

$A_{13} \pmod{5}$

	blocks	defect	matrix
$G :$	1	2	20×14
	2	2	13×10
	3	1	5×4
	4	1	5×4
	5	1	5×4
	6	1	4×2
	7	0	$3575_1 = \chi_{26}, \varphi_{27}$

	blocks	defect	matrix
$2.G :$	8	0	$7800_1 = \chi_{40}, \varphi_{38}$
	9	0	$21450_1 = \chi_{55}, \varphi_{41}$
	10	2	13×10
	11	2	11×5
	12	0	$8800_1 = \chi_{65}, \varphi_{57}$
	13	0	$20800_1 = \chi_{81}, \varphi_{58}$
	$14 = \overline{13}$	0	$20800_2 = \chi_{82}, \varphi_{59}$

Block 1:	φ_1	φ_4	φ_5	φ_9	φ_{10}	φ_{14}	φ_{15}	φ_{16}	φ_{20}	φ_{21}	φ_{23}	φ_{24}	φ_{26}	φ_{32}
$1_1 = \chi_1$	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$66_1 = \chi_4$	.	1	.	.	.	.	.	.	.	.	.	.	.	.
$429_1 = \chi_7$	.	1	.	1	.	.	.	.	.	.	.	.	.	.
$429_2 = \chi_8$	1	.	.	.	1	.	.	.	.	.	.	.	.	.
$572_1 = \chi_{13}$	.	.	1	.	1	.	.	.	.	.	.	.	.	.
$792_1 = \chi_{14}$	.	.	.	.	.	.	1	.	.	.	.	.	.	.
$936_1 = \chi_{15}$	.	.	.	1	.	1	.	.	.	.	.	.	.	.
$1287_1 = \chi_{16}$	.	.	.	1	.	.	.	1	.	.	.	.	.	.
$2574_1 = \chi_{19}$	1	.	1	.	1	.	.	.	1	.	.	.	.	.
$3003_1 = \chi_{22}$	.	.	.	.	.	.	1	.	.	1	.	.	.	.
$3432_2 = \chi_{24}$	.	1	1	.	.	.	.	.	.	.	.	1	.	.
$3432_3 = \chi_{25}$	1	.	.	.	.	.	.	1	.	.	1	.	.	.
$4004_1 = \chi_{28}$	.	.	.	.	.	1	.	.	.	.	.	.	1	.
$4212_1 = \chi_{29}$	.	.	.	.	.	.	.	.	1	1	.	.	.	.
$5148_1 = \chi_{34}$	.	1	.	1	.	1	.	1	.	.	.	1	.	.
$6864_1 = \chi_{38}$	1	.	1	.	.	.	.	.	1	1	1	.	.	.
$9009_1 = \chi_{44}$	.	.	.	.	.	.	1	.	.	.	.	.	1	1
$10296_1 = \chi_{46}$	.	.	.	.	.	.	1	.	.	1	1	.	.	1
$11583_1 = \chi_{48}$	.	.	1	.	.	.	.	1	.	.	1	1	.	1
$12012_2 = \chi_{50}$	.	.	.	.	.	1	.	.	.	.	.	1	1	1

$$\begin{array}{ll}
 \varphi_1 & = 1_1 \\
 \varphi_4 & = 66_1 \\
 \varphi_5 & = 144_1 \\
 \varphi_9 & = 363_1 \\
 \varphi_{10} & = 428_1 \\
 \varphi_{14} & = 573_1 \\
 \varphi_{15} & = 792_1 \\
 \varphi_{16} & = 924_1 \\
 \varphi_{20} & = 2001_1 \\
 \varphi_{21} & = 2211_1 \\
 \varphi_{23} & = 2507_1 \\
 \varphi_{24} & = 3222_1 \\
 \varphi_{26} & = 3431_1 \\
 \varphi_{32} & = 4786_1
 \end{array}$$

Block 2:	φ_2	φ_6	φ_8	φ_{11}	φ_{12}	φ_{22}	φ_{25}	φ_{34}	φ_{35}	φ_{37}		
$12_1 = \chi_2$	1	.	.	.	.	.	.	.	.	.		
$208_1 = \chi_5$	1	1	.	.	.	.	.	.	.	.	$\varphi_2 =$	12_1
$429_3 = \chi_9$	.	1	1	.	.	.	.	.	.	.	$\varphi_6 =$	196_1
$462_1 = \chi_{10}$	.	.	.	1	.	.	.	.	.	.	$\varphi_8 =$	233_1
$462_2 = \chi_{11}$	.	.	.	.	1	.	.	.	.	.	$\varphi_{11} =$	462_1
$2574_2 = \chi_{20}$	1	.	1	.	.	1	.	.	.	.	$\varphi_{12} =$	462_2
$3432_1 = \chi_{23}$	.	1	.	.	.	.	1	.	.	.	$\varphi_{22} =$	2329_1
$6006_1 = \chi_{36}$	1	1	1	.	.	1	1	.	.	.	$\varphi_{25} =$	3236_1
$7371_1 = \chi_{39}$	.	.	.	1	1	.	.	.	.	1	$\varphi_{34} =$	5446_1
$8008_1 = \chi_{41}$	.	.	1	.	.	1	.	1	.	.	$\varphi_{35} =$	5446_2
$8008_2 = \chi_{42}$	.	.	1	.	.	1	.	.	1	.	$\varphi_{37} =$	6447_1
$12012_1 = \chi_{49}$	.	.	.	.	.	1	1	.	.	1		
$20592_1 = \chi_{54}$	.	.	.	1	1	1	.	1	1	1		

Block 3:	φ_3	φ_{30}	φ_{33}	φ_{36}		
$65_1 = \chi_3$	1	.	.	.	$\varphi_3 =$	65_1
$4290_1 = \chi_{30}$	.	1	.	.	$\varphi_{30} =$	4290_2
$6435_1 = \chi_{37}$	1	.	.	1	$\varphi_{33} =$	5070_1
$9360_1 = \chi_{45}$	.	1	1	.	$\varphi_{36} =$	6370_1
$11440_1 = \chi_{47}$	.	.	1	1		

Block 4:	φ_7	φ_{13}	φ_{31}	φ_{39}		
$220_1 = \chi_6$	1	.	.	.	$\varphi_7 =$	220_1
$495_1 = \chi_{12}$	.	1	.	.	$\varphi_{13} =$	495_1
$5005_1 = \chi_{33}$	.	1	1	.	$\varphi_{31} =$	4510_1
$8580_1 = \chi_{43}$	1	.	.	1	$\varphi_{39} =$	8360_1
$12870_1 = \chi_{51}$	.	.	1	1		

Block 5:	φ_{17}	φ_{19}	φ_{28}	φ_{40}		
$1365_1 = \chi_{17}$	1	.	.	.	$\varphi_{17} =$	1365_1
$2860_1 = \chi_{21}$	1	1	.	.	$\varphi_{19} =$	1495_1
$3640_1 = \chi_{27}$	.	.	1	.	$\varphi_{28} =$	3640_1
$15015_1 = \chi_{52}$	.	1	.	1	$\varphi_{40} =$	13520_1
$17160_1 = \chi_{53}$	.	.	1	1		

Block 6:	φ_{18}	φ_{29}		
$1430_1 = \chi_{18}$	1	.	$\varphi_{18} =$	1430_1
$4290_2 = \chi_{31}$	.	1	$\varphi_{29} =$	4290_1
$4290_3 = \chi_{32}$	.	1		
$5720_1 = \chi_{35}$	1	1		

Block 10:	φ_{42}	φ_{43}	φ_{47}	φ_{48}	φ_{49}	φ_{50}	φ_{52}	φ_{53}	φ_{54}	φ_{55}		
$32_1 = \chi_{56}$	1	.	.	.	.	.	.	.	.	.		
$32_2 = \chi_{57}$	.	1	.	.	.	.	.	.	.	.	$\varphi_{42} =$	32_1
$4576_1 = \chi_{63}$	.	.	1	1	.	.	.	.	.	.	$\varphi_{43} =$	32_2
$4928_1 = \chi_{64}$	1	1	.	.	1	1	.	.	.	.	$\varphi_{47} =$	2288_1
$9152_2 = \chi_{67}$	.	.	.	.	1	.	.	.	1	.	$\varphi_{48} =$	2288_2
$9152_3 = \chi_{68}$	.	.	.	.	.	1	.	.	.	1	$\varphi_{49} =$	2432_1
$9152_4 = \chi_{69}$	1	1	1	1	.	.	1	.	.	.	$\varphi_{50} =$	2432_2
$9152_5 = \chi_{70}$	1	1	1	1	.	.	.	1	.	.	$\varphi_{52} =$	4512_1
$9504_1 = \chi_{71}$	1	1	1	1	1	1	.	.	.	.	$\varphi_{53} =$	4512_2
$11232_1 = \chi_{72}$	.	.	.	.	.	.	.	1	1	.	$\varphi_{54} =$	6720_1
$11232_2 = \chi_{73}$	.	.	.	.	.	.	1	.	.	1	$\varphi_{55} =$	6720_2
$16016_1 = \chi_{79}$	1	1	1	.	1	.	.	1	1	.		
$16016_2 = \chi_{80}$	1	1	.	1	.	1	1	.	.	1		

Block 11:	φ_{44}	φ_{45}	φ_{46}	φ_{51}	φ_{56}		
$352_1 = \chi_{58}$	1	.	.	.	.		
$1728_1 = \chi_{59}$	1	.	1	.	.		
$2496_1 = \chi_{60}$	.	1	1	.	.	$\varphi_{44} =$	352_1
$2496_2 = \chi_{61}$	.	1	1	.	.	$\varphi_{45} =$	1120_1
$4224_1 = \chi_{62}$	.	.	1	1	.	$\varphi_{46} =$	1376_1
$9152_1 = \chi_{66}$	.	1	.	.	1	$\varphi_{51} =$	2848_1
$11232_3 = \chi_{74}$	1	.	.	1	1	$\varphi_{56} =$	8032_1
$11232_4 = \chi_{75}$	1	.	.	1	1		
$13728_1 = \chi_{76}$	.	.	.	2	1		
$13728_2 = \chi_{77}$	1	1	1	1	1		
$13728_3 = \chi_{78}$	1	1	1	1	1		