(9,20,10,21)(12,23,13,24)(18,27,19,28), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32)]) \cong$ C4 x Q8

$N_5 = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,4,16,26)(2,8,22,30)(3,11,25,31)(5,14,6,15)(7,17,29,32)(9,20,10,21)(12,23,13,24)(18,27,19,28)]) \cong$ C4 x Q8

$N_6 = Group([(1,32,5,28)(2,23,9,11)(3,30,12,21)(4,7,14,18)(6,27,16,17)(8,13,20,25)(10,31,22,24)(15,19,26,29), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \cong$ C4 x Q8

$N_7 = Group([(1,4,16,26)(2,8,22,30)(3,11,25,31)(5,14,6,15)(7,17,29,32)(9,20,10,21)(12,23,13,24)(18,27,19,28), (1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \cong$ C4 x Q8

$N_8 = Group([(1,15,16,14)(2,21,22,20)(3,24,25,23)(4,5,26,6)(7,28,29,27)(8,9,30,10)(11,12,31,13)(17,18,32,19), (1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \cong$ C4 x Q8

$N_9 = Group([(1,27,5,17)(2,31,9,24)(3,20,12,8)(4,19,14,29)(6,32,16,28)(7,26,18,15)(10,23,22,11)(13,30,25,21), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \cong$ C4 x Q8

$N_{10} = Group([(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,4,16,26)(2,8,22,30)(3,11,25,31)(5,14,6,15)(7,17,29,32)(9,20,10,21)(12,23,13,24)(18,27,19,28)]) \cong$ C4 x Q8

$N_{11} = Group([(1,13,5,25)(2,19,9,29)(3,16,12,6)(4,24,14,31)(7,22,18,10)(8,28,20,32)(11,26,23,15)(17,30,27,21), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,4,16,26)(2,8,22,30)(3,11,25,31)(5,14,6,15)(7,17,29,32)(9,20,10,21)(12,23,13,24)(18,27,19,28)]) \cong$ C4 x Q8

$N_{12} = Group([(1,18,6,29)(2,25,10,12)(3,9,13,22)(4,27,15,32)(5,7,16,19)(8,31,21,23)(11,20,24,30)(14,17,26,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,4,16,26)(2,8,22,30)(3,11,25,31)(5,14,6,15)(7,17,29,32)(9,20,10,21)(12,23,13,24)(18,27,19,28)]) \cong$ C4 x C4

$N_{13} = Group([(1,11,6,24)(2,17,10,28)(3,14,13,26)(4,25,15,12)(5,23,16,31)(7,20,19,30)(8,29,21,18)(9,27,22,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \cong$ C4 x C4

$N_{14} = Group([(1,21,5,30)(2,4,9,14)(3,32,12,28)(6,8,16,20)(7,23,18,11)(10,15,22,26)(13,27,25,17)(19,31,29,24), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \cong$ C4 x Q8

$N_{15} = Group([(1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,4,16,26)(2,8,22,30)(3,11,25,31)(5,14,6,15)(7,17,29,32)(9,20,10,21)(12,23,13,24)(18,27,19,28)]) \cong$ C4 x C4

$N_{16} = Group([(1,8,5,20)(2,15,9,26)(3,27,12,17)(4,22,14,10)(6,21,16,30)(7,31,18,24)(11,19,23,29)(13,32,25,28), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \cong$ C4 x Q8

$N_{17} = Group([(1,8,5,20)(2,15,9,26)(3,27,12,17)(4,22,14,10)(6,21,16,30)(7,31,18,24)(11,19,23,29)(13,32,25,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \cong$ C4 x Q8

$N_{18} = Group([(1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,4,16,26)(2,8,22,30)(3,11,25,31)(5,14,6,15)(7,17,29,32)(9,20,10,21)(12,23,13,24)(18,27,19,28)]) \cong$ C4 x Q8

$N_{19} = Group([(1,18,6,29)(2,25,10,12)(3,9,13,22)(4,27,15,32)(5,7,16,19)(8,31,21,23)(11,20,24,30)(14,17,26,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,4,16,26)(2,8,22,30)(3,11,25,31)(5,14,6,15)(7,17,29,32)(9,20,10,21)(12,23,13,24)(18,27,19,28)]) \cong$ C4 x Q8

$N_{20} = Group([(1,11,6,24)(2,17,10,28)(3,14,13,26)(4,25,15,12)(5,23,16,31)(7,20,19,30)(8,29,21,18)(9,27,22,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \cong$ C4 x Q8

$N_{21} = Group([(1,27,5,17)(2,31,9,24)(3,20,12,8)(4,19,14,29)(6,32,16,28)(7,26,18,15)(10,23,22,11)(13,30,25,21), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \cong$ C4 x Q8

$N_{22} = Group([(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,4,16,26)(2,8,22,30)(3,11,25,31)(5,14,6,15)(7,17,29,32)(9,20,10,21)(12,23,13,24)(18,27,19,28)]) \cong$ C4 x Q8

$N_{23} = Group([(1,4,16,26)(2,8,22,30)(3,11,25,31)(5,14,6,15)(7,17,29,32)(9,20,10,21)(12,23,13,24)(18,27,19,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \cong$ C4 x Q8

$N_{24} = Group([(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,8,5,20)(2,15,9,26)(3,27,12,17)(4,22,14,10)(6,21,16,30)(7,31,18,24)(11,19,23,29)(13,32,25,28), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23)]) \cong$ C4 x Q8

$N_{25} = Group([(1,13,5,25)(2,19,9,29)(3,16,12,6)(4,24,14,31)(7,22,18,10)(8,28,20,32)(11,26,23,15)(17,30,27,21), (1,8,5,20)(2,15,9,26)(3,27,12,17)(4,22,14,10)(6,21,16,30)(7,31,18,24)(11,19,23,29)(13,32,25,28), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23)]) \cong$ C4 x Q8

$N_{26} = Group([(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,21,5,30)(2,4,9,14)(3,32,12,28)(6,8,16,20)(7,23,18,11)(10,15,22,26)(13,27,25,17)(19,31,29,24), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23)]) \cong$ C4 x Q8

$N_{27} = Group([(1,13,5,25)(2,19,9,29)(3,16,12,6)(4,24,14,31)(7,22,18,10)(8,28,20,32)(11,26,23,15)(17,30,27,21), (1,21,5,30)(2,4,9,14)(3,32,12,28)(6,8,16,20)(7,23,18,11)(10,15,22,26)(13,27,25,17)(19,31,29,24), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23)]) \cong$ C4 x Q8

$N_{28} = Group([(1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,4,16,26)(2,8,22,30)(3,11,25,31)(5,14,6,15)(7,17,29,32)(9,20,10,21)(12,23,13,24)(18,27,19,28)]) \cong$ C4 x Q8

$N_{29} = Group([(1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,4,16,26)(2,8,22,30)(3,11,25,31)(5,14,6,15)(7,17,29,32)(9,20,10,21)(12,23,13,24)(18,27,19,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \cong$ C4 x Q8

$N_{30} = Group([(1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,11,6,24)(2,17,10,28)(3,14,13,26)(4,25,15,12)(5,23,16,31)(7,20,19,30)(8,29,21,18)(9,27,22,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \cong$ C4 x Q8

$N_{31} = Group([(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,4,16,26)(2,8,22,30)(3,11,25,31)(5,14,6,15)(7,17,29,32)(9,20,10,21)(12,23,13,24)(18,27,19,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23)]) \cong$ C4 x Q8

$N_{32} = Group([(1,8,5,20)(2,15,9,26)(3,27,12,17)(4,22,14,10)(6,21,16,30)(7,31,18,24)(11,19,23,29)(13,32,25,28), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23)]) \cong$ C4 x Q8

$N_{33} = Group([(1,18,6,29)(2,25,10,12)(3,9,13,22)(4,27,15,32)(5,7,16,19)(8,31,21,23)(11,20,24,30)(14,17,26,28), (1,4,16,26)(2,8,22,30)(3,11,25,31)(5,14,6,15)(7,17,29,32)(9,20,10,21)(12,23,13,24)(18,27,19,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23)]) \cong$ C4 x Q8

$N_{34} = Group([(1,8,5,20)(2,15,9,26)(3,27,12,17)(4,22,14,10)(6,21,16,30)(7,31,18,24)(11,19,23,29)(13,32,25,28), (1,11,6,24)(2,17,10,28)(3,14,13,26)(4,25,15,12)(5,23,16,31)(7,20,19,30)(8,29,21,18)(9,27,22,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23)]) \cong$ C4 x Q8

$N_{35} = Group([(1,2,6,10)(3,18,13,29)(4,8,15,21)(5,9,16,22)(7,25,19,12)(11,27,24,32)(14,20,26,30)(17,31,28,23), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,4,16,26)(2,8,22,30)(3,11,25,31)(5,14,6,15)(7,17,29,32)(9,20,10,21)(12,23,13,24)(18,27,19,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28)]) \cong$ C4 x Q8