

$HN \pmod{7}$

	blocks	defect	matrix
$G :$	1	1	7×6
	2	0	$133_1 = \chi_2, \varphi_2$
	3	0	$133_2 = \chi_3, \varphi_3$
	4	1	7×6
	5	1	7×6
	6	0	$8778_1 = \chi_6, \varphi_6$
	7	0	$8778_2 = \chi_7, \varphi_7$
	8	0	$35112_1 = \chi_{11}, \varphi_{11}$
	9	0	$35112_2 = \chi_{12}, \varphi_{12}$
	10	0	$65835_1 = \chi_{13}, \varphi_{13}$
	11	0	$65835_2 = \chi_{14}, \varphi_{14}$
	12	1	5×3
	13	0	$365750_1 = \chi_{20}, \varphi_{19}$
	14	0	$374528_1 = \chi_{21}, \varphi_{20}$
	15	0	$374528_2 = \chi_{22}, \varphi_{21}$
	16	0	$656250_1 = \chi_{25}, \varphi_{24}$
	$17 = \overline{16}$	0	$656250_2 = \chi_{26}, \varphi_{25}$
	18	0	$718200_1 = \chi_{27}, \varphi_{26}$
	19	0	$718200_2 = \chi_{28}, \varphi_{27}$
	20	0	$1053360_1 = \chi_{29}, \varphi_{28}$
	21	0	$1066527_1 = \chi_{30}, \varphi_{29}$
	22	0	$1066527_2 = \chi_{31}, \varphi_{30}$
	23	0	$1185030_1 = \chi_{32}, \varphi_{33}$
	24	0	$1361920_1 = \chi_{34}, \varphi_{35}$
	25	0	$1361920_2 = \chi_{35}, \varphi_{36}$
	$26 = \overline{25}$	0	$1361920_3 = \chi_{36}, \varphi_{37}$
	27	0	$2661120_1 = \chi_{42}, \varphi_{41}$
	28	0	$3878280_1 = \chi_{47}, \varphi_{44}$
	29	0	$4156250_1 = \chi_{48}, \varphi_{45}$
	30	0	$5103000_1 = \chi_{51}, \varphi_{47}$
	31	0	$5103000_2 = \chi_{52}, \varphi_{48}$
	32	0	$5332635_1 = \chi_{53}, \varphi_{49}$

Block 1:	φ_1	φ_8	φ_{17}	φ_{39}	φ_{40}	φ_{46}	
$1_1 = \chi_1$	1	.	.	.	.	.	$\varphi_1 = 1_1$
$8910_1 = \chi_8$	1	1	.	.	.	.	$\varphi_8 = 8909_1$
$267520_1 = \chi_{18}$	.	1	1	.	.	.	$\varphi_{17} = 258611_1$
$1625184_1 = \chi_{38}$	.	.	.	.	1	.	$\varphi_{39} = 1574816_1$
$3200000_1 = \chi_{45}$	.	.	.	1	1	.	$\varphi_{40} = 1625184_1$
$4561920_1 = \chi_{49}$	.	.	1	.	.	1	$\varphi_{46} = 4303309_1$
$5878125_1 = \chi_{54}$	.	.	.	1	.	1	

Block 4:	φ_4	φ_9	φ_{10}	φ_{23}	φ_{38}	φ_{43}	
$760_1 = \chi_4$	1	.	.	.	.	.	$\varphi_4 = 760_1$
$9405_1 = \chi_9$	.	1	.	.	.	.	$\varphi_9 = 9405_1$
$16929_1 = \chi_{10}$	1	.	1	.	.	.	$\varphi_{10} = 16169_1$
$653125_1 = \chi_{24}$	.	.	1	1	.	.	$\varphi_{23} = 636956_1$
$2031480_1 = \chi_{39}$	.	.	.	1	1	.	$\varphi_{38} = 1394524_1$
$3424256_1 = \chi_{46}$	.	1	.	.	.	1	$\varphi_{43} = 3414851_1$
$4809375_1 = \chi_{50}$	.	.	.	.	1	1	

Block 5:	φ_5	φ_{16}	φ_{22}	φ_{31}	φ_{32}	φ_{34}	
$3344_1 = \chi_5$	1	.	.	.	.	.	$\varphi_5 = 3344_1$
$214016_1 = \chi_{17}$	.	1	.	.	.	.	$\varphi_{16} = 214016_1$
$406296_1 = \chi_{23}$	1	.	1	.	.	.	$\varphi_{22} = 402952_1$
$1354320_1 = \chi_{33}$	.	1	.	1	.	.	$\varphi_{31} = 1140304_1$
$1575936_1 = \chi_{37}$	.	.	1	.	1	.	$\varphi_{32} = 1172984_1$
$2375000_1 = \chi_{40}$	.	.	.	1	.	1	$\varphi_{34} = 1234696_1$
$2407680_1 = \chi_{41}$	.	.	.	.	1	1	

Block 12:	φ_{15}	φ_{18}	φ_{42}	
$69255_1 = \chi_{15}$	1	.	.	$\varphi_{15} = 69255_1$
$69255_2 = \chi_{16}$	1	.	.	$\varphi_{18} = 270864_1$
$270864_1 = \chi_{19}$	.	1	.	$\varphi_{42} = 2715120_1$
$2784375_1 = \chi_{43}$	1	.	1	
$2985984_1 = \chi_{44}$	.	1	1	