

The group G is isomorphic to the group labelled by [720, 764] in the Small Groups library.

Ordinary character table of $G \cong A6 : C2$:

	1a	2a	2b	3a	4a	5a	5b	8a	8b	10a	10b
χ_1	1	1	1	1	1	1	1	1	1	1	1
χ_2	1	-1	1	1	1	1	1	-1	-1	-1	-1
χ_3	8	2	0	-1	0	$-E(5)^2 - E(5)^3$	$-E(5) - E(5)^4$	0	0	$E(5) + E(5)^4$	$E(5)^2 + E(5)^3$
χ_4	8	-2	0	-1	0	$-E(5) - E(5)^4$	$-E(5)^2 - E(5)^3$	0	0	$-E(5)^2 - E(5)^3$	$-E(5) - E(5)^4$
χ_5	8	2	0	-1	0	$-E(5) - E(5)^4$	$-E(5)^2 - E(5)^3$	0	0	$E(5)^2 + E(5)^3$	$E(5) + E(5)^4$
χ_6	8	-2	0	-1	0	$-E(5)^2 - E(5)^3$	$-E(5) - E(5)^4$	0	0	$-E(5) - E(5)^4$	$-E(5)^2 - E(5)^3$
χ_7	9	1	1	0	1	-1	-1	-1	-1	1	1
χ_8	9	-1	1	0	1	-1	-1	1	1	-1	-1
χ_9	10	0	2	1	-2	0	0	0	0	0	0
χ_{10}	10	0	-2	1	0	0	0	$-E(8) + E(8)^3$	$E(8) - E(8)^3$	0	0
χ_{11}	10	0	-2	1	0	0	0	$E(8) - E(8)^3$	$-E(8) + E(8)^3$	0	0

Trivial source character table of $G \cong A6 : C2$ at $p = 5$

<i>Normalisers</i> N_i	N_1						N_2				
<i>p</i> - subgroups of G up to conjugacy in G	P_1						P_2				
<i>Representatives</i> $n_j \in N_i$	1a	2a	2b	3a	4a	8a	8b	1a	2b	2a	2a
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	10	0	2	1	2	2	2	0	0	0	0
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	10	0	2	1	2	-2	-2	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 1 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	25	-5	1	-2	1	1	1	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 1 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	25	5	1	-2	1	-1	-1	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 1 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	10	0	2	1	-2	0	0	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 1 \cdot \chi_{11}$	10	0	-2	1	0	$E(8) - E(8)^3$	$-E(8) + E(8)^3$	0	0	0	0
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 1 \cdot \chi_{10} + 0 \cdot \chi_{11}$	10	0	-2	1	0	$-E(8) + E(8)^3$	$E(8) - E(8)^3$	0	0	0	0
$1 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	1	1	1	1	1	1	1	1	1	1	1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 1 \cdot \chi_3 + 0 \cdot \chi_4 + 1 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	16	4	0	-2	0	0	0	1	-1	1	-1
$0 \cdot \chi_1 + 0 \cdot \chi_2 + 0 \cdot \chi_3 + 1 \cdot \chi_4 + 0 \cdot \chi_5 + 1 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	16	-4	0	-2	0	0	0	1	-1	-1	1
$0 \cdot \chi_1 + 1 \cdot \chi_2 + 0 \cdot \chi_3 + 0 \cdot \chi_4 + 0 \cdot \chi_5 + 0 \cdot \chi_6 + 0 \cdot \chi_7 + 0 \cdot \chi_8 + 0 \cdot \chi_9 + 0 \cdot \chi_{10} + 0 \cdot \chi_{11}$	1	-1	1	1	1	-1	-1	1	1	-1	-1

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

$$P_2 = \text{Group}([(1, 8, 6, 4, 5)(2, 10, 9, 7, 3)]) \cong C5$$

$$N_1 = \text{Group}([(2, 3, 4)(5, 7, 8)(6, 9, 10), (1, 2)(3, 5)(4, 6)(7, 8)(9, 10)]) \cong A6 : C2$$

$$N_2 = \text{Group}([(2, 10)(3, 9)(4, 6)(5, 8), (1, 8, 6, 4, 5)(2, 10, 9, 7, 3), (1, 10)(2, 8)(3, 6)(4, 7)(5, 9)]) \cong D20$$