	1a	4a	2a	4b	4c	-4d	4e	4f	2b	4g	2c	4h	-4i	-4i	4k	41	2d	-4m	2e	$\frac{1}{4n}$	40	4p	4q	4r	2f	4s	${2g}$	4t	4u	4v	-4w	4x
2/-	1	1	<u> </u>	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	1	1	1	1 4 <i>p</i>	1 4 <i>q</i>	1	1	1	<u> 29</u> 1	1	1 1 1	1	-4 <i>w</i> 1	1
χ_1	1	-1	1	_1 _1	1	_1 _1	1	_1 _1	1	<u>-1</u>	1	_1 _1	1	_1 _1	1	_1 _1	1	_1 _1	1	<u>-1</u>	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	1	1	_1 _1	_1 _1	_1	_1	1	1	1	1	_1	_1	_1 _1	-1
$\begin{array}{c} \chi_3 \\ \chi_4 \end{array}$	1	<u>-1</u>	1	-1	-1	1	-1	1	1	<u>-1</u>	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	1	1	1	1	1	1	1	1	1	1	_1 _1	<u>-1</u>	_1 _1	-1	_1 _1	_1 _1	_1	_1 _1	_1	_1	<u>-1</u>	_1	_1	_1 _1	_1 _1	-1
$\begin{array}{c} \chi_5 \\ \chi_6 \end{array}$	1	<u>-1</u>	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	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	_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	<u>-1</u>	1	_1	1	_1	1	<u>-1</u>	1	1	- 1	1	_1	_1	1	_1	1	1	<u>-1</u>	1	-1
χ_9	1	E(4)	_1	-E(4)	1	E(4)	-1	-E(4)	1	E(4)	-1	-E(4)	1	E(4)	-1	-E(4)	1	E(4)	-1	-E(4)	1	E(4)	-1	-E(4)	1	E(4)	-1	-E(4)	1	E(4)	-1	-E(4)
χ_{10}	1	-E(4)	-1	E(4)	1	-E(4)	-1	E(4)	1	-E(4)	-1	E(4)	1	-E(4)	-1	E(4)	1	-E(4)	-1	E(4)	1	-E(4)	-1	E(4)	1	-E(4)	-1	E(4)	1	-E(4)	-1	E(4)
χ_{11}	1	E(4)		$-\stackrel{\circ}{E}(\stackrel{\circ}{4})$	-1	-E(4)	1	E(4)	1	E(4)	-1	$-\stackrel{\circ}{E}(\stackrel{\circ}{4})$	-1	-E(4)	1	E(4)	1	E(4)'	-1	$-\dot{E(4)}$	-1	-E(4)	1	E(4)	1	E(4)		$-\stackrel{\circ}{E}(\stackrel{\prime}{4})$	-1	-E(4)	1	E(4)
χ_{12}	1	$-\dot{E}(4)$		E(4)	-1	E(4)	1	$-\dot{E(4)}$	1	$-\dot{E}(4)$	-1	E(4)	-1	E(4)	1	$-\dot{E(4)}$	1	$-\dot{E(4)}$	-1	E(4)	-1	E(4)	1	$-\stackrel{\widehat{E}(4)}{(4)}$	1	$-\stackrel{\widehat{E}(4)}{=}$		E(4)	-1	E(4)	1	$-\dot{E(4)}$
χ_{13}	1	E(4)	-1	$-\dot{E(4)}$	1	E(4)	-1	-E(4)	1	E(4)	-1	$-\dot{E(4)}$	1	E(4)	-1	-E(4)	-1	-E(4)	1	E(4)	-1	$-\dot{E(4)}$	1	E(4)	-1	-E(4)	1	E(4)	-1	$-\dot{E(4)}$	1	E(4)
χ_{14}	1	$-\dot{E(4)}$	-1	E(4)	1	$-\dot{E(4)}$	-1	E(4)	1	$-\dot{E(4)}$	-1	E(4)	1	$-\dot{E(4)}$	-1	E(4)	-1	E(4)	1	$-\dot{E(4)}$	-1	E(4)	1	$-\hat{E(4)}$	-1	E(4)	1	$-\dot{E(4)}$	-1	E(4)	1	$-\dot{E(4)}$
χ_{15}	1	E(4)	-1	-E(4)	-1	-E(4)	1	E(4)	1	E(4)	-1	-E(4)	-1	-E(4)	1	E(4)	-1	-E(4)	1	E(4)	1	E(4)	-1	-E(4)	-1	-E(4)	1	E(4)	1	E(4)	-1	-E(4)
χ_{16}	1	-E(4)	-1	E(4)	-1	E(4)	1	-E(4)	1	-E(4)	-1	E(4)	-1	E(4)	1	-E(4)	-1	E(4)	1	-E(4)	1	-E(4)	-1	E(4)	-1	E(4)	1	-E(4)	1	-E(4)	-1	E(4)
χ_{17}	1	1	1	1	E(4)	E(4)	E(4)	E(4)	-1	-1	-1	-1	-E(4)	-E(4)	-E(4)	-E(4)	1	1	1	1	E(4)	E(4)	E(4)	E(4)	-1	-1	-1	-1	-E(4)	-E(4)	-E(4)	-E(4)
χ_{18}	1	-1	1	-1	E(4)	-E(4)	E(4)	-E(4)	-1	1	-1	1	-E(4)	E(4)	-E(4)	E(4)	1	-1	1	-1	E(4)	-E(4)	E(4)	-E(4)	-1	1	-1	1	-E(4)	E(4)	-E(4)	E(4)
χ_{19}	1	1	1	1	-E(4)	-E(4)	-E(4)	-E(4)	-1	-1	-1	-1	E(4)	E(4)	E(4)	E(4)	1	1	1	1	-E(4)	-E(4)	-E(4)	-E(4)	-1	-1	-1	-1	E(4)	E(4)	E(4)	E(4)
χ_{20}	1	-1	1	-1	-E(4)	E(4)	-E(4)	E(4)	-1	1	-1	1	E(4)	-E(4)	E(4)	-E(4)	1	-1	1	-1	-E(4)	E(4)	-E(4)	E(4)	-1	1	-1	1	E(4)	-E(4)	E(4)	-E(4)
χ_{21}	1	1	1	1	E(4)	E(4)	E(4)	E(4)	-1	-1	-1	-1	-E(4)	-E(4)	-E(4)	-E(4)	-1	-1	-1	-1	-E(4)	-E(4)	-E(4)	-E(4)	1	1	1	1	E(4)	E(4)	E(4)	E(4)
χ_{22}	1	-1	1	-1	E(4)	-E(4)	E(4)	-E(4)	-1	1	-1	1	-E(4)	E(4)	-E(4)	E(4)	-1	1	-1	1	-E(4)	E(4)	-E(4)	E(4)	1	-1	1	-1	E(4)	-E(4)	E(4)	-E(4)
χ_{23}	1	1	1	1	-E(4)	-E(4)	-E(4)	-E(4)	-1	-1	-1	-1	E(4)	E(4)	E(4)	E(4)	-1	-1	-1	-1	E(4)	E(4)	E(4)	E(4)	1	1	1	1	-E(4)	-E(4)	-E(4)	-E(4)
χ_{24}	1	-1 -(1)	1	-1	-E(4)	E(4)	-E(4)	E(4)	-1	1	-1	1	E(4)	-E(4)	E(4)	-E(4)	-1	1	-1	1	E(4)	-E(4)	E(4)	-E(4)	1	-1	1	-1	-E(4)	E(4)	-E(4)	E(4)
χ_{25}	1	E(4)	-1	-E(4)	E(4)	-1	-E(4)	1	-1	-E(4)	1	E(4)	-E(4)	1	E(4)	-1	1	E(4)	-1	-E(4)	E(4)	-1	-E(4)	1	-1	-E(4)	1	E(4)	-E(4)	1	E(4)	-1
χ_{26}	1	-E(4)		E(4)	E(4)	1	-E(4)	-1	-1	E(4)	1	-E(4)	-E(4)	-1	E(4)	1	1	-E(4)	-1	E(4)	E(4)	1	-E(4)	-1	-1	E(4)	1	-E(4)	-E(4)	-1	E(4)	1
χ_{27}	1	E(4)		-E(4)	-E(4)	1	E(4)	-1	-1	-E(4)	1	E(4)	E(4)	-1	-E(4)	1	1	E(4)	-1	-E(4)	-E(4)	1	E(4)	-1	-1	-E(4)	1	E(4)	E(4)	-1	-E(4)	1
χ_{28}	1	-E(4)		E(4)	-E(4)	-1	E(4)	1	-1	E(4)	1	-E(4)	E(4)	1	-E(4)	-1	1	-E(4)	-1	E(4)	-E(4)	-1	E(4)	1	-1	E(4)	1	-E(4)	E(4)	1	-E(4)	-1
χ_{29}	1	E(4)	-1	-E(4)	E(4)	-1	-E(4)	1	-1	-E(4)	1	E(4)	-E(4)	1	E(4)	-l	-1	-E(4)	1	E(4)	-E(4)	1	E(4)	-1	1	E(4)		-E(4)	E(4)	-1	-E(4)	1
χ_{30}	1	-E(4)		E(4)	E(4)	1	-E(4)	-1	-1	E(4)	1	-E(4)	-E(4)	-l	E(4)	1	-l	E(4)	1	-E(4)	-E(4)	-1	E(4)	1	1	-E(4)		E(4)	E(4)	1	-E(4)	-l
χ_{31}	1 1	E(4)		-E(4)	-E(4)	1	E(4)	-l	-1	-E(4)	1	E(4)	E(4)	-1	-E(4)	1	-1	-E(4)	1	E(4)	E(4)	-1	-E(4)	1	1	E(4)		-E(4)	-E(4)	1	E(4)	-l
χ_{32}	1	-E(4)	-1	E(4)	-E(4)	-1	E(4)	1	-1	E(4)	1	-E(4)	E(4)	1	-E(4)	-1	-1	E(4)	1	-E(4)	E(4)	1	-E(4)	-1	1	-E(4)	-1	E(4)	-E(4)	-1	E(4)	1

Trivial source character table of $G \cong C4 \times C4 \times C2$ at p = 2:

Trivial source character table of $G \cong C4 \times C4 \times C2$ at $p = 2$:											
Normalisers N_i	$N_1 \mid N_2 \mid N_3 \mid N_3$	$ N_5 N_6 N_7$	$N_8 N_9 I$	$N_{10} \mid N_{11} \mid N_{12} \mid N_{13} \mid N_{14}$	$ N_{15} N_{16} N_{17} N_{18} N_{19} N_{20} $	$N_{21} \mid N_{22} \mid N_{23} \mid N_{24} \mid N_{25} \mid N_{26} \mid N$	$N_{27} \mid N_{28} \mid N_{29} \mid N_{30} \mid N_{31} \mid N_{31}$	$I_{32} \mid N_{33} \mid N_{34} \mid N_{35} \mid$	$N_{36} \mid N_{37} \mid N_{38} \mid N_{39} \mid N_{40}$	$ \mid N_{41} \mid N_{42} \mid N_{43} \mid N_{44} \mid N_{45} \mid N_{46} \mid N_{47} \mid N_{48} \mid . $	$N_{49} \mid N_{50} \mid N_{51} \mid N_{52} \mid N_{53} \mid N_{54} \mid$
p-subgroups of G up to conjugacy in G	$P_1 \mid P_2 \mid P_3 \mid P_4$	$P_5 \mid P_6 \mid P_7$	$P_8 P_9 I$	$P_{10} \mid P_{11} \mid P_{12} \mid P_{13} \mid P_{14}$	$P_{15} P_{16} P_{17} P_{18} P_{19} P_{20}$	$P_{21} \mid P_{22} \mid P_{23} \mid P_{24} \mid P_{25} \mid P_{26} \mid P_{26}$	$P_{27} \mid P_{28} \mid P_{29} \mid P_{30} \mid P_{31} \mid P_{31}$	$P_{32} \mid P_{33} \mid P_{34} \mid P_{35} \mid$	$P_{36} \mid P_{37} \mid P_{38} \mid P_{39} \mid P_{40}$	$oxed{P_{41} \mid P_{42} \mid P_{43} \mid P_{44} \mid P_{45} \mid P_{46} \mid P_{47} \mid P_{48}}$	$P_{49} \mid P_{50} \mid P_{51} \mid P_{52} \mid P_{53} \mid P_{54}$
Representatives $n_j \in N_i$	$1a \mid 1a \mid 1a \mid 1a$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1a 1a	$1a \mid 1a \mid 1a \mid 1a \mid 1a$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$a \mid 1a \mid 1a \mid 1a \mid 1a \mid 1$	$a \mid 1a \mid 1a \mid 1a \mid$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$oxed{1a \ 1a \ 1a \ 1a \ 1a \ 1a \ 1a \ 1a}$	$1a \mid 1a \mid 1a \mid 1a \mid 1a \mid 1a$
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16} + 1 \cdot \chi_{17} + 1 \cdot \chi_{18} + 1 \cdot \chi_{21} + 1 \cdot \chi_{22} + 1 \cdot \chi_{23} + 1 \cdot \chi_{24} + 1 \cdot \chi_{25} + 1 \cdot \chi_{26} + 1 \cdot \chi_{27} + 1 \cdot \chi_{29} + 1 \cdot \chi_{30} + 1 \cdot \chi_{31} + 1 \cdot \chi_{32} = 0$	$32 \ 0 \ 0 \ 0$	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 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0
$1 \cdot \chi_{1} + 1 \cdot \chi_{2} + 1 \cdot \chi_{3} + 1 \cdot \chi_{4} + 1 \cdot \chi_{5} + 1 \cdot \chi_{6} + 1 \cdot \chi_{7} + 1 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 1 \cdot \chi_{17} + 1 \cdot \chi_{18} + 1 \cdot \chi_{19} + 1 \cdot \chi_{21} + 1 \cdot \chi_{22} + 1 \cdot \chi_{23} + 1 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32} + 0 \cdot \chi_{32} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32} + 0 \cdot \chi_{32} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32} + 0 \cdot \chi_{32} + 0 \cdot \chi_{32} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32} + 0 \cdot \chi_{32} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32} +$	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 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0
$1 \cdot \chi_{1} + 1 \cdot \chi_{2} + 1 \cdot \chi_{3} + 1 \cdot \chi_{4} + 1 \cdot \chi_{5} + 1 \cdot \chi_{6} + 1 \cdot \chi_{7} + 1 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 1 \cdot \chi_{25} + 1 \cdot \chi_{26} + 1 \cdot \chi_{27} + 1 \cdot \chi_{28} + 1 \cdot \chi_{29} + 1 \cdot \chi_{30} + 1 \cdot \chi_{31} + 1 \cdot \chi_{32}$	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 0	0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0
$1 \cdot \chi_{1} + 1 \cdot \chi_{2} + 1 \cdot \chi_{3} + 1 \cdot \chi_{4} + 1 \cdot \chi_{5} + 1 \cdot \chi_{6} + 1 \cdot \chi_{7} + 1 \cdot \chi_{8} + 1 \cdot \chi_{9} + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32} = 0$	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	0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16} + 1 \cdot \chi_{17} + 1 \cdot \chi_{18} + 1 \cdot \chi_{19} + 1 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 1 \cdot \chi_{29} + 1 \cdot \chi_{30} + 1 \cdot \chi_{31} + 1 \cdot \chi_{32} = 0$	16 0 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 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 1 \cdot \chi_{21} + 1 \cdot \chi_{22} + 1 \cdot \chi_{23} + 1 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 1 \cdot \chi_{29} + 1 \cdot \chi_{30} + 1 \cdot \chi_{31} + 1 \cdot \chi_{32} = 0$	16 0 0 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 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0
$1 \cdot \chi_{1} + 1 \cdot \chi_{2} + 1 \cdot \chi_{3} + 1 \cdot \chi_{4} + 0 \cdot \chi_{5} + 0 \cdot \chi_{6} + 0 \cdot \chi_{7} + 0 \cdot \chi_{8} + 1 \cdot \chi_{9} + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 1 \cdot \chi_{17} + 1 \cdot \chi_{18} + 1 \cdot \chi_{19} + 1 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 1 \cdot \chi_{25} + 1 \cdot \chi_{26} + 1 \cdot \chi_{27} + 1 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 1 \cdot \chi_{25} + 1 \cdot \chi_{26} + 1 \cdot \chi_{27} + 1 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32} + 0 \cdot \chi_{32} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32} + 0 \cdot \chi_{32} + 0 \cdot \chi_{32} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32} + 0 \cdot \chi_{32} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32} +$	16 0 0 0	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 0	0 0 0 0 0 0 0	0 0 0 0 0
$1 \cdot \chi_{1} + 1 \cdot \chi_{2} + 1 \cdot \chi_{3} + 1 \cdot \chi_{4} + 0 \cdot \chi_{5} + 0 \cdot \chi_{6} + 0 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{29} + 1 \cdot \chi_{23} + 1 \cdot \chi_{24} + 1 \cdot \chi_{25} + 1 \cdot \chi_{26} + 1 \cdot \chi_{27} + 1 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	16 0 0 0	0 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	0 0 0 0 0 0 0	0 0 0 0 0
$1 \cdot \chi_{1} + 0 \cdot \chi_{2} + 0 \cdot \chi_{3} + 1 \cdot \chi_{4} + 0 \cdot \chi_{5} + 1 \cdot \chi_{6} + 1 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 1 \cdot \chi_{26} + 1 \cdot \chi_{27} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 1 \cdot \chi_{32}$	8 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	0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0
$1 \cdot \chi_{1} + 1 \cdot \chi_{2} + 0 \cdot \chi_{3} + 0 \cdot \chi_{4} + 1 \cdot \chi_{5} + 1 \cdot \chi_{6} + 0 \cdot \chi_{7} + 0 \cdot \chi_{8} + 1 \cdot \chi_{9} + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	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 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0
$1 \cdot \chi_{1} + 1 \cdot \chi_{2} + 0 \cdot \chi_{3} + 0 \cdot \chi_{4} + 1 \cdot \chi_{5} + 1 \cdot \chi_{6} + 0 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	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	0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0
$1 \cdot \chi_{1} + 0 \cdot \chi_{2} + 1 \cdot \chi_{3} + 0 \cdot \chi_{4} + 1 \cdot \chi_{5} + 0 \cdot \chi_{6} + 1 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 1 \cdot \chi_{18} + 0 \cdot \chi_{19} + 1 \cdot \chi_{20} + 0 \cdot \chi_{21} + 1 \cdot \chi_{22} + 0 \cdot \chi_{23} + 1 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	8 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 0 0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0
$1 \cdot \chi_{1} + 0 \cdot \chi_{2} + 0 \cdot \chi_{3} + 1 \cdot \chi_{4} + 1 \cdot \chi_{5} + 0 \cdot \chi_{6} + 0 \cdot \chi_{7} + 1 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 1 \cdot \chi_{26} + 1 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 1 \cdot \chi_{30} + 1 \cdot \chi_{31} + 0 \cdot \chi_{32}$	8 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 0	0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0
$1 \cdot \chi_{1} + 0 \cdot \chi_{2} + 0 \cdot \chi_{3} + 1 \cdot \chi_{4} + 1 \cdot \chi_{5} + 0 \cdot \chi_{6} + 0 \cdot \chi_{7} + 1 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 1 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 1 \cdot \chi_{28} + 1 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 1 \cdot \chi_{32}$	8 0 8 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 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0
$1 \cdot \chi_{1} + 1 \cdot \chi_{2} + 0 \cdot \chi_{3} + 0 \cdot \chi_{4} + 0 \cdot \chi_{5} + 0 \cdot \chi_{6} + 1 \cdot \chi_{7} + 1 \cdot \chi_{8} + 1 \cdot \chi_{9} + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	8 0 0 8	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 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0
$1 \cdot \chi_{1} + 1 \cdot \chi_{2} + 1 \cdot \chi_{3} + 1 \cdot \chi_{4} + 1 \cdot \chi_{5} + 1 \cdot \chi_{6} + 1 \cdot \chi_{7} + 1 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	8 8 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 0	0 0 0 0 0 0 0	0 0 0 0 0
$1 \cdot \chi_{1} + 0 \cdot \chi_{2} + 1 \cdot \chi_{3} + 0 \cdot \chi_{4} + 1 \cdot \chi_{5} + 0 \cdot \chi_{6} + 1 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 1 \cdot \chi_{17} + 0 \cdot \chi_{18} + 1 \cdot \chi_{19} + 0 \cdot \chi_{20} + 1 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 1 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	8 8 0 0	0 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	0 0 0 0 0 0 0	0 0 0 0 0
$1 \cdot \chi_{1} + 0 \cdot \chi_{2} + 0 \cdot \chi_{3} + 1 \cdot \chi_{4} + 0 \cdot \chi_{5} + 1 \cdot \chi_{6} + 1 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 1 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 1 \cdot \chi_{28} + 0 \cdot \chi_{29} + 1 \cdot \chi_{30} + 1 \cdot \chi_{31} + 0 \cdot \chi_{32}$	8 0 8 0	0 0 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 0 0 0 0 0 0	0 0 0 0 0 0
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$1 \cdot \chi_{1} + 0 \cdot \chi_{2} + 1 \cdot \chi_{3} + 0 \cdot \chi_{4} + 0 \cdot \chi_{5} + 1 \cdot \chi_{6} + 0 \cdot \chi_{7} + 1 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 1 \cdot \chi_{18} + 0 \cdot \chi_{19} + 1 \cdot \chi_{20} + 1 \cdot \chi_{21} + 0 \cdot \chi_{22} + 1 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	8 8 0 0	0 0 0	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 0 0 0 0	0 0 0 0 0 0
$1 \cdot \chi_{1} + 1 \cdot \chi_{2} + 1 \cdot \chi_{3} + 1 \cdot \chi_{4} + 0 \cdot \chi_{5} + 0 \cdot \chi_{6} + 0 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	8 0 0 8	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 0 0 0 0 0 0	0 0 0 0 0
$1 \cdot \chi_{1} + 1 \cdot \chi_{2} + 1 \cdot \chi_{3} + 1 \cdot \chi_{4} + 0 \cdot \chi_{5} + 0 \cdot \chi_{6} + 0 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 1 \cdot \chi_{17} + 1 \cdot \chi_{18} + 1 \cdot \chi_{19} + 1 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	8 8 0 0	8 0 8	0 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 0	0 0 0 0 0
$1 \cdot \chi_{1} + 1 \cdot \chi_{2} + 1 \cdot \chi_{3} + 1 \cdot \chi_{4} + 0 \cdot \chi_{5} + 0 \cdot \chi_{6} + 0 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 1 \cdot \chi_{22} + 1 \cdot \chi_{23} + 1 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	8 8 0 0	0 8 0	8 0	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	0 0 0 0 0
$1 \cdot \chi_{1} + 1 \cdot \chi_{2} + 1 \cdot \chi_{3} + 1 \cdot \chi_{4} + 0 \cdot \chi_{5} + 0 \cdot \chi_{6} + 0 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 1 \cdot \chi_{25} + 1 \cdot \chi_{26} + 1 \cdot \chi_{27} + 1 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	8 0 8 0	0 0 8	8 0	0 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 0 0 0 0
$1 \cdot \chi_{1} + 1 \cdot \chi_{2} + 0 \cdot \chi_{3} + 0 \cdot \chi_{4} + 0 \cdot \chi_{5} + 0 \cdot \chi_{6} + 1 \cdot \chi_{7} + 1 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	8 0 0 8	0 0 0	0 0	0 0 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 0 0 0
$1 \cdot \chi_{1} + 1 \cdot \chi_{2} + 1 \cdot \chi_{3} + 1 \cdot \chi_{4} + 0 \cdot \chi_{5} + 0 \cdot \chi_{6} + 0 \cdot \chi_{7} + 0 \cdot \chi_{8} + 1 \cdot \chi_{9} + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	8 0 0 8	0 8 8	0 0	0 0 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 0 0 0
$1 \cdot \chi_{1} + 0 \cdot \chi_{2} + 1 \cdot \chi_{3} + 0 \cdot \chi_{4} + 0 \cdot \chi_{5} + 1 \cdot \chi_{6} + 0 \cdot \chi_{7} + 1 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 1 \cdot \chi_{17} + 0 \cdot \chi_{18} + 1 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 1 \cdot \chi_{22} + 0 \cdot \chi_{23} + 1 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	8 8 0 0	0 0 0	0 0	0 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		$0 \mid 0 \mid 0 \mid 0 \mid 0 \mid 0$
$1 \cdot \chi_{1} + 0 \cdot \chi_{2} + 1 \cdot \chi_{3} + 0 \cdot \chi_{4} + 1 \cdot \chi_{5} + 0 \cdot \chi_{6} + 1 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	4 4 4 4	0 0 0	0 0	0 0 4 0 0	0 4 4 0 0 0		$0 \mid 4 \mid 0 \mid 0 \mid 0 \mid 0$	0 0 0	0 0 0 0 0		$0 \mid 0 \mid 0 \mid 0 \mid 0 \mid 0$
$1 \cdot \chi_{1} + 1 \cdot \chi_{2} + 0 \cdot \chi_{3} + 0 \cdot \chi_{4} + 0 \cdot \chi_{5} + 0 \cdot \chi_{6} + 1 \cdot \chi_{7} + 1 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	4 4 4 4	0 0 0	0 0	0 0 0 0 0	4 4 0 0 0 0	0 0 0 0 4 0	$0 \mid 0 \mid 4 \mid 0 \mid 0 \mid 0$	0 0 0	0 0 0 0 0		0 0 0 0 0 0
$1 \cdot \chi_{1} + 1 \cdot \chi_{2} + 1 \cdot \chi_{3} + 1 \cdot \chi_{4} + 0 \cdot \chi_{5} + 0 \cdot \chi_{6} + 0 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	4 4 4 4	4 4 4	4 0	0 0 0 0	0 4 0 0 4 0	4 4 4 4 0 4 0	0 0 0 4 0 0	0 0 0	0 0 0 0		0 0 0 0 0
$1 \cdot \chi_{1} + 0 \cdot \chi_{2} + 0 \cdot \chi_{3} + 1 \cdot \chi_{4} + 1 \cdot \chi_{5} + 0 \cdot \chi_{6} + 0 \cdot \chi_{7} + 1 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	4 4 4 4	0 0 0	0 0	0 0 0 4 4	0 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 0
$1 \cdot \chi_{1} + 0 \cdot \chi_{2} + 0 \cdot \chi_{3} + 1 \cdot \chi_{4} + 0 \cdot \chi_{5} + 1 \cdot \chi_{6} + 1 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	4 4 4 4					0 0 0 0 0 0			0 0 0 0	0 0 0 0 0 0 0	
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	4 4 4 4	0 0 0	0 0	4 4 0 0 0	0 4 0 0 0 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	
$1 \cdot \chi_{1} + 0 \cdot \chi_{2} + 1 \cdot \chi_{3} + 0 \cdot \chi_{4} + 0 \cdot \chi_{5} + 1 \cdot \chi_{6} + 0 \cdot \chi_{7} + 1 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	4 4 4 4	0 0 0	0 0	0 0 0 0	0 4 0 0 0 4	0 0 0 0 0 0 4	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 4 0	0 0 0 0	0 0 0 0 0 0 0 0	
$1 \cdot \chi_{1} + 0 \cdot \chi_{2} + 0 \cdot \chi_{3} + 1 \cdot \chi_{4} + 0 \cdot \chi_{5} + 0 \cdot \chi_{6} + 0 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 1 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 1 \cdot \chi_{32}$	4 0 4 0	4 4 0	0 4	0 0 0 0 4	0 0 0 0 4 0	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
$1 \cdot \chi_{1} + 0 \cdot \chi_{2} + 0 \cdot \chi_{3} + 1 \cdot \chi_{4} + 0 \cdot \chi_{5} + 0 \cdot \chi_{6} + 0 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 1 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 1 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	4 0 4 0	0 0 4	4 0	0 0 0 0 4	0 0 0 4 0 0	0 0 0 4 0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0	4 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	4 0 0 4	0 4 4	0 0	4 0 0 0 0	4 0 0 0 0 0	0 0 0 0 0 4 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0	0 4 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0
$1 \cdot \chi_{1} + 1 \cdot \chi_{2} + 0 \cdot \chi_{3} + 0 \cdot \chi_{4} + 0 \cdot \chi_{5} + 0 \cdot \chi_{6} + 0 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	4 0 0 4	4 0 0	4 0	4 0 0 0 0	0 0 0 0 0 0	4 0 0 0 4 0 0	0 0 0 0 0	0 0 0	0 0 4 0 0		0 0 0 0 0
$1 \cdot \chi_{1} + 1 \cdot \chi_{2} + 0 \cdot \chi_{3} + 0 \cdot \chi_{4} + 0 \cdot \chi_{5} + 0 \cdot \chi_{6} + 0 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} +$	$\frac{4}{1}$ 0 0 4	0 4 4	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}$	$\frac{4}{4}$ 0 0 4	4 0 0	4 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		0 0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		
$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_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 1 \cdot \chi_{30} + 1 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 1 \cdot \chi_{30} + 1 \cdot \chi_{31} + 0 \cdot $	4 0 4 0	4 4 0	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 1 \cdot \chi_{17} + 0 \cdot \chi_{18} + 1 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{31} + 0$	4 4 0 0	4 0 4	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0			
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$\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} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 1 \cdot \chi_{18} + 0 \cdot \chi_{19} + 1 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{31} + 0 $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			
$\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} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{21} + 1 \cdot \chi_{22} + 0 \cdot \chi_{23} + 1 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{19} + 0 $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 4 0	4 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			
$\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} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 1 \cdot \chi_{26} + 1 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		$egin{array}{ c c c c c c c c c c c c c c c c c c c$	
$\frac{1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}}{1 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_5 + 0 \cdot \chi_{24} +$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			
$\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} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}}{1 \cdot \chi_7 + 0 \cdot \chi_9 + 0 \cdot \chi_9 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{bmatrix} 0 & 0 & 2 & 0 \\ 0 & 2 & 0 & 0 \end{bmatrix}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 2 2 2 2 0 0 2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
$\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} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{30} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}}{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_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}}{1 \cdot \chi_{1} + 0 \cdot \chi_{1} + 0 \cdot \chi_{1} + 0 \cdot \chi_{11} $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c c} 2 & 0 \\ \hline 0 & 2 \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0 0 0 0 0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
$\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} + 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_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}}{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_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{31} + 0 \cdot $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $		$\begin{bmatrix} 0 & 2 \\ 0 & 0 \end{bmatrix}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	* = = * * =	- " " "		0 0 0 0 0 0 0 0	
$\frac{1 \cdot \chi_{1} + 0 \cdot \chi_{2} + 0 \cdot \chi_{3} + 0 \cdot \chi_{4} + 1 \cdot \chi_{5} + 0 \cdot \chi_{6} + 0 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}}{1 \cdot \chi_{1} + 0 \cdot \chi_{2} + 0 \cdot \chi_{3} + 1 \cdot \chi_{4} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}}{1 \cdot \chi_{1} + 0 \cdot \chi_{1} + 0 \cdot \chi_{1} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}}{1 \cdot \chi_{1} + 0 \cdot \chi_{1} + 0 \cdot \chi_{1} + 0 \cdot \chi_{1} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2 2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			$egin{array}{c c c c c c c c c c c c c c c c c c c $		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2 0 0 0 0 2 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_{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_{21} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}}{1 \cdot \chi_{1} + 0 \cdot \chi_{2} + 0 \cdot \chi_{3} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{31} + $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{vmatrix} 2 & 2 \\ 0 & 0 \end{vmatrix}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				0 0 0 0 0 0 0 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} + 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_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}}{1 \cdot \chi_{1} + 0 \cdot \chi_{2} + 0 \cdot \chi_{3} + 0 \cdot \chi_{4} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}}{1 \cdot \chi_{1} + 0 \cdot \chi_{1} + 0 \cdot \chi_{1} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{20} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}}{1 \cdot \chi_{1} + 0 \cdot \chi_{1} + 0 \cdot \chi_{1} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{31} + 0 \cdot \chi_{31} + 0 \cdot \chi_{32}}{1 \cdot \chi_{1} + 0 \cdot \chi_{1} + 0 \cdot \chi_{1} + 0 \cdot \chi_{1} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot \chi_{17} + 0 \cdot \chi_{18} + 0 \cdot \chi_{19} + 0 \cdot \chi_{21} + 0 \cdot \chi_{22} + 0 \cdot \chi_{23} + 0 \cdot \chi_{24} + 0 \cdot \chi_{25} + 0 \cdot \chi_{26} + 0 \cdot \chi_{27} + 0 \cdot \chi_{28} + 0 \cdot \chi_{29} + 0 \cdot \chi_{31} + 0 $	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	
$\begin{bmatrix} 2 & \lambda 1 & 1 & 0 & \lambda 2 & 1 & 0 & \lambda 3 & 1 & 0 & \lambda 4 & 1 & 0 & \lambda 2 & 1 $			1 1								

 $P_3 = Group([(3,5)(4,6)(7,9)(8,10)]) \cong C2$ $P_4 = Group([(3,5)(4,6)]) \cong C2$ $P_5 = Group([(1,2)(7,9)(8,10)]) \cong C2$ $P_6 = Group([(1,2)(3,5)(4,6)]) \cong C2$ $P_7 = Group([(1,2)]) \cong C2$ $P_8 = Group([(1,2)(3,5)(4,6)(7,9)(8,10)]) \cong C2$ $P_9 = Group([(1,2)(3,4,5,6)(7,8,9,10),(3,5)(4,6)(7,9)(8,10)]) \cong C4$ $P_{10} = Group([(3,4,5,6),(3,5)(4,6)]) \cong C4$ $P_{11} = Group([(3,4,5,6)(7,9)(8,10),(3,5)(4,6)]) \cong C4$ $P_{12} = Group([(3,5)(4,6)(7,8,9,10),(7,9)(8,10)]) \cong C4$ $P_{13} = Group([(3,4,5,6)(7,8,9,10),(3,5)(4,6)(7,9)(8,10)]) \cong C4$ $P_{14} = Group([(3,6,5,4)(7,8,9,10),(3,5)(4,6)(7,9)(8,10)]) \cong C4$ $P_{15} = Group([(1,2)(3,4,5,6),(3,5)(4,6)]) \cong C4$ $P_{16} = Group([(7,9)(8,10),(3,5)(4,6)]) \cong C2 \times C2$ $P_{17} = Group([(7, 8, 9, 10), (7, 9)(8, 10)]) \cong C4$ $P_{18} = Group([(1,2)(3,6,5,4)(7,8,9,10),(3,5)(4,6)(7,9)(8,10)]) \cong C4$ $P_{19} = Group([(1,2)(3,5)(4,6),(3,5)(4,6)(7,9)(8,10)]) \cong C2 \times C2$ $P_{20} = Group([(1,2)(3,5)(4,6)(7,8,9,10),(7,9)(8,10)]) \cong C4$ $P_{21} = Group([(1,2)(7,9)(8,10),(3,5)(4,6)]) \cong C2 \times C2$ $P_{22} = Group([(1,2), (7,9)(8,10)]) \cong C2 \times C2$ $P_{23} = Group([(1,2)(3,5)(4,6),(7,9)(8,10)]) \cong C2 \times C2$ $P_{24} = Group([(1,2),(3,5)(4,6)(7,9)(8,10)]) \cong C2 \times C2$ $P_{25} = Group([(1,2)(3,4,5,6)(7,9)(8,10),(3,5)(4,6)]) \cong C4$ $P_{26} = Group([(1,2),(3,5)(4,6)]) \cong C2 \times C2$ $P_{27} = Group([(1,2)(7,8,9,10),(7,9)(8,10)]) \cong C4$ $P_{28} = Group([(7,9)(8,10),(3,5)(4,6),(7,8,9,10)]) \cong C4 \times C2$ $P_{29} = Group([(7,9)(8,10),(3,5)(4,6),(1,2)(3,4,5,6)]) \cong C4 \times C2$ $P_{30} = Group([(7,9)(8,10),(3,5)(4,6),(1,2)]) \cong C2 \times C2 \times C2$ $P_{31} = Group([(7,9)(8,10),(3,5)(4,6),(3,4,5,6)(7,8,9,10)]) \cong C4 \times C2$ $P_{32} = Group([(7,9)(8,10), (3,5)(4,6), (1,2)(3,4,5,6)(7,8,9,10)]) \cong C4 \times C2$ $P_{33} = Group([(7,9)(8,10),(3,5)(4,6),(3,4,5,6)]) \cong C4 \times C2$ $P_{34} = Group([(7,9)(8,10),(3,5)(4,6),(1,2)(7,8,9,10)]) \cong C4 \times C2$ $P_{35} = Group([(3,6,5,4)(7,8,9,10),(1,2)(3,5)(4,6),(3,5)(4,6)(7,9)(8,10)]) \cong C4 \times C2$ $P_{36} = Group([(3,6,5,4)(7,8,9,10),(1,2),(3,5)(4,6)(7,9)(8,10)]) \cong C4 \times C2$ $P_{37} = Group([(3,4,5,6),(1,2),(3,5)(4,6)]) \cong C4 \times C2$ $P_{38} = Group([(3,4,5,6),(1,2)(7,9)(8,10),(3,5)(4,6)]) \cong C4 \times C2$ $P_{39} = Group([(3,4,5,6)(7,9)(8,10),(1,2),(3,5)(4,6)]) \cong C4 \times C2$ $P_{40} = Group([(3,4,5,6)(7,9)(8,10),(1,2)(7,9)(8,10),(3,5)(4,6)]) \cong C4 \times C2$ $P_{41} = Group([(3,4,5,6)(7,8,9,10),(1,2)(3,5)(4,6),(3,5)(4,6)(7,9)(8,10)]) \cong C4 \times C2$ $P_{42} = Group([(7, 8, 9, 10), (1, 2), (7, 9)(8, 10)]) \cong C4 \times C2$ $P_{43} = Group([(7, 8, 9, 10), (1, 2)(3, 5)(4, 6), (7, 9)(8, 10)]) \cong C4 \times C2$ $P_{44} = Group([(3,5)(4,6)(7,8,9,10),(1,2),(7,9)(8,10)]) \cong C4 \times C2$

 $P_{45} = Group([(3,5)(4,6)(7,8,9,10),(1,2)(3,5)(4,6),(7,9)(8,10)]) \cong C4 \times C2$ $P_{46} = Group([(3,4,5,6)(7,8,9,10),(1,2),(3,5)(4,6)(7,9)(8,10)]) \cong C4 \times C2$ $P_{47} = Group([(7,9)(8,10),(3,5)(4,6),(3,4,5,6),(1,2)(7,8,9,10)]) \cong C4 \times C4$ $P_{48} = Group([(7,9)(8,10),(3,5)(4,6),(7,8,9,10),(1,2)]) \cong C4 \times C2 \times C2$ $P_{49} = Group([(7,9)(8,10),(3,5)(4,6),(3,4,5,6),(1,2)]) \cong C4 \times C2 \times C2$ $P_{50} = Group([(7,9)(8,10),(3,5)(4,6),(7,8,9,10),(1,2)(3,4,5,6)]) \cong C4 \times C4$ $P_{51} = Group([(7,9)(8,10),(3,5)(4,6),(7,8,9,10),(3,4,5,6)]) \cong C4 \times C4$

 $P_{52} = Group([(7,9)(8,10), (3,5)(4,6), (3,4,5,6)(7,8,9,10), (1,2)]) \cong C4 \times C2 \times C2$ $P_{53} = Group([(7,9)(8,10), (3,5)(4,6), (3,4,5,6)(7,8,9,10), (1,2)(7,8,9,10)]) \cong C4 \times C4 \times C4$

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

 $P_2 = Group([(7,9)(8,10)]) \cong C2$

 $P_{54} = Group([(7,9)(8,10),(3,5)(4,6),(7,8,9,10),(3,4,5,6),(1,2)]) \cong C4 \times C4 \times C2$ $N_1 = Group([(1, 2), (3, 4, 5, 6), (7, 8, 9, 10)]) \cong C4 \times C4 \times C2$ $N_2 = Group([(1, 2), (3, 4, 5, 6), (7, 8, 9, 10)]) \cong C4 \times C4 \times C2$ $N_3 = Group([(1, 2), (3, 4, 5, 6), (7, 8, 9, 10)]) \cong C4 \times C4 \times C2$ $N_4 = Group([(1, 2), (3, 4, 5, 6), (7, 8, 9, 10)]) \cong C4 \times C4 \times C2$ $N_5 = Group([(1,2), (3,4,5,6), (7,8,9,10)]) \cong C4 \times C4 \times C2$ $N_6 = Group([(1, 2), (3, 4, 5, 6), (7, 8, 9, 10)]) \cong C4 \times C4 \times C2$ $N_7 = Group([(1,2), (3,4,5,6), (7,8,9,10)]) \cong C4 \times C4 \times C2$ $N_8 = Group([(1, 2), (3, 4, 5, 6), (7, 8, 9, 10)]) \cong C4 \times C4 \times C2$ $N_9 = Group([(1, 2), (3, 4, 5, 6), (7, 8, 9, 10)]) \cong C4 \times C4 \times C2$ $N_{10} = Group([(1,2),(3,4,5,6),(7,8,9,10)]) \cong C4 \times C4 \times C2$ $N_{11} = Group([(1,2), (3,4,5,6), (7,8,9,10)]) \cong C4 \times C4 \times C2$ $N_{12} = Group([(1,2), (3,4,5,6), (7,8,9,10)]) \cong C4 \times C4 \times C2$ $N_{13} = Group([(1,2), (3,4,5,6), (7,8,9,10)]) \cong C4 \times C4 \times C2$ $N_{14} = Group([(1,2), (3,4,5,6), (7,8,9,10)]) \cong C4 \times C4 \times C2$ $N_{15} = Group([(1,2), (3,4,5,6), (7,8,9,10)]) \cong C4 \times C4 \times C2$ $N_{16} = Group([(1,2), (3,4,5,6), (7,8,9,10)]) \cong C4 \times C4 \times C2$ $N_{17} = Group([(1,2), (3,4,5,6), (7,8,9,10)]) \cong C4 \times C4 \times C2$ $N_{18} = Group([(1,2), (3,4,5,6), (7,8,9,10)]) \cong C4 \times C4 \times C2$ $N_{19} = Group([(1,2), (3,4,5,6), (7,8,9,10)]) \cong C4 \times C4 \times C2$ $N_{20} = Group([(1,2), (3,4,5,6), (7,8,9,10)]) \cong C4 \times C4 \times C2$ $N_{21} = Group([(1,2), (3,4,5,6), (7,8,9,10)]) \cong C4 \times C4 \times C2$ $N_{22} = Group([(1,2), (3,4,5,6), (7,8,9,10)]) \cong C4 \times C4 \times C2$ $N_{23} = Group([(1,2), (3,4,5,6), (7,8,9,10)]) \cong C4 \times C4 \times C2$ $N_{24} = Group([(1, 2), (3, 4, 5, 6), (7, 8, 9, 10)]) \cong C4 \times C4 \times C2$ $N_{25} = Group([(1,2), (3,4,5,6), (7,8,9,10)]) \cong C4 \times C4 \times C2$ $N_{26} = Group([(1, 2), (3, 4, 5, 6), (7, 8, 9, 10)]) \cong C4 \times C4 \times C2$ $N_{27} = Group([(1, 2), (3, 4, 5, 6), (7, 8, 9, 10)]) \cong C4 \times C4 \times C2$ $N_{28} = Group([(1, 2), (3, 4, 5, 6), (7, 8, 9, 10)]) \cong C4 \times C4 \times C2$ $N_{29} = Group([(1,2), (3,4,5,6), (7,8,9,10)]) \cong C4 \times C4 \times C2$ $N_{30} = Group([(1, 2), (3, 4, 5, 6), (7, 8, 9, 10)]) \cong C4 \times C4 \times C2$ $N_{31} = Group([(1, 2), (3, 4, 5, 6), (7, 8, 9, 10)]) \cong C4 \times C4 \times C2$ $N_{32} = Group([(1,2), (3,4,5,6), (7,8,9,10)]) \cong C4 \times C4 \times C2$ $N_{33} = Group([(1, 2), (3, 4, 5, 6), (7, 8, 9, 10)]) \cong C4 \times C4 \times C2$ $N_{34} = Group([(1,2), (3,4,5,6), (7,8,9,10)]) \cong C4 \times C4 \times C2$ $N_{35} = Group([(1,2), (3,4,5,6), (7,8,9,10)]) \cong C4 \times C4 \times C2$ $N_{36} = Group([(1, 2), (3, 4, 5, 6), (7, 8, 9, 10)]) \cong C4 \times C4 \times C2$ $N_{37} = Group([(1, 2), (3, 4, 5, 6), (7, 8, 9, 10)]) \cong C4 \times C4 \times C2$ $N_{38} = Group([(1, 2), (3, 4, 5, 6), (7, 8, 9, 10)]) \cong C4 \times C4 \times C2$ $N_{39} = Group([(1,2), (3,4,5,6), (7,8,9,10)]) \cong C4 \times C4 \times C2$ $N_{40} = Group([(1,2), (3,4,5,6), (7,8,9,10)]) \cong C4 \times C4 \times C2$ $N_{41} = Group([(1, 2), (3, 4, 5, 6), (7, 8, 9, 10)]) \cong C4 \times C4 \times C2$ $N_{42} = Group([(1,2), (3,4,5,6), (7,8,9,10)]) \cong C4 \times C4 \times C2$ $N_{43} = Group([(1, 2), (3, 4, 5, 6), (7, 8, 9, 10)]) \cong C4 \times C4 \times C2$ $N_{44} = Group([(1, 2), (3, 4, 5, 6), (7, 8, 9, 10)]) \cong C4 \times C4 \times C2$ $N_{45} = Group([(1, 2), (3, 4, 5, 6), (7, 8, 9, 10)]) \cong C4 \times C4 \times C2$ $N_{46} = Group([(1, 2), (3, 4, 5, 6), (7, 8, 9, 10)]) \cong C4 \times C4 \times C2$ $N_{47} = Group([(1, 2), (3, 4, 5, 6), (7, 8, 9, 10)]) \cong C4 \times C4 \times C2$ $N_{48} = Group([(1, 2), (3, 4, 5, 6), (7, 8, 9, 10)]) \cong C4 \times C4 \times C2$

 $\begin{aligned} N_{49} &= Group([(1,2),(3,4,5,6),(7,8,9,10)]) \cong \text{C4} \times \text{C4} \times \text{C2} \\ N_{50} &= Group([(1,2),(3,4,5,6),(7,8,9,10)]) \cong \text{C4} \times \text{C4} \times \text{C2} \\ N_{51} &= Group([(1,2),(3,4,5,6),(7,8,9,10)]) \cong \text{C4} \times \text{C4} \times \text{C2} \\ N_{52} &= Group([(1,2),(3,4,5,6),(7,8,9,10)]) \cong \text{C4} \times \text{C4} \times \text{C2} \\ N_{53} &= Group([(1,2),(3,4,5,6),(7,8,9,10)]) \cong \text{C4} \times \text{C4} \times \text{C2} \\ N_{54} &= Group([(1,2),(3,4,5,6),(7,8,9,10)]) \cong \text{C4} \times \text{C4} \times \text{C2} \end{aligned}$