The group G is isomorphic to the group labelled by [32, 29] in the Small Groups library Ordinary character table of $G \cong (C2 \times Q8) : C2$:

	1a	4a	4b	2a	2b	2c	4c	4d	4e	4f	2d	2e	4g	4h
(1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	1	-1	-1	-1	1	1	1	1	1	-1	-1	1	-1	1
(3	1	-1	-1	1	1	1	1	-1	-1	-1	1	1	1	-1
(4	1	-1	1	-1	1	1	-1	1	-1	1	-1	1	1	-1
(5	1	-1	1	1	1	1	-1	-1	1	1	1	1	-1	1
6	1	1	-1	-1	1	1	-1	-1	1	-1	-1	1	1	1
7	1	1	-1	1	1	1	-1	1	-1	-1	1	1	-1	-1
(8	1	1	1	-1	1	1	1	-1	-1	1	-1	1	-1	-1
9	2	0	0	2	-2	2	0	0	0	0	-2	-2	0	0
(10	2	0	0	-2	-2	2	0	0	0	0	2	-2	0	0
11	2	0	-2	0	2	-2	0	0	0	2	0	-2	0	0
12	2	0	2	0	2	-2	0	0	0	-2	0	-2	0	0
13	2	0	0	0	-2	-2	0	0	-2 * E(4)	0	0	2	0	2 * E(4)
14	2	0	0	0	-2	-2	0	0	2*E(4)	0	0	2	0	-2*E(4)

Trivial source character table of $G \cong (C2 \times Q8)$: C2 at p = 2:

Normalisers N_i	N T N T	1.7	N T	A7 A	7 17	N 7	N T N T	1.7	A7	A 7	A 7 A 7	λ7	1.77	N 7 N	7 1	7 1	7 177	1.7	1.7	1 1 1	λī	77 7	7 77		17			7 1	7 77	17
-	N_1 N_2		1V ₄	$\frac{N_5}{D}$	6 IV ₇	N ₈			N_{12}	-	$N_{14} \mid N$	-		N_{18} N_{18}			$N_{21} \mid N_2$	-	N_{24}	N ₂₅	N_{26}	$\frac{N_{27}}{D}$	$N_{28} \mid N_2$		$\frac{1}{2}$	N_{32}	55	91		N_{37}
p-subgroups of G up to conjugacy in G	P_1 P_2	_	P_4	P_5 F	$\stackrel{?}{\scriptstyle 6} P_7$	P_8	$\frac{P_9}{1} P_{10}$	P_{11}	P_{12}	P_{13}	P_{14} P	$P_{15} P_{16}$	P_{17}	P_{18} I	$P_{19} \mid P$	$rac{r}{20}$ R	$P_{21} P_{22}$	P_{23}	P_{24}	P_{25}	P_{26}	$\frac{P_{27}}{1}$	$P_{28} \mid P_{29}$	$\frac{1}{2}$	P_{31}	P_{32}				P_{37}
Representatives $n_j \in N_i$	$\begin{array}{c cccc} 1a & 1a \\ \hline 22 & 0 \end{array}$		$\frac{1a}{a}$	$\frac{1a}{a}$	$\frac{a}{a}$	$\frac{1a}{2}$	$\frac{1a}{a}$	1 <i>a</i>	$\frac{1a}{a}$	$\frac{1a}{a}$	$\frac{1a}{a}$	$\frac{a}{a}$	1 <i>a</i>	1 <i>a</i>	$\frac{1a}{a}$	$\frac{1a}{2}$	$\frac{1a}{a}$	$\frac{1a}{a}$	$\frac{1a}{a}$	1 <i>a</i>	$\frac{1a}{2}$	$\frac{1a}{a}$	$\frac{a}{a}$	$\frac{1a}{a}$	$\frac{1a}{a}$	$\frac{1a}{a}$	$\begin{array}{ c c c c c }\hline 1a & 1 \\ \hline \end{array}$	$\frac{a}{a}$		a $1a$
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 2 \cdot \chi_9 + 2 \cdot \chi_{10} + 2 \cdot \chi_{11} + 2 \cdot \chi_{12} + 2 \cdot \chi_{13} + 2 \cdot \chi_{14}$		0	0	0 () 0	0	0 0	0	0	0	0 () 0	0	0	0 (0	0 0	0	0	0	0	0 '	$\frac{0}{0}$	$\frac{0}{0}$	0	0	0	0 (0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 2 \cdot \chi_{11} + 2 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	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 '	$\frac{0}{0}$	$\frac{0}{0}$	0	0	0	0 (0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 2 \cdot \chi_9 + 2 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	16 0	1 - 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	$\frac{0}{0}$	$\frac{0}{1}$	0	0	0 (0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 2 \cdot \chi_{13} + 2 \cdot \chi_{14}$	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
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 2 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14}$	16 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 0	
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 2 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14}$	16 0	0	0	0 8	3 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	
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 2 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	8 0		0	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	
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	8 8	8	8	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	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14}$	8 0	0	8	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	0 0	0 0	
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	8 8	0	0	4	4 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 0	0 0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 2 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	8 0	8	0	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
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14}$	8 0	0	8	4	4 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	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	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	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 2 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	8 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 (0 0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 2 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	8 8	0	0	0 (0 0	0	0 0	0	0	0	0 0	3 0	0	0	0 (0	0 0	0	0	0	0	0	0 0	0	0	0	0	0 (0 0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14}$	8 0	0	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
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	8 8	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	0	0	0	0	0	0 0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	8 8	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	0	0	0	0	0 0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	4 4	4	4	0 (0 (4	0 0	0	0	0	0 (0	0	4	4 (0	0 0	0	0	0	0	0	0 0	0	0	0	0	0	0 0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	4 4	0	0	0 (0 0	0	0 0	0	0	2	0 4	1 0	0	2	0 2	2	0 0	0	0	0	0	0	0 0	0	0	0	0	0	0 0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	4 4	4	4	0 (0 (4	0 0	0	0	0	0 (0	4	0	0 (0	4 0	0	0	0	0	0	0 0	0	0	0	0	0	0 0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	4 4	4	4	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	0	0	0 0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	4 4	4	4	0 (0 (4	0 0	0	0	0	4	1 0	0	0	0 (0	0 0	4	0	0	0	0	0 0	0	0	0	0	0 (0 0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	4 4	4	4	0 (0 (4	4 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	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	4 4	4	4	4	4	4	0 4	4	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
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	4 4	0	0	2 2	2 0	0	0 2	0	0	0	0 4	1 0	2	0	0 (0	0 0	0	0	0	2	0	0 0	0	0	0	0	0 (0 0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	4 4	0	0	2 2	2 0	0	0 2	0	0	0	4 (0	2	0	0 (0	0 0	0	0	0	0	2	0 0	0	0	0	0	0 (0 0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	4 4	0	0	0 (0 0	0	0 0	0	0	2	4 (0	0	2	0 (0	0 0	0	0	0	0	0	$\overline{2}$ 0	0	0	0	0	0 (0 0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	4 4	4	4	0 (0 (4	0 0	0	0	0	0 () 4	0	0	0 (0	0 0	0	0	0	0	0	0 4	0	0	0	0	0 (0 0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	2 2	2	2	2 2	2 2	2	0 2	2	2	0	0 () 2	0	2	2 (0	0 0	0	0	2	0	0	$\overline{0}$ 2	2	0	0	0	0 (0 0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	2 2	2	2	0 (0 (2	2 0	0	0	0	0 (0	2	2	2 (0	2 0	0	2	0	0	0	0 0	0	2	0	0	0 (0 0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	2 2	2	2	2 2	2 2	2	0 2	2	2	0	2 2	2 0	2	0	0 (0	2 0	2	0	2	2	2	0 0	0	0	2	0	0 (0 0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}$	2 2	2	2	0 (0 (2	0 0	0	0	2	2 2	2 0	0	2	2 2	2	0 2	2	0	0	0	0	$\overline{2}$ $\overline{0}$	0	0	0	2	0 1	$0 \downarrow 0$	0
$\frac{1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}}{1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}}$	2 2	2	2	0 (0 0	2	2 0	0	0	0	2 2	2 2	0	0	0 (0	0 0	2	2	0	0	0	$\overline{0}$ $\overline{2}$	0	0	0	0	2	0 0	0
$\frac{1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}}{1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}}$	2 2	2	2	2 2	2 2	2	2 2	2	2	2	0 (0	0	0	0 (0	0 2	0	2	2	0	0	$\overline{0 0}$	0	0	0	0	0 '	$\overline{2}$ $\overline{0}$	0
$\frac{1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}}{1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}}$	2 2	2	2	0 (0 0	2	0 0	0	0	2	0 () 2	2	0	0 (0	2 2	0	0	0	0	0	$\overline{0 2}$	0	0	0	0	0 /	$\overline{0 2}$	0
$\frac{1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}}{1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14}}$	1 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	$\overline{1}$ $\overline{1}$	1	1	1	1	1	$\frac{1}{1}$	1
$\frac{1}{\sqrt{2}} = \frac{1}{\sqrt{2}} = 1$																		1 '												

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

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P_2 = 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(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(1,23)(
P_3 = 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(3,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,32)(12,
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 $P_6 = Group([(1,14)(2,20)(3,23)(4,5)(6,26)(7,27)(8,9)(10,30)(11,12)(13,31)(15,16)(17,18)(19,32)(21,22)(24,25)(28,29)]) \cong \mathbb{C}^2$

= 0	up([(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),(1,5)(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)(27,32),(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)(27,32),(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)(27,32),(1,5)(27,32)(27,32),(1,5)(27,32)(27,32),(1,5)(27,32)(27,32),(1,5)(27,32)(27,32),(1,5)(27,32)(27,32),(1,5)(27,32)(27,32),(1,5)(27,32)(27,32),(1,5)(27,32),(1	$(28,32)]) \cong C2 \times C2$
= 0	$up([(1\ 32\ 16\ 17)(2\ 24\ 22\ 23)(3\ 30\ 25\ 8)(4\ 18\ 26\ 19)(5\ 28\ 6\ 27)(7\ 15\ 29\ 14)(9\ 31\ 10\ 11)(12\ 21\ 13\ 20)(1\ 16)(2\ 22)(3\ 25)(4\ 26)(5\ 6)(7\ 29)(8\ 30)(9\ 10)(11\ 31)(12\ 13)(14\ 15)(17\ 32)(18\ 19)(20\ 21)(23\ 24)(27\ 22)(3\ 25)(4\ 26)(5\ 6)(7\ 29)(8\ 30)(9\ 10)(11\ 31)(12\ 13)(14\ 15)(17\ 32)(18\ 19)(20\ 21)(23\ 24)(27\ 22)(3\ 25)(4\ 26)(5\ 6)(7\ 29)(8\ 30)(9\ 10)(11\ 31)(12\ 13)(14\ 15)(17\ 32)(18\ 19)(20\ 21)(23\ 24)(27\ 22)(3\ 25)(4\ 26)(5\ 6)(7\ 29)(8\ 30)(9\ 10)(11\ 31)(12\ 13)(14\ 15)(17\ 32)(18\ 19)(20\ 21)(23\ 24)(27\ 22)(23\ 22)(23\ 25$	(3) $\cong C4$

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

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

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

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

 $N_1 = Group([(1,2,5,9)(3,18,12,7)(4,21,14,30)(6,10,16,22)(8,26,20,15)(11,24)(12,23)(13,24)(16,26)(17,27)(19,29)(21,30)(24,31)(27,32)] \\ \cong (C_2 \times Q_8) : C_2 \times Q_8) : C_3 \times Q_8 : C_2 \times Q_8 : C_2 \times Q_8 : C_2 \times Q_8 : C_3 \times Q_8 : C_3 \times Q_8 : C_4 \times Q$ $N_2 = Group([(1,2,5,9)(3,18,12,7)(4,21,14,30)(6,13,12,23,28)(13,29,25,19)(17,24,27,31),(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,12,23,28)(13,29,25,19)(17,24,27,31),(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,12,23,28)(13,29,25,19)(17,24,27,31),(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,12,23,28)(13,29,25,19)(17,24,27,31),(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,12,23,28)(13,29,25,19)(17,24,27,31),(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,12,23,28)(13,29,25,19)(17,24,27,31),(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,12,23,28)(13,29,25,19)(17,24,27,31),(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,12,23,28)(13,29,25,19)(17,24,27,31),(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,12,23,28)(13,29,25,19)(17,24,27,31),(1,3,5,12)(2,7,9,18)(13,29,25,19)(17,24,27,31),(1,3,5,12)(2,7,9,18)(13,29,25,19)(17,24,27,31),(1,3,23,28)(13,29,25,19)(17,24,27,31),(1,3,23,28)(13,29,25,19)(17,24,27,31),(1,3,23,28)(13,29,25,19)(17,24,27,31),(1,3,23,28)(13,29,25,19)(17,24,27,31),(1,3,23,28)(13,29,25,19)(17,24,27,31),(1,3,23,28)(13,29,25,19)(17,24,27,31),(1,3,23,28)(13,29,25,19)(17,24,27,31),(1,3,23,28)(13,29,25,19)(17,24,27,31),(1,3,23,28)(13,29,25,19)(17,24,27,31),(1,3,23,28)(13,29,25,19)(17,24,27,31),(1,3,23,28)(13,29,25,19)(17,24,27,31),(1,3,23,28)(13,29,25,19)(17,24,27,31),(1,3,23,28)(13,29,25,19)(17,24,27,31),(1,3,23,28)(13,29,25,19)(17,24,27,31),(1,3,23,28)(13,29,25,19)(17,24,27,28)(17,24,28)(1$ $N_3 = Group([(1,2,5,9)(3,18,12,7)(4,21,14,30)(6,10,16,22)(8,26,20,15)(11,24)(12,23)(13,24)(16,26)(17,27)(19,29)(21,30)(24,31)(27,32)] \\ \cong (C_2 \times Q_8): C_2 \times Q_8: C$

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N_5 = Group([(1,4)(2,8)(3,11)(5,14)(6,15)(7,17)(9,20)(10,21)(12,23)(13,24)(16,26)(17,27)(19,29)(21,30)(24,31)(29,32),(1,5,5,13)(2,9,9,19)(3,6,12,16)(4,31,14,24)(7,10,18,22)(8,32,20,28)(11,15,23,26)(17,21,27,30)]) \\ \cong C_4 \times C_2 \times C_2 \times C_3 \times C_4 \times C_4 \times C_4 \times C_5 \times C_5
N_6 = Group([(1,14)(2,20)(3,23)(4,5)(6,26)(7,27)(8,9)(10,30)(11,12)(13,31)(15,16)(17,18)(29,32)(13,24)(16,26)(17,27)(19,29)(15,24,26,31)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,23)(21,
N_7 = 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)(22,30)(25,31)(27,32), (1,2,5,9)(3,18,12,7)(4,21,14,30)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)] \\ \cong (C2 \times Q8) : C2 \times Q8 : C3 \times Q8 :
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 $N_4 = Group([(1,2,5,9)(3,18,12,7)(4,21,14,30)(6,10,16,22)(8,26,20,15)(11,23)(13,24)(16,25)(8,17,20,27)(10,19,22)(11,23)(13,24)(16,25)(8,17,20,27)(10,19,22)(11,24)(12,25)(14,26)(17,24)(12,25)(12,24$

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

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

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N_{11} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(4,26)(17,28)(13,29)(21,22)(24,25)(28,29), \\ (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 (C2 \times Q8) : C2 \times Q8 : C3 \times Q8 :
N_{12} = 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), \\ (1,4)(2,8)(3,11)(5,14)(6,15)(7,17)(9,20)(10,21)(12,23)(13,24)(16,26)(18,27)(19,28)(22,30)(25,31)(29,32), \\ (1,4)(2,8)(3,11)(5,14)(6,15)(7,17)(9,20)(10,21)(12,23)(13,24)(16,26)(18,27)(19,28)(22,30)(25,31)(29,32), \\ (1,4)(2,8)(3,11)(5,14)(6,15)(7,17)(9,20)(10,21)(12,23)(13,24)(16,26)(18,27)(19,28)(22,30)(25,31)(29,32), \\ (1,4)(2,8)(3,11)(5,14)(6,15)(12,23)(13,24)(16,26)(18,27)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,28)(19,
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- $N_{22} = Group([(1,18,5,7)(2,3,9,12)(4,32,14,28)(6,29,16,19)(8,24,20,31)(10,13,22,25)(11,30,23,21)(15,27,26,17),(1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,24)(12,25)(14,26)(17,27)(19,29)(21,30)(24,31)(27,32),(1,2,5,9)(3,18,12,7)(4,21,14,30)(6,10,16,22)(8,26,20,15)(11,32,23,28)(13,24)(16,26)(17,27)(19,29)(21,30)(24,31)(27,32),(1,2,5,9)(3,18,12,7)(4,21,14,30)(6,10,16,22)(11,24)(12,25)(14,26)(17,27)(19,29)(21,30)(24,31)(27,32),(11,24)(12,25)(14,26)(17,27)(19,29)(21,30)(24,31)(27,32),(11,24)(12,25)(14,26)(17,27)(19,29)(21,30)(24,31)(27,32),(11,24)(12,25)(14,26)(17,27)(19,29)(21,30)(24,31)(27,32),(11,24)(12,25)(14,26)(17,27)(19,29)(21,30)(24,31)(27,32),(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(12,25)($ $N_{23} = Group([(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(27,32),(1,2,5,9)(3,12)(4,26,31)(27,32),(1,2,5,9)(3,12)(4,26,31)(27,32),(1,2,5,9)(3,12)(4,26,31)(27,32),(1,2,3)(27,3$
- $N_{24} = Group([(1,32,16,17)(2,24,22,23)(3,30,25,8)(4,18,26,17)(2,24,22,23)(3,30,25,8)(4,18,26,17)(2,24,22,23)(3,30,25,8)(4,18,26,17)(2,24,27,31),(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \\ \cong (C2 \times Q8) : C2 \times Q8) : C2 \times Q8) : C2 \times Q8$
- $N_{25} = Group([(1,4)(2,8)(3,11)(5,14)(6,15)(7,17)(9,20)(10,21)(12,23)(13,24)(16,25)(14,26)(17,27)(19,29)(21,30)(24,31)(27,32), \\ (1,5)(2,9)(3,12)(4,14)(6,15)(7,17)(9,20)(10,21)(12,23)(13,24)(16,25)(14,26)(17,27)(19,29)(15,24,26,31)(27,32), \\ (1,2,5,9)(3,18,12,7)(4,21,14,30)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)] \\ = (C_{2} \times Q_{8}) \times (C_{2} \times$
- $N_{26} = Group([(1,13,5,25)(2,19,9,29)(3,16,12,6)(4,24,14,31)(7,22,18,10)(8,28,20,32)(11,26,23,15)(17,30,27,21),(1,5)(2,9)(3,12)(4,14)(6,16)(7,17)(9,20)(10,21)(12,23)(13,24)(16,26)(17,27)(19,29)(21,30)(24,31)(28,32),(1,4)(2,8)(3,11)(5,14)(6,15)(7,17)(9,20)(10,21)(12,23)(13,24)(16,26)(17,27)(19,29)(21,30)(24,31)(28,32),(1,4)(2,8)(3,11)(5,14)(6,15)(7,17)(9,20)(10,21)(12,23)(13,24)(16,26)(17,27)(19,29)(21,30)(24,31)(28,32),(1,4)(28$
- $N_{27} = Group([(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32),(1,5)(2,9)(3,12)(4,14)(6,16)(7,17)(9,20)(10,22)(11,24)(12,25)(14,26)(17,27)(19,29)(21,30)(24,31)(2$
- $N_{28} = Group([(1,2,5,9)(3,18,12,7)(4,21,14,30)(6,10,16,22)(8,26,20,15)(11,32,32,32)(13,29,25,19)(17,24,27,31),(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(14,26)(17,28)(13,29,25,19)(17,24,27,31),(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(14,26)(17,28)(14,26)(17,28)(14,26)(17,28)(14,26)(17,28)(14,26)(17,28)(14,26)(17,28)(14,26)(17,28)(14,$ $N_{29} = Group([(1,21,16,20)(2,26,22,4)(3,32,25,17)(5,30,6,8)(7,24,29,23)(9,15,10,14)(11,18,31,19)(12,28,13,27),(1,5)(2,9)(3,12)(4,14)(6,16)(7,19)(8,20)(13,29,25,19)(17,24,27,31),(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(13,29,25,19)(17,24,27,31),(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(13,29,25,19)(17,24,27,31),(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(13,29,25,19)(17,24,27,31),(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(13,29,25,19)(17,24,27,31),(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(13,29,25,19)(17,24,27,31),(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(13,29,25,19)(17,24,27,31),(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(13,29,25,19)(17,24,27,31),(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(13,29,29,25)(13,29,29,25)(13,29,29,25)(13,29,29,29)(13,29,29,29)(13,29,29,29)(13,29,29,29)(13,29,29,29)(13,29,29,29)(13,29,29,29)(13,29,29,29)(13,29,29,29)(13,29,29,29)(13,29,29,29)(13,29,29,29)(13,29,29,29)(13,29$
- $N_{30} = Group([(1,2,5,9)(3,18,12,7)(4,21,14,30)(6,10,16,22)(8,26,20,15)(11,32,23,28)(13,29,25,19)(17,24,27,31),(1,4)(2,8)(3,11)(5,14)(6,15)(7,17)(9,20)(10,21)(12,23)(13,24)(16,26)(17,27)(19,29)(21,30)(24,31)(27,32),(1,5)(2,9)(3,12)(4,14)(6,15)(7,17)(9,20)(10,21)(12,23)(13,24)(16,26)(17,27)(19,29)(21,30)(24,31)(27,32),(1,5)(2,9)(21,30)(24,31)(27,32),(1,5)(2,9)(21,30)(24,31)(27,32),(1,5)(2,9)(21,30)(24,31)(27,32),(1,5)(29,32),(1,$
- $N_{31} = Group([(1,2,5,9)(3,18,12,7)(4,21,14,30)(6,10,16,22)(8,26,20,15)(11,32,23,28)(13,29,25,19)(17,24,27,31),(1,11,5,23)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \\ \cong (C2 \times Q8) : C2 C2 \times Q8 + C2$ $N_{32} = Group([(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,4)(2,8)(3,11)(5,14)(6,15)(7,17)(9,20)(10,21)(12,23)(13,24)(16,26)(17,27)(19,29)(21,30)(24,31)(27,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,24)(12,25)(14,26)(17,27)(19,29)(21,30)(24,31)(27,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,24)(12,25)(14,26)(17,27)(19,29)(21,30)(24,31)(27,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,24)(12,25)(14,26)(17,27)(19,29)(21,30)(24,31)(27,32), (1,5)(2,9)(21,30)(24,31)(27,32), (1,5)(27,32)(17,27)(19,29)(21,30)(24,31)(27,32), (1,5)(27,32)(17,27)(19,29)(21,30)(24,31)(27,32), (1,5)(27,32)(17,27)(19,29)(21,30)(24,31)(27,32), (1,5)(27,32)(17,27)(19,29)(21,30)(24,31)(27,32), (1,5)(27,32)(17,27)(19,29)(21,30)(24,31)(27,32), (1,5)(27,32)(17,27)(19,29)(21,30)(24,31)(27,32), (1,5)(27,32)(17,27)(19,29)(21,30)(24,31)(27,32), (1,5)(27,32)(17,27)(19,29)(21,30)(24,31)(27,32), (1,5)(27,32)(17,27)(19,29)(21,30)(27,32), (1,5)(27,32)(17,27)(19,29)(21,30)(27,32), (1,5)(27,32)(17$
- $N_{33} = Group([(1,2,5,9)(3,18,12,7)(4,21,14,30)(6,10,16,22)(8,26,20,15)(11,24)(22,29)(15,24,26,31)(21,28,30,32), (1,5)(2,9)(3,12)(4,14)(6,15)(7,17)(9,20)(10,21)(12,23)(13,24)(16,26)(17,27)(19,29)(21,30)(24,31)(27,32), (1,4)(2,8)(3,11)(5,14)(6,15)(7,17)(9,20)(10,21)(12,23)(13,24)(16,26)(17,27)(19,29)(21,30)(24,31)(27,32), (1,4)(2,8)(3,11)(5,14)(6,15)(7,17)(9,20)(10,21)(12,23)(13,24)(16,26)(17,27)(19,29)(21,30)(24,31)(27,32), (1,4)(2,8)(3,11)(5,14)(6,15)(7,17)(9,20)(10,21)(12,23)(13,24)(16,26)(17,27)(19,29)(21,30)(24,31)(27,32), (1,4)(2,8)(3,11)(5,14)(6,15)(7,17)(9,20)(10,21)(12,23)(13,24)(16,26)(17,27)(19,29)(21,30)(24,31)(27,32), (1,4)(2,8)(21,24)(2$ $N_{34} = Group([(1,21,16,20)(2,26,22,4)(3,32,25,17)(5,30,6,8)(7,24,29,23)(9,15,10,14)(11,18,31,19)(12,28,13,27),(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32),(1,5)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32),(1,5)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32),(1,5)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32),(1,5)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32),(1,5)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32),(1,5)(2,7,9,18)(4,11,14,23)(6,13,16,25)(15,26)(17,27)(10,19,22,29)(15,24,26,31)(21,28,30,32),(1,5)(2,19,12)(21,28,13,27),(1,2,19,12)(21,28,12)(21,$
- $N_{35} = Group([(1,18,5,7)(2,3,9,12)(4,32,14,28)(6,29,16,19)(8,24,20,31)(15,27,26,17),(1,4)(2,8)(3,11)(5,14)(6,15)(7,17)(9,20)(10,21)(12,23)(13,24)(16,26)(17,27)(19,29)(21,30)(24,31)(27,32),(1,5)(2,9)(3,12)(4,14)(6,15)(7,17)(9,20)(10,21)(12,23)(13,24)(16,26)(17,27)(19,29)(21,30)(24,31)(27,32),(1,5)(2,9)(3,12)(4,14)(6,15)(7,17)(9,20)(10,21)(12,23)(13,24)(16,26)(17,27)(19,29)(21,30)(24,31)(27,32),(1,5)(2,9)(21,30)(24,31)(27,32),(1,5)(29,32)(11,24)(12,25)(14,26)(17,27)(19,29)(21,30)(24,31)(27,32),(1,5)(29,32)(11,24)(12,25)(14,26)(17,27)(19,29)(21,30)(24,31)(27,32),(11,24)(12,25)(14,26)(17,27)(19,29)(21,30)(24,31)(27,32),(11,24)(17,28)(17,27)(19,29)(11,24)(17,28)(17,2$ $N_{36} = Group([(1,21,16,20)(2,26,22,4)(3,32,25,17)(5,30,6,8)(7,24,29,23)(9,15,10,14)(11,18,31,19)(12,28,13,27),(1,11,5,23)(2,17,9,27)(3,14,12,4)(6,24,16,31)(7,20,18,8)(10,28,22,32)(13,26,25,15)(19,30,29,21),(1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,24)(12,25)(14,26)(17,27)(19,29)(21,30)(24,31)(27,32),(1,25,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,24)(12,25)(14,26)(17,27)(19,29)(21,30)(24,31)(27,32),(17,9,27)(3,14,12,4)(6,24,16,31)(7,20,18,8)(10,28,22,32)(13,26,25,15)(19,30,29,21),(1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,24)(12,25)(14,26)(17,27)(19,29)(21,30)(24,31)(27,32),(17,9,27)(3,14,12,4)(6,24,16,31)(7,20,18,8)(10,28,22,32)(13,26,25,15)(19,30,29,21),(1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(14,26)(17,27)(19,29)(11,24)(12,25)(13,26)(13,$ $N_{37} = Group([(1,2,5,9)(3,18,12,7)(4,21,14,30)(6,10,16,22)(8,26,20,15)(11,32,32,32)(13,24)(16,26)(17,27)(19,22)(11,24)(12,25)(14,26)(17,27)(19,22)(11,24)(12,25)(12,24)(12,25)(12,24)(12,25)(12,24)(12,25)(12,24)(12,25)(12,24)(12,25)(12,24)(12,25)(12,24)(12,25)(12,24)(12,25)(12,24)(12,25)(12,24)(12,25)(12,24)(12,25)(12,24)(12,25)(12,24)(12,25)(12,24)(12,25)(12,24)(12,24)(12,25)(12,24)(12,24)(12,25)(12,24)(12,24)(12,25)(12,24)(12,24)(12,24)(12,24)(12,24)(12,24)(12,24)(12,24)(12,24)(12,24)(12,24)(12,24)(12,24)(12,24)(12,24)(12,24)(12,24$

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

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

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

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

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

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

 $P_{34} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(2,3)(13,25)(15,26)(17,27)(19,29)(15,24,26,31)(21,28)(13,25)(15,26)(17,27)(19,29)(15,24,26,31)(21,28)(13,25)(15,26)(17,27)(19,29)(15,24,26,31)(21,28)(15,26)(17,27)(19,29)(15,24,26,31)(21,28)(15,26)(17,27)(19,29)(15,24,26,31)(21,28)(15,26)(17,27)(19,29)(15,24,26,31)(21,28)(15,26)(17,27)(19,29)(15,24,26,31)(21,28)(15,26)(17,27)(19,29)(15,24,26,31)(21,28)(15,26)(17,27)(19,29)(15,24,26,31)(21,28)(15,26)(17,27)(19,29)(15,24,26,31)(21,28)(15,26)(17,27)(19,29)(15,24,26,31)(21,28)(15,26)(17,27)(19,29)(15,24,26,31)(21,28)(15,26)(17,27)(19,29)(15,24,26,31)(21,28)(15,26)(17,27)(19,29)(15,24,26,31)(21,28)(15,26)(17,27)(19,29)(15,24,26,31)(21,28)(15,26)(17,27)(19,29)(15,24,26,31)(21,28)(17$

 $P_{36} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(13,25)(15,26)(17,28)(13,26)(17,28)(13,26)(17,28)(13,26)(17,28)(13,26)(17,28)(13,26)(17,28)(13,26)(17,28)(13,26)(17,28)(13,26)(17,28)(13,28)$ $P_{37} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,17)(9,20)(10,21)(12,23)(13,24)(12,25)(14,26)(17,27)(19,29)(21,30)(24,31)(25,31)(27,32), \\ (1,2,5)(1,2,2)(1,2,3)(1,2,2)(1,2,3)(1,2,2)(1,2,3)(13,24)(12,25)(13,24)(12,25)(13,24)(12,25)(13,24)(12,25)(13,24)(12,25)(13,24)(12,25)(13,24)(1$

 $N_{13} = Group([(1,18,5,7)(2,3,9,12)(4,32)(1,28)(6,29,16,19)(8,24,20,31)(10,13,22,25)(11,30,23,21)(15,27,26,17),(1,5)(2,9)(3,18,12,7)(4,21,14,30)(6,10,16,22)(11,24)(12,25)(14,26)(17,28)(13,29,25,19)(17,24,27,31),(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,24,20,31)(10,13,22,25)(11,30,23,21)(15,27,26,17),(1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,24)(12,25)(14,26)(17,27)(19,29)(21,30)(24,31)(24,$ $N_{14} = Group([(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,5)(2,9)(3,12)(4,14)(6,15)(7,17)(9,20)(10,21)(12,23)(13,24)(16,26)(18,27)(19,28)(22,30)(25,31)(29,32)]) \\ \cong (C2 \times Q8) : C2 \times Q8 : C2 \times Q8 : C3 \times Q8 :$

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

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

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

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