

Character Tables of Multiplicity-Free Endomorphism Rings

$G = M_{12}.2$ (no. 13)

$H = 4^2 : (6 \times 2) < 4^2 : D_{12}.2$

rank: 13

degree: 990

	O_1	O_2	O_3	O_4	O_5	O_6	O_7	O_8	O_9	O_{10}
$1a^+$	1	1	12	16	16	48	64	64	96	96
$16ab$	1	1	-6	7	7	12	10	10	-12	-12
$45a^-$	1	1	-6	-4	-4	12	-12	-12	-12	-12
$54a^+$	1	1	$4-2r_5$	$2+2r_5$	$2+2r_5$	$2-6r_5$	$-10-2r_5$	$-10-2r_5$	8	8
$54a^-$	1	1	$4+2r_5$	$2-2r_5$	$2-2r_5$	$2+6r_5$	$-10+2r_5$	$-10+2r_5$	8	8
$55a^+$	1	-1	0	8	-8	0	8	-8	0	0
$55a^-$	1	-1	0	-4	4	0	-4	4	-24	24
$55bc$	1	-1	0	-4	4	0	-4	4	12	-12
$66a^+$	1	1	6	4	4	0	4	4	-12	-12
$99a^+$	1	-1	0	4	-4	0	-12	12	0	0
$99a^-$	1	1	2	-4	-4	-12	4	4	-4	-4
$144a^+$	1	1	-4	-1	-1	0	4	4	8	8
$176a^+$	1	-1	0	-1	1	0	8	-8	0	0

	O_{11}	O_{12}	O_{13}
$1a^+$	192	192	192
$16ab$	12	-42	12
$45a^-$	12	24	12
$54a^+$	$2+2r_5$	$-12+4r_5$	$2+2r_5$
$54a^-$	$2-2r_5$	$-12-4r_5$	$2-2r_5$
$55a^+$	24	0	-24
$55a^-$	12	0	-12
$55bc$	12	0	-12
$66a^+$	-12	24	-12
$99a^+$	-12	0	12
$99a^-$	12	-8	12
$144a^+$	-12	4	-12
$176a^+$	-12	0	12

$r_5 = \text{Sqrt}(5)$

References

- [Höh01] I. Höhler. Vielfachheitsfreie Permutationsdarstellungen und die Invarianten zugehöriger Graphen. Examensarbeit, RWTH Aachen, 2001.