The group G is isomorphic to the group labelled by [32, 4] in the Small Groups library.
Ordinary character table of $G \cong$ C8 : C4:

	$1a$	$8a$	$4a$	$4b$	$2a$	$2b$	$8b$	$8c$	$8d$	$4c$	$4d$	$4e$	$4f$	$2c$	$8e$	$8f$	$8g$	$4g$	$4h$	$8h$
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	$-E(4)$	1	-1	1	$E(4)$	-1	1	$-E(4)$	$E(4)$	-1	1	-1	$E(4)$	$-E(4)$	1	$E(4)$	-1	$-E(4)$
χ_6	1	-1	$E(4)$	1	-1	1	$-E(4)$	-1	1	$E(4)$	$-E(4)$	-1	1	-1	$-E(4)$	$E(4)$	1	$-E(4)$	-1	$E(4)$
χ_7	1	1	$-E(4)$	1	-1	1	$-E(4)$	1	-1	$-E(4)$	$E(4)$	-1	1	-1	$-E(4)$	$E(4)$	-1	$E(4)$	-1	$E(4)$
χ_8	1	1	$E(4)$	1	-1	1	$E(4)$	1	-1	$E(4)$	$-E(4)$	-1	1	-1	$E(4)$	$-E(4)$	-1	$-E(4)$	-1	$-E(4)$
χ_9	1	$-E(4)$	-1	-1	1	1	$E(4)$	$E(4)$	$-E(4)$	1	-1	-1	-1	1	$-E(4)$	$E(4)$	$E(4)$	1	-1	$-E(4)$
χ_{10}	1	$E(4)$	-1	-1	1	1	$-E(4)$	$-E(4)$	$E(4)$	1	-1	-1	-1	1	$E(4)$	$-E(4)$	$-E(4)$	1	-1	$E(4)$
χ_{11}	1	$-E(4)$	1	-1	1	1	$-E(4)$	$E(4)$	$-E(4)$	-1	1	-1	-1	1	$E(4)$	$-E(4)$	$E(4)$	-1	-1	$E(4)$
χ_{12}	1	$E(4)$	1	-1	1	1	$E(4)$	$-E(4)$	$E(4)$	-1	1	-1	-1	1	$-E(4)$	$E(4)$	$-E(4)$	-1	-1	$-E(4)$
χ_{13}	1	$-E(4)$	$-E(4)$	-1	-1	1	-1	$E(4)$	$E(4)$	$E(4)$	$E(4)$	1	-1	-1	1	1	$-E(4)$	$-E(4)$	1	-1
χ_{14}	1	$E(4)$	$E(4)$	-1	-1	1	-1	$-E(4)$	$-E(4)$	$-E(4)$	$-E(4)$	1	-1	-1	1	1	$E(4)$	$E(4)$	1	-1
χ_{15}	1	$-E(4)$	$E(4)$	-1	-1	1	1	$E(4)$	$E(4)$	$-E(4)$	$-E(4)$	1	-1	-1	-1	-1	$-E(4)$	$E(4)$	1	1
χ_{16}	1	$E(4)$	$-E(4)$	-1	-1	1	1	$-E(4)$	$-E(4)$	$E(4)$	$E(4)$	1	-1	-1	-1	-1	$E(4)$	$-E(4)$	1	1
χ_{17}	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_{18}	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_{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 $G \cong$ C8 : C4 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}
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}
Representatives $n_j \in N_i$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$	$1a$
$1\cdot\chi_1+1\cdot\chi_2+1\cdot\chi_3+1\cdot\chi_4+1\cdot\chi_5+1\cdot\chi_6+1\cdot\chi_7+1\cdot\chi_8+1\cdot\chi_9+1\cdot\chi_{10}+1\cdot\chi_{11}+1\cdot\chi_{12}+1\cdot\chi_{13}+1\cdot\chi_{14}+1\cdot\chi_{15}+1\cdot\chi_{16}+2\cdot\chi_{17}+2\cdot\chi_{18}+2\cdot\chi_{19}+2\cdot\chi_{20}$	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1\cdot\chi_1+1\cdot\chi_2+1\cdot\chi_3+1\cdot\chi_4+1\cdot\chi_5+1\cdot\chi_6+1\cdot\chi_7+1\cdot\chi_8+1\cdot\chi_9+1\cdot\chi_{10}+1\cdot\chi_{11}+1\cdot\chi_{12}+1\cdot\chi_{13}+1\cdot\chi_{14}+1\cdot\chi_{15}+1\cdot\chi_{16}+0\cdot\chi_{17}+0\cdot\chi_{18}+0\cdot\chi_{19}+0\cdot\chi_{20}$	16	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1\cdot\chi_1+1\cdot\chi_2+1\cdot\chi_3+1\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+1\cdot\chi_9+1\cdot\chi_{10}+1\cdot\chi_{11}+1\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}+0\cdot\chi_{17}+0\cdot\chi_{18}+2\cdot\chi_{19}+2\cdot\chi_{20}$	16	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1\cdot\chi_1+1\cdot\chi_2+1\cdot\chi_3+1\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+1\cdot\chi_9+1\cdot\chi_{10}+1\cdot\chi_{11}+1\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}+2\cdot\chi_{17}+2\cdot\chi_{18}+0\cdot\chi_{19}+0\cdot\chi_{20}$	16	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1\cdot\chi_1+1\cdot\chi_2+1\cdot\chi_3+1\cdot\chi_4+1\cdot\chi_5+1\cdot\chi_6+1\cdot\chi_7+1\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}+0\cdot\chi_{17}+0\cdot\chi_{18}+0\cdot\chi_{19}+0\cdot\chi_{20}$	8	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1\cdot\chi_1+1\cdot\chi_2+1\cdot\chi_3+1\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+1\cdot\chi_9+1\cdot\chi_{10}+1\cdot\chi_{11}+1\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}+0\cdot\chi_{17}+0\cdot\chi_{18}+0\cdot\chi_{19}+0\cdot\chi_{20}$	8	8	8	8	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1\cdot\chi_1+1\cdot\chi_2+1\cdot\chi_3+1\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+1\cdot\chi_{13}+1\cdot\chi_{14}+1\cdot\chi_{15}+1\cdot\chi_{16}+0\cdot\chi_{17}+0\cdot\chi_{18}+0\cdot\chi_{19}+0\cdot\chi_{20}$	8	8	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0
$1\cdot\chi_1+0\cdot\chi_2+1\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+1\cdot\chi_{11}+1\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}+0\cdot\chi_{17}+0\cdot\chi_{18}+1\cdot\chi_{19}+1\cdot\chi_{20}$	8	0	8	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
$1\cdot\chi_1+0\cdot\chi_2+1\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+1\cdot\chi_9+1\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}+1\cdot\chi_{17}+1\cdot\chi_{18}+0\cdot\chi_{19}+0\cdot\chi_{20}$	8	0	0	8	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
$1\cdot\chi_1+1\cdot\chi_2+1\cdot\chi_3+1\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}+0\cdot\chi_{17}+0\cdot\chi_{18}+0\cdot\chi_{19}+0\cdot\chi_{20}$	4	4	4	4	4	4	4	0	0	4	0	0	0	0	0	0	0	0	0	0
$1\cdot\chi_1+0\cdot\chi_2+1\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+1\cdot\chi_{11}+1\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}+0\cdot\chi_{17}+0\cdot\chi_{18}+0\cdot\chi_{19}+0\cdot\chi_{20}$	4	4	4	4	0	4	0	4	0	0	4	0	0	0	0	0	0	0	0	0
$1\cdot\chi_1+0\cdot\chi_2+1\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+1\cdot\chi_9+1\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}+0\cdot\chi_{17}+0\cdot\chi_{18}+0\cdot\chi_{19}+0\cdot\chi_{20}$	4	4	4	4	0	4	0	0	4	0	0	4	0	0	0	0	0	0	0	0
$1\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+1\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+1\cdot\chi_7+1\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}+0\cdot\chi_{17}+0\cdot\chi_{18}+0\cdot\chi_{19}+0\cdot\chi_{20}$	4	4	0	0	4	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0
$1\cdot\chi_1+0\cdot\chi_2+0\cdot\chi_3+1\cdot\chi_4+1\cdot\chi_5+1\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}+0\cdot\chi_{17}+0\cdot\chi_{18}+0\cdot\chi_{19}+0\cdot\chi_{20}$	4	4	0	0	4	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0
$1\cdot\chi_1+1\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+0\cdot\chi_{13}+0\cdot\chi_{14}+1\cdot\chi_{15}+1\cdot\chi_{16}+0\cdot\chi_{17}+0\cdot\chi_{18}+0\cdot\chi_{19}+0\cdot\chi_{20}$	4	4	0	0	0	0	4	0	0	0	0	0	0	0	4	0	0	0	0	0
$1\cdot\chi_1+1\cdot\chi_2+0\cdot\chi_3+0\cdot\chi_4+0\cdot\chi_5+0\cdot\chi_6+0\cdot\chi_7+0\cdot\chi_8+0\cdot\chi_9+0\cdot\chi_{10}+0\cdot\chi_{11}+0\cdot\chi_{12}+1\cdot\chi_{13}+1\cdot\chi_{14}+0\cdot\chi_{15}+0\cdot\chi_{16}+0\cdot\chi_{17}+0\cdot\chi_{18}+0\cdot\chi_{19}+0\cdot\chi_{20}$	4	4	0	0	0	0	4	0	0	0	0	0	0	0	0	4	0	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	2	2	2	0	0	0	0	2	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	2	0	0	2	0	0	2	2	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	2	2	0	0	2	0	0	0	0	2	2	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

$P_1 = Group([()]) \cong 1$
$P_2 = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32)]) \cong$ C2
$P_3 = Group([(1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32)]) \cong$ C2
$P_4 = Group([(1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28)]) \cong$ C2
$P_5 = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32)]) \cong$ C4
$P_6 = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32)]) \cong$ C2 x C2
$P_7 = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,14,6,26)(2,20,10,30)(3,23,13,31)(4,16,15,5)(7,27,19,32)(8,22,21,9)(11,25,24,12)(17,29,28,18)]) \cong$ C4
$P_8 = Group([(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32)]) \cong$ C4
$P_9 = Group([(1,11,16,31)(2,17,22,32)(3,14,25,15)(4,13,26,12)(5,23,6,24)(7,20,29,21)(8,19,30,18)(9,27,10,28), (1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28)]) \cong$ C4
$P_{10} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32)]) \cong$ C4 x C2
$P_{11} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32)]) \cong$ C4 x C2
$P_{12} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,11,16,31)(2,17,22,32)(3,14,25,15)(4,13,26,12)(5,23,6,24)(7,20,29,21)(8,19,30,18)(9,27,10,28), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32)]) \cong$ C4 x C2
$P_{13} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,2,4,8,6,10,15,21)(3,19,11,28,13,7,24,17)(5,9,14,20,16,22,26,30)(12,29,23,32,25,18,31,27), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32)]) \cong$ C8
$P_{14} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,9,4,20,6,22,15,30)(2,14,8,16,10,26,21,5)(3,29,11,32,13,18,24,27)(7,31,17,12,19,23,28,25), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32)]) \cong$ C8
$P_{15} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,19,26,27,6,7,14,32)(2,24,30,25,10,11,20,12)(3,9,31,21,13,22,23,8)(4,28,5,29,15,17,16,18), (1,14,6,26)(2,20,10,30)(3,23,13,31)(4,16,15,5)(7,27,19,32)(8,22,21,9)(11,25,24,12)(17,29,28,18)]) \cong$ C8
$P_{16} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,28,14,18,6,17,26,29)(2,3,20,23,10,13,30,31)(4,7,16,27,15,19,5,32)(8,11,22,25,21,24,9,12), (1,14,6,26)(2,20,10,30)(3,23,13,31)(4,16,15,5)(7,27,19,32)(8,22,21,9)(11,25,24,12)(17,29,28,18)]) \cong$ C8
$P_{17} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \cong$ C4 x C4
$P_{18} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,2,4,8,6,10,15,21)(3,19,11,28,13,7,24,17)(5,9,14,20,16,22,26,30)(12,29,23,32,25,18,31,27)]) \cong$ C8 x C2
$P_{19} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,19,26,27,6,7,14,32)(2,24,30,25,10,11,20,12)(3,9,31,21,13,22,23,8)(4,28,5,29,15,17,16,18)]) \cong$ C8 x C2
$P_{20} = Group([(1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,2,4,8,6,10,15,21)(3,19,11,28,13,7,24,17)(5,9,14,20,16,22,26,30)(12,29,23,32,25,18,31,27)]) \cong$ C8 : C4

$N_1 = Group([(1,2,4,8,6,10,15,21)(3,19,11,28,13,7,24,17)(5,9,14,20,16,22,26,30)(12,29,23,32,25,18,31,27), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32)]) \cong$ C8 : C4
$N_2 = Group([(1,2,4,8,6,10,15,21)(3,19,11,28,13,7,24,17)(5,9,14,20,16,22,26,30)(12,29,23,32,25,18,31,27), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32)]) \cong$ C8 : C4
$N_3 = Group([(1,2,4,8,6,10,15,21)(3,19,11,28,13,7,24,17)(5,9,14,20,16,22,26,30)(12,29,23,32,25,18,31,27), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32)]) \cong$ C8 : C4
$N_4 = Group([(1,2,4,8,6,10,15,21)(3,19,11,28,13,7,24,17)(5,9,14,20,16,22,26,30)(12,29,23,32,25,18,31,27), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32)]) \cong$ C8 : C4
$N_5 = Group([(1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,2,4,8,6,10,15,21)(3,19,11,28,13,7,24,17)(5,9,14,20,16,22,26,30)(12,29,23,32,25,18,31,27), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \cong$ C8 : C4
$N_6 = Group([(1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,2,4,8,6,10,15,21)(3,19,11,28,13,7,24,17)(5,9,14,20,16,22,26,30)(12,29,23,32,25,18,31,27), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \cong$ C8 : C4
$N_7 = Group([(1,14,6,26)(2,20,10,30)(3,23,13,31)(4,16,15,5)(7,27,19,32)(8,22,21,9)(11,25,24,12)(17,29,28,18), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,2,4,8,6,10,15,21)(3,19,11,28,13,7,24,17)(5,9,14,20,16,22,26,30)(12,29,23,32,25,18,31,27), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \cong$ C8 : C4
$N_8 = Group([(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32)]) \cong$ C4 x C4
$N_9 = Group([(1,11,16,31)(2,17,22,32)(3,14,25,15)(4,13,26,12)(5,23,6,24)(7,20,29,21)(8,19,30,18)(9,27,10,28), (1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \cong$ C4 x C4
$N_{10} = Group([(1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,2,4,8,6,10,15,21)(3,19,11,28,13,7,24,17)(5,9,14,20,16,22,26,30)(12,29,23,32,25,18,31,27), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \cong$ C8 : C4
$N_{11} = Group([(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,2,4,8,6,10,15,21)(3,19,11,28,13,7,24,17)(5,9,14,20,16,22,26,30)(12,29,23,32,25,18,31,27)]) \cong$ C8 : C4
$N_{12} = Group([(1,11,16,31)(2,17,22,32)(3,14,25,15)(4,13,26,12)(5,23,6,24)(7,20,29,21)(8,19,30,18)(9,27,10,28), (1,16)(2,22)(3,25)(4,26)(5,6)(7,29)(8,30)(9,10)(11,31)(12,13)(14,15)(17,32)(18,19)(20,21)(23,24)(27,28), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,2,4,8,6,10,15,21)(3,19,11,28,13,7,24,17)(5,9,14,20,16,22,26,30)(12,29,23,32,25,18,31,27)]) \cong$ C8 : C4
$N_{13} = Group([(1,2,4,8,6,10,15,21)(3,19,11,28,13,7,24,17)(5,9,14,20,16,22,26,30)(12,29,23,32,25,18,31,27), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \cong$ C8 : C4
$N_{14} = Group([(1,9,4,20,6,22,15,30)(2,14,8,16,10,26,21,5)(3,29,11,32,13,18,24,27)(7,31,17,12,19,23,28,25), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,2,4,8,6,10,15,21)(3,19,11,28,13,7,24,17)(5,9,14,20,16,22,26,30)(12,29,23,32,25,18,31,27), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \cong$ C8 : C4
$N_{15} = Group([(1,19,26,27,6,7,14,32)(2,24,30,25,10,11,20,12)(3,9,31,21,13,22,23,8)(4,28,5,29,15,17,16,18), (1,26,6,14)(2,30,10,20)(3,31,13,23)(4,5,15,16)(7,32,19,27)(8,9,21,22)(11,12,24,25)(17,18,28,29), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,2,4,8,6,10,15,21)(3,19,11,28,13,7,24,17)(5,9,14,20,16,22,26,30)(12,29,23,32,25,18,31,27)]) \cong$ C8 : C4
$N_{16} = Group([(1,28,14,18,6,17,26,29)(2,3,20,23,10,13,30,31)(4,7,16,27,15,19,5,32)(8,11,22,25,21,24,9,12), (1,14,6,26)(2,20,10,30)(3,23,13,31)(4,16,15,5)(7,27,19,32)(8,22,21,9)(11,25,24,12)(17,29,28,18), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,2,4,8,6,10,15,21)(3,19,11,28,13,7,24,17)(5,9,14,20,16,22,26,30)(12,29,23,32,25,18,31,27)]) \cong$ C8 : C4
$N_{17} = Group([(1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,2,4,8,6,10,15,21)(3,19,11,28,13,7,24,17)(5,9,14,20,16,22,26,30)(12,29,23,32,25,18,31,27)]) \cong$ C8 : C4
$N_{18} = Group([(1,2,4,8,6,10,15,21)(3,19,11,28,13,7,24,17)(5,9,14,20,16,22,26,30)(12,29,23,32,25,18,31,27), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32)]) \cong$ C8 : C4
$N_{19} = Group([(1,19,26,27,6,7,14,32)(2,24,30,25,10,11,20,12)(3,9,31,21,13,22,23,8)(4,28,5,29,15,17,16,18), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32), (1,2,4,8,6,10,15,21)(3,19,11,28,13,7,24,17)(5,9,14,20,16,22,26,30)(12,29,23,32,25,18,31,27)]) \cong$ C8 : C4
$N_{20} = Group([(1,2,4,8,6,10,15,21)(3,19,11,28,13,7,24,17)(5,9,14,20,16,22,26,30)(12,29,23,32,25,18,31,27), (1,3,5,12)(2,7,9,18)(4,11,14,23)(6,13,16,25)(8,17,20,27)(10,19,22,29)(15,24,26,31)(21,28,30,32), (1,4,6,15)(2,8,10,21)(3,11,13,24)(5,14,16,26)(7,17,19,28)(9,20,22,30)(12,23,25,31)(18,27,29,32), (1,5)(2,9)(3,12)(4,14)(6,16)(7,18)(8,20)(10,22)(11,23)(13,25)(15,26)(17,27)(19,29)(21,30)(24,31)(28,32), (1,6)(2,10)(3,13)(4,15)(5,16)(7,19)(8,21)(9,22)(11,24)(12,25)(14,26)(17,28)(18,29)(20,30)(23,31)(27,32)]) \cong$ C8 : C4