

$A_7 \pmod{2}$

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

Block 1:	φ_1	φ_5	φ_6
$1_1 = \chi_1$	1	.	.
$14_1 = \chi_5$	.	1	.
$15_1 = \chi_7$	1	1	.
$21_1 = \chi_8$	1	.	1
$35_1 = \chi_9$	1	1	1
$14_3 = \chi_{12}$	.	1	.
$14_4 = \chi_{13}$	.	1	.
$20_1 = \chi_{14}$	.	.	1
$36_1 = \chi_{16}$	2	1	1

$$\begin{aligned} \varphi_1 &= 1_1 \\ \varphi_5 &= 14_1 \\ \varphi_6 &= 20_1 \end{aligned}$$

Block 2:	φ_2	φ_3	φ_4
$6_1 = \chi_2$	.	.	1
$10_1 = \chi_3$	.	1	1
$10_2 = \chi_4$	1	.	1
$14_2 = \chi_6$	1	1	1
$4_1 = \chi_{10}$	1	.	.
$4_2 = \chi_{11}$	.	1	.
$20_2 = \chi_{15}$	1	1	2

$$\begin{aligned} \varphi_2 &= 4_1 \\ \varphi_3 &= 4_2 \\ \varphi_4 &= 6_1 \end{aligned}$$

Blocks 3, 4:	φ_7	φ_8	
$6_2 = \chi_{17}$	1	.	
$15_2 = \chi_{18}$	.	1	
$15_4 = \chi_{19}$	.	1	
$21_2 = \chi_{20}$	1	1	$\varphi_7 = 6_2$
$21_4 = \chi_{21}$	1	1	$\varphi_8 = 15_1$
$6_4 = \chi_{24}$	1	.	
$6_6 = \chi_{25}$	1	.	
$36_2 = \chi_{28}$	1	2	

Blocks 5, 6:	φ_9	
$24_1 = \chi_{22}$	1	$\varphi_9 = 24_1$
$24_5 = \chi_{26}$	1	

Blocks 7, 8:	φ_{10}	
$24_3 = \chi_{23}$	1	$\varphi_{10} = 24_3$
$24_7 = \chi_{27}$	1	