The group G is isomorphic to the group labelled by [16, 14] in the Small Groups library. Ordinary character table of $G \cong C2 \times C2 \times C2 \times C2$:

 $|\chi_{10}|$ 1 -1 1 -1 1 -1 1 -1 1 -1 1 -1 1 -1 1 $|\chi_{11}|$ 1 1 -1 -1 1 1 -1 -1 -1 1 1 -1 -1 1 $|\chi_{12}|$ 1 -1 -1 1 1 -1 -1 1 1 -1 1 1 -1 | $|\chi_{15}|$ 1 1 -1 -1 -1 1 1 -1 -1 1 1 1 -1 -1

 $|\chi_{16}|$ 1 -1 -1 1 -1 1 1 -1 1 1 -1 1 1 -1 1 1

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

Trivial source character table of $G \cong C2 \times C2$	37 37 37 37	37 37 37 37	37 37	37 37	37 37 37	37 37	37 37	37 37	37 37 37	37 37	37 37	37 37	37 37	37 37 37	7 37 37	37 37	37 37	37 37 7	7 37 37	37 37 37	37 37	37 37 3	AT AT				77 77	AT AT	
Normalisers N_i	N_2 N_3 N_4 N_5	N_6 N_7 N_8 N_9	$N_{10} N_{11}$	N_{12} N_{13}	$N_{14} \mid N_{15} \mid N_{16}$	N_{17} N_{18}	$N_{19} N_{20}$	$N_{21} N_{22}$	N_{23} N_{24} N_{25}	$N_{26} N_{27}$	$N_{28} N_{29}$	$N_{30} N_{31}$	N_{32} N_{33}	N_{34} N_{35} N	$\frac{1}{36}$ $\frac{1}{1}$ $\frac{1}{1}$ $\frac{1}{1}$ $\frac{1}{1}$ $\frac{1}{1}$	$\frac{N_{39}}{N_{39}} = \frac{N_{40}}{N_{40}}$	N_{41} N_{42}	N_{43} N_{44} I	$N_{45} N_{46} N_{47}$	N_{48} N_{49} N_{50}	N_{51} N_{52}	N_{53} N_{54} N_{54}	$\frac{\sqrt{55}}{D}$ $\frac{N_{56}}{D}$	$\frac{6}{N_{57}} \frac{N_{58}}{N_{58}}$	$N_{59} N_{60}$	N_{61} N_{62}	N_{63} N_{64}	N_{65} N_{66}	$\frac{N_{67}}{D}$
p-subgroups of G up to conjugacy in G	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	P_{10} P_{11}	$\frac{P_{12}}{1}$ $\frac{P_{13}}{1}$	$\frac{P_{14}}{1}$ $\frac{P_{15}}{1}$ $\frac{P_{16}}{1}$	P_{17} P_{18}	P_{19} P_{20}	P_{21} P_{22}	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$P_{26} P_{27}$	$P_{28} P_{29}$	P_{30} P_{31}	P_{32} P_{33}	P_{34} P_{35} P_{35}	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{1}{1}$ $\frac{1}{1}$ $\frac{1}{1}$	P_{41} P_{42}	P_{43} P_{44} I	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	P_{48} P_{49} P_{50}	$\frac{P_{51}}{1}$ $\frac{P_{52}}{1}$	$\frac{P_{53}}{1}$ $\frac{P_{54}}{1}$ $\frac{I}{1}$	$\begin{array}{c c} r & P_{56} \\ \hline 1 & 1 \\ \hline \end{array}$	$\frac{3}{1}$ P_{57} P_{58}	$P_{59} P_{60}$	P_{61} P_{62}	P_{63} P_{64}	P_{65} P_{66}	P_{67}
Representatives $n_j \in N_i$	1a 1a 1a 1a	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1 <i>a</i> 1 <i>a</i>	1a 1a	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1a 1a	1 <i>a</i> 1 <i>a</i>	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1a 1a	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1a 1a	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1 <i>a</i> 1 <i>a</i>	1a 1a	$\frac{1a}{a}$	$\frac{1a}{a}$	$\frac{1a}{a}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{1a}{a}$				
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16} \qquad 16$	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	$\begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$	0 0	0 0	0 0	0 0 0	0 0 0	0 0	0 0	0 0	0 0	0 0		0 0	0 0	
$\frac{1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 0 \cdot \chi_{14} + 1 \cdot \chi_{15} + 0 \cdot \chi_{16}}{1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{14} + 1 \cdot \chi_{15} + 0 \cdot \chi_{16}} = 8$		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	$\begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$	0 0	0 0	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0	0 0	0 0	$\frac{0}{0}$	0 0	0 0		0 0	0 0	
$\frac{1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}{1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}} = 8$	0 8 0 0	0 0 0 0	0 0	0 0	0 0 0	0 0	0 0	0 0	0 0 0	0 0	0 0	0 0	0 0	0 0 0	$\begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$	0 0	0 0	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0	0 0	0 0	$\frac{0}{0}$	0 0			0 0	0 0	
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12} + 1 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 1 \cdot \chi_{16} \mid 8$	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	0 0 0	$\begin{bmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \end{bmatrix}$	0 0	0 0	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0	0 0	0 0	$\frac{0}{0}$	$\begin{array}{c c} 0 & 0 \\ \hline \end{array}$	0 0		0 0	0 0	
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} \mid 8$	0 0 0 8	0 0 0 0	0 0	0 0	0 0 0	0 0	0 0	0 0	0 0 0	0 0	0 0	0 0	0 0	0 0 0	0 0	0 0	0 0	0 0	0 0 0	0 0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 1 \cdot \chi_{16} \mid 8$	0 0 0 0	8 0 0 0	0 0	0 0	0 0 0	0 0	0 0	0 0	0 0 0	0 0	0 0	0 0	0 0	0 0 0	0 0	0 0	0 0	0 0	0 0 0	0 0 0	0 0	0 0	$\frac{0}{0}$	0 0	0 0	0 0	0 0	0 0	
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16} \mid 8$	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 0	0 0	0 0	$\frac{0}{0}$	0 0	0 0	0 0	0 0	0 0	
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} \mid 8$	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 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 1
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12} + 1 \cdot \chi_{13} + 0 \cdot \chi_{14} + 1 \cdot \chi_{15} + 0 \cdot \chi_{16} \mid 8$	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	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0	0 0	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 1
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16} = 8$		0 0 0 0	8 0	0 0	0 0 0	0 0	0 0	0 0	0 0 0	0 0	0 0	0 0	0 0	0 0 0	0 0	0 0	0 0	0 0	0 0 0	0 0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 1 \cdot \chi_{14} + 1 \cdot \chi_{15} + 0 \cdot \chi_{16} = 8$		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 0	0 0	0 0	0 0	0 0	0 0	0 0	
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16} = 8$	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	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 1 \cdot \chi_{16} = 8$	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 0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} = 8$	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 0	0 0	0 0 0	0 0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 1 \cdot \chi_{14} + 1 \cdot \chi_{15} + 0 \cdot \chi_{16} = 8$	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	0 0	0 0	0 0 0	0 0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 1 \cdot \chi_{16} = 8$	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 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 + 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} + 0 \cdot \chi_{15} + 1 \cdot \chi_{16} $	0 0 4 0		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 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} $	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	0 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	$0 \boxed{0}$	0 0	0 0	0 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 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \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} + 1 \cdot \chi_{16} $	0 0 4 0	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	0 0	0 0 0	0 0	0 0	0 0	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} + 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 4 0 0	0 0 0 0	0 0	4 0	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	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 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \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} + 0 \cdot \chi_{16} $	4 0 0 0	0 4 0 0	0 0	0 0	0 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 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 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} $	0 4 0 0	0 0 0 0	0 4	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 0	0 0	0 0	0 0	0 0 0	0 0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 1 \cdot \chi_{15} + 0 \cdot \chi_{16} = 4$	4 0 0 0	0 0 0 0	0 4	4 0	0 0 0	0 0	0 0	0 0	4 0 0	0 0	0 0	0 0	0 0	0 0 0	0 0 0	0 0	0 0	0 0	0 0 0	0 0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} = 4$	0 0 4 0	0 0 0 0	0 4	0 0	4 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	0 0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0
$\frac{1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}{4}$	0 4 0 0	4 0 0 0	0 0	0 0	0 4 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 0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0
$\frac{1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}{4}$	0 0 0 4	0 0 0 0	4 0	0 0	4 0 0	0 0	0 0	0 0	0 0 0	4 0	0 0	0 0	0 0	0 0 0	0 0	0 0	0 0	0 0	0 0 0	0 0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0
$\frac{1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}{1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}$	0 4 0 4	0 4 0 0	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	$\frac{0}{0}$	0 0	0 0	0 0	0 0 0	0 0 0	0 0	0 0	$\frac{0}{0}$	$\frac{1}{1}$	$\frac{1}{0}$	$\frac{1}{0}$	0 0	0 0	$\frac{1}{0}$
$\frac{1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}{1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}$	0 0 0 4	0 0 0 4	0 0	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	$\frac{0}{0}$	0 0	0 0	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0	0 0	0 0	$\frac{0}{0}$	$\frac{1}{0}$	$\frac{1}{0}$	0 0	0 0	0 0	$\frac{1}{0}$
$\frac{1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 1 \cdot \chi_{15} + 0 \cdot \chi_{16}}{1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 0 \cdot \chi_{14} + 1 \cdot \chi_{15} + 0 \cdot \chi_{16}}$		0 0 0 4	4 0	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	$\frac{0}{0}$	0 0	0 0	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0	0 0	0 0	$\frac{0}{0}$	$\frac{1}{0}$	$\frac{1}{0}$	0 0	0 0	0 0	0
$\frac{1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 0 \cdot \chi_{14} + 1 \cdot \chi_{15} + 0 \cdot \chi_{16}}{1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 1 \cdot \chi_{16}}$	0 0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	4 0	0 4	0 0 0	0 0	0 0	0 0	0 0 0	0 0	0 0	4 0	0 0	0 0 0	$\frac{3}{0}$ $\frac{3}{0}$ $\frac{3}{0}$	0 0	0 0	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0	0 0	0 0	$\frac{0}{0}$	$\frac{1}{0}$	$\frac{1}{0}$	$\frac{1}{0}$	0 0	0 0	$+\frac{0}{0}$
$\frac{1 \cdot \chi_{1} + 0 \cdot \chi_{2} + 1 \cdot \chi_{3} + 0 \cdot \chi_{4} + 0 \cdot \chi_{5} + 0 \cdot \chi_{6} + 0 \cdot \chi_{7} + 0 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 1 \cdot \chi_{16}}{1 \cdot \chi_{1} + 0 \cdot \chi_{2} + 1 \cdot \chi_{3} + 0 \cdot \chi_{4} + 0 \cdot \chi_{5} + 1 \cdot \chi_{6} + 0 \cdot \chi_{7} + 1 \cdot \chi_{8} + 0 \cdot \chi_{9} + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 1 \cdot \chi_{16}}$		4 0 0 0	0 0	0 4	4 0 0	0 0	0 0	0 0	0 0 0	0 0	0 0	0 4	0 0	0 0 0	$\frac{0}{0}$	0 0	0 0	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0	0 0	0 0	$\frac{0}{0}$	$\frac{1}{1}$	$\frac{1}{0}$		0 0	0 0	$\frac{1}{0}$
70 70 70 70 70 70 70 70 70 70 70 70 70 7	4 0 0 4	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0	0 0	0 0	0 0 0	0 0	0 0	0 4	4 0	0 0 0	$\frac{0}{0}$	0 0	0 0	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0	0 0	0 0	0 0	$\frac{0}{0}$	$\frac{1}{0}$		0 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 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \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_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}} $	0 0 4	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0	0 0	0 0 0	0 0	0 0	0 0	0 0 0	0 0	0 0	0 0	0 4	0 0 0	$\frac{0}{0}$	0 0	0 0	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0	0 0	0 0	0 0	$\frac{0}{0}$	$\frac{1}{0}$		0 0	0 0	
$\frac{1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}{1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}} = \frac{4}{1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}$	0 0 4 4	0 0 0 0	4 0	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0	0 0	0 0	0 0 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 0	$\frac{0}{0}$	0 0	$\frac{1}{0}$		0 0	0 0	
$\frac{1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}{1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}} = \frac{4}{1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}$	0 4 0 0	$\begin{bmatrix} 0 & 0 & 4 & 0 \\ 0 & 4 & 0 & 0 \end{bmatrix}$	4 0	0 0	0 0 0	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 0 0	0 0	0 0	$\frac{0}{0}$	0 0			0 0	0 0	
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16} = 4$	0 0 0 0	$\begin{bmatrix} 0 & 4 & 0 & 0 \\ 0 & 4 & 4 & 0 \end{bmatrix}$	4 0	4 0	0 0 0	0 0	0 0	0 0	0 0 0	+ - + - +		0 0		0 4 0	$\frac{0}{4}$	0 0	0 0	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0	0 0	0 0	$\frac{0}{0}$	0 0	0 0	0 0	0 0	0 0	
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} = 4$	0 0 0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0	0 0	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0	0 0	0 0	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\frac{4}{2}$ $\frac{0}{4}$ $\frac{0}{2}$	0 0	0 0	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0	0 0	0 0	$\frac{0}{0}$	0 0	$\frac{1}{0}$	0 0	0 0	0 0	
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} = 4$	4 4 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	0 0	0 0 0	$\frac{0}{2}$ $\frac{4}{2}$ $\frac{0}{4}$	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 0	
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} = 4$	0 4 0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0	0 0	0 0	0 0 0	0 0	0 0	0 0	0 0	0 0 0	0 0 4	0 0	0 0	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0	0 0	0 0	$\frac{0}{0}$	0 0	0 0	0 0	0 0	0 0	
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 1 \cdot \chi_{16} = 4$	0 0 0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0	4 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0	0 0	0 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 0	0 0	0 0	0 0	0 0	0 0	0 0	0 1
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 1 \cdot \chi_{15} + 0 \cdot \chi_{16} = 4$	0 0 0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0	4 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 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 + 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} + 1 \cdot \chi_{14} + 1 \cdot \chi_{15} + 0 \cdot \chi_{16} $	0 0 0 0	0 0 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	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 1
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} = 4$	0 0 0 0	0 0 0 0	0 0	0 0	4 4 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 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 1
$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} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} $	0 0 0 0	0 0 4 0	0 0	0 4	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	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
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 1 \cdot \chi_{15} + 0 \cdot \chi_{16} = 4$	0 0 0 0	0 4 0 4	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 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
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} = 4$	0 0 0 0	4 0 4 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	0 0	0 0	0 0	4 0 0	0 0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12} + 1 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} = 4$	0 0 4 0	0 0 4 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	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
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} = 4$	0 0 0 4	0 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	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 0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 1 \cdot \chi_{16} $	0 0 4 0	0 0 0 0	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 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 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \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} + 1 \cdot \chi_{16} $	0 0 0 0	0 4 0 0	0 0	0 4	0 0 4	0 0	0 0	0 0	0 0 0	0 0	0 0	0 0	0 0	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 0	0 0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12} + 1 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} = 4$	4 0 0 0	0 0 4 0	0 0	0 0	0 0 4	0 0	0 0	0 0	0 0 0	0 0	0 0	0 0	0 0	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	0 0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} = 4$	0 0 0 4	0 0 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 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
$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 2 0 2	0 2 2 0	2 0	2 0	2 0 0	0 0	0 2	0 0	0 0 0	2 2	0 0	0 0	0 0	2 2 2	2 0 0	0 0	0 0	0 0	0 0 0	0 0 0	2 2	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 + 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} $	2 0 0 2	2 0 0 2	2 0	0 2	2 0 0	0 2	0 0	0 0	0 0 0	2 0	2 2	2 2	2 0	0 0 0	0 0	0 0	0 0	0 0	0 0 0	0 0 0	0 0	2 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 0 2 2	0 0 0 0	2 2	0 0	2 2 2	0 0	0 0	0 0	0 2 0	2 0	0 0	0 0	0 2	0 0 0	0 0	0 0	2 2	0 0	0 0 2	2 0 0	0 0	0 2	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 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} $	2 2 2 0	0 0 0 0	0 2	2 2	2 0 0	2 2	0 2	0 2	2 2 0	0 0	0 0	0 0	0 0	0 0 0	0 2 0	0 0	0 0	0 0	0 0 0	0 0 0	0 0	0 0	$\overline{2}$ 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 + 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 2 0 0	2 0 0 2	0 0	2 0	2 2 2	0 0	0 2	0 0	0 0 2	0 0	0 0	0 2	0 0	0 0 0	0 0 2	2 2	0 2	0 0	0 0 0	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 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16} + 0 \cdot $	2 0 0 0	0 2 2 0	0 0	0 2	2 2 2	0 2	0 0	2 0	0 0 0	0 0	0 0	0 0	0 0	0 0 2	2 0 0	0 0	0 2	2 0	0 0 0	0 2 2	0 0	0 0	0 0	2 0	0 0	0 0	0 0	0 0	0
$\frac{1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}{2}$	0 0 2 0	2 2 2 2	0 2	0 0	2 0 0	0 0	2 0	0 0	0 2 0	0 0	0 0	0 2	0 0	0 0 2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0	0 0	0 2	2 2 0	0 0 0	0 0	0 0	0 0	0 2	0 0	0 0	0 0	0 0	0
$\frac{1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}{2}$	2 2 2 2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{c c} 2 & 0 \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c c} \hline 0 & 2 \\ \hline \end{array}$	0 0	0 0	2 2	0 0 0	0 2 0	0 0	0 0	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0 0	0 0	0 0	$\frac{0}{0}$	$\frac{1}{0}$	$\frac{1}{2}$ 0	0 0	0 0	0 0	$+\frac{1}{0}$
$\frac{1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}{1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}$	0 2 0 2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 2	0 2	0 0 2	0 0	0 0	0 2	0 0 0	0 2	2 0	0 0	0 0	0 0 0	$\frac{3}{0} + \frac{2}{0} + \frac{3}{2}$	0 0	0 0	0 2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 2 0	0 0	0 0	$\frac{0}{0}$	$\frac{1}{1}$	$\frac{2}{0}$	0 0	0 0	0 0	0
$\frac{1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}{1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 2	2 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0	0 0	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0	0 0	0 0	2 0	0 0 0	$\frac{3}{0}$ $\frac{3}{0}$ $\frac{2}{0}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0	0 0	$\frac{0}{2}$ 0 2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2 0	0 0	$\frac{0}{0}$	$\frac{1}{0}$	$\frac{1}{0}$	$\frac{1}{2}$	0 0	0 0	$+\frac{0}{0}$
$\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} + 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} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}{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} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}} $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{bmatrix} 2 & 0 & 2 & 0 \\ 0 & 0 & 2 & 2 \end{bmatrix}$	0 0	2 2	0 2 0	9 0	0 0	0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0	2 0	0 0	0 2	0 0 0	$\frac{1}{0}$	$\begin{array}{c c} 2 & 0 \\ \hline 0 & 2 \end{array}$	0 0	2 0	$\frac{2}{0}$ $\frac{3}{2}$ $\frac{2}{0}$	0 0 2	2 0	0 0	$\frac{0}{0}$	$\frac{1}{0}$		$\frac{2}{0}$	0 0	0 0	10
$\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} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}{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} + 1 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}} $	9 9 9 0	$\begin{bmatrix} 0 & 0 & 2 & 2 \\ 0 & 0 & 2 & 2 \end{bmatrix}$	9 0	0 0	0 0 2	0 0	0 0	0 0	0 0 0	0 0	0 2	0 0	0 0	9 0 0	$\frac{1}{2}$	0 0	0 0	0 0	$\frac{0}{0}$ $\frac{2}{2}$ $\frac{0}{0}$	2 0 2	0 0	0 0	$\frac{0}{0}$	0 0			2 0	0 0	10
	0 2 0 0	9 0 2 2	2 0	0 0	0 0 2	0 0	0 0	0 0	0 0 0	0 0	0 2	2 0	0 0	2 0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0	2 0	2 0	2 0 0	0 0 0	0 0	0 0	$\frac{0}{0}$	0 0		0 0	0 2	0 0	10
$\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} + 1 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}{1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_1 + 0 $	2 0 0	0 0 0	2 2	0 2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0 0	0 0	0 2	0 0 2	0 0	0 0	2 0	0 0	0 0 0	0 0	0 0	2 0	0 0	0 0 0	0 0 0	0 0	0 0	$\frac{0}{0}$				0 2	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 + 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} + 0 \cdot \chi_{16}}{1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_1 + 0 $	2 0 0 0	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2 2	2 0	0 2 0	0 0	0 0	2 0	0 0 0	0 0	0 2	0 0	0 0	0 2 (0 0	0 2	0 0	0 2	0 0 0	0 0 0	0 0	0 0	$\frac{0}{0}$				0 0	2 0	
$\frac{1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 1 \cdot \chi_{16}}{1 \cdot \chi_{10} + 0 \cdot$	1 1 1 1	2 2 0 0	2 0	2 Z	1 1 1															$\begin{array}{c ccccccccccccccccccccccccccccccccccc$								0 2	
$ \left[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} \right] $			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 1	1 1	1 1	1 1	1 1	1 1	
																													,

 $P_1 = Group([()]) \cong 1$ $P_2 = Group([(7,8)]) \cong C2$ $P_3 = Group([(5,6)]) \cong C2$ $P_4 = Group([(5,6)(7,8)]) \cong C2$ $P_5 = Group([(3,4)]) \cong C2$ $P_6 = Group([(3,4)(7,8)]) \cong C2$ $P_7 = Group([(3,4)(5,6)]) \cong C2$ $P_8 = Group([(1,2)(3,4)(5,6)]) \cong C2$ $P_9 = Group([(1,2)(3,4)(7,8)]) \cong C2$ $P_{10} = Group([(1,2)(3,4)]) \cong C2$ $P_{11} = Group([(1,2)(5,6)(7,8)]) \cong C2$ $P_{12} = Group([(1,2)(5,6)]) \cong C2$ $P_{13} = Group([(1,2)(7,8)]) \cong C2$ $P_{14} = Group([(1,2)]) \cong C2$ $P_{15} = Group([(3,4)(5,6)(7,8)]) \cong C2$ $P_{16} = Group([(1,2)(3,4)(5,6)(7,8)]) \cong C2$ $P_{17} = Group([(1,2)(7,8),(1,2)(5,6)]) \cong C2 \times C2$ $P_{18} = Group([(7,8),(1,2)]) \cong C2 \times C2$ $P_{19} = Group([(3,4)(7,8),(3,4)(5,6)]) \cong C2 \times C2$ $P_{20} = Group([(5,6),(1,2)]) \cong C2 \times C2$ $P_{21} = Group([(7,8),(3,4)(5,6)]) \cong C2 \times C2$ $P_{22} = Group([(1,2)(7,8),(5,6)]) \cong C2 \times C2$ $P_{23} = Group([(7,8),(1,2)(5,6)]) \cong C2 \times C2$ $P_{24} = Group([(5,6)(7,8),(1,2)]) \cong C2 \times C2$ $P_{25} = Group([(3,4)(7,8),(5,6)]) \cong C2 \times C2$ $P_{26} = Group([(3,4),(1,2)]) \cong C2 \times C2$ $P_{27} = Group([(5,6),(3,4)]) \cong C2 \times C2$ $P_{28} = Group([(1,2)(7,8),(3,4)]) \cong C2 \times C2$ $P_{29} = Group([(7,8),(1,2)(3,4)]) \cong C2 \times C2$ $P_{30} = Group([(1,2)(7,8),(1,2)(3,4)]) \cong C2 \times C2$ $P_{31} = Group([(3,4)(7,8),(1,2)]) \cong C2 \times C2$ $P_{32} = Group([(7,8),(3,4)]) \cong C2 \times C2$ $P_{33} = Group([(5,6)(7,8),(3,4)]) \cong C2 \times C2$ $P_{34} = Group([(5,6),(1,2)(3,4)]) \cong C2 \times C2$ $P_{35} = Group([(1,2)(5,6),(1,2)(3,4)]) \cong C2 \times C2$ $P_{36} = Group([(3,4)(5,6),(1,2)]) \cong C2 \times C2$ $P_{37} = Group([(7,8),(5,6)]) \cong C2 \times C2$ $P_{38} = Group([(1,2)(3,4)(7,8),(5,6)]) \cong C2 \times C2$ $P_{39} = Group([(3,4)(7,8),(1,2)(5,6)]) \cong C2 \times C2$ $P_{40} = Group([(1,2)(3,4)(7,8),(1,2)(5,6)]) \cong C2 \times C2$ $P_{41} = Group([(1,2)(5,6)(7,8),(1,2)(3,4)]) \cong C2 \times C2$ $P_{42} = Group([(3,4)(5,6)(7,8),(1,2)]) \cong C2 \times C2$ $P_{43} = Group([(1,2)(7,8),(1,2)(3,4)(5,6)]) \cong C2 \times C2$ $P_{44} = Group([(1,2)(3,4)(7,8),(3,4)(5,6)]) \cong C2 \times C2$ $P_{45} = Group([(3,4)(7,8), (1,2)(3,4)(5,6)]) \cong C2 \times C2$ $P_{46} = Group([(1,2)(3,4)(7,8),(1,2)(3,4)(5,6)]) \cong C2 \times C2$

 $P_{47} = Group([(1,2)(5,6)(7,8),(3,4)]) \cong C2 \times C2$ $P_{48} = Group([(5,6)(7,8),(1,2)(3,4)]) \cong C2 \times C2$ $P_{49} = Group([(1,2)(7,8),(3,4)(5,6)]) \cong C2 \times C2$ $P_{50} = Group([(7,8),(1,2)(3,4)(5,6)]) \cong C2 \times C2$ $P_{51} = Group([(1,2)(5,6),(3,4)]) \cong C2 \times C2$ $P_{52} = Group([(5,6),(3,4),(1,2)]) \cong C2 \times C2 \times C2$ $P_{53} = Group([(7,8),(3,4),(1,2)]) \cong C2 \times C2 \times C2$ $P_{54} = Group([(5,6)(7,8),(3,4),(1,2)]) \cong C2 \times C2 \times C2$ $P_{55} = Group([(7,8),(5,6),(1,2)]) \cong C2 \times C2 \times C2$ $P_{56} = Group([(7,8),(3,4)(7,8),(1,2)]) \cong C2 \times C2 \times C2$ $P_{57} = Group([(7,8),(3,4)(5,6),(1,2)]) \cong C2 \times C2 \times C2$ $P_{58} = Group([(5,6)(7,8),(3,4)(7,8),(1,2)]) \cong C2 \times C2 \times C2$

$$\begin{split} P_{59} &= Group([(7,8),(5,6),(3,4)]) \cong \text{C2} \times \text{C2} \times \text{C2} \\ P_{60} &= Group([(5,6),(3,4),(1,2)(7,8)]) \cong \text{C2} \times \text{C2} \times \text{C2} \\ P_{61} &= Group([(7,8),(3,4),(1,2)(5,6)]) \cong \text{C2} \times \text{C2} \times \text{C2} \\ P_{62} &= Group([(5,6)(7,8),(3,4),(1,2)(7,8)]) \cong \text{C2} \times \text{C2} \times \text{C2} \\ P_{63} &= Group([(7,8),(5,6),(1,2)(3,4)]) \cong \text{C2} \times \text{C2} \times \text{C2} \\ P_{64} &= Group([(5,6),(3,4)(7,8),(1,2)(7,8)]) \cong \text{C2} \times \text{C2} \times \text{C2} \end{split}$$

 $P_{65} = Group([(7,8), (3,4)(5,6), (1,2)(5,6)]) \cong C2 \times C2 \times C2$ $P_{66} = Group([(5,6)(7,8), (3,4)(7,8), (1,2)(7,8)]) \cong C2 \times C2 \times C2$ $P_{67} = Group([(7,8), (5,6), (3,4), (1,2)]) \cong C2 \times C2 \times C2 \times C2$ $N_1 = Group([(1, 2), (3, 4), (5, 6), (7, 8)]) \cong C2 \times C2 \times C2 \times C2$ $N_2 = Group([(1, 2), (3, 4), (5, 6), (7, 8)]) \cong C2 \times C2 \times C2 \times C2$ $N_3 = Group([(1, 2), (3, 4), (5, 6), (7, 8)]) \cong C2 \times C2 \times C2 \times C2$ $N_4 = Group([(1, 2), (3, 4), (5, 6), (7, 8)]) \cong C2 \times C2 \times C2 \times C2$ $N_5 = Group([(1, 2), (3, 4), (5, 6), (7, 8)]) \cong C2 \times C2 \times C2 \times C2$ $N_6 = Group([(1, 2), (3, 4), (5, 6), (7, 8)]) \cong C2 \times C2 \times C2 \times C2$ $N_7 = Group([(1,2), (3,4), (5,6), (7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_8 = Group([(1, 2), (3, 4), (5, 6), (7, 8)]) \cong C2 \times C2 \times C2 \times C2$ $N_9 = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{10} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{11} = Group([(1, 2), (3, 4), (5, 6), (7, 8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{12} = Group([(1, 2), (3, 4), (5, 6), (7, 8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{13} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{14} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{15} = Group([(1, 2), (3, 4), (5, 6), (7, 8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{16} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{17} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{18} = Group([(1, 2), (3, 4), (5, 6), (7, 8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{19} = Group([(1, 2), (3, 4), (5, 6), (7, 8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{20} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{21} = Group([(1, 2), (3, 4), (5, 6), (7, 8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{22} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{23} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{24} = Group([(1, 2), (3, 4), (5, 6), (7, 8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{25} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{26} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{27} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{28} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{29} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{30} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{31} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{32} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{33} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{34} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{35} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{36} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{37} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{38} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{39} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{40} = Group([(1, 2), (3, 4), (5, 6), (7, 8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{41} = Group([(1, 2), (3, 4), (5, 6), (7, 8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{42} = Group([(1, 2), (3, 4), (5, 6), (7, 8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{43} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{44} = Group([(1,2), (3,4), (5,6), (7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{45} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{46} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{47} = Group([(1,2), (3,4), (5,6), (7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{48} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{49} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$

 $N_{50} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{51} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{52} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{53} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{54} = Group([(1, 2), (3, 4), (5, 6), (7, 8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{55} = Group([(1, 2), (3, 4), (5, 6), (7, 8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{56} = Group([(1, 2), (3, 4), (5, 6), (7, 8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{57} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{58} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{59} = Group([(1, 2), (3, 4), (5, 6), (7, 8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{60} = Group([(1, 2), (3, 4), (5, 6), (7, 8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{61} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{62} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{63} = Group([(1, 2), (3, 4), (5, 6), (7, 8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{64} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{65} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{66} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$ $N_{67} = Group([(1,2),(3,4),(5,6),(7,8)]) \cong C2 \times C2 \times C2 \times C2$