

$U_3(8) \pmod{7}$

	blocks	defect	matrix
$G :$	1	1	5×2
	2	0	$56_1 = \chi_2, \varphi_2$
	3	1	5×2
	$4 = \bar{3}$	1	5×2
	5	0	$133_1 = \chi_5, \varphi_5$
	6	0	$133_2 = \chi_6, \varphi_6$
	7	0	$133_3 = \chi_7, \varphi_7$
	8	0	$399_1 = \chi_8, \varphi_8$
	9	0	$399_2 = \chi_9, \varphi_9$
	10	0	$399_3 = \chi_{10}, \varphi_{10}$
	11	0	$567_1 = \chi_{23}, \varphi_{14}$
	$12 = \bar{11}$	0	$567_2 = \chi_{24}, \varphi_{15}$
	13	0	$567_3 = \chi_{25}, \varphi_{16}$
	$14 = \bar{13}$	0	$567_4 = \chi_{26}, \varphi_{17}$
	15	0	$567_5 = \chi_{27}, \varphi_{18}$
	$16 = \bar{15}$	0	$567_6 = \chi_{28}, \varphi_{19}$
$3.G :$	17	1	5×2
	$18 = 17^*$		
	19	1	5×2
	$20 = 19^*$		
	21	1	5×2
	$22 = 21^*$		
	23	0	$189_1 = \chi_{32}, \varphi_{23}$

	blocks	defect	matrix
	$24 = 23^*$		
	25	0	$189_3 = \chi_{33}, \varphi_{24}$
	$26 = 25^*$		
	27	0	$189_5 = \chi_{34}, \varphi_{25}$
	$28 = 27^*$		
	29	0	$399_4 = \chi_{35}, \varphi_{26}$
	$30 = 29^*$		
	31	0	$399_6 = \chi_{36}, \varphi_{27}$
	$32 = 31^*$		
	33	0	$399_8 = \chi_{37}, \varphi_{28}$
	$34 = 33^*$		
	35	0	$567_7 = \chi_{50}, \varphi_{32}$
	$36 = 35^*$		
	$37 = \bar{36}$	0	$567_9 = \chi_{51}, \varphi_{33}$
	$38 = 37^*$		
	39	0	$567_{11} = \chi_{52}, \varphi_{34}$
	$40 = 39^*$		
	$41 = \bar{40}$	0	$567_{13} = \chi_{53}, \varphi_{35}$
	$42 = 41^*$		
	43	0	$567_{15} = \chi_{54}, \varphi_{36}$
	$44 = 43^*$		
	$45 = \bar{44}$	0	$567_{17} = \chi_{55}, \varphi_{37}$
	$46 = 45^*$		

Block 1:	φ_1	φ_{13}
$1_1 = \chi_1$	1	.
$512_1 = \chi_{13}$	.	1
$513_1 = \chi_{14}$	1	1
$513_2 = \chi_{15}$	1	1
$513_3 = \chi_{16}$	1	1

$$\begin{aligned} \varphi_1 &= 1_1 \\ \varphi_{13} &= 512_1 \end{aligned}$$

Block 3:	φ_3	φ_{11}
$57_1 = \chi_3$	1	.
$456_1 = \chi_{11}$	.	1
$513_4 = \chi_{17}$	1	1
$513_6 = \chi_{19}$	1	1
$513_8 = \chi_{21}$	1	1

$$\begin{aligned} \varphi_3 &= 57_1 \\ \varphi_{11} &= 456_1 \end{aligned}$$

Block 4:	φ_4	φ_{12}
$57_2 = \chi_4$	1	.
$456_2 = \chi_{12}$	.	1
$513_5 = \chi_{18}$	1	1
$513_7 = \chi_{20}$	1	1
$513_9 = \chi_{22}$	1	1

$$\begin{aligned}\varphi_4 &= 57_2 \\ \varphi_{12} &= 456_2\end{aligned}$$

Blocks 17, 18:	φ_{20}	φ_{29}
$57_3 = \chi_{29}$	1	.
$456_3 = \chi_{38}$	.	1
$513_{10} = \chi_{41}$	1	1
$513_{16} = \chi_{44}$	1	1
$513_{22} = \chi_{47}$	1	1

$$\begin{aligned}\varphi_{20} &= 57_3 \\ \varphi_{29} &= 456_3\end{aligned}$$

Blocks 19, 20:	φ_{21}	φ_{30}
$57_5 = \chi_{30}$	1	.
$456_5 = \chi_{39}$	.	1
$513_{12} = \chi_{42}$	1	1
$513_{18} = \chi_{45}$	1	1
$513_{24} = \chi_{48}$	1	1

$$\begin{aligned}\varphi_{21} &= 57_5 \\ \varphi_{30} &= 456_5\end{aligned}$$

Blocks 21, 22:	φ_{22}	φ_{31}
$57_7 = \chi_{31}$	1	.
$456_7 = \chi_{40}$	.	1
$513_{14} = \chi_{43}$	1	1
$513_{20} = \chi_{46}$	1	1
$513_{26} = \chi_{49}$	1	1

$$\begin{aligned}\varphi_{22} &= 57_7 \\ \varphi_{31} &= 456_7\end{aligned}$$