

The group  $G$  is isomorphic to the group labelled by [ 504, 156 ] in the Small Groups library.  
 Ordinary character table of  $G \cong \text{PSL}(2,8)$ :

	1a	2a	3a	7a	7b	7c	9a	9b	9c
$\chi_1$	1	1	1	1	1	1	1	1	1
$\chi_2$	7	-1	-2	0	0	0	1	1	1
$\chi_3$	7	-1	1	0	0	0	$E(9)^2 + E(9)^4 + E(9)^5 + E(9)^7$	$-E(9)^2 - E(9)^7$	$-E(9)^4 - E(9)^5$
$\chi_4$	7	-1	1	0	0	0	$-E(9)^4 - E(9)^5$	$E(9)^2 + E(9)^4 + E(9)^5 + E(9)^7$	$-E(9)^2 - E(9)^7$
$\chi_5$	7	-1	1	0	0	0	$-E(9)^2 - E(9)^7$	$-E(9)^4 - E(9)^5$	$E(9)^2 + E(9)^4 + E(9)^5 + E(9)^7$
$\chi_6$	8	0	-1	1	1	1	-1	-1	-1
$\chi_7$	9	1	0	$E(7) + E(7)^6$	$E(7)^2 + E(7)^5$	$E(7)^3 + E(7)^4$	0	0	0
$\chi_8$	9	1	0	$E(7)^3 + E(7)^4$	$E(7) + E(7)^6$	$E(7)^2 + E(7)^5$	0	0	0
$\chi_9$	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  $p = 2$ :

Normalisers $N_i$	$N_1$									$N_2$	$N_3$	$N_4$						
$p$ -subgroups of $G$ up to conjugacy in $G$	$P_1$									$P_2$	$P_3$	$P_4$						
Representatives $n_j \in N_i$	1a	7a	7c	7b	3a	9a	9c	9b		1a	1a	1a	7a	7c	7f	7b	7e	7d
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9$	56	0	0	0	2	2	2	2		0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9$	32	$E(7)^2 + E(7)^3 + E(7)^4 + E(7)^5$	$E(7) + E(7)^2 + E(7)^5 + E(7)^6$	$E(7) + E(7)^3 + E(7)^4 + E(7)^6$	-1	$-E(9)^2 - E(9)^3 - E(9)^6 - E(9)^7$	$E(9)^2 - E(9)^3 + E(9)^4 + E(9)^5 - E(9)^6 + E(9)^7$	$-E(9)^3 - E(9)^4 - E(9)^5 - E(9)^6$		0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9$	32	$E(7) + E(7)^3 + E(7)^4 + E(7)^6$	$E(7)^2 + E(7)^3 + E(7)^4 + E(7)^5$	$E(7) + E(7)^2 + E(7)^5 + E(7)^6$	-1	$-E(9)^3 - E(9)^4 - E(9)^5 - E(9)^6$	$-E(9)^2 - E(9)^3 - E(9)^6 - E(9)^7$	$E(9)^2 - E(9)^3 + E(9)^4 + E(9)^5 - E(9)^6 + E(9)^7$		0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9$	32	$E(7) + E(7)^2 + E(7)^5 + E(7)^6$	$E(7) + E(7)^3 + E(7)^4 + E(7)^6$	$E(7)^2 + E(7)^3 + E(7)^4 + E(7)^5$	-1	$E(9)^2 - E(9)^3 + E(9)^4 + E(9)^5 - E(9)^6 + E(9)^7$	$-E(9)^3 - E(9)^4 - E(9)^5 - E(9)^6$	$-E(9)^2 - E(9)^3 + E(9)^4 + E(9)^5 - E(9)^6 + E(9)^7$		0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9$	16	$E(7)^2 + E(7)^5$	$E(7) + E(7)^6$	$E(7)^3 + E(7)^4$	1	$E(9)^2 + E(9)^4 + E(9)^5 + E(9)^7$	$-E(9)^4 - E(9)^5$	$-E(9)^2 - E(9)^7$		0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	16	$E(7) + E(7)^6$	$E(7)^3 + E(7)^4$	$E(7)^2 + E(7)^5$	1	$-E(9)^4 - E(9)^5$	$-E(9)^2 - E(9)^7$	$E(9)^2 + E(9)^4 + E(9)^5 + E(9)^7$		0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9$	16	$E(7)^3 + E(7)^4$	$E(7)^2 + E(7)^5$	$E(7) + E(7)^6$	1	$-E(9)^2 - E(9)^7$	$E(9)^2 + E(9)^4 + E(9)^5 + E(9)^7$	$-E(9)^4 - E(9)^5$		0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	8	1	1	1	-1	-1	-1	-1		0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9$	28	0	0	0	1	1	1	1		4	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 2 \cdot \chi_7 + 2 \cdot \chi_8 + 2 \cdot \chi_9$	62	-1	-1	-1	-1	2	2	2		6	2	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9$	9	$E(7)^3 + E(7)^4$	$E(7)^2 + E(7)^5$	$E(7) + E(7)^6$	0	0	0	0		1	1	1	$E(7)^4$	$E(7)$	$E(7)^5$	$E(7)^2$	$E(7)^6$	$E(7)^3$
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	9	$E(7) + E(7)^6$	$E(7)^3 + E(7)^4$	$E(7)^2 + E(7)^5$	0	0	0	0		1	1	1	$E(7)$	$E(7)^2$	$E(7)^3$	$E(7)^4$	$E(7)^5$	$E(7)^6$
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9$	9	$E(7)^2 + E(7)^5$	$E(7) + E(7)^6$	$E(7)^3 + E(7)^4$	0	0	0	0		1	1	1	$E(7)^2$	$E(7)^4$	$E(7)^6$	$E(7)$	$E(7)^3$	$E(7)^5$
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	9	$E(7) + E(7)^6$	$E(7)^3 + E(7)^4$	$E(7)^2 + E(7)^5$	0	0	0	0		1	1	1	$E(7)^6$	$E(7)^5$	$E(7)^4$	$E(7)^3$	$E(7)^2$	$E(7)$
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9$	9	$E(7)^3 + E(7)^4$	$E(7)^2 + E(7)^5$	$E(7) + E(7)^6$	0	0	0	0		1	1	1	$E(7)^3$	$E(7)^6$	$E(7)^2$	$E(7)^5$	$E(7)$	$E(7)^4$
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9$	9	$E(7)^2 + E(7)^5$	$E(7) + E(7)^6$	$E(7)^3 + E(7)^4$	0	0	0	0		1	1	1	$E(7)^5$	$E(7)^3$	$E(7)$	$E(7)^6$	$E(7)^4$	$E(7)^2$

- $P_1 = \text{Group}([\{\}]) \cong 1$
- $P_2 = \text{Group}([(2, 7)(3, 5)(4, 6)(8, 9)]) \cong \text{C2}$
- $P_3 = \text{Group}([(2, 3)(4, 8)(5, 7)(6, 9), (2, 9)(3, 6)(4, 5)(7, 8)]) \cong \text{C2} \times \text{C2}$
- $P_4 = \text{Group}([(2, 7)(3, 5)(4, 6)(8, 9), (2, 3)(4, 8)(5, 7)(6, 9), (2, 9)(3, 6)(4, 5)(7, 8)]) \cong \text{C2} \times \text{C2} \times \text{C2}$

- $N_1 = \text{Group}([(1, 2)(3, 4)(6, 7)(8, 9), (1, 3, 2)(4, 5, 6)(7, 8, 9)]) \cong \text{PSL}(2,8)$
- $N_2 = \text{Group}([(2, 7)(3, 5)(4, 6)(8, 9), (2, 3)(4, 8)(5, 7)(6, 9), (2, 4)(3, 8)(5, 9)(6, 7)]) \cong \text{C2} \times \text{C2} \times \text{C2}$
- $N_3 = \text{Group}([(2, 9)(3, 6)(4, 5)(7, 8), (2, 3)(4, 8)(5, 7)(6, 9), (2, 4)(3, 8)(5, 9)(6, 7)]) \cong \text{C2} \times \text{C2} \times \text{C2}$
- $N_4 = \text{Group}([(2, 9)(3, 6)(4, 5)(7, 8), (2, 3)(4, 8)(5, 7)(6, 9), (2, 7)(3, 5)(4, 6)(8, 9), (3, 4, 6, 9, 5, 8, 7)]) \cong (\text{C2} \times \text{C2} \times \text{C2}) : \text{C7}$