

$A_{15} \pmod{3}$

	blocks	defect	matrix
$G :$	1	6	60×18
	2	4	22×10
	3	2	9×5
	4	1	3×2

Block 1:	φ_1	φ_2	φ_3	φ_5	φ_6	φ_7	φ_8	φ_9	φ_{10}	φ_{12}	φ_{15}	φ_{16}	φ_{19}	φ_{21}	φ_{23}
$1_1 = \chi_1$	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$14_1 = \chi_2$	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$91_1 = \chi_4$	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.
$350_1 = \chi_5$	.	1	.	.	1	.	.	.	.	.	.	.	.	.	.
$364_1 = \chi_6$	.	.	1	1	.	.	.	.	.	.	.	.	.	.	.
$715_1 = \chi_7$	1	1	1	1	1	.	.	.	.	.	.	.	.	.	.
$910_1 = \chi_8$	.	1	.	.	1	1	.	.	.	.	.	.	.	.	.
$1001_1 = \chi_9$	.	.	.	1	.	.	1	.	.	.	.	.	.	.	.
$1430_1 = \chi_{10}$	2	.	.	.	.	.	.	.	1	.	.	.	.	.	.
$1716_1 = \chi_{12}$	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
$1716_2 = \chi_{13}$	.	.	.	.	.	.	.	.	.	1	.	.	.	.	.
$1925_1 = \chi_{14}$	1	2	.	1	1	1	1	.	.	.	.	.	.	.	.
$2002_1 = \chi_{15}$	1	1	.	.	.	1	.	.	1	.	.	.	.	.	.
$2002_2 = \chi_{16}$	.	.	.	.	.	.	1	1	.	.	.	.	.	.	.
$3003_1 = \chi_{19}$	.	.	.	.	.	.	.	1	.	1	.	.	.	.	.
$5005_1 = \chi_{20}$	2	1	.	.	.	.	.	.	1	.	1	.	.	.	.
$6006_1 = \chi_{21}$	.	1	.	.	.	.	1	.	.	1	1	.	.	.	.
$7007_1 = \chi_{22}$	1	1	1	1	1	1	.	.	.	.	.	1	.	.	.
$9100_1 = \chi_{24}$	1	2	2	1	1	1	1	1	.	.	.	1	.	.	.
$11375_1 = \chi_{27}$	2	1	1	.	.	1	.	.	1	.	1	1	.	.	.
$12012_1 = \chi_{29}$	2	.	.	.	.	.	.	.	1	.	.	.	1	.	.
$12012_2 = \chi_{30}$	2	.	.	.	.	.	.	.	1	.	.	.	1	.	.
$12740_1 = \chi_{31}$	1	.	2	1	.	.	.	1	.	1	1	1	.	.	.
$13650_1 = \chi_{32}$	2	2	.	.	1	1	1	.	1	.	.	.	1	.	.
$14300_1 = \chi_{33}$	.	.	.	.	.	.	1	1	.	1	.	.	1	.	.
$21450_1 = \chi_{35}$	1	.	1	1	.	.	.	.	.	1	.	.	.	.	1
$25025_1 = \chi_{38}$	2	.	1	1	.	.	.	.	.	.	1	1	.	1	.
$25025_2 = \chi_{39}$	2	2	1	.	.	1	.	.	1	.	1	.	.	.	1
$25025_3 = \chi_{40}$	.	1	1	.	.	1	1	2	.	1	.	.	.	.	1
$26950_1 = \chi_{41}$	2	.	.	1	.	.	1	.	.	.	.	.	1	1	.
$28028_1 = \chi_{43}$	2	1	.	.	1	.	.	.	.	.	1	.	.	.	.
$30030_1 = \chi_{44}$	1	1	1	1	.	.	1	2	.	2	1	.	.	.	1
$32032_1 = \chi_{45}$	3	1	1	.	.	1	.	1	1	.	1	1	.	.	1
$35035_1 = \chi_{47}$	1	1	1	1	.	1	1	1	.	2	1	1	.	.	1
$42042_1 = \chi_{49}$	4	2	2	2	1	1	1	1	1	1	1	1	1	1	.
$42042_2 = \chi_{50}$	3	2	.	.	1	1	.	.	1	.	.	.	1	.	.
$43120_1 = \chi_{51}$	.	.	.	.	.	.	.	.	.	2	.	.	1	.	.
$50050_1 = \chi_{54}$	2	2	1	1	1	1	.	.	.	1	1	.	.	.	1
$50050_2 = \chi_{55}$	2	1	.	1	.	.	.	.	.	1	1	.	.	1	.
$53625_1 = \chi_{57}$	2	.	.	.	.	.	.	.	.	.	1	.	1	1	.

(Block 1:)	φ_{25}	φ_{28}	φ_{30}
$1_1 = \chi_1$.	.	.
$14_1 = \chi_2$.	.	.
$91_1 = \chi_4$.	.	.
$350_1 = \chi_5$.	.	.
$364_1 = \chi_6$.	.	.
$715_1 = \chi_7$.	.	.
$910_1 = \chi_8$.	.	.
$1001_1 = \chi_9$.	.	.
$1430_1 = \chi_{10}$.	.	.
$1716_1 = \chi_{12}$.	.	.
$1716_2 = \chi_{13}$.	.	.
$1925_1 = \chi_{14}$.	.	.
$2002_1 = \chi_{15}$.	.	.
$2002_2 = \chi_{16}$.	.	.
$3003_1 = \chi_{19}$.	.	.
$5005_1 = \chi_{20}$.	.	.
$6006_1 = \chi_{21}$.	.	.
$7007_1 = \chi_{22}$.	.	.
$9100_1 = \chi_{24}$.	.	.
$11375_1 = \chi_{27}$.	.	.
$12012_1 = \chi_{29}$.	.	.
$12012_2 = \chi_{30}$.	.	.
$12740_1 = \chi_{31}$.	.	.
$13650_1 = \chi_{32}$.	.	.
$14300_1 = \chi_{33}$.	.	.
$21450_1 = \chi_{35}$.	.	.
$25025_1 = \chi_{38}$.	.	.
$25025_2 = \chi_{39}$.	.	.
$25025_3 = \chi_{40}$.	.	.
$26950_1 = \chi_{41}$.	.	.
$28028_1 = \chi_{43}$	1	.	.
$30030_1 = \chi_{44}$.	.	.
$32032_1 = \chi_{45}$.	.	.
$35035_1 = \chi_{47}$.	.	.
$42042_1 = \chi_{49}$.	.	.
$42042_2 = \chi_{50}$.	1	.
$43120_1 = \chi_{51}$.	1	.
$50050_1 = \chi_{54}$	1	.	.
$50050_2 = \chi_{55}$.	1	.
$53625_1 = \chi_{57}$	1	.	.

(Block 1:)	φ_1	φ_2	φ_3	φ_5	φ_6	φ_7	φ_8	φ_9	φ_{10}	φ_{12}	φ_{15}	φ_{16}	φ_{19}	φ_{21}	φ_{23}
63700 ₁ = χ_{62}	2	2	.	.	1	1	.	.	.	.	.	.	.	.	.
70070 ₁ = χ_{63}	1	2	.	.	.	1	.	.	.	1	.	.	.	.	.
75075 ₁ = χ_{64}	5	2	.	.	.	1	1	.	2	1	1	.	2	1	.
75075 ₂ = χ_{65}	2	.	.	.	.	.	.	.	.	1	.	.	1	.	.
78000 ₁ = χ_{66}	2	2	.	.	1	1	1	1	.	1	.	.	1	.	.
78000 ₂ = χ_{67}	2	2	.	.	1	1	1	1	.	1	.	.	1	.	.
80080 ₁ = χ_{68}	4	2	1	1	1	1	2	2	1	3	1	.	2	.	1
91000 ₁ = χ_{71}	5	2	1	1	1	2	1	1	1	2	2	1	1	1	1
100100 ₁ = χ_{73}	3	3	2	1	1	2	1	2	.	2	1	1	.	.	1
100100 ₂ = χ_{74}	5	2	.	1	1	1	1	.	1	2	1	.	2	1	.
100100 ₃ = χ_{75}	5	2	.	1	1	1	1	.	1	2	1	.	2	1	.
112112 ₁ = χ_{77}	5	3	2	1	1	2	1	2	1	2	1	1	1	.	1
112112 ₂ = χ_{78}	3	3	2	1	1	2	.	1	.	1	.	1	.	.	.
125125 ₁ = χ_{80}	4	3	2	1	1	2	1	2	.	2	1	2	.	.	.
146432 ₁ = χ_{84}	6	3	1	1	1	2	1	1	1	2	1	1	2	1	.
146432 ₂ = χ_{85}	6	3	1	1	1	2	1	1	1	2	1	1	2	1	.
150150 ₁ = χ_{86}	3	2	.	.	.	1	1	2	.	3	.	.	1	.	.
159250 ₁ = χ_{87}	6	5	2	1	1	2	1	1	1	2	1	1	1	.	.
175175 ₁ = χ_{89}	7	4	2	2	1	2	2	2	1	4	2	1	2	1	1
210210 ₁ = χ_{91}	7	4	2	2	2	2	1	1	.	3	1	1	2	1	.

(Block 1:)	φ_{25}	φ_{28}	φ_{30}	
63700 ₁ = χ_{62}	1	.	1	$\varphi_1 = 1_1$
70070 ₁ = χ_{63}	.	1	1	$\varphi_2 = 13_1$
75075 ₁ = χ_{64}	.	1	.	$\varphi_3 = 78_1$
75075 ₂ = χ_{65}	1	.	1	$\varphi_5 = 286_1$
78000 ₁ = χ_{66}	1	.	1	$\varphi_6 = 337_1$
78000 ₂ = χ_{67}	1	.	1	$\varphi_7 = 560_1$
80080 ₁ = χ_{68}	1	.	.	$\varphi_8 = 715_1$
91000 ₁ = χ_{71}	1	.	.	$\varphi_9 = 1287_1$
100100 ₁ = χ_{73}	1	.	1	$\varphi_{10} = 1428_1$
100100 ₂ = χ_{74}	1	1	.	$\varphi_{12} = 1716_1$
100100 ₃ = χ_{75}	1	1	.	$\varphi_{15} = 3562_1$
112112 ₁ = χ_{77}	1	.	1	$\varphi_{16} = 5732_1$
112112 ₂ = χ_{78}	1	.	2	$\varphi_{19} = 10582_1$
125125 ₁ = χ_{80}	1	.	2	$\varphi_{21} = 15365_1$
146432 ₁ = χ_{84}	1	1	1	$\varphi_{23} = 19369_1$
146432 ₂ = χ_{85}	1	1	1	$\varphi_{25} = 24114_1$
150150 ₁ = χ_{86}	1	1	2	$\varphi_{28} = 29106_1$
159250 ₁ = χ_{87}	1	1	2	$\varphi_{30} = 38661_1$
175175 ₁ = χ_{89}	1	1	1	
210210 ₁ = χ_{91}	2	1	2	

Block 2:	φ_4	φ_{11}	φ_{14}	φ_{17}	φ_{18}	φ_{22}	φ_{27}	φ_{29}	φ_{31}	φ_{33}
$90_1 = \chi_3$	1	.	.	.	.	.	.	.	.	.
$1638_1 = \chi_{11}$	1	1	.	.	.	.	.	.	.	.
$2925_1 = \chi_{18}$	.	.	1	.	.	.	.	.	.	.
$7722_1 = \chi_{23}$	.	.	.	1	.	.	.	.	.	.
$9450_1 = \chi_{25}$	2	1	.	1	.	.	.	.	.	.
$11088_1 = \chi_{26}$	.	.	1	.	1	.	.	.	.	.
$19305_1 = \chi_{34}$	.	.	.	.	.	1	.	.	.	.
$27027_1 = \chi_{42}$	1	.	.	.	.	.	1	.	.	.
$34398_1 = \chi_{46}$	2	1	.	.	.	.	.	1	.	.
$35100_1 = \chi_{48}$	.	.	.	.	1	.	1	.	.	.
$45045_1 = \chi_{53}$	.	1	.	.	.	.	.	.	1	.
$51975_1 = \chi_{56}$	.	.	.	.	.	1	.	1	.	.
$54054_1 = \chi_{58}$	1	.	.	1	.	1	1	.	.	.
$57330_1 = \chi_{59}$	.	.	1	.	1	1	1	.	.	.
$61425_1 = \chi_{61}$	.	.	.	.	.	.	.	.	.	1
$90090_1 = \chi_{70}$	1	.	1	.	1	1	1	1	.	.
$96525_1 = \chi_{72}$	2	1	.	1	1	1	1	1	.	.
$108108_1 = \chi_{76}$	1	2	.	.	.	.	.	.	1	1
$122850_1 = \chi_{79}$	2	1	.	1	.	1	.	1	.	1
$126126_1 = \chi_{81}$	1	1	1	.	1	1	.	1	.	1
$128700_1 = \chi_{82}$	.	1	1	.	.	1	.	.	1	1
$135135_1 = \chi_{83}$	1	2	.	1	.	1	.	.	1	1

$$\begin{aligned}
\varphi_4 &= 90_1 & \varphi_{22} &= 19305_1 \\
\varphi_{11} &= 1548_1 & \varphi_{27} &= 26937_1 \\
\varphi_{14} &= 2925_1 & \varphi_{29} &= 32670_1 \\
\varphi_{17} &= 7722_1 & \varphi_{31} &= 43497_1 \\
\varphi_{18} &= 8163_1 & \varphi_{33} &= 61425_1
\end{aligned}$$

Block 3:	φ_{13}	φ_{20}	φ_{26}	φ_{32}	φ_{34}
$2835_1 = \chi_{17}$	1	.	.	.	.
$11583_1 = \chi_{28}$	.	1	.	.	.
$24948_1 = \chi_{37}$	.	.	1	.	.
$44550_1 = \chi_{52}$	.	.	.	1	.
$58968_1 = \chi_{60}$	1	1	.	1	.
$81081_1 = \chi_{69}$	.	1	1	1	.
$162162_1 = \chi_{88}$	1	.	.	.	1
$184275_1 = \chi_{90}$	.	.	1	.	1
$231660_1 = \chi_{93}$	1	.	1	1	1

$$\begin{aligned}
\varphi_{13} &= 2835_1 \\
\varphi_{20} &= 11583_1 \\
\varphi_{26} &= 24948_1 \\
\varphi_{32} &= 44550_1 \\
\varphi_{34} &= 159327_1
\end{aligned}$$

Block 4:	φ_{24}	φ_{35}
$22113_1 = \chi_{36}$	1	.
$221130_1 = \chi_{92}$	.	1
$243243_1 = \chi_{94}$	1	1

$$\begin{aligned} \varphi_{24} &= 22113_1 \\ \varphi_{35} &= 221130_1 \end{aligned}$$