

The group  $G$  is isomorphic to the group labelled by [ 36, 4 ] in the Small Groups library.  
 Ordinary character table of  $G \cong \text{D36}$ :

	1a	2a	2b	9a	3a	2c	18a	6a	9b	18b	9c	18c
$\chi_1$	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
$\chi_3$	1	-1	1	1	1	-1	1	1	1	1	1	1
$\chi_4$	1	1	-1	1	1	-1	-1	-1	1	-1	1	-1
$\chi_5$	2	0	2	-1	2	0	-1	2	-1	-1	-1	-1
$\chi_6$	2	0	-2	-1	2	0	1	-2	-1	1	-1	1
$\chi_7$	2	0	2	$E(9)^2 + E(9)^7$	-1	0	$E(9)^2 + E(9)^7$	-1	$E(9)^4 + E(9)^5$	$E(9)^4 + E(9)^5$	$-E(9)^2 - E(9)^4 - E(9)^5 - E(9)^7$	$-E(9)^2 - E(9)^4 - E(9)^5 - E(9)^7$
$\chi_8$	2	0	2	$E(9)^4 + E(9)^5$	-1	0	$E(9)^4 + E(9)^5$	-1	$-E(9)^2 - E(9)^4 - E(9)^5 - E(9)^7$	$-E(9)^2 - E(9)^4 - E(9)^5 - E(9)^7$	$E(9)^2 + E(9)^7$	$E(9)^2 + E(9)^7$
$\chi_9$	2	0	2	$-E(9)^2 - E(9)^4 - E(9)^5 - E(9)^7$	-1	0	$-E(9)^2 - E(9)^4 - E(9)^5 - E(9)^7$	-1	$E(9)^2 + E(9)^7$	$E(9)^2 + E(9)^7$	$E(9)^4 + E(9)^5$	$E(9)^4 + E(9)^5$
$\chi_{10}$	2	0	-2	$E(9)^2 + E(9)^7$	-1	0	$-E(9)^2 - E(9)^7$	1	$E(9)^4 + E(9)^5$	$-E(9)^4 - E(9)^5$	$-E(9)^2 - E(9)^4 - E(9)^5 - E(9)^7$	$E(9)^2 + E(9)^4 + E(9)^5 + E(9)^7$
$\chi_{11}$	2	0	-2	$E(9)^4 + E(9)^5$	-1	0	$-E(9)^4 - E(9)^5$	1	$-E(9)^2 - E(9)^4 - E(9)^5 - E(9)^7$	$E(9)^2 + E(9)^4 + E(9)^5 + E(9)^7$	$E(9)^2 + E(9)^7$	$-E(9)^2 - E(9)^7$
$\chi_{12}$	2	0	-2	$-E(9)^2 - E(9)^4 - E(9)^5 - E(9)^7$	-1	0	$E(9)^2 + E(9)^4 + E(9)^5 + E(9)^7$	1	$E(9)^2 + E(9)^7$	$-E(9)^2 - E(9)^7$	$E(9)^4 + E(9)^5$	$-E(9)^4 - E(9)^5$

Trivial source character table of  $G \cong \text{D36}$  at  $p = 2$ :

Normalisers $N_i$	$N_1$					$N_2$					$N_3$	$N_4$	$N_5$
$p$ -subgroups of $G$ up to conjugacy in $G$	$P_1$					$P_2$					$P_3$	$P_4$	$P_5$
Representatives $n_j \in N_i$	1a	9a	3a	9b	9c	1a	9c	3a	9a	9b	1a	1a	1a
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 1 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	4	4	4	4	4	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	4	-2	4	-2	-2	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	4	$2 * E(9)^2 + 2 * E(9)^7$	-2	$2 * E(9)^4 + 2 * E(9)^5$	$-2 * E(9)^2 - 2 * E(9)^4 - 2 * E(9)^5 - 2 * E(9)^7$	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11} + 0 \cdot \chi_{12}$	4	$2 * E(9)^4 + 2 * E(9)^5$	-2	$-2 * E(9)^2 - 2 * E(9)^4 - 2 * E(9)^5 - 2 * E(9)^7$	$2 * E(9)^2 + 2 * E(9)^7$	0	0	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 1 \cdot \chi_{12}$	4	$-2 * E(9)^2 - 2 * E(9)^4 - 2 * E(9)^5 - 2 * E(9)^7$	-2	$2 * E(9)^2 + 2 * E(9)^7$	$2 * E(9)^4 + 2 * E(9)^5$	0	0	0	0	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	2	2	2	2	2	2	2	2	2	2	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	2	-1	2	-1	-1	2	-1	2	-1	-1	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	2	$E(9)^2 + E(9)^7$	-1	$E(9)^4 + E(9)^5$	$-E(9)^2 - E(9)^4 - E(9)^5 - E(9)^7$	2	$-E(9)^2 - E(9)^4 - E(9)^5 - E(9)^7$	-1	$E(9)^2 + E(9)^7$	$E(9)^4 + E(9)^5$	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	2	$-E(9)^2 - E(9)^4 - E(9)^5 - E(9)^7$	-1	$E(9)^2 + E(9)^7$	$E(9)^4 + E(9)^5$	2	$E(9)^4 + E(9)^5$	-1	$-E(9)^2 - E(9)^4 - E(9)^5 - E(9)^7$	$E(9)^2 + E(9)^7$	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	2	$E(9)^4 + E(9)^5$	-1	$-E(9)^2 - E(9)^4 - E(9)^5 - E(9)^7$	$E(9)^2 + E(9)^7$	2	$E(9)^2 + E(9)^7$	-1	$E(9)^4 + E(9)^5$	$-E(9)^2 - E(9)^4 - E(9)^5 - E(9)^7$	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	2	2	2	2	2	0	0	0	0	0	2	0	0
$1 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11} + 0 \cdot \chi_{12}$	2	2	2	2	2	0	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

$P_1 = \text{Group}([(())]) \cong 1$   
 $P_2 = \text{Group}([(1, 3)(2, 6)(4, 9)(5, 10)(7, 14)(8, 15)(11, 19)(12, 20)(13, 21)(16, 24)(17, 25)(18, 26)(22, 29)(23, 30)(27, 32)(28, 33)(31, 35)(34, 36)]) \cong \text{C2}$   
 $P_3 = \text{Group}([(1, 2)(3, 6)(4, 27)(5, 18)(7, 22)(8, 13)(9, 32)(10, 26)(11, 17)(12, 16)(14, 29)(15, 21)(19, 25)(20, 24)(23, 34)(28, 31)(30, 36)(33, 35)]) \cong \text{C2}$   
 $P_4 = \text{Group}([(1, 6)(2, 3)(4, 32)(5, 26)(7, 29)(8, 21)(9, 27)(10, 18)(11, 25)(12, 24)(13, 15)(14, 22)(16, 20)(17, 19)(23, 36)(28, 35)(30, 34)(31, 33)]) \cong \text{C2}$   
 $P_5 = \text{Group}([(1, 3)(2, 6)(4, 9)(5, 10)(7, 14)(8, 15)(11, 19)(12, 20)(13, 21)(16, 24)(17, 25)(18, 26)(22, 29)(23, 30)(27, 32)(28, 33)(31, 35)(34, 36), (1, 2)(3, 6)(4, 27)(5, 18)(7, 22)(8, 13)(9, 32)(10, 26)(11, 17)(12, 16)(14, 29)(15, 21)(19, 25)(20, 24)(23, 34)(28, 31)(30, 36)(33, 35)]) \cong \text{C2 x C2}$

$N_1 = \text{Group}([(1, 2)(3, 6)(4, 27)(5, 18)(7, 22)(8, 13)(9, 32)(10, 26)(11, 17)(12, 16)(14, 29)(15, 21)(19, 25)(20, 24)(23, 34)(28, 31)(30, 36)(33, 35), (1, 3)(2, 6)(4, 9)(5, 10)(7, 14)(8, 15)(11, 19)(12, 20)(13, 21)(16, 24)(17, 25)(18, 26)(22, 29)(23, 30)(27, 32)(28, 33)(31, 35)(34, 36), (1, 4, 11, 13, 23, 31, 5, 12, 22)(2, 7, 16, 18, 28, 34, 8, 17, 27)(3, 9, 19, 21, 30, 35, 10, 20, 29)(6, 14, 24, 26, 33, 36, 15, 25, 32), (1, 5, 13)(2, 8, 18)(3, 10, 21)(4, 12, 23)(6, 15, 26)(7, 17, 28)(9, 20, 30)(11, 22, 31)(14, 25, 33)(16, 27, 34)(19, 29, 35)(24, 32, 36)]) \cong \text{D36}$   
 $N_2 = \text{Group}([(1, 2)(3, 6)(4, 27)(5, 18)(7, 22)(8, 13)(9, 32)(10, 26)(11, 17)(12, 16)(14, 29)(15, 21)(19, 25)(20, 24)(23, 34)(28, 31)(30, 36)(33, 35), (1, 3)(2, 6)(4, 9)(5, 10)(7, 14)(8, 15)(11, 19)(12, 20)(13, 21)(16, 24)(17, 25)(18, 26)(22, 29)(23, 30)(27, 32)(28, 33)(31, 35)(34, 36), (1, 4, 11, 13, 23, 31, 5, 12, 22)(2, 7, 16, 18, 28, 34, 8, 17, 27)(3, 9, 19, 21, 30, 35, 10, 20, 29)(6, 14, 24, 26, 33, 36, 15, 25, 32), (1, 5, 13)(2, 8, 18)(3, 10, 21)(4, 12, 23)(6, 15, 26)(7, 17, 28)(9, 20, 30)(11, 22, 31)(14, 25, 33)(16, 27, 34)(19, 29, 35)(24, 32, 36)]) \cong \text{D36}$   
 $N_3 = \text{Group}([(1, 2)(3, 6)(4, 27)(5, 18)(7, 22)(8, 13)(9, 32)(10, 26)(11, 17)(12, 16)(14, 29)(15, 21)(19, 25)(20, 24)(23, 34)(28, 31)(30, 36)(33, 35), (1, 3)(2, 6)(4, 9)(5, 10)(7, 14)(8, 15)(11, 19)(12, 20)(13, 21)(16, 24)(17, 25)(18, 26)(22, 29)(23, 30)(27, 32)(28, 33)(31, 35)(34, 36)]) \cong \text{C2 x C2}$   
 $N_4 = \text{Group}([(1, 6)(2, 3)(4, 32)(5, 26)(7, 29)(8, 21)(9, 27)(10, 18)(11, 25)(12, 24)(13, 15)(14, 22)(16, 20)(17, 19)(23, 36)(28, 35)(30, 34)(31, 33), (1, 2)(3, 6)(4, 27)(5, 18)(7, 22)(8, 13)(9, 32)(10, 26)(11, 17)(12, 16)(14, 29)(15, 21)(19, 25)(20, 24)(23, 34)(28, 31)(30, 36)(33, 35), (1, 3)(2, 6)(4, 9)(5, 10)(7, 14)(8, 15)(11, 19)(12, 20)(13, 21)(16, 24)(17, 25)(18, 26)(22, 29)(23, 30)(27, 32)(28, 33)(31, 35)(34, 36)]) \cong \text{C2 x C2}$   
 $N_5 = \text{Group}([(1, 2)(3, 6)(4, 27)(5, 18)(7, 22)(8, 13)(9, 32)(10, 26)(11, 17)(12, 16)(14, 29)(15, 21)(19, 25)(20, 24)(23, 34)(28, 31)(30, 36)(33, 35), (1, 3)(2, 6)(4, 9)(5, 10)(7, 14)(8, 15)(11, 19)(12, 20)(13, 21)(16, 24)(17, 25)(18, 26)(22, 29)(23, 30)(27, 32)(28, 33)(31, 35)(34, 36)]) \cong \text{C2 x C2}$