

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  $p = 2$ :

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

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

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

$$P_3 = \text{Group}([(1, 2)(3, 5)(4, 26)(6, 24)(7, 28)(8, 22)(9, 27)(10, 20)(11, 25)(12, 18)(13, 23)(14, 16)(15, 21)(17, 19)]) \cong \text{C2}$$

$$P_4 = \text{Group}([(1, 5)(2, 3)(4, 28)(6, 27)(7, 26)(8, 25)(9, 24)(10, 23)(11, 22)(12, 21)(13, 20)(14, 19)(15, 18)(16, 17)]) \cong \text{C2}$$

$$P_5 = \text{Group}([(1, 3)(2, 5)(4, 7)(6, 9)(8, 11)(10, 13)(12, 15)(14, 17)(16, 19)(18, 21)(20, 23)(22, 25)(24, 27)(26, 28), (1, 2)(3, 5)(4, 26)(6, 24)(7, 28)(8, 22)(9, 27)(10, 20)(11, 25)(12, 18)(13, 23)(14, 16)(15, 21)(17, 19)]) \cong \text{C2} \times \text{C2}$$

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

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

$$N_3 = \text{Group}([(1, 2)(3, 5)(4, 26)(6, 24)(7, 28)(8, 22)(9, 27)(10, 20)(11, 25)(12, 18)(13, 23)(14, 16)(15, 21)(17, 19), (1, 3)(2, 5)(4, 7)(6, 9)(8, 11)(10, 13)(12, 15)(14, 17)(16, 19)(18, 21)(20, 23)(22, 25)(24, 27)(26, 28)]) \cong \text{C2} \times \text{C2}$$

$$N_4 = \text{Group}([(1, 5)(2, 3)(4, 28)(6, 27)(7, 26)(8, 25)(9, 24)(10, 23)(11, 22)(12, 21)(13, 20)(14, 19)(15, 18)(16, 17), (1, 2)(3, 5)(4, 26)(6, 24)(7, 28)(8, 22)(9, 27)(10, 20)(11, 25)(12, 18)(13, 23)(14, 16)(15, 21)(17, 19), (1, 3)(2, 5)(4, 7)(6, 9)(8, 11)(10, 13)(12, 15)(14, 17)(16, 19)(18, 21)(20, 23)(22, 25)(24, 27)(26, 28)]) \cong \text{C2} \times \text{C2}$$

$$N_5 = \text{Group}([(1, 2)(3, 5)(4, 26)(6, 24)(7, 28)(8, 22)(9, 27)(10, 20)(11, 25)(12, 18)(13, 23)(14, 16)(15, 21)(17, 19), (1, 3)(2, 5)(4, 7)(6, 9)(8, 11)(10, 13)(12, 15)(14, 17)(16, 19)(18, 21)(20, 23)(22, 25)(24, 27)(26, 28)]) \cong \text{C2} \times \text{C2}$$