

The group G is isomorphic to the group labelled by [720, 763] in the Small Groups library.

Ordinary character table of $G \cong S6$:

	1a	2a	2b	2c	3a	3b	4a	4b	5a	6a	6b
χ_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
χ_3	5	-1	3	1	-1	2	-1	1	0	-1	0
χ_4	5	-3	1	1	2	-1	-1	-1	0	0	1
χ_5	5	1	-3	1	-1	2	-1	-1	0	1	0
χ_6	5	3	-1	1	2	-1	-1	1	0	0	-1
χ_7	9	3	3	1	0	0	1	-1	-1	0	0
χ_8	9	-3	-3	1	0	0	1	1	-1	0	0
χ_9	10	2	-2	-2	1	1	0	0	0	-1	1
χ_{10}	10	-2	2	-2	1	1	0	0	0	1	-1
χ_{11}	16	0	0	0	-2	-2	0	0	1	0	0

Trivial source character table of $G \cong S6$ at $p = 3$

<i>Normalisers</i> N_i	N_1							N_2				N_3				N_4				
<i>p</i> - subgroups of G up to conjugacy in G	P_1							P_2				P_3				P_4				
<i>Representatives</i> $n_j \in N_i$	1a	2a	2b	2c	4a	4b	5a	1a	2b	2b	2c	1a	2a	2a	2c	1a	2c	2b	2a	4a
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11}$	27	3	3	3	-1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11}$	27	-3	-3	3	-1	-3	2	0	0	0	0	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11}$	36	-6	6	0	-2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11}$	36	6	-6	0	-2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11}$	36	0	0	-4	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	9	3	3	1	1	-1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	9	-3	-3	1	1	1	-1	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	6	0	4	2	0	2	1	3	3	1	1	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11}$	15	-3	5	-1	-1	1	0	3	3	-1	-1	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	15	3	-5	-1	-1	-1	0	3	-3	1	-1	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	6	0	-4	2	0	-2	1	3	-3	-1	1	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	6	4	0	2	0	2	1	0	0	0	0	3	3	1	1	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	15	5	-3	-1	-1	1	0	0	0	0	0	3	3	-1	-1	0	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	6	-4	0	2	0	-2	1	0	0	0	0	3	-3	-1	1	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11}$	15	-5	3	-1	-1	-1	0	0	0	0	0	3	-3	1	-1	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	10	-4	4	2	-2	0	0	1	1	1	1	1	-1	-1	1	1	1	1	-1	-1
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	1	-1	-1	1	1	-1	1	1	-1	-1	1	1	-1	-1	1	1	1	-1	-1	1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	10	4	-4	2	-2	0	0	1	-1	-1	1	1	1	1	1	1	1	-1	1	-1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11}$	20	0	0	-4	0	0	0	2	0	0	-2	2	0	0	-2	2	-2	0	0	0

$$P_1 = \text{Group}([()]) \cong 1$$

$$P_2 = \text{Group}([(1, 2, 3)]) \cong C3$$

$$P_3 = \text{Group}([(1, 2, 3)(4, 6, 5)]) \cong C3$$

$$P_4 = \text{Group}([(4, 5, 6), (1, 2, 3)]) \cong C3 \times C3$$

$$N_1 = \text{SymmetricGroup}([1..6]) \cong S6$$

$$N_2 = \text{Group}([(4, 5), (2, 3), (5, 6), (1, 2, 3)]) \cong S3 \times S3$$

$$N_3 = \text{Group}([(2, 3)(5, 6), (1, 2, 3)(4, 6, 5), (1, 4)(2, 6)(3, 5), (4, 6, 5)]) \cong S3 \times S3$$

$$N_4 = \text{Group}([(4, 5, 6), (1, 4)(2, 5)(3, 6), (2, 3), (5, 6), (1, 2, 3)]) \cong (S3 \times S3) : C2$$