

The group  $G$  is isomorphic to the group  $\text{PSL}(3,2) : \text{C2}$ .  
Ordinary character table of  $G \cong \text{PSL}(3,2) : \text{C2}$ :

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

Trivial source character table of  $G \cong \text{PSL}(3,2) : \text{C2}$  at  $p = 2$ :

Normalisers $N_i$	$N_1$			$N_2$	$N_3$			$N_4$	$N_5$	$N_6$		$N_7$	$N_8$	$N_9$	$N_{10}$
$p$ -subgroups of $G$ up to conjugacy in $G$	$P_1$			$P_2$	$P_3$			$P_4$	$P_5$	$P_6$		$P_7$	$P_8$	$P_9$	$P_{10}$
Representatives $n_j \in N_i$	1a	3a	7a	1a	1a	3a	1a	1a	1a	1a	3a	1a	1a	1a	1a
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	16	4	2	0	0	0	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	32	2	-3	0	0	0	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9$	16	-2	2	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 2 \cdot \chi_4 + 2 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	40	4	-2	8	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	8	2	1	0	2	2	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9$	8	-1	1	0	2	-1	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	20	2	-1	4	2	2	2	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 2 \cdot \chi_3 + 2 \cdot \chi_4 + 2 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	52	4	-4	4	0	0	0	4	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	28	4	0	4	0	0	0	0	2	2	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	12	0	-2	4	0	0	0	0	2	-1	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	26	2	-2	2	2	2	2	2	0	0	2	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	26	2	-2	2	0	0	0	2	0	0	0	2	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9$	2	2	2	2	0	0	0	2	2	2	0	0	2	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

$P_1 = \text{Group}([()]) \cong 1$   
 $P_2 = \text{Group}([(1, 7)(2, 6)(3, 4)(5, 8)]) \cong \text{C2}$   
 $P_3 = \text{Group}([(2, 8)(3, 4)(5, 6)]) \cong \text{C2}$   
 $P_4 = \text{Group}([(1, 7)(2, 6)(3, 4)(5, 8), (2, 8)(3, 4)(5, 6)]) \cong \text{C2} \times \text{C2}$   
 $P_5 = \text{Group}([(1, 7)(2, 6)(3, 4)(5, 8), (1, 3, 7, 4)(2, 5, 6, 8)]) \cong \text{C4}$   
 $P_6 = \text{Group}([(1, 7)(2, 6)(3, 4)(5, 8), (1, 6)(2, 7)(3, 5)(4, 8)]) \cong \text{C2} \times \text{C2}$   
 $P_7 = \text{Group}([(1, 7)(2, 6)(3, 4)(5, 8), (1, 4)(2, 6)(3, 7), (2, 8)(3, 4)(5, 6)]) \cong \text{D8}$   
 $P_8 = \text{Group}([(1, 7)(2, 6)(3, 4)(5, 8), (1, 2, 3, 5, 7, 6, 4, 8), (1, 3, 7, 4)(2, 5, 6, 8)]) \cong \text{C8}$   
 $P_9 = \text{Group}([(1, 7)(2, 6)(3, 4)(5, 8), (1, 8)(2, 4)(3, 6)(5, 7), (1, 3, 7, 4)(2, 5, 6, 8)]) \cong \text{D8}$   
 $P_{10} = \text{Group}([(1, 7)(2, 6)(3, 4)(5, 8), (1, 4)(2, 6)(3, 7), (2, 8)(3, 4)(5, 6), (1, 2, 3, 5, 7, 6, 4, 8)]) \cong \text{D16}$

$N_1 = \text{Group}([(2, 4)(3, 5)(7, 8), (1, 2, 3)(4, 6, 7)]) \cong \text{PSL}(3,2) : \text{C2}$   
 $N_2 = \text{Group}([(1, 7)(2, 6)(3, 4)(5, 8), (1, 3)(4, 7)(5, 8), (1, 8, 4, 6, 7, 5, 3, 2)]) \cong \text{D16}$   
 $N_3 = \text{Group}([(2, 8)(3, 4)(5, 6), (1, 7)(3, 5)(4, 6), (1, 7)(2, 3)(4, 8)]) \cong \text{D12}$   
 $N_4 = \text{Group}([(2, 8)(3, 4)(5, 6), (1, 7)(2, 6)(3, 4)(5, 8), (1, 3)(4, 7)(5, 8)]) \cong \text{D8}$   
 $N_5 = \text{Group}([(1, 3, 7, 4)(2, 5, 6, 8), (1, 7)(2, 6)(3, 4)(5, 8), (2, 8)(3, 4)(5, 6), (1, 2)(3, 8)(4, 5)(6, 7)]) \cong \text{D16}$   
 $N_6 = \text{Group}([(1, 6)(2, 7)(3, 5)(4, 8), (1, 7)(2, 6)(3, 4)(5, 8), (2, 6, 7)(3, 4, 5), (1, 3, 7, 4)(2, 5, 6, 8)]) \cong \text{S4}$   
 $N_7 = \text{Group}([(2, 8)(3, 4)(5, 6), (1, 4)(2, 6)(3, 7), (1, 7)(2, 6)(3, 4)(5, 8), (1, 2)(3, 8)(4, 5)(6, 7)]) \cong \text{D16}$   
 $N_8 = \text{Group}([(1, 2, 3, 5, 7, 6, 4, 8), (1, 3, 7, 4)(2, 5, 6, 8), (1, 7)(2, 6)(3, 4)(5, 8), (2, 8)(3, 4)(5, 6)]) \cong \text{D16}$   
 $N_9 = \text{Group}([(1, 3, 7, 4)(2, 5, 6, 8), (1, 8)(2, 4)(3, 6)(5, 7), (1, 7)(2, 6)(3, 4)(5, 8), (2, 8)(3, 4)(5, 6)]) \cong \text{D16}$   
 $N_{10} = \text{Group}([(1, 2, 3, 5, 7, 6, 4, 8), (2, 8)(3, 4)(5, 6), (1, 4)(2, 6)(3, 7), (1, 7)(2, 6)(3, 4)(5, 8)]) \cong \text{D16}$