

The group  $G$  is isomorphic to the group labelled by [ 28, 3 ] in the Small Groups library.

Ordinary character table of  $G \cong \text{D28}$ :

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

Trivial source character table of  $G \cong \text{D28}$  at  $p = 7$ :

Normalisers $N_i$	$N_1$				$N_2$			
$p$ -subgroups of $G$ up to conjugacy in $G$	$P_1$				$P_2$			
Representatives $n_j \in N_i$	1a	2b	2a	2c	1a	2b	2a	2c
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10}$	7	1	7	1	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10}$	7	-1	-7	1	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 1 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10}$	7	1	-7	-1	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 1 \cdot \chi_9 + 1 \cdot \chi_{10}$	7	-1	7	-1	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	1	1	1	1	1	1	1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10}$	1	1	-1	-1	1	-1	1	-1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10}$	1	-1	1	-1	1	1	-1	-1
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10}$	1	-1	-1	1	1	-1	-1	1

$$P_1 = \text{Group}([(())]) \cong 1$$

$$P_2 = \text{Group}([(1, 12, 24, 8, 20, 4, 16)(2, 14, 26, 10, 22, 6, 18)(3, 15, 27, 11, 23, 7, 19)(5, 17, 28, 13, 25, 9, 21)]) \cong \text{C7}$$

$$N_1 = \text{Group}([(1, 2)(3, 5)(4, 26)(6, 24)(7, 28)(8, 22)(9, 27)(10, 20)(11, 25)(12, 18)(13, 23)(14, 16)(15, 21)(17, 19), (1, 3)(2, 5)(4, 7)(6, 9)(8, 11)(10, 13)(12, 15)(14, 17)(16, 19)(18, 21)(20, 23)(22, 25)(24, 27)(26, 28), (1, 4, 8, 12, 16, 20, 24)(2, 6, 10, 14, 18, 22, 26)(3, 7, 11, 15, 19, 23, 27)(5, 9, 13, 17, 21, 25, 28)]) \cong \text{D28}$$

$$N_2 = \text{Group}([(1, 12, 24, 8, 20, 4, 16)(2, 14, 26, 10, 22, 6, 18)(3, 15, 27, 11, 23, 7, 19)(5, 17, 28, 13, 25, 9, 21), (1, 2)(3, 5)(4, 26)(6, 24)(7, 28)(8, 22)(9, 27)(10, 20)(11, 25)(12, 18)(13, 23)(14, 16)(15, 21)(17, 19), (1, 3)(2, 5)(4, 7)(6, 9)(8, 11)(10, 13)(12, 15)(14, 17)(16, 19)(18, 21)(20, 23)(22, 25)(24, 27)(26, 28)]) \cong \text{D28}$$