

$U_6(2).2 \pmod{7}$

	blocks	defect	matrix
$G :$	1	1	7×6
	2	1	7×6
	3	0	$231_1 = \chi_{3,0}, \varphi_{3,0}$
	4	0	$231_2 = \chi_{3,1}, \varphi_{3,1}$
	5	0	$252_1 = \chi_{4,0}, \varphi_{4,0}$
	6	0	$252_2 = \chi_{4,1}, \varphi_{4,1}$
	7	0	$385_1 = \chi_{5,0}, \varphi_{5,0}$
	8	0	$385_2 = \chi_{5,1}, \varphi_{5,1}$
	9	0	$560_1 = \chi_{7,0}, \varphi_{7,0}$
	$10 = \overline{9}$	0	$560_2 = \chi_{7,1}, \varphi_{7,1}$
	11	0	$616_1 = \chi_{8,0}, \varphi_{8,0}$
	12	0	$616_2 = \chi_{8,1}, \varphi_{8,1}$
	13	0	$1540_1 = \chi_{9+}, \varphi_{9+}$
	14	0	$1155_1 = \chi_{11,0}, \varphi_{11,0}$
	15	0	$1155_2 = \chi_{11,1}, \varphi_{11,1}$
	16	0	$2310_1 = \chi_{12+}, \varphi_{12+}$
	17	0	$1386_1 = \chi_{14,0}, \varphi_{14,0}$
	18	0	$1386_2 = \chi_{14,1}, \varphi_{14,1}$
	19	0	$1540_2 = \chi_{15,0}, \varphi_{15,0}$
	20	0	$1540_3 = \chi_{15,1}, \varphi_{15,1}$
	21	0	$6160_1 = \chi_{16+}, \varphi_{16+}$
	22	0	$4620_1 = \chi_{19,0}, \varphi_{19,0}$
	23	0	$4620_2 = \chi_{19,1}, \varphi_{19,1}$
	24	0	$4928_1 = \chi_{20,0}, \varphi_{20,0}$
	25	0	$4928_2 = \chi_{20,1}, \varphi_{20,1}$
	26	0	$5544_1 = \chi_{21,0}, \varphi_{21,0}$
	27	0	$5544_2 = \chi_{21,1}, \varphi_{21,1}$
	28	0	$12320_1 = \chi_{22+}, \varphi_{22+}$
	29	0	$6930_1 = \chi_{24,0}, \varphi_{24,0}$
	30	0	$6930_2 = \chi_{24,1}, \varphi_{24,1}$
	31	0	$8064_1 = \chi_{25,0}, \varphi_{25,0}$
	32	0	$8064_2 = \chi_{25,1}, \varphi_{25,1}$
	33	0	$9240_1 = \chi_{26,0}, \varphi_{26,0}$
	34	0	$9240_2 = \chi_{26,1}, \varphi_{26,1}$
	35	0	$18480_1 = \chi_{27+}, \varphi_{27+}$
	36	0	$20790_1 = \chi_{29+}, \varphi_{29+}$
	37	0	$10395_1 = \chi_{31,0}, \varphi_{31,0}$
	38	0	$10395_2 = \chi_{31,1}, \varphi_{31,1}$
	39	0	$20790_2 = \chi_{32+}, \varphi_{32+}$
	40	0	$13860_1 = \chi_{35,0}, \varphi_{35,0}$

	blocks	defect	matrix
	41	0	$13860_2 = \chi_{35,1}, \varphi_{35,1}$
	42	0	$14784_1 = \chi_{36,0}, \varphi_{36,0}$
	43	0	$14784_2 = \chi_{36,1}, \varphi_{36,1}$
	44	0	$18711_1 = \chi_{37,0}, \varphi_{37,0}$
	45	0	$18711_2 = \chi_{37,1}, \varphi_{37,1}$
	46	0	$18711_3 = \chi_{38,0}, \varphi_{38,0}$
	47	0	$18711_4 = \chi_{38,1}, \varphi_{38,1}$
	48	0	$41580_1 = \chi_{39+}, \varphi_{39+}$
	49	0	$24640_1 = \chi_{41,0}, \varphi_{41,0}$
	50	0	$24640_2 = \chi_{41,1}, \varphi_{41,1}$
	51	0	$51030_1 = \chi_{42+}, \varphi_{42+}$
	52	0	$37422_1 = \chi_{45,0}, \varphi_{45,0}$
	53	0	$37422_2 = \chi_{45,1}, \varphi_{45,1}$
$2.G :$	54	0	$56_1 = \chi_{47,0}, \varphi_{46,0}$
	55	0	$56_2 = \chi_{47,1}, \varphi_{46,1}$
	56	1	7×6
	57	1	7×6
	58	0	$616_3 = \chi_{49,0}, \varphi_{48,0}$
	59	0	$616_4 = \chi_{49,1}, \varphi_{48,1}$
	60	0	$1232_1 = \chi_{51,0}, \varphi_{50,0}$
	61	0	$1232_2 = \chi_{51,1}, \varphi_{50,1}$
	62	0	$2464_1 = \chi_{52,0}, \varphi_{51,0}$
	63	0	$2464_2 = \chi_{52,1}, \varphi_{51,1}$
	64	0	$3080_1 = \chi_{53,0}, \varphi_{52,0}$
	65	0	$3080_2 = \chi_{53,1}, \varphi_{52,1}$
	66	0	$6720_1 = \chi_{54+}, \varphi_{53+}$
	67	0	$5544_3 = \chi_{56,0}, \varphi_{56,0}$
	68	0	$5544_4 = \chi_{56,1}, \varphi_{56,1}$
	69	0	$6160_2 = \chi_{57,0}, \varphi_{57,0}$
	70	0	$6160_3 = \chi_{57,1}, \varphi_{57,1}$
	71	0	$12320_2 = \chi_{58+}, \varphi_{58+}$
	72	0	$9856_1 = \chi_{61,0}, \varphi_{61,0}$
	73	0	$9856_2 = \chi_{61,1}, \varphi_{61,1}$
	74	0	$12320_3 = \chi_{63,0}, \varphi_{63,0}$
	75	0	$12320_4 = \chi_{63,1}, \varphi_{63,1}$
	76	0	$24640_3 = \chi_{64+}, \varphi_{64+}$
	77	0	$13608_1 = \chi_{66,0}, \varphi_{66,0}$
	78	0	$13608_2 = \chi_{66,1}, \varphi_{66,1}$
	79	0	$18480_2 = \chi_{68,0}, \varphi_{67,1}$
	80	0	$18480_3 = \chi_{68,1}, \varphi_{67,0}$

	blocks	defect	matrix
	81	0	$22176_1 = \chi_{70,0}, \varphi_{69,0}$
	82	0	$22176_2 = \chi_{70,1}, \varphi_{69,1}$
	83	0	$24640_4 = \chi_{71,0}, \varphi_{70,0}$
	84	0	$24640_5 = \chi_{71,1}, \varphi_{70,1}$
	85	0	$49280_1 = \chi_{72+}, \varphi_{71+}$
	86	0	$27720_1 = \chi_{74,0}, \varphi_{73,0}$
	87	0	$27720_2 = \chi_{74,1}, \varphi_{73,1}$
	88	0	$30240_1 = \chi_{75,0}, \varphi_{74,0}$
	89	0	$30240_2 = \chi_{75,1}, \varphi_{74,1}$
	90	0	$44352_1 = \chi_{77,0}, \varphi_{75,0}$
	91	0	$44352_2 = \chi_{77,1}, \varphi_{75,1}$
3.G :	92	0	$42_1 = \chi_{78+}, \varphi_{76+}$
	93	0	$420_1 = \chi_{79+}, \varphi_{77+}$
	94	0	$462_1 = \chi_{80+}, \varphi_{78+}$
	95	0	$924_1 = \chi_{81+}, \varphi_{79+}$
	96	0	$1848_1 = \chi_{82+}, \varphi_{80+}$
	97	0	$2310_2 = \chi_{83+}, \varphi_{81+}$
	98	0	$2772_1 = \chi_{84+}, \varphi_{82+}$
	99	1	7×6
	100	0	$4620_3 = \chi_{88+}, \varphi_{86+}$
	101	0	$4620_4 = \chi_{89+}, \varphi_{87+}$
	102	0	$5040_1 = \chi_{90+}, \varphi_{88+}$
	103	0	$5544_5 = \chi_{91+}, \varphi_{89+}$
	104	0	$6930_3 = \chi_{92+}, \varphi_{90+}$
	105	0	$6930_4 = \chi_{93+}, \varphi_{91+}$
	106	0	$6930_5 = \chi_{94+}, \varphi_{92+}$
	$107 = \overline{106}$	0	$6930_6 = \chi_{95+}, \varphi_{93+}$
	108	0	$7392_1 = \chi_{96+}, \varphi_{94+}$
	109	0	$9240_3 = \chi_{97+}, \varphi_{95+}$
	110	0	$9240_4 = \chi_{98+}, \varphi_{96+}$
	111	0	$11088_1 = \chi_{99+}, \varphi_{97+}$
	112	0	$13440_1 = \chi_{100+}, \varphi_{98+}$
	113	0	$13860_3 = \chi_{101+}, \varphi_{99+}$
	114	0	$18480_4 = \chi_{102+}, \varphi_{100+}$
	115	0	$18480_5 = \chi_{103+}, \varphi_{101+}$
	116	0	$20790_3 = \chi_{104+}, \varphi_{102+}$
	117	0	$22176_3 = \chi_{105+}, \varphi_{103+}$
	118	0	$29568_1 = \chi_{109+}, \varphi_{107+}$
	119	0	$36960_1 = \chi_{110+}, \varphi_{108+}$
	120	0	$37422_3 = \chi_{111+}, \varphi_{109+}$

	blocks	defect	matrix
	121	0	$37422_4 = \chi_{112+}, \varphi_{110+}$
	122	0	$41580_2 = \chi_{113+}, \varphi_{111+}$
	123	0	$43008_1 = \chi_{114+}, \varphi_{112+}$
	124	0	$51030_2 = \chi_{115+}, \varphi_{113+}$
	125	0	$51030_3 = \chi_{116+}, \varphi_{114+}$
	126	0	$55440_1 = \chi_{117+}, \varphi_{115+}$
	127	0	$59136_1 = \chi_{118+}, \varphi_{116+}$
	128	0	$74844_1 = \chi_{119+}, \varphi_{117+}$
6.G :	129	1	7×6
	130	0	$1344_1 = \chi_{122+}, \varphi_{119+}$
	131	0	$3696_1 = \chi_{124+}, \varphi_{121+}$
	132	0	$7392_2 = \chi_{126+}, \varphi_{123+}$
	133	0	$11088_2 = \chi_{127+}, \varphi_{126+}$
	134	0	$14784_3 = \chi_{129+}, \varphi_{127+}$
	135	0	$14784_4 = \chi_{130+}, \varphi_{128+}$
	136	0	$18480_6 = \chi_{132+}, \varphi_{129+}$
	137	0	$18480_7 = \chi_{133+}, \varphi_{130+}$
	138	0	$27216_1 = \chi_{134+}, \varphi_{131+}$
	139	0	$29568_2 = \chi_{135+}, \varphi_{132+}$
	140	0	$30240_3 = \chi_{136+}, \varphi_{133+}$
	141	0	$30240_4 = \chi_{137+}, \varphi_{134+}$
	142	0	$36960_2 = \chi_{138+}, \varphi_{136+}$
	143	0	$36960_3 = \chi_{139+}, \varphi_{137+}$
	144	0	$43008_2 = \chi_{142+}, \varphi_{138+}$
	145	0	$44352_3 = \chi_{143+}, \varphi_{139+}$
	146	0	$44352_4 = \chi_{144+}, \varphi_{140+}$
	147	0	$55440_2 = \chi_{145+}, \varphi_{141+}$
	148	0	$73920_1 = \chi_{146+}, \varphi_{142+}$
	149	0	$73920_2 = \chi_{147+}, \varphi_{143+}$
	150	0	$73920_3 = \chi_{148+}, \varphi_{144+}$

Block 1:	$\varphi_{1,0}$	$\varphi_{2,0}$	$\varphi_{6,0}$	$\varphi_{18,0}$	$\varphi_{34,0}$	$\varphi_{44,0}$	
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	$\varphi_{1,0} = 1_1$
$22_1 = \chi_{2,0}$	.	1	.	.	.	.	$\varphi_{2,0} = 22_1$
$440_1 = \chi_{6,0}$	1	.	1	.	.	.	$\varphi_{6,0} = 439_1$
$3520_1 = \chi_{18,0}$	.	1	.	1	.	.	$\varphi_{18,0} = 3498_1$
$11264_1 = \chi_{34,0}$	.	.	1	.	1	.	$\varphi_{34,0} = 10825_1$
$32768_1 = \chi_{44,0}$	.	.	.	1	.	1	$\varphi_{44,0} = 29270_1$
$40095_1 = \chi_{46,0}$	.	.	.	.	1	1	

Block 2:	$\varphi_{1,1}$	$\varphi_{2,1}$	$\varphi_{6,1}$	$\varphi_{18,1}$	$\varphi_{34,1}$	$\varphi_{44,1}$
$1_2 = \chi_{1,1}$	1	.	.	.	.	.
$22_2 = \chi_{2,1}$	.	1	.	.	.	.
$440_2 = \chi_{6,1}$	1	.	1	.	.	.
$3520_2 = \chi_{18,1}$	.	1	.	1	.	.
$11264_2 = \chi_{34,1}$	.	.	1	.	1	.
$32768_2 = \chi_{44,1}$	.	.	.	1	.	1
$40095_2 = \chi_{46,1}$	.	.	.	.	1	1

$$\begin{aligned}
\varphi_{1,1} &= 1_2 \\
\varphi_{2,1} &= 22_2 \\
\varphi_{6,1} &= 439_2 \\
\varphi_{18,1} &= 3498_2 \\
\varphi_{34,1} &= 10825_2 \\
\varphi_{44,1} &= 29270_2
\end{aligned}$$

Block 56:	$\varphi_{47,0}$	$\varphi_{49,0}$	$\varphi_{55,1}$	$\varphi_{60,0}$	$\varphi_{62,1}$	$\varphi_{68,0}$
$176_1 = \chi_{48,0}$	1	.	.	.	.	.
$792_1 = \chi_{50,0}$	.	1	.	.	.	.
$7776_1 = \chi_{60,0}$	.	1	.	1	.	.
$11264_3 = \chi_{62,0}$	.	.	1	1	.	.
$15840_2 = \chi_{67,1}$	.	.	1	.	1	.
$21384_1 = \chi_{69,0}$	1	.	.	.	.	1
$32768_3 = \chi_{76,0}$	.	.	.	.	1	1

$$\begin{aligned}
\varphi_{47,0} &= 176_1 \\
\varphi_{49,0} &= 792_1 \\
\varphi_{55,1} &= 4280_2 \\
\varphi_{60,0} &= 6984_1 \\
\varphi_{62,1} &= 11560_2 \\
\varphi_{68,0} &= 21208_1
\end{aligned}$$

Block 57:	$\varphi_{47,1}$	$\varphi_{49,1}$	$\varphi_{55,0}$	$\varphi_{60,1}$	$\varphi_{62,0}$	$\varphi_{68,1}$
$176_2 = \chi_{48,1}$	1	.	.	.	.	.
$792_2 = \chi_{50,1}$	.	1	.	.	.	.
$7776_2 = \chi_{60,1}$	.	1	.	1	.	.
$11264_4 = \chi_{62,1}$	.	.	1	1	.	.
$15840_1 = \chi_{67,0}$	.	.	1	.	1	.
$21384_2 = \chi_{69,1}$	1	.	.	.	.	1
$32768_4 = \chi_{76,1}$	.	.	.	.	1	1

$$\begin{aligned}
\varphi_{47,1} &= 176_2 \\
\varphi_{49,1} &= 792_2 \\
\varphi_{55,0} &= 4280_1 \\
\varphi_{60,1} &= 6984_2 \\
\varphi_{62,0} &= 11560_1 \\
\varphi_{68,1} &= 21208_2
\end{aligned}$$

Block 99:	φ_{83+}	φ_{84+}	φ_{85+}	φ_{104+}	φ_{105+}	φ_{106+}
$2970_1 = \chi_{85+}$	1	.	.	.	.	.
$2970_2 = \chi_{86+}$	.	1	.	.	.	.
$2970_3 = \chi_{87+}$	.	.	1	.	.	.
$23760_1 = \chi_{106+}$	.	.	.	1	.	.
$23760_2 = \chi_{107+}$	.	.	.	.	1	.
$23760_3 = \chi_{108+}$	.	.	.	.	.	1
$80190_1 = \chi_{120+}$	1	1	1	1	1	1

$$\begin{aligned}
\varphi_{83+} &= 2970_1 \\
\varphi_{84+} &= 2970_2 \\
\varphi_{85+} &= 2970_3 \\
\varphi_{104+} &= 23760_1 \\
\varphi_{105+} &= 23760_2 \\
\varphi_{106+} &= 23760_3
\end{aligned}$$

Block 129:	φ_{118+}	φ_{120+}	φ_{122+}	φ_{124+}	φ_{125+}	φ_{135+}			
$240_1 = \chi_{121+}$	1	.	.	.	.	.	φ_{118+}	=	240_1
$2112_1 = \chi_{123+}$	1	1	.	.	.	.	φ_{120+}	=	1872_1
$5280_1 = \chi_{125+}$	.	.	1	.	.	.	φ_{122+}	=	5280_1
$12672_1 = \chi_{128+}$	.	1	.	.	1	.	φ_{124+}	=	10272_1
$15552_1 = \chi_{131+}$	.	.	1	1	.	.	φ_{125+}	=	10800_1
$42240_1 = \chi_{140+}$	.	.	.	1	.	1	φ_{135+}	=	31968_1
$42768_1 = \chi_{141+}$	.	.	.	.	1	1			