

Character Tables of Multiplicity-Free Endomorphism Rings

$G = M_{12}.2$ (no. 9)

$H = (2 \times A_5).2 < (2^2 \times A_5).2$

rank: 11

degree: 792

	O_1	O_2	O_3	O_4	O_5	O_6	O_7	O_8	O_9	O_{10}
$1a^+$	1	1	15	15	40	60	60	120	120	120
$16ab$	1	1	6	6	-14	15	15	-6	-6	-24
$45a^+$	1	1	-5	-5	8	4	4	16	16	-24
$54a^+$	1	1	$1+2r_5$	$1+2r_5$	-4	$-4r_5$	$-4r_5$	$4+4r_5$	$4+4r_5$	$16-4r_5$
$54a^-$	1	1	$1-2r_5$	$1-2r_5$	-4	$4r_5$	$4r_5$	$4-4r_5$	$4-4r_5$	$16+4r_5$
$55a^-$	1	-1	7	-7	0	12	-12	8	-8	0
$66a^+$	1	1	3	3	16	0	0	-12	-12	0
$66a^-$	1	-1	-5	5	0	0	0	20	-20	0
$99a^-$	1	-1	3	-3	0	-12	12	0	0	0
$144a^+$	1	1	-2	-2	-4	-5	-5	-2	-2	0
$176a^-$	1	-1	-2	2	0	3	-3	-10	10	0

	O_{11}
$1a^+$	240
$16ab$	6
$45a^+$	-16
$54a^+$	-24
$54a^-$	-24
$55a^-$	0
$66a^+$	0
$66a^-$	0
$99a^-$	0
$144a^+$	20
$176a^-$	0

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

References

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