

The group G is isomorphic to the group labelled by [336, 114] in the Small Groups library.

Ordinary character table of $G \cong \text{SL}(2,7)$:

	1a	2a	4a	3a	6a	8a	8b	7a	14a	7b	14b
χ_1	1	1	1	1	1	1	1	1	1	1	1
χ_2	3	3	-1	0	0	1	1	$E(7) + E(7)^2 + E(7)^4$	$E(7) + E(7)^2 + E(7)^4$	$E(7)^3 + E(7)^5 + E(7)^6$	$E(7)^3 + E(7)^5 + E(7)^6$
χ_3	3	3	-1	0	0	1	1	$E(7)^3 + E(7)^5 + E(7)^6$	$E(7)^3 + E(7)^5 + E(7)^6$	$E(7) + E(7)^2 + E(7)^4$	$E(7) + E(7)^2 + E(7)^4$
χ_4	6	6	2	0	0	0	0	-1	-1	-1	-1
χ_5	7	7	-1	1	1	-1	-1	0	0	0	0
χ_6	8	8	0	-1	-1	0	0	1	1	1	1
χ_7	4	-4	0	1	-1	0	0	$-E(7) - E(7)^2 - E(7)^4$	$E(7) + E(7)^2 + E(7)^4$	$-E(7)^3 - E(7)^5 - E(7)^6$	$E(7)^3 + E(7)^5 + E(7)^6$
χ_8	4	-4	0	1	-1	0	0	$-E(7)^3 - E(7)^5 - E(7)^6$	$E(7)^3 + E(7)^5 + E(7)^6$	$-E(7) - E(7)^2 - E(7)^4$	$E(7) + E(7)^2 + E(7)^4$
χ_9	6	-6	0	0	0	$E(8) - E(8)^3$	$-E(8) + E(8)^3$	-1	1	-1	1
χ_{10}	6	-6	0	0	0	$-E(8) + E(8)^3$	$E(8) - E(8)^3$	-1	1	-1	1
χ_{11}	8	-8	0	-1	1	0	0	1	-1	1	-1

Trivial source character table of $G \cong \text{SL}(2,7)$ 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	3a	4a	6a	8a	8b	2a	1a	6b	3b	6a	3a	2a
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	7	1	3	1	1	1	7	0	0	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	14	-1	-2	-1	2	2	14	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	14	-1	2	-1	0	0	14	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	7	1	-1	1	-1	-1	7	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11}$	14	-1	0	1	$-E(8) + E(8)^3$	$E(8) - E(8)^3$	-14	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11}$	14	2	0	-2	$-E(8) + E(8)^3$	$E(8) - E(8)^3$	-14	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11}$	14	-1	0	1	$E(8) - E(8)^3$	$-E(8) + E(8)^3$	-14	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	1	1	1	1	1	1	1	1	1	1	1	1	1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	8	-1	0	-1	0	0	8	1	$E(3)^2$	$E(3)^2$	$E(3)$	$E(3)$	1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	8	-1	0	-1	0	0	8	1	$E(3)$	$E(3)$	$E(3)^2$	$E(3)^2$	1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	8	2	0	-2	0	0	-8	1	-1	1	-1	1	-1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11}$	8	-1	0	1	0	0	-8	1	$-E(3)^2$	$E(3)^2$	$-E(3)$	$E(3)$	-1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11}$	8	-1	0	1	0	0	-8	1	$-E(3)$	$E(3)$	$-E(3)^2$	$E(3)^2$	-1

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

$$P_2 = \text{Group}([(2, 6, 9, 5, 13, 14, 12)(3, 8, 10, 7, 15, 16, 11)]) \cong C7$$

$$N_1 = \text{Group}([(1, 2, 4, 3)(5, 9, 7, 10)(6, 11, 8, 12)(13, 16, 15, 14), (2, 5, 6)(3, 7, 8)(9, 13, 14)(10, 15, 16)]) \cong \text{SL}(2,7)$$

$$N_2 = \text{Group}([(2, 6, 9, 5, 13, 14, 12)(3, 8, 10, 7, 15, 16, 11), (5, 14, 12)(6, 13, 9)(7, 16, 11)(8, 15, 10), (1, 4)(2, 3)(5, 16, 12, 7, 14, 11)(6, 15, 9, 8, 13, 10)]) \cong C2 \times (C7 : C3)$$