The group G is isomorphic to the group C2.(PSL(3,2):C2). Ordinary character table of  $G \cong C2$ . (PSL(3,2): C2)  $\cong$  SL(2,7). C2:

	1a	2a	4a	3a	6a	8a	8b	7a	14a	4b	12a	12b	16a	16b	16c	16d
$\chi_1$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_2$	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1
$\chi_3$	6	6	-2	0	0	2	2	-1	-1	0	0	0	0	0	0	0
$\chi_4$	6	6	2	0	0	0	0	-1	-1	0	0	0	$E(8) - E(8)^3$	$E(8) - E(8)^3$	$-E(8) + E(8)^3$	$-E(8) + E(8)^3$
$\chi_5$	6	6	2	0	0	0	0	-1	-1	0	0	0	$-E(8) + E(8)^3$	$-E(8) + E(8)^3$	$E(8) - E(8)^3$	$E(8) - E(8)^3$
$\chi_6$	7	7	-1	1	1	-1	-1	0	0	1	1	1	-1	-1	-1	-1
$\chi_7$	7	7	-1	1	1	-1	-1	0	0	-1	-1	-1	1	1	1	1
$\chi_8$	8	8	0	-1	-1	0	0	1	1	2	-1	-1	0	0	0	0
$\chi_9$	8	8	0	-1	-1	0	0	1	1	-2	1	1	0	0	0	0
$\chi_{10}$	8	-8	0	2	-2	0	0	1	-1	0	0	0	0	0	0	0
$\chi_{11}$	6	-6	0	0	0	$E(8) - E(8)^3$	$-E(8) + E(8)^3$	-1	1	0	0	0	$E(16) - E(16)^7$	$-E(16) + E(16)^7$	$E(16)^3 - E(16)^5$	$-E(16)^3 + E(16)^5$
$\chi_{12}$	6	-6	0	0	0	$E(8) - E(8)^3$	$-E(8) + E(8)^3$	-1	1	0	0	0	$-E(16) + E(16)^7$	$E(16) - E(16)^7$	$-E(16)^3 + E(16)^5$	$E(16)^3 - E(16)^5$
$\chi_{13}$	6	-6	0	0	0	$-E(8) + E(8)^3$	$E(8) - E(8)^3$	-1	1	0	0	0	$-E(16)^3 + E(16)^5$	$E(16)^3 - E(16)^5$	$E(16) - E(16)^7$	$-E(16) + E(16)^7$
$\chi_{14}$	6	-6	0	0	0	$-E(8) + E(8)^3$	$E(8) - E(8)^3$	-1	1	0	0	0	$E(16)^3 - E(16)^5$	$-E(16)^3 + E(16)^5$	$-E(16) + E(16)^7$	$E(16) - E(16)^7$
$\chi_{15}$	8	-8	0	-1	1	0	0	1	-1	0	$-E(12)^7 + E(12)^{11}$	$E(12)^7 - E(12)^{11}$	0	0	0	0
$\chi_{16}$	8	-8	0	-1	1	0	0	1	-1	0	$E(12)^7 - E(12)^{11}$	$-E(12)^7 + E(12)^{11}$	0	0	0	0

Trivial source character table of $G \cong C2$ . (PSL(3,2): C2) = SL(2,7). C2 at $p=2$ :																	
Normalisers $N_i$		$N_1$		$N_2$		$I_2$		$N_{i}$	4	$N_5$	$N_6$	N	7	$N_8$	$N_9$	$N_{10}$	$N_{11}$
p-subgroups of $G$ up to conjugacy in $G$		$P_1$			$P_2$		$P_3$	$P_{2}$	4	$P_5$	$P_6$	P	7	$P_8$	$P_9$	$P_{10}$	$P_{11}$
Representatives $n_j \in N_i$	1a	3a	7a	1a	3a	7a	1a	1a	3a	1a	1a	1a	3a	1a	1a	1a	1a
$\boxed{1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 2 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}$	32	8	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		4	-6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 1 \cdot \chi_{15} + 1 \cdot \chi_{16}$		-4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}$		4	2	16	4	2	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 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}   0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}   0 \cdot \chi_{16} 0$		2	-3	32	2	-3	0	0	0	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}$	16	-2	2	16	-2	2	0	0	0	0	0	0	0	0	0	0	0
$\boxed{1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 2 \cdot \chi_4 + 2 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}$		4	-2		4	-2	8	0	0	0	0	0	0	0	0	0	0
$\boxed{1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}$		2	1	8	2	1	0	2	2	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 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}   0 \cdot \chi_{17} + 0 \cdot \chi_{19} + 0$	8	-1	1	8	-1	1	0	2	-1	0	0	0	0	0	0	0	0
$\boxed{1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}$		2	-1	20	2	-1	4	2	2	2	0	0	0	0	0	0	0
$\boxed{1 \cdot \chi_1 + 1 \cdot \chi_2 + 2 \cdot \chi_3 + 2 \cdot \chi_4 + 2 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}}$	52	4	-4	52	4	-4	4	0	0	0	4	0	0	0	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}$	28	4	0	28	4	0	4	0	0	0	0	2	2	0	0	0	0
	12	0	-2	12	0	-2	4	0	0	0	0	2	-1	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}$	26	2	-2	26	2	$\overline{-2}$	2	2	2	2	2	0	0	2	0	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}$	2	2	2	2	2	2	2	0	0	0	2	2	2	0	2	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}$	26	2	-2	26	2	-2	2	0	0	0	2	0	0	0	0	2	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12} + 0 \cdot \chi_{13} + 0 \cdot \chi_{14} + 0 \cdot \chi_{15} + 0 \cdot \chi_{16}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	'										-						

 $P_2 = Group([(1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16)(17,19)(18,20)(21,22)(23,24)(25,26)(27,28)(29,30)(31,32)]) \cong C2$ 

 $P_3 = Group([(1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16)(17,19)(18,20)(21,22)(23,24)(25,26)(27,28)(29,30)(31,32), \\ (1,13,4,15)(2,7,3,5)(6,24,8,23)(9,14,10,16)(11,32,12,31)(17,20,19,18)(21,27,22,28)(25,29,26,30)]) \cong C4$ 

 $P_5 = Group([(1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16)(17,19)(18,20)(21,22)(23,24)(25,26)(27,28)(29,30)(31,32), \\ (1,13,4,15)(2,7,3,5)(6,24,8,23)(9,14,10,16)(11,32,12,31)(17,20,19,18)(21,27,22,28)(25,29,26,30), \\ (1,24,12,22)(13,29,15,30)(17,24,19,23)(27,32,28,31)]) \cong Q8$ 

 $P_{10} = Group([(1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16)(17,19)(18,20)(21,22)(23,24)(25,26)(27,28)(25,29,26,30), (1,2,2,28,13,7,19,21,4,3,18,27,15,5,17,22)(6,9,26,11,24,14,30,32,8,10,25,12,23,16,29,31), (1,18,13,17,4,20,15,19)(2,27,7,22,3,28,5,21)(6,25,24,29,8,26,23,30)(9,12,14,31,10,11,16,32)] \\ \cong C16 + C16$ 

 $P_{11} = Group([(1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16)(17,12)(13,15)(14,16)(17,12)(13,15)(14,16)(17,12)(13,15)(14,16)(17,12)(13,15)(14,16)(17,12)(13,14,15)(17,12)(13,14,15)(17,12)(13,14,15)(17,12)(17,1$ 

 $N_2 = Group([(1,2,4,3)(5,9,7,10)(6,11,8,12)(13,21,15,22)(14,23,16,24)(17,25,19,26)(18,27,20,28)(29,31,30,32),(2,5,6)(3,7,8)(9,13,14)(10,15,16)(11,17,18)(12,19,20)(21,26,29)(22,25,30)]) \cong C2 \cdot (PSL(3,2) : C2) = SL(2,7) \cdot C2 \cdot (PSL(3,2) : C2) = SL(2,7) \cdot C2 \cdot (PSL(3,2) : C3) = SL(2,7) \cdot C3 \cdot (PSL$ 

 $N_3 = Group([(1,13,4,15)(2,7,3,5)(6,24,8,23)(9,14,10,16)(11,32,12,31)(17,20,19,18)(21,27,22,28)(25,29,26,30), (1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16)(17,19)(18,20)(21,22)(23,24)(25,26)(27,28)(25,29,26,30), (1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16)(17,19)(18,20)(21,22)(23,24)(25,26)(27,28)(25,29,26,30), (1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16)(17,19)(18,20)(21,22)(23,24)(25,26)(27,28)(25,29,26,30), (1,4)(2,3)(5,17,12)(9,21,10,22)(13,23,15,24)(14,28,16,27)(17,26,19,25)(18,30,20,29)]) \\ \cong Q32 - Q3$ 

 $N_4 = Group([(1,26,4,25)(2,9,3,10)(5,14,7,16)(6,18,8,20)(11,21,22)(23,24)(25,26)(27,28)(29,30)(11,21,22,21)(27,31,28,32), (1,2,20,26,9,6,4,3,18,25,10,8)(11,21,22,21)(27,31,28,32), (1,2,20,26,9,6,4,3,18,25,10,8)(11,21,22,21)(27,31,28,32), (1,2,20,26,9,6,4,3,18,25,10,8)(11,21,22,21)(27,31,28,32), (1,2,20,26,9,6,4,3,18,25,10,8)(11,21,22,21)(27,31,28,32), (1,2,20,26,9,6,4,3,18,25,10,8)(11,21,22,21)(27,31,28,32), (1,2,20,26,9,6,4,3,18,25,10,8)(11,21,22,21)(27,31,28,32), (1,2,20,26,9,6,4,3,18,25,10,8)(11,21,22,21)(27,31,28,32), (1,2,20,26,9,6,4,3,18,25,10,8)(11,21,22,21)(27,31,28,32), (1,2,20,26,9,6,4,3,18,25,10,8)(11,21,22,21)(27,31,28,32), (1,2,20,26,9,6,4,3,18,25,10,8)(11,21,22,21)(27,31,28,32), (1,2,20,26,9,6,4,3,18,25,10,8)(11,21,22,21)(27,31,28,32), (1,2,20,26,9,6,4,3,18,25,10,8)(11,21,22,21)(27,31,28,21), (1,2,20,26,9,6,4,3,18,25,10,8)(11,21,22,21)(27,31,28,21), (1,2,20,26,9,6,4,3,18,25,10,8)(11,21,22,21)(27,31,28,21), (1,2,20,26,9,6,4,3,18,25,10,8)(11,21,22,21)($ 

 $N_5 = Group([(1,26,4,25)(2,9,3,10)(5,14,7,16)(6,18,8,20)(11,21,22)(13,29,15,30)(17,24,19,23)(27,32,28,31),(1,13,4,15)(2,7,3,5)(6,24,8,23)(9,14,10,16)(11,32,12,31)(17,20,19,18)(21,27,22,28)(25,29,26,30),(1,4)(2,3)(5,7)(6,8)(9,10)(11,12)(13,15)(14,16)(17,19)(18,20)(21,22)(23,24)(25,26)(27,28)(29,30)(31,32),(1,6,4,8)(2,31,3,32)(5,11,7,12)(9,21,10,22)(13,23,15,24)(14,28,16,27)(17,26,19,25)(18,30,20,29)]) \\ \cong Q16$  $N_6 = Group([(1,18,13,17,4,20,15,19)(2,27,7,22,3,28,5,21)(6,25,24,29,8,26,23,30)(9,12,14,31,10,11,16,32),(1,2,2,28,13,7,19,21,4,3,18,27,15,5,17,22)(6,9,26,11,24,14,31,10,11,16,32),(1,13,4,15)(2,7,3,5)(6,24,8,23)(9,14,10,16)(11,32,12,31)(17,20,19,18)(21,27,22,28)(25,29,26,30),(1,13,4,15)(21,27,22,28)(25,29,26,28),(1,13,4,15)(21,27,22,28)(25,29,26,28),(1,13,4,15)(21,27,22,28)(25,29,26,28),(1,13,4,15)(21,27,22,28)(25,29,26,28),(1,13,4,15)(21,27,22,28)(25,29,26,28),(1,13,4,15)(21,27,22,28)(25,29,26,28),(1,13,4,15)(21,27,22,28)(25,29,26,28),(1,13,4,15)(21,27,22,28)(25,29,28),(1,13,4,15)(21,27,22,28)(25,29,28),(1,13,4,15)(21,27,22,28)(25,29,28),(1,13,4,15)(21,27,22,28)(25,29,28),(1,13,4,15)(21,27,22,28)(25,29,28),(1,13,4,15)(21,27,22,28)(25,29,28),(1,13,4,15)(21,27,22,28)(25,29,28),(1,13,4,15)(21,27,22,28)(25,29,28),(1,13,4,15)(21,27,22,28)(25,29,28),(1,13,23,28)(25,29,28),(1,13,23,28)(25,29,28),(1,13,23,28),(1,13,23,28),(1,13,23,28),(1,13,23,28),(1,13,23,28),(1,13,23,28)$ 

 $N_7 = Group([(1,10,4,9)(2,8,3,6)(5,23,7,24)(11,17,12,19)(13,14,15,16)(14,16)(17,19)(13,14,15,16)(14,16)(17,19)(13,14,15,16)(14,16)(17,19)(13,14,15,16)(14,16)(17,19)(13,14,15,16)(14,16)(17,19)(13,14,15,16)(14,16)(17,19)(13,14,15,16)(14,16)(17,19)(13,14,15,16)(14,16)(17,19)(13,14,15,16)(14,16)(17,19)(13,14,15)(14,16)$  $N_8 = Group([(1,26,4,25)(2,9,3,10)(5,14,7,16)(6,18,8,20)(11,21,12,22)(13,29,15,30)(17,24,19,23)(27,32,28,31),(1,6,4,8)(2,31,3,32)(5,11,7,12)(9,21,10,22)(13,23,15,24)(14,28,16,27)(17,26,19,25)(18,30,20,29),(1,13,4,15)(2,7,3,5)(6,24,8,23)(9,14,10,16)(11,32,12,31)(17,20,19,18)(21,22,23,16,29,31)] \\ \cong Q32 + Q32 +$ 

 $N_{11} = Group([(1,10,4,9)(2,8,3,6)(5,23,7,24)(11,17,12,19)(13,14,15,16)(14,25)(27,22,28)(25,29,26,30), (1,26,4,25)(27,29,28,31), (1,6,4,8)(2,31,3,32)(5,11,7,12)(9,21,10,22)(13,23,15,24)(14,28,16,27)(17,26,19,25)(18,30,20,29), (1,13,4,15)(27,22,28)(25,29,26,30), (1,26,4,25)(27,29,28,31), (1,6,4,8)(2,31,3,32)(27,32,28,31), (1,6,4,8)(2,31,3,32)(27,32,28,31), (1,6,4,8)(2,31,3,32)(27,32,28,31), (1,6,4,8)(2,31,3,32)(27,32,28,31), (1,6,4,8)(2,31,3,32)(27,32,28,31), (1,6,4,8)(27,32,28)(27,32,28)(27,32,28), (1,13,4,15)(27,32,28)(27,32,28), (1,13,4,15)(27,32,28)(27,32,28), (1,13,4,15)(27,32,28), ($