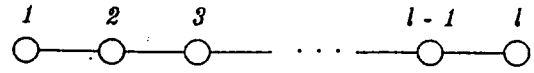


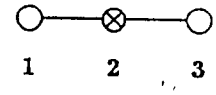


$$
\begin{aligned}
\{\bar{J}\} &= \{100.001; 110.011\} && (\tfrac{\overline{12}}{34}) \\
\{\tau_2\bar{J}\} &= \{110.011; 100.001\} && (\tfrac{\overline{13}}{24}) \\
\{\tau_1\tau_2\bar{J}\} &= \{010.111; -100.001\} && (\tfrac{\overline{23}}{14}) \\
\{\tau_3\tau_2\bar{J}\} &= \{111.010; 100.-001\} && (\tfrac{\overline{14}}{23}) \\
\{\tau_1\tau_3\tau_2\bar{J}\} &= \{011.110; -100.-001\} && (\tfrac{\overline{24}}{13}) \\
\{\tau_2\tau_1\tau_3\tau_2\bar{J}\} &= \{001.100; -110.-011\} && (\tfrac{\overline{34}}{12})
\end{aligned}
$$

■

| | $C_1$ | $C_2$ | $C_3$ | $C_4$ | $C_5$ | $C_6$ | $C_7$ | $C_8$ | $C_9$ | $C_{10}$ | $C_{11}$ | $C_{12}$ | $C_{13}$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $\chi_1$ | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| $\chi_2$ | 1 | -1 | 1 | -1 | 1 | -1 | 1 | -1 | 1 | 1 | 1 | -1 | 1 |
| $\chi_3$ | 2 | 0 | -1 | 0 | 2 | 0 | 2 | 0 | 2 | -1 | 2 | 0 | 2 |
| $\chi_4$ | 3 | 1 | 0 | 1 | 3 | -1 | -1 | -1 | -1 | 0 | 3 | 1 | -1 |
| $\chi_5$ | 3 | 1 | 0 | -1 | -1 | -1 | -1 | 1 | 3 | 0 | 3 | 1 | -1 |
| $\chi_6$ | 3 | -1 | 0 | -1 | 3 | 1 | -1 | 1 | -1 | 0 | 3 | -1 | -1 |
| $\chi_7$ | 3 | -1 | 0 | 1 | -1 | 1 | -1 | -1 | 3 | 0 | 3 | -1 | -1 |
| $\chi_8$ | 3 | -1 | 0 | 1 | -1 | -1 | 3 | 1 | -1 | 0 | 3 | -1 | -1 |
| $\chi_9$ | 3 | 1 | 0 | -1 | -1 | 1 | 3 | -1 | -1 | 0 | 3 | 1 | -1 |
| $\chi_{10}$ | 4 | -2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | -4 | 2 | 0 |
| $\chi_{11}$ | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | -1 | -4 | -2 | 0 |
| $\chi_{12}$ | 6 | 0 | 0 | 0 | -2 | 0 | -2 | 0 | -2 | 0 | 6 | 0 | 2 |
| $\chi_{13}$ | 8 | 0 | -1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | -8 | 0 | 0 |

| $\Psi$ | $J$ | $\Psi'$ | $J'$ | $Ch$ |
|---|---|---|---|---|
| $\mathbf{A_3}$ | {1000.0100.0010} | $\mathbf{2A_1}$ | {1101.0111} | $\chi_4$ |
| $\mathbf{A_3'}$ | {1000.0100.0001} | $\mathbf{2A_1'}$ | {1110.0111} | $\chi_9$ |
| $\mathbf{A_3''}$ | {0100.0010.0001} | $\mathbf{2A_1''}$ | {1110.1101} | $\chi_5$ |
| $\mathbf{4A_1}$ | {1000.1211.0010.0001} | $\mathbf{3A_1}$ | {1100.0110.0101} | $\chi_3$ |
| $\mathbf{3A_1}$ | {1000.0010.0001} | $\mathbf{A_2}$ | {1111.0100} | $\chi_{13}$ |
| $\mathbf{A_2}$ | {1000.0100} | $\mathbf{3A_1}$ | {1110.1101.0111} | $\chi_{13}$ |
| $\mathbf{2A_1}$ | {1000.0010} | $\mathbf{A_3}$ | {0001,1100,0110} | $\chi_7$ |
| $\mathbf{2A_1'}$ | {1000.0001} | $\mathbf{A_3'}$ | {0010,0101,1100} | $\chi_6$ |
| $\mathbf{2A_1''}$ | {0010.0001} | $\mathbf{A_3''}$ | {1000.0101,0110} | $\chi_8$ |
| $\mathbf{D_4}$ | {1000,0100,0010,0001} | $\emptyset$ | $\emptyset$ | $\chi_1$ |
| $\emptyset$ | $\emptyset$ | $\mathbf{D_4}$ | {1000.0100,0010,0001} | $\chi_2$ |

| $\Psi$ | $J$ | $\Psi'$ | $J'$ | $Char$ |
|---|---|---|---|---|
| $\mathbf{G_2}$ | $\{0100.\frac{1}{3}(1000+0010+0001)\}$ | $\mathbf{A_2}$ | {0001,0110} | $\chi_{12}$ |