

The group G is isomorphic to the projective special linear group $\text{PSL}(2,8)$.

Ordinary character table of $G \cong \text{PSL}(2,8)$:

	1a	2a	3a	7a	7b	7c	9a	9b	9c
χ_1	1	1	1	1	1	1	1	1	1
χ_2	7	-1	-2	0	0	0	1	1	1
χ_3	7	-1	1	0	0	0	$E(9)^2 + E(9)^4 + E(9)^5 + E(9)^7$	$-E(9)^2 - E(9)^7$	$-E(9)^4 - E(9)^5$
χ_4	7	-1	1	0	0	0	$-E(9)^4 - E(9)^5$	$E(9)^2 + E(9)^4 + E(9)^5 + E(9)^7$	$-E(9)^2 - E(9)^7$
χ_5	7	-1	1	0	0	0	$-E(9)^2 - E(9)^7$	$-E(9)^4 - E(9)^5$	$E(9)^2 + E(9)^4 + E(9)^5 + E(9)^7$
χ_6	8	0	-1	1	1	1	-1	-1	-1
χ_7	9	1	0	$E(7) + E(7)^6$	$E(7)^2 + E(7)^5$	$E(7)^3 + E(7)^4$	0	0	0
χ_8	9	1	0	$E(7)^3 + E(7)^4$	$E(7) + E(7)^6$	$E(7)^2 + E(7)^5$	0	0	0
χ_9	9	1	0	$E(7)^2 + E(7)^5$	$E(7)^3 + E(7)^4$	$E(7) + E(7)^6$	0	0	0

Trivial source character table of $G \cong \text{PSL}(2,8)$ at $p = 3$:

Normalisers N_i	N_1					N_2		N_3	
p -subgroups of G up to conjugacy in G	P_1					P_2		P_3	
Representatives $n_j \in N_i$	1a	7a	7c	7b	2a	1a	2a	1a	2a
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	9	2	2	2	1	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	36	1	1	1	-4	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9$	9	$E(7)^2 + E(7)^5$	$E(7) + E(7)^6$	$E(7)^3 + E(7)^4$	1	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9$	9	$E(7)^3 + E(7)^4$	$E(7)^2 + E(7)^5$	$E(7) + E(7)^6$	1	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	9	$E(7) + E(7)^6$	$E(7)^3 + E(7)^4$	$E(7)^2 + E(7)^5$	1	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	21	0	0	0	-3	3	-1	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	30	2	2	2	-2	3	1	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	1	1	1	1	1	1	1	1	1
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	28	0	0	0	-4	1	-1	1	-1

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

$$P_2 = \text{Group}([(1, 6, 5)(2, 4, 9)(3, 8, 7)]) \cong \text{C3}$$

$$P_3 = \text{Group}([(1, 6, 5)(2, 4, 9)(3, 8, 7), (1, 3, 9, 6, 8, 2, 5, 7, 4)]) \cong \text{C9}$$

$$N_1 = \text{Group}([(1, 2)(3, 4)(6, 7)(8, 9), (1, 3, 2)(4, 5, 6)(7, 8, 9)]) \cong \text{PSL}(2,8)$$

$$N_2 = \text{Group}([(1, 6, 5)(2, 4, 9)(3, 8, 7), (2, 8)(3, 4)(5, 6)(7, 9), (1, 2)(3, 8)(4, 5)(6, 9)]) \cong \text{D18}$$

$$N_3 = \text{Group}([(1, 3, 9, 6, 8, 2, 5, 7, 4), (1, 6, 5)(2, 4, 9)(3, 8, 7), (2, 8)(3, 4)(5, 6)(7, 9)]) \cong \text{D18}$$