

The group  $G$  is isomorphic to the projective special linear group  $\mathrm{PSL}(3,3)$ .  
Ordinary character table of  $G \cong \mathrm{PSL}(3,3)$ :

	<i>1a</i>	<i>2a</i>	<i>3a</i>	<i>3b</i>	<i>4a</i>	<i>6a</i>	<i>8a</i>		<i>8b</i>	<i>13a</i>		<i>13b</i>	<i>13c</i>		<i>13d</i>
$\chi_1$	1	1	1	1	1	1	1		1	1		1	1		1
$\chi_2$	12	4	3	0	0	1	0		0	−1		−1	−1		−1
$\chi_3$	13	−3	4	1	1	0	−1		−1	0		0	0		0
$\chi_4$	16	0	−2	1	0	0	0		0	$E(13)^{\frown}4 + E(13)^{\frown}10 + E(13)^{\frown}12$		$E(13)^{\frown}7 + E(13)^{\frown}8 + E(13)^{\frown}11$	$E(13) + E(13)^{\frown}3 + E(13)^{\frown}9$		$E(13)^{\frown}2 + E(13)^{\frown}5 + E(13)^{\frown}6$
$\chi_5$	16	0	−2	1	0	0	0		0	$E(13)^{\frown}7 + E(13)^{\frown}8 + E(13)^{\frown}11$		$E(13) + E(13)^{\frown}3 + E(13)^{\frown}9$	$E(13)^{\frown}2 + E(13)^{\frown}5 + E(13)^{\frown}6$		$E(13)^{\frown}4 + E(13)^{\frown}10 + E(13)^{\frown}12$
$\chi_6$	16	0	−2	1	0	0	0		0	$E(13)^{\frown}2 + E(13)^{\frown}5 + E(13)^{\frown}6$		$E(13)^{\frown}4 + E(13)^{\frown}10 + E(13)^{\frown}12$	$E(13)^{\frown}7 + E(13)^{\frown}8 + E(13)^{\frown}11$		$E(13) + E(13)^{\frown}3 + E(13)^{\frown}9$
$\chi_7$	16	0	−2	1	0	0	0		0	$E(13) + E(13)^{\frown}3 + E(13)^{\frown}9$		$E(13)^{\frown}2 + E(13)^{\frown}5 + E(13)^{\frown}6$	$E(13)^{\frown}4 + E(13)^{\frown}10 + E(13)^{\frown}12$		$E(13)^{\frown}7 + E(13)^{\frown}8 + E(13)^{\frown}11$
$\chi_8$	26	2	−1	−1	2	−1	0		0	0		0	0		0
$\chi_9$	26	−2	−1	−1	0	1	$E(8) + E(8)^{\frown}3$		$−E(8) − E(8)^{\frown}3$	0		0	0		0
$\chi_{10}$	26	−2	−1	−1	0	1	$−E(8) − E(8)^{\frown}3$		$E(8) + E(8)^{\frown}3$	0		0	0		0
$\chi_{11}$	27	3	0	0	−1	0	−1		−1	1		1	1		1
$\chi_{12}$	39	−1	3	0	−1	−1	1		1	0		0	0		0

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

<i>Normalisers</i> $N_i$	$N_1$												$N_2$	$N_3$	$N_4$	$N_5$	$N_6$	$N_7$	$N_8$						
$p$ – subgroups of $G$ up to conjugacy in $G$	$P_1$												$P_2$	$P_3$	$P_4$	$P_5$	$P_6$	$P_7$	$P_8$						
<i>Representatives</i> $n_j \in N_i$	1a	3a	3b	13a			13b			13c			13d			1a	3a	1a	1a	3b	1a	3a	1a	1a	1a
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12}$	80	8	2	2			2			2			2			0	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12}$	64	10	1	−1			−1			−1			−1			0	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	16	−2	1	$E(13) + E(13)^{\frown}3 + E(13)^{\frown}9$			$E(13)^{\frown}2 + E(13)^{\frown}5 + E(13)^{\frown}6$			$E(13)^{\frown}4 + E(13)^{\frown}10 + E(13)^{\frown}12$			$E(13)^{\frown}7 + E(13)^{\frown}8 + E(13)^{\frown}11$			0	0	0	0	0	0	0	0	0	
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	16	−2	1	$E(13)^{\frown}2 + E(13)^{\frown}5 + E(13)^{\frown}6$			$E(13)^{\frown}4 + E(13)^{\frown}10 + E(13)^{\frown}12$			$E(13)^{\frown}7 + E(13)^{\frown}8 + E(13)^{\frown}11$			$E(13) + E(13)^{\frown}3 + E(13)^{\frown}9$			0	0	0	0	0	0	0	0	0	
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	16	−2	1	$E(13)^{\frown}4 + E(13)^{\frown}10 + E(13)^{\frown}12$			$E(13)^{\frown}7 + E(13)^{\frown}8 + E(13)^{\frown}11$			$E(13) + E(13)^{\frown}3 + E(13)^{\frown}9$			$E(13)^{\frown}2 + E(13)^{\frown}5 + E(13)^{\frown}6$			0	0	0	0	0	0	0	0	0	
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	16	−2	1	$E(13)^{\frown}7 + E(13)^{\frown}8 + E(13)^{\frown}11$			$E(13) + E(13)^{\frown}3 + E(13)^{\frown}9$			$E(13)^{\frown}2 + E(13)^{\frown}5 + E(13)^{\frown}6$			$E(13)^{\frown}4 + E(13)^{\frown}10 + E(13)^{\frown}12$			0	0	0	0	0	0	0	0	0	
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12}$	144	0	−3	1			1			1			1			0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 2 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12}$	104	14	2	0			0			0			0			8	2	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12}$	104	5	−1	0			0			0			0			8	−1	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 2 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 2 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 1 \cdot \chi_{12}$	156	12	0	0			0			0			0			12	0	4	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12}$	28	1	1	2			2			2			2			4	1	0	2	2	0	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	12	3	0	−1			−1			−1			−1			4	1	0	2	−1	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	26	8	2	0			0			0			0			2	2	2	0	0	2	2	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	26	−1	−1	0			0			0			0			2	−1	2	0	0	2	−1	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12}$	54	0	0	2			2			2			2			6	0	2	2	2	0	0	2	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12}$	78	6	0	0			0			0			0			6	0	2	0	0	0	0	0	2	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	1	1	1	1			1			1			1			1	1	1	1	1	1	1	1	1	1

$P_1 = Group([(())]) \cong 1$   
 $P_2 = Group([(2,6)(5,9)(7,12)(8,11)]) \cong \mathrm{C}2$   
 $P_3 = Group([(2,11,6,8)(3,13)(4,10)(5,12,9,7), (2,6)(5,9)(7,12)(8,11)]) \cong \mathrm{C}4$   
 $P_4 = Group([(2,6)(5,9)(7,12)(8,11), (3,13)(5,7)(8,11)(9,12)]) \cong \mathrm{C}2 \times \mathrm{C}2$   
 $P_5 = Group([(2,11,6,8)(3,13)(4,10)(5,12,9,7), (2,6)(5,9)(7,12)(8,11), (2,9,6,5)(3,10)(4,13)(7,11,12,8)]) \cong \mathrm{Q}8$   
 $P_6 = Group([(2,11,6,8)(3,13)(4,10)(5,12,9,7), (2,6)(5,9)(7,12)(8,11), (3,13)(5,7)(8,11)(9,12)]) \cong \mathrm{D}8$   
 $P_7 = Group([(2,9,8,12,6,5,11,7)(3,4,13,10), (2,11,6,8)(3,13)(4,10)(5,12,9,7), (2,6)(5,9)(7,12)(8,11)]) \cong \mathrm{C}8$   
 $P_8 = Group([(2,9,8,12,6,5,11,7)(3,4,13,10), (2,6)(5,9)(7,12)(8,11), (2,11,6,8)(3,13)(4,10)(5,12,9,7), (2,6)(3,13)(5,12)(7,9)]) \cong \mathrm{QD}16$

$N_1 = Group([(2,4)(3,5)(6,8)(10,11), (1,2,3)(5,6,7)(8,9,10)(11,12,13)]) \cong \mathrm{PSL}(3,3)$   
 $N_2 = Group([(2,9)(3,10)(5,6)(8,11), (2,6)(5,9)(7,12)(8,11), (3,4)(5,11)(7,12)(8,9), (4,13)(5,9)(7,8)(11,12)]) \cong \mathrm{GL}(2,3)$   
 $N_3 = Group([(2,11,6,8)(3,13)(4,10)(5,12,9,7), (2,6)(5,9)(7,12)(8,11), (3,13)(5,7)(8,11)(9,12), (2,7,6,12)(3,4)(5,11,9,8)(10,13)]) \cong \mathrm{QD}16$   
 $N_4 = Group([(1,10)(3,8)(9,12)(11,13), (2,6)(5,9)(7,12)(8,11), (1,4)(2,13)(3,6)(7,9), (3,13)(5,7)(8,11)(9,12)]) \cong \mathrm{S}4$   
 $N_5 = Group([(2,11,6,8)(3,13)(4,10)(5,12,9,7), (2,6)(5,9)(7,12)(8,11), (3,4)(5,11)(7,12)(8,9), (2,9,6,5)(3,10)(4,13)(7,11,12,8), (4,13)(5,9)(7,8)(11,12)]) \cong \mathrm{GL}(2,3)$   
 $N_6 = Group([(2,11,6,8)(3,13)(4,10)(5,12,9,7), (2,6)(5,9)(7,12)(8,11), (3,13)(5,7)(8,11)(9,12), (2,7,6,12)(3,4)(5,11,9,8)(10,13)]) \cong \mathrm{QD}16$   
 $N_7 = Group([(2,9,8,12,6,5,11,7)(3,4,13,10), (2,11,6,8)(3,13)(4,10)(5,12,9,7), (2,6)(5,9)(7,12)(8,11), (3,13)(5,7)(8,11)(9,12)]) \cong \mathrm{QD}16$   
 $N_8 = Group([(2,9,8,12,6,5,11,7)(3,4,13,10), (2,6)(5,9)(7,12)(8,11), (2,11,6,8)(3,13)(4,10)(5,12,9,7), (2,6)(3,13)(5,12)(7,9), (3,13)(5,7)(8,11)(9,12)]) \cong \mathrm{QD}16$