

# $L_5(2) \pmod{7}$

	blocks	defect	matrix
$G :$	1	1	$5 \times 3$
	2	1	$5 \times 3$
	3	1	$5 \times 3$
	4	0	$217_1 = \chi_5, \varphi_5$
	5	0	$280_1 = \chi_6, \varphi_6$
	6	0	$315_1 = \chi_7, \varphi_7$
	$7 = \bar{6}$	0	$315_2 = \chi_8, \varphi_8$
	8	0	$315_3 = \chi_9, \varphi_9$

	blocks	defect	matrix
	$9 = \bar{8}$	0	$315_4 = \chi_{10}, \varphi_{10}$
	10	0	$315_5 = \chi_{11}, \varphi_{11}$
	$11 = \bar{10}$	0	$315_6 = \chi_{12}, \varphi_{12}$
	12	0	$651_1 = \chi_{18}, \varphi_{16}$
	13	0	$651_2 = \chi_{19}, \varphi_{17}$
	$14 = \bar{13}$	0	$651_3 = \chi_{20}, \varphi_{18}$
	15	0	$868_1 = \chi_{21}, \varphi_{20}$

<b>Block 1:</b>	$\varphi_1$	$\varphi_{14}$	$\varphi_{15}$
$1_1 = \chi_1$	1	.	.
$465_3 = \chi_{15}$	.	1	.
$465_4 = \chi_{16}$	.	1	.
$496_1 = \chi_{17}$	1	.	1
$960_1 = \chi_{25}$	.	1	1

$$\begin{aligned} \varphi_1 &= 1_1 \\ \varphi_{14} &= 465_2 \\ \varphi_{15} &= 495_1 \end{aligned}$$

<b>Block 2:</b>	$\varphi_2$	$\varphi_3$	$\varphi_{21}$
$30_1 = \chi_2$	1	.	.
$124_1 = \chi_3$	1	1	.
$930_2 = \chi_{23}$	.	.	1
$930_3 = \chi_{24}$	.	.	1
$1024_1 = \chi_{26}$	.	1	1

$$\begin{aligned} \varphi_2 &= 30_1 \\ \varphi_3 &= 94_1 \\ \varphi_{21} &= 930_1 \end{aligned}$$

<b>Block 3:</b>	$\varphi_4$	$\varphi_{13}$	$\varphi_{19}$
$155_1 = \chi_4$	1	.	.
$465_1 = \chi_{13}$	.	1	.
$465_2 = \chi_{14}$	.	1	.
$930_1 = \chi_{22}$	1	.	1
$1240_1 = \chi_{27}$	.	1	1

$$\begin{aligned} \varphi_4 &= 155_1 \\ \varphi_{13} &= 465_1 \\ \varphi_{19} &= 775_1 \end{aligned}$$