

The group G is isomorphic to the alternating group A7.

Ordinary character table of $G \cong \text{A7}$:

	1a	2a	3a	3b	4a	5a	6a	7a	7b
χ_1	1	1	1	1	1	1	1	1	1
χ_2	6	2	3	0	0	1	-1	-1	-1
χ_3	10	-2	1	1	0	0	1	$E(7) + E(7)^2 + E(7)^4$	$E(7)^3 + E(7)^5 + E(7)^6$
χ_4	10	-2	1	1	0	0	1	$E(7)^3 + E(7)^5 + E(7)^6$	$E(7) + E(7)^2 + E(7)^4$
χ_5	14	2	2	-1	0	-1	2	0	0
χ_6	14	2	-1	2	0	-1	-1	0	0
χ_7	15	-1	3	0	-1	0	-1	1	1
χ_8	21	1	-3	0	-1	1	1	0	0
χ_9	35	-1	-1	-1	1	0	-1	0	0

Trivial source character table of $G \cong \text{A7}$ at $p = 7$:

Normalisers N_i	N_1							N_2		
p -subgroups of G up to conjugacy in G	P_1							P_2		
Representatives $n_j \in N_i$	1a	5a	3b	3a	2a	4a	6a	1a	3b	3a
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	7	2	1	4	3	1	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9$	21	1	0	-3	1	-1	1	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	14	-1	2	-1	2	0	-1	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	21	1	0	6	1	-1	-2	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	14	-1	-1	2	2	0	2	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9$	35	0	-1	-1	-1	1	-1	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	35	0	2	5	-5	-1	1	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	15	0	0	3	-1	-1	-1	1	$E(3)^2$	$E(3)$
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	15	0	0	3	-1	-1	-1	1	$E(3)$	$E(3)^2$
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	1	1	1	1	1	1	1	1	1	1

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

$$P_2 = \text{Group}([(1, 4, 2, 5, 7, 3, 6)]) \cong \text{C7}$$

$$N_1 = \text{AlternatingGroup}([1..7]) \cong \text{A7}$$

$$N_2 = \text{Group}([(1, 4, 2, 5, 7, 3, 6), (2, 7, 4)(3, 5, 6)]) \cong \text{C7} : \text{C3}$$