

$M_{22} \pmod{3}$

	blocks	defect	matrix
$3.G :$	1	3	16×5
	2	2	9×2
	3	1	3×1
	$4 = \bar{3}$	1	3×1
	5	1	3×1
$6.G :$	6	3	16×5
	7	2	9×2
	8	1	3×1

	blocks	defect	matrix
	$9 = \bar{8}$	1	3×1
$12.G :$	10	3	16×5
	$11 = 10 * 7$		
	12	1	3×1
	$13 = 12 * 7$		
	$14 = \bar{13}$	1	3×1
	$15 = 14 * 7$		

Block 1:	φ_1	φ_5	φ_6	φ_7	φ_{10}
$1_1 = \chi_1$	1	.	.	.	.
$55_1 = \chi_5$	.	.	.	1	.
$154_1 = \chi_7$	1	1	1	1	.
$280_1 = \chi_{10}$	.	1	.	.	1
$280_2 = \chi_{11}$	.	.	1	.	1
$385_1 = \chi_{12}$	1	1	1	1	1
$105_1 = \chi_{36}$	1	.	1	1	.
$105_2 = \chi_{36}^{*23}$	1	.	1	1	.
$105_3 = \chi_{37}$	1	1	.	1	.
$105_4 = \chi_{37}^{*23}$	1	1	.	1	.
$231_4 = \chi_{40}$	.	.	.	.	1
$231_5 = \chi_{40}^{*2}$	.	.	.	.	1
$330_2 = \chi_{41}$	1	1	1	.	1
$330_3 = \chi_{41}^{*2}$	1	1	1	.	1
$384_1 = \chi_{42}$	.	1	1	1	1
$384_2 = \chi_{42}^{*2}$	.	1	1	1	1

$$\begin{aligned}
 \varphi_1 &= 1_1 \\
 \varphi_5 &= 49_1 \\
 \varphi_6 &= 49_2 \\
 \varphi_7 &= 55_1 \\
 \varphi_{10} &= 231_1
 \end{aligned}$$

Block 2:	φ_2	φ_9	
$21_1 = \chi_2$	1	.	
$210_1 = \chi_8$	.	1	
$231_1 = \chi_9$	1	1	
$21_2 = \chi_{32}$	1	.	$\varphi_2 = 21_1$
$21_3 = \chi_{32}^{*2}$	1	.	$\varphi_9 = 210_1$
$210_3 = \chi_{38}$	.	1	
$210_4 = \chi_{38}^{*2}$	.	1	
$231_2 = \chi_{39}$	1	1	
$231_3 = \chi_{39}^{*2}$	1	1	

Block 3:	φ_3	
$45_1 = \chi_3$	1	
$45_3 = \chi_{33}$	1	$\varphi_3 = 45_1$
$45_4 = \chi_{33}^{*8}$	1	

Block 4:	φ_4	
$45_2 = \chi_4$	1	
$45_5 = \chi_{34}$	1	$\varphi_4 = 45_2$
$45_6 = \chi_{34}^{*8}$	1	

Block 5:	φ_8	
$99_1 = \chi_6$	1	
$99_2 = \chi_{35}$	1	$\varphi_8 = 99_1$
$99_3 = \chi_{35}^{*2}$	1	

Block 6:	φ_{11}	φ_{12}	φ_{13}	φ_{17}	φ_{18}	
$10_1 = \chi_{13}$	1	.	.	.	.	
$10_2 = \chi_{14}$	.	1	.	.	.	
$56_1 = \chi_{15}$	.	.	1	.	.	
$154_2 = \chi_{19}$	.	.	.	1	.	
$154_3 = \chi_{20}$	.	.	.	.	1	
$440_1 = \chi_{23}$	1	1	2	1	1	$\varphi_{11} = 10_1$
$66_1 = \chi_{43}$	1	.	1	.	.	$\varphi_{12} = 10_2$
$66_2 = \chi_{43}^{*8}$	1	.	1	.	.	$\varphi_{13} = 56_1$
$66_3 = \chi_{44}$	.	1	1	.	.	$\varphi_{17} = 154_1$
$66_4 = \chi_{44}^{*8}$	.	1	1	.	.	$\varphi_{18} = 154_2$
$210_7 = \chi_{49}$	.	.	1	1	.	
$210_8 = \chi_{49}^{*5}$	.	.	1	1	.	
$210_9 = \chi_{50}$	.	.	1	.	1	
$210_{10} = \chi_{50}^{*5}$	.	.	1	.	1	
$384_3 = \chi_{52}$	1	1	1	1	1	
$384_4 = \chi_{52}^{*2}$	1	1	1	1	1	

Block 7:	φ_{14}	φ_{19}	
$120_1 = \chi_{16}$	1	.	
$210_2 = \chi_{21}$	.	1	
$330_1 = \chi_{22}$	1	1	
$120_2 = \chi_{45}$	1	.	$\varphi_{14} = 120_1$
$120_3 = \chi_{45}^{*2}$	1	.	$\varphi_{19} = 210_2$
$210_5 = \chi_{48}$	.	1	
$210_6 = \chi_{48}^{*2}$	.	1	
$330_4 = \chi_{51}$	1	1	
$330_5 = \chi_{51}^{*2}$	1	1	

Block 8:	φ_{15}	
$126_1 = \chi_{17}$	1	
$126_3 = \chi_{46}$	1	$\varphi_{15} = 126_1$
$126_4 = \chi_{46}^{*23}$	1	

Block 9:	φ_{16}	
$126_2 = \chi_{18}$	1	$\varphi_{16} = 126_2$
$126_5 = \chi_{47}$	1	
$126_6 = \chi_{47}^{*23}$	1	

Block 10:	φ_{20}	φ_{21}	φ_{22}	φ_{25}	φ_{26}	
$56_2 = \chi_{24}$	1	.	.	.	.	$\varphi_{20} = 56_2$ $\varphi_{21} = 56_4$ $\varphi_{22} = 64_1$ $\varphi_{25} = 160_1$ $\varphi_{26} = 160_3$
$56_4 = \chi_{25}$	.	1	.	.	.	
$160_1 = \chi_{28}$	.	.	.	1	.	
$160_3 = \chi_{29}$	.	.	.	.	1	
$176_1 = \chi_{30}$	1	1	1	.	.	
$560_1 = \chi_{31}$	1	1	2	1	1	
$120_4 = \chi_{53}$	1	.	1	.	.	
$120_5 = \chi_{53}^{*17}$	1	.	1	.	.	
$120_8 = \chi_{54}$	.	1	1	.	.	
$120_9 = \chi_{54}^{*17}$	.	1	1	.	.	
$336_1 = \chi_{57}$	1	1	1	1	.	
$336_2 = \chi_{57}^{*89}$	1	1	1	1	.	
$336_5 = \chi_{58}$	1	1	1	.	1	
$336_6 = \chi_{58}^{*89}$	1	1	1	.	1	
$384_5 = \chi_{59}$	.	.	1	1	1	
$384_6 = \chi_{59}^{*5}$	.	.	1	1	1	

Block 12:	φ_{23}	
$144_1 = \chi_{26}$	1	$\varphi_{23} = 144_1$
$144_5 = \chi_{55}$	1	
$144_6 = \chi_{55}^{*29}$	1	

Block 14:	φ_{24}	
$144_3 = \chi_{27}$	1	$\varphi_{24} = 144_3$
$144_9 = \chi_{56}$	1	
$144_{10} = \chi_{56}^{*29}$	1	