

$Ly \pmod{7}$

	blocks	defect	matrix
$G :$	1	1	7×6
	2	1	7×6
	3	1	5×3
	4	0	$48174_1 = \chi_5, \varphi_5$
	$5 = \bar{4}$	0	$48174_2 = \chi_6, \varphi_6$
	6	0	$120064_1 = \chi_7, \varphi_7$
	$7 = \bar{6}$	0	$120064_2 = \chi_8, \varphi_8$
	8	0	$381766_1 = \chi_9, \varphi_9$
	9	1	7×6
	10	1	5×3
	11	0	$4997664_1 = \chi_{15}, \varphi_{16}$
	12	0	$5379430_1 = \chi_{16}, \varphi_{17}$
	13	0	$10758860_1 = \chi_{17}, \varphi_{18}$
	14	0	$11834746_1 = \chi_{18}, \varphi_{19}$
	15	0	$22609664_1 = \chi_{26}, \varphi_{27}$
	16	0	$22609664_2 = \chi_{27}, \varphi_{28}$
	17	0	$22609664_3 = \chi_{28}, \varphi_{29}$
	18	0	$28787220_1 = \chi_{33}, \varphi_{34}$
	19	0	$29586865_1 = \chi_{34}, \varphi_{35}$
	20	0	$43110144_1 = \chi_{39}, \varphi_{38}$
	21	0	$43110144_2 = \chi_{40}, \varphi_{39}$
	22	0	$43110144_3 = \chi_{41}, \varphi_{40}$
	23	0	$43110144_4 = \chi_{42}, \varphi_{41}$
	24	0	$43110144_5 = \chi_{43}, \varphi_{42}$
	25	0	$44159500_1 = \chi_{44}, \varphi_{43}$
	26	0	$52994655_1 = \chi_{49}, \varphi_{45}$
	27	0	$71008476_1 = \chi_{53}, \varphi_{46}$

Block 1:	φ_1	φ_{10}	φ_{14}	φ_{21}	φ_{22}	φ_{26}	
$1_1 = \chi_1$	1	.	.	.	.	.	$\varphi_1 = 1_1$
$3073960_1 = \chi_{13}$	.	.	1	.	.	.	$\varphi_{10} = 973710_1$
$18395586_1 = \chi_{20}$	.	1	.	1	.	.	$\varphi_{14} = 3073960_1$
$19212250_1 = \chi_{23}$	.	1	.	.	1	.	$\varphi_{21} = 17421876_1$
$21312500_1 = \chi_{24}$	1	.	.	.	.	1	$\varphi_{22} = 18238540_1$
$21312500_2 = \chi_{25}$	.	.	1	.	1	.	$\varphi_{26} = 21312499_1$
$38734375_1 = \chi_{38}$	.	.	.	1	.	1	

Block 2:	φ_2	φ_3	φ_{23}	φ_{24}	φ_{32}	φ_{33}	
$2480_1 = \chi_2$	1	.	.	.	.	.	$\varphi_2 = 2480_1$
$2480_2 = \chi_3$	.	1	.	.	.	.	$\varphi_3 = 2480_2$
$27252720_3 = \chi_{31}$	.	.	.	.	1	.	$\varphi_{23} = 18441280_1$
$27252720_4 = \chi_{32}$	.	.	.	.	.	1	$\varphi_{24} = 18441280_2$
$36887520_1 = \chi_{37}$	1	1	1	1	.	.	$\varphi_{32} = 27252720_1$
$45694000_1 = \chi_{47}$	.	.	1	.	1	.	$\varphi_{33} = 27252720_2$
$45694000_2 = \chi_{48}$	.	.	.	1	.	1	

Block 3:	φ_4	φ_{12}	φ_{20}	
$45694_1 = \chi_4$	1	.	.	$\varphi_4 = 45694_1$
$1534500_1 = \chi_{11}$	1	1	.	$\varphi_{12} = 1488806_1$
$16906780_1 = \chi_{19}$	.	.	1	$\varphi_{20} = 16906780_1$
$18395586_2 = \chi_{21}$	.	1	1	
$18395586_3 = \chi_{22}$	.	1	1	

Block 9:	φ_{11}	φ_{13}	φ_{25}	φ_{31}	φ_{37}	φ_{44}	
$1152735_1 = \chi_{10}$	1	.	.	.	.	.	$\varphi_{11} = 1152735_1$
$3028266_1 = \chi_{12}$	.	1	.	.	.	.	$\varphi_{13} = 3028266_1$
$33813560_1 = \chi_{36}$	.	1	.	.	1	.	$\varphi_{25} = 20410679_1$
$45648306_1 = \chi_{45}$	.	.	1	1	.	.	$\varphi_{31} = 25237627_1$
$45648306_2 = \chi_{46}$	1	.	.	.	.	1	$\varphi_{37} = 30785294_1$
$56022921_1 = \chi_{51}$	.	.	.	1	1	.	$\varphi_{44} = 44495571_1$
$64906250_1 = \chi_{52}$	.	.	1	.	.	1	

Block 10:	φ_{15}	φ_{30}	φ_{36}	
$4226695_1 = \chi_{14}$	1	.	.	$\varphi_{15} = 4226695_1$
$27252720_1 = \chi_{29}$	1	1	.	$\varphi_{30} = 23026025_1$
$27252720_2 = \chi_{30}$	1	1	.	$\varphi_{36} = 30739600_1$
$30739600_1 = \chi_{35}$	.	.	1	
$53765625_1 = \chi_{50}$	.	1	1	