| The group G is isomorphic to the group labelled by $[64, 12]$ in the Small Groups library. | |
|--|--|

Ordinary character table of $G \cong ((C4 : C8) : C2) : 1$:

| | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ |
|--|---|
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$ | |
| ************************************** | |
| | $ \begin{array}{l} (4, 9)(3, 8)(27, 9)(2, 1)(31, 2)(31, 3)(31, 5)(31, 3)(41, 3)(41, 3)(31, 3)(31, 5)) \cong C \times C$ |

(3, 5, 5)(1, 3, 5)(

(3, 5, 5, 1, 1, 2, 3, 1, 3, 5, 1, 3, 1,

 $3.5 \times 10.5 \times 1$

 $x_{3}, x_{5}, x_{5},$

 $x_{3}, x_{5}, x_{5},$

(25, 25)(25, 25)(24, 25)(25,

 $S_{5} = Group([(1,14)(2,24)(3,5)(4,54)(24,46)(25,24)(3,5)(4,54)(45,20)(25,30)$

1, 3, 5, 1, 1, 3, 1, 3, 1, 4, 3, 1, 4, 5, 1, 4, 5, 1, 5, 1, 4, 5, 1, 5, 1, 4, 5, 1

(3, 5, 5)(13, 5)(13, 5)(14, 5)(15, 5)(14, 5)(15, 5)(14, 5)(15, 5)(14, 5)(15, 5)(14, 5)(15, 5)(14, 5)(15, 5)(14, 5)(15, 5)(14, 5)(15, 5)(14, 5)(15, 5)(14, 5)(15, 5)(14, 5)(15, 5)(14, 5)(15, 5)(14, 5)(15, 5)(14, 5)(15, 5)(14, 5)(15, 5)(14, 5)(15,

3, 5, 5, 1

 $\begin{vmatrix} \chi_6 & 1 & E(4) & -1 & 1 & -1 & 1 & 1 & -E(4) & E(4) & -E(4) & 1 & -1 & -1 & 1 & E(4) & -E(4) & -E$ $ig|\hspace{.1cm} \chi_{10}\hspace{.1cm} ig|\hspace{.1cm} 2\hspace{.1cm} 0\hspace{.1cm} 0\hspace{.1cm} -2\hspace{.1cm} -2\hspace{.1cm} 2\hspace{.1cm} 2\hspace{.1cm} 0\hspace{.1cm} 0\hspace{.1cm} 0\hspace{.1cm} 2\hspace{.1cm} 0$ $\begin{vmatrix} \chi_{11} \\ \chi_{11} \end{vmatrix}$ 2 0 0 0 0 -2 -2 -2 -E(8) - E(8)^3 0 0 0 0 2 2 E(8) + E(8)^3 E(8) + E(8)^3 0 0 -E(8) - E(8)^3 $\begin{vmatrix} \chi_{13} \\ \chi_{14} \\ 2 \end{vmatrix} = 0 \qquad 0 \qquad 0 \qquad 2 \qquad -2 \qquad -2 \qquad -E(8) + E(8)^3 \qquad 0 \qquad 0 \qquad 0 \qquad 0 \qquad -2 \qquad 2 \qquad -E(8) + E(8)^3 \qquad E(8) - E(8)^3 \qquad 0 \qquad 0 \qquad E(8) - E(8)^3 \\ \chi_{14} \quad 2 \quad 0 \quad 0 \quad 0 \quad 2 \quad -2 \quad -2 \quad E(8) - E(8)^3 \qquad 0 \qquad 0 \quad 0 \quad -2 \quad 2 \quad E(8) - E(8)^3 \quad -E(8) + E(8)^3 \qquad 0 \qquad 0 \quad -E(8) + E(8)^3$ $|\chi_{19}| \ 4 \qquad 0 \qquad 0 \quad 0 \quad -4 \quad 4 \qquad 0 \qquad 0 \qquad 0 \quad 0 \quad 0 \quad -4 \quad 0 \qquad 0 \qquad 0 \quad 0 \quad 0$