

# $M_{12} \pmod{11}$

	blocks	defect	matrix
$G :$	1	1	$7 \times 5$
	2	0	$11_1 = \chi_2, \varphi_2$
	3	0	$11_2 = \chi_3, \varphi_3$
	4	0	$55_1 = \chi_8, \varphi_7$
	5	0	$55_2 = \chi_9, \varphi_8$
	6	0	$55_3 = \chi_{10}, \varphi_9$
	7	0	$66_1 = \chi_{11}, \varphi_{10}$

	blocks	defect	matrix
	8	0	$99_1 = \chi_{12}, \varphi_{12}$
	9	0	$176_1 = \chi_{15}, \varphi_{13}$
$2.G :$	10	1	$7 \times 5$
	11	0	$44_1 = \chi_{20}, \varphi_{18}$
	$12 = \overline{11}$	0	$44_2 = \chi_{21}, \varphi_{19}$
	13	0	$110_1 = \chi_{22}, \varphi_{21}$
	$14 = \overline{13}$	0	$110_2 = \chi_{23}, \varphi_{22}$

<b>Block 1:</b>	$\varphi_1$	$\varphi_4$	$\varphi_5$	$\varphi_6$	$\varphi_{11}$
$1_1 = \chi_1$	1	.	.	.	.
$16_1 = \chi_4$	.	1	.	.	.
$16_2 = \chi_5$	.	1	.	.	.
$45_1 = \chi_6$	.	1	1	.	.
$54_1 = \chi_7$	1	.	.	1	.
$120_1 = \chi_{13}$	.	.	1	.	1
$144_1 = \chi_{14}$	.	.	.	1	1

$$\begin{aligned} \varphi_1 &= 1_1 \\ \varphi_4 &= 16_1 \\ \varphi_5 &= 29_1 \\ \varphi_6 &= 53_1 \\ \varphi_{11} &= 91_1 \end{aligned}$$

<b>Block 10:</b>	$\varphi_{14}$	$\varphi_{15}$	$\varphi_{16}$	$\varphi_{17}$	$\varphi_{20}$
$10_1 = \chi_{16}$	1	.	.	.	.
$10_2 = \chi_{17}$	.	1	.	.	.
$12_1 = \chi_{18}$	.	.	1	.	.
$32_1 = \chi_{19}$	.	.	.	1	.
$120_2 = \chi_{24}$	.	.	1	.	1
$160_1 = \chi_{25}$	1	1	.	1	1
$160_2 = \chi_{26}$	1	1	.	1	1

$$\begin{aligned} \varphi_{14} &= 10_1 \\ \varphi_{15} &= 10_2 \\ \varphi_{16} &= 12_1 \\ \varphi_{17} &= 32_1 \\ \varphi_{20} &= 108_1 \end{aligned}$$