

$U_3(11) \pmod{11}$

	blocks	defect	matrix
$G :$	1 2	3 0	47×40 $1331_1 = \chi_{18}, \varphi_{41}$
$3.G :$	3 $4 = 3^*$	3	47×40

Block 1:	φ_1	φ_2	φ_3	φ_4	φ_5	φ_6	φ_7	φ_8	φ_9	φ_{10}	φ_{11}	φ_{12}	φ_{13}	φ_{14}	φ_{15}	φ_{16}
$1_1 = \chi_1$	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$110_1 = \chi_2$	1	1	.	.	.	.	.
$111_1 = \chi_3$.	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.
$111_2 = \chi_4$	1	.	.	.	.	.	1	.	.	.	.	.	.	.	.	.
$111_3 = \chi_5$	1	.	.	.	.	1	.	.	.	.	.	.	.	.	.	.
$370_1 = \chi_6$	1	.	.	.	.	.	.	1	.	.	.	.
$370_2 = \chi_7$	1	.	.	.	.	.	.	1	.	.	.	.
$370_3 = \chi_8$	1	.	.	.	.	.	.	1	.	.	.	.
$1110_1 = \chi_9$	1	1	.	.	.	1	1	.	.	.	.	.	1	1	.	.
$1110_2 = \chi_{10}$.	1	.	.	1	.	.	1	1	.	.	.	.	.	1	1
$1110_3 = \chi_{11}$	1	.	.	.	.	.	.	.	.	1	1	.	.	.	.	.
$1110_4 = \chi_{12}$.	.	1	1	.	.	.	1	1	.	.	1	.	.	.	.
$1110_5 = \chi_{13}$.	.	.	1	.	1	.	.	.	.	.	.	.	.	.	1
$1110_6 = \chi_{14}$.	.	1	.	.	.	1	.	.	.	.	.	.	.	1	.
$1221_1 = \chi_{15}$
$1221_2 = \chi_{16}$	2	.	.
$1221_3 = \chi_{17}$	2	.	.	.
$1332_1 = \chi_{19}$.	.	.	1	.	.	.	1	1	.	.	.	.	.	.	1
$1332_2 = \chi_{20}$.	.	1	.	.	.	.	1	1	.	.	.	.	.	1	.
$1332_3 = \chi_{21}$.	1	.	.	1	1	1	.	.	.	.	.	.	.	1	1
$1332_4 = \chi_{22}$	2	.	.	1	1	.	.	1	.	.	.	.
$1332_5 = \chi_{23}$	1	.	.	1	1	.	.	3	.	.	.	.
$1332_6 = \chi_{24}$	1	1	.	.	.	.	.	.	.	.	.	.	1	1	.	.
$1332_7 = \chi_{25}$	1	.	.	.	.	.	.	.	.	.
$1332_8 = \chi_{26}$	1	.	.	.	.	.	.	.	.	.	.
$1332_9 = \chi_{27}$.	1	.	.	.	1	.	.	.	.	.	.	1	1	.	1
$1332_{10} = \chi_{28}$.	1	.	.	.	.	1	.	.	.	.	.	1	1	1	.
$1332_{11} = \chi_{29}$.	1	.	1	.	1	.	1	.	.	.	.	.	.	.	1
$1332_{12} = \chi_{30}$.	1	1	.	.	.	1	.	1	.	.	.	.	.	1	.
$1332_{13} = \chi_{31}$.	.	1	.	1	.	.	.	1	.	.	1	.	.	1	1
$1332_{14} = \chi_{32}$.	.	.	1	1	.	.	1	.	.	.	1	.	.	1	1
$1332_{15} = \chi_{33}$	1	1	.	.	1	.	.
$1332_{16} = \chi_{34}$	1	1	.	1	.	.	.
$1332_{17} = \chi_{35}$.	.	.	1	.	.	.	.	.	.	.	.	.	1	.	.
$1332_{18} = \chi_{36}$.	.	1	.	.	.	.	.	.	.	.	.	1	.	.	.
$1440_1 = \chi_{37}$	1	.	.	1	1	.	.	2	.	.	1	.
$1440_2 = \chi_{38}$	1	.	.	1	1	.	.	2	.	.	.	1
$1440_3 = \chi_{39}$.	1	1	.	.	.	1	.	.	.	.	.	1	.	1	1
$1440_4 = \chi_{40}$.	1	.	1	.	1	.	.	.	.	.	.	.	1	1	1
$1440_5 = \chi_{41}$	1	.	.	.	.	.	.	.	.	.	1	.	1	1	.	.

(Block 1:)	φ_1	φ_2	φ_3	φ_4	φ_5	φ_6	φ_7	φ_8	φ_9	φ_{10}	φ_{11}	φ_{12}	φ_{13}	φ_{14}	φ_{15}	φ_{16}
$1440_6 = \chi_{42}$	1	.	.	.	.	.	.	.	.	1	.	.	1	1	.	.
$1440_7 = \chi_{43}$.	.	1	.	.	.	.	.	1	.	.	.	.	.	.	.
$1440_8 = \chi_{44}$.	.	.	1	.	.	.	1	.	.	.	.	.	.	.	.
$1440_9 = \chi_{45}$.	1	.	.	.	1	.	.	.	.	.	.	.	1	.	.
$1440_{10} = \chi_{46}$.	1	.	.	.	.	1	.	.	.	.	.	1	.	.	.
$1440_{11} = \chi_{47}$.	.	.	1	1	1	.	1	.	.	.	.	.	.	.	1
$1440_{12} = \chi_{48}$.	.	1	.	1	.	1	.	1	.	.	.	.	.	1	.

(Block 1:)	φ_{17}	φ_{18}	φ_{19}	φ_{20}	φ_{21}	φ_{22}	φ_{23}	φ_{24}	φ_{25}	φ_{26}	φ_{27}	φ_{28}	φ_{29}	φ_{30}	φ_{31}
$1440_6 = \chi_{42}$	1	.	.	.	.	1	.	.	.	.	.	.	.	.	.
$1440_7 = \chi_{43}$	.	.	1	1	.	.	1	.	.	.	.	.	.	.	.
$1440_8 = \chi_{44}$	.	.	1	1	.	.	.	1	.	.	.	.	.	.	.
$1440_9 = \chi_{45}$	1	.	.	.	.	.	.	1	.	.	.	1	.	.	.
$1440_{10} = \chi_{46}$	.	1	.	.	.	.	1	.	.	.	1	.	.	.	.
$1440_{11} = \chi_{47}$	.	.	.	1	.	.	.	.	1	.	.	.	.	1	.
$1440_{12} = \chi_{48}$	.	.	.	1	.	.	.	.	.	1	.	.	.	.	1

(Block 1:)	φ_{32}	φ_{33}	φ_{34}	φ_{35}	φ_{36}	φ_{37}	φ_{38}	φ_{39}	φ_{40}
$1440_6 = \chi_{42}$	1
$1440_7 = \chi_{43}$.	1	.	1	.	.	.	.	.
$1440_8 = \chi_{44}$	1	.	.	.	1	.	.	.	.
$1440_9 = \chi_{45}$	1	.
$1440_{10} = \chi_{46}$	1	.	.
$1440_{11} = \chi_{47}$	1	.	.	.	.
$1440_{12} = \chi_{48}$.	.	.	1	.	.	.	.	.

- $\varphi_1 = 1_1$
- $\varphi_2 = 8_1$
- $\varphi_3 = 10_1$
- $\varphi_4 = 10_2$
- $\varphi_5 = 27_1$
- $\varphi_6 = 28_1$
- $\varphi_7 = 28_2$
- $\varphi_8 = 35_1$
- $\varphi_9 = 35_2$
- $\varphi_{10} = 55_1$
- $\varphi_{11} = 55_2$
- $\varphi_{12} = 64_1$
- $\varphi_{13} = 80_1$
- $\varphi_{14} = 80_2$
- $\varphi_{15} = 81_1$
- $\varphi_{16} = 81_2$
- $\varphi_{17} = 82_1$
- $\varphi_{18} = 82_2$
- $\varphi_{19} = 91_1$
- $\varphi_{20} = 125_1$
- $\varphi_{21} = 143_1$
- $\varphi_{22} = 143_2$
- $\varphi_{23} = 154_1$
- $\varphi_{24} = 154_2$
- $\varphi_{25} = 179_1$
- $\varphi_{26} = 179_2$
- $\varphi_{27} = 252_1$
- $\varphi_{28} = 252_2$
- $\varphi_{29} = 279_1$
- $\varphi_{30} = 370_1$
- $\varphi_{31} = 370_2$
- $\varphi_{32} = 440_1$
- $\varphi_{33} = 440_2$
- $\varphi_{34} = 485_1$
- $\varphi_{35} = 585_1$
- $\varphi_{36} = 585_2$
- $\varphi_{37} = 721_1$
- $\varphi_{38} = 836_1$
- $\varphi_{39} = 836_2$
- $\varphi_{40} = 999_1$

Blocks 3, 4:	φ_{42}	φ_{43}	φ_{44}	φ_{45}	φ_{46}	φ_{47}	φ_{48}	φ_{49}	φ_{50}	φ_{51}	φ_{52}	φ_{53}	φ_{54}	φ_{55}	φ_{56}
$111_4 = \chi_{49}$	1	.	.	.	1	.	.	.	.	.	.	.	.	.	1
$111_6 = \chi_{50}$	1	.	.	.	.	.	.	1	.
$111_8 = \chi_{51}$.	1	.	1	.	.	.	.	.	.	.	.	.	.	.
$111_{10} = \chi_{52}$	1	.	.	.	1	.	.
$480_1 = \chi_{53}$	1	.	.	1	.	.	.	.
$480_3 = \chi_{54}$	1	.	.	1	.	.	.	.
$480_5 = \chi_{55}$	1	.	.	1	.	.	.	.
$1110_7 = \chi_{56}$.	1	.	1	.	1	.	.	.	1	1	.	.	.	.
$1110_9 = \chi_{57}$.	.	.	1	1	.	.	.	.	.	.	.	.	.	.
$1110_{11} = \chi_{58}$	1	.	.	.	.	.	1	.	1	.	.	.	.	1	.
$1110_{13} = \chi_{59}$	1	.	1	.	1	.	.	.	.	1	.	1	.	.	1
$1110_{15} = \chi_{60}$.	.	1	.	.	1	.	2	.	.	1	.	.	.	.
$1110_{17} = \chi_{61}$.	1	.	.	.	.	1	.	.	.	.	1	.	.	.
$1221_4 = \chi_{62}$	1
$1221_6 = \chi_{63}$	2	.	.	.	1	1	.
$1221_8 = \chi_{64}$	1	.	.
$1221_{10} = \chi_{65}$
$1332_{19} = \chi_{66}$.	.	1	.	1	.	.	1	.	1	1	.	.	.	.
$1332_{21} = \chi_{67}$	1	.	.	.	.	.	.	.	.	.	.
$1332_{23} = \chi_{68}$.	.	.	1	.	1	.	.	.	1	.	.	.	.	.
$1332_{25} = \chi_{69}$	1	.	.	.	.	.	.
$1332_{27} = \chi_{70}$.	.	.	1	.	.	.	.	.	.	.	.	.	.	.
$1332_{29} = \chi_{71}$.	1	1	.	.	.	.	.	.	1	1	1	.	.	.
$1332_{31} = \chi_{72}$.	1	.	.	.	1	.	.	.	1	.	1	.	.	.
$1332_{33} = \chi_{73}$.	.	.	1	.	1	.	1	.	.	2	.	.	.	.
$1332_{35} = \chi_{74}$.	.	1	.	.	1	.	1	.	1	1	.	.	.	.
$1332_{37} = \chi_{75}$.	1	.	.	.	.	.	.	1	.	.	.	.	.	.
$1332_{39} = \chi_{76}$	1	.	.	.	.	.	.	.	.	.	.	.	.	1	.
$1332_{41} = \chi_{77}$	1	1	.	.	.	.	1	.	.	1	.	1	.	.	.
$1332_{43} = \chi_{78}$	1	.	1	.	.	.	1	.	.	.	.	1	.	.	1
$1332_{45} = \chi_{79}$.	.	1	.	1	.	.	.	.	.	.	1	.	.	1
$1332_{47} = \chi_{80}$.	.	1	1	1	1	.	.	.	.	.	.	.	.	.
$1332_{49} = \chi_{81}$	1	.	.	.	.	.	1	.	1	.	.	1	.	1	.
$1332_{51} = \chi_{82}$	1	.	3	.	.	1	.	.	.	.
$1332_{53} = \chi_{83}$	1	.	.	.	.	.	.	.	.
$1440_{13} = \chi_{84}$	1	.	.	.	1	1	.
$1440_{15} = \chi_{85}$	1	.	2	.	1	1	.	.	.	.
$1440_{17} = \chi_{86}$	1	1	.	.	.	.	1	.	1	.	.	1	.	.	.
$1440_{19} = \chi_{87}$.	.	.	1	.	1	.	.	.	.	.	.	.	.	.
$1440_{21} = \chi_{88}$.	.	1	.	.	1	.	.	.	1	1	1	.	.	.

(Blocks 3, 4:)	φ_{57}	φ_{58}	φ_{59}	φ_{60}	φ_{61}	φ_{62}	φ_{63}	φ_{64}	φ_{65}	φ_{66}	φ_{67}	φ_{68}	φ_{69}	φ_{70}	φ_{71}
111 ₄ = χ_{49}	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
111 ₆ = χ_{50}	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
111 ₈ = χ_{51}	.	1	.	.	.	.	.	.	.	.	.	.	.	.	.
111 ₁₀ = χ_{52}	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
480 ₁ = χ_{53}	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
480 ₃ = χ_{54}	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
480 ₅ = χ_{55}	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1110 ₇ = χ_{56}	.	1	.	.	1	.	.	.	.	.	.	1	.	.	.
1110 ₉ = χ_{57}	1	.	.	.	.	.	.	1	.	.	.	.	.	.	1
1110 ₁₁ = χ_{58}	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
1110 ₁₃ = χ_{59}	.	.	.	1	.	.	.	.	1	.	.	.	.	.	.
1110 ₁₅ = χ_{60}	1	.	.	.	.	.	.	.	.	1	.	.	1	.	.
1110 ₁₇ = χ_{61}	.	.	.	.	.	1	1	.	.	.	.	.	.	.	.
1221 ₄ = χ_{62}	.	.	.	2	.	.	.	.	.	.	1	.	.	.	.
1221 ₆ = χ_{63}	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1221 ₈ = χ_{64}	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1221 ₁₀ = χ_{65}	.	1	.	.	2	.	.	.	.	.	.	.	.	1	.
1332 ₁₉ = χ_{66}	1	.	.	.	.	.	.	.	.	1	.	.	1	.	.
1332 ₂₁ = χ_{67}	.	.	.	.	1	.	.	1	.	.	.	.	.	.	.
1332 ₂₃ = χ_{68}	1	1	.	.	1	.	.	.	.	.	.	.	.	.	.
1332 ₂₅ = χ_{69}	.	.	1	1	.	.	.	.	.	.	1	.	.	.	.
1332 ₂₇ = χ_{70}	.	.	.	1	.	.	.	1	.	.	.	.	.	.	1
1332 ₂₉ = χ_{71}	.	.	.	1	.	.	.	.	1	.	.	1	.	.	.
1332 ₃₁ = χ_{72}	.	1	.	.	1	.	.	.	.	.	.	1	.	.	.
1332 ₃₃ = χ_{73}	1	.	.	.	.	.	.	.	.	1	.	.	.	.	.
1332 ₃₅ = χ_{74}	.	.	.	.	1	.	.	.	.	.	.	1	1	.	.
1332 ₃₇ = χ_{75}	.	.	.	.	.	1	1	.	.	.	.	.	.	.	.
1332 ₃₉ = χ_{76}	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
1332 ₄₁ = χ_{77}	.	.	.	.	.	1	1	.	1	.	.	.	.	.	.
1332 ₄₃ = χ_{78}	.	.	.	1	.	.	.	.	1	.	.	.	.	.	.
1332 ₄₅ = χ_{79}	1	.	.	1	.	.	.	.	.	.	.	.	.	.	1
1332 ₄₇ = χ_{80}	1	.	.	.	.	.	.	1	.	1	.	.	.	.	1
1332 ₄₉ = χ_{81}	.	.	1	.	.	.	1	.	.	.	.	.	.	.	.
1332 ₅₁ = χ_{82}	1	.	.	.	.	.	.	.	.	.	.	.	1	.	.
1332 ₅₃ = χ_{83}	.	.	.	.	1	1	.	.	.	.	.	.	.	1	.
1440 ₁₃ = χ_{84}	.	.	1	.	.	.	.	.	.	.	.	.	.	.	.
1440 ₁₅ = χ_{85}	1	.	.	.	.	.	.	.	.	.	.	.	1	.	.
1440 ₁₇ = χ_{86}	.	.	.	1	.	.	1	.	1	.	.	.	.	.	.
1440 ₁₉ = χ_{87}	.	1	.	.	1	.	.	1	.	.	.	.	.	.	.
1440 ₂₁ = χ_{88}	1	.	.	.	.	.	.	.	.	.	.	1	1	.	.

(Blocks 3, 4:)	φ_{72}	φ_{73}	φ_{74}	φ_{75}	φ_{76}	φ_{77}	φ_{78}	φ_{79}	φ_{80}	φ_{81}
$111_4 = \chi_{49}$
$111_6 = \chi_{50}$
$111_8 = \chi_{51}$
$111_{10} = \chi_{52}$
$480_1 = \chi_{53}$	1	.	.	.	.	.	.	.	.	.
$480_3 = \chi_{54}$	1	.	.	.	.	.	.	.	.	.
$480_5 = \chi_{55}$	1	.	.	.	.	.	.	.	.	.
$1110_7 = \chi_{56}$.	.	1	.	.	.	.	.	.	.
$1110_9 = \chi_{57}$.	1	.	.	.	.	.	.	.	.
$1110_{11} = \chi_{58}$	1	.	.
$1110_{13} = \chi_{59}$	1	.	.	.	.	.
$1110_{15} = \chi_{60}$	1	.	.	.	.	.	.	.	.	.
$1110_{17} = \chi_{61}$	1	.	.	.
$1221_4 = \chi_{62}$	1	.	.	.	.
$1221_6 = \chi_{63}$	1	.
$1221_8 = \chi_{64}$	1
$1221_{10} = \chi_{65}$.	.	.	1	.	.	.	.	.	.
$1332_{19} = \chi_{66}$	1	.	.	.	.	.
$1332_{21} = \chi_{67}$.	1	.	1	.	.	.	.	.	.
$1332_{23} = \chi_{68}$.	1	1	.	.	.	.	.	.	.
$1332_{25} = \chi_{69}$	1	.	.
$1332_{27} = \chi_{70}$	1	.	.	.	.
$1332_{29} = \chi_{71}$	1	.	.	.	.	.
$1332_{31} = \chi_{72}$	1	.	.	.
$1332_{33} = \chi_{73}$	1	.	1	.	.	.	.	.	.	.
$1332_{35} = \chi_{74}$.	.	1	.	.	.	.	.	.	.
$1332_{37} = \chi_{75}$	1	.
$1332_{39} = \chi_{76}$	1
$1332_{41} = \chi_{77}$	1	.	.	.
$1332_{43} = \chi_{78}$	1	.	.
$1332_{45} = \chi_{79}$	1	.	.	.	.	.
$1332_{47} = \chi_{80}$.	1	.	.	.	.	.	.	.	.
$1332_{49} = \chi_{81}$	1	.	.
$1332_{51} = \chi_{82}$	2	.	.	.	.	.	.	.	.	.
$1332_{53} = \chi_{83}$	1	.	.	.
$1440_{13} = \chi_{84}$	1
$1440_{15} = \chi_{85}$	1	.	1	.	.	.	.	.	.	.
$1440_{17} = \chi_{86}$	1	.	.
$1440_{19} = \chi_{87}$.	1	.	1	.	.	.	.	.	.
$1440_{21} = \chi_{88}$	1	.	.	.	.	.

(Blocks 3, 4:)	φ_{42}	φ_{43}	φ_{44}	φ_{45}	φ_{46}	φ_{47}	φ_{48}	φ_{49}	φ_{50}	φ_{51}	φ_{52}	φ_{53}	φ_{54}	φ_{55}	φ_{56}
$1440_{23} = \chi_{89}$	.	.	.	1	1	1	.	1	.	.	.	.	.	.	.
$1440_{25} = \chi_{90}$	1	.	.	.	.	.	.	.	.	.	.	1	.	.	1
$1440_{27} = \chi_{91}$	.	1	1	.	.	.	1	.	.	1	.	1	.	.	.
$1440_{29} = \chi_{92}$	.	1	.	.	.	.	.	.	.	1	.	.	.	.	.
$1440_{31} = \chi_{93}$	.	.	1	.	1	.	.	.	.	.	.	.	.	.	1
$1440_{33} = \chi_{94}$	1	.	.	.	.	.	1	.	1	.	.	.	.	1	.
$1440_{35} = \chi_{95}$	.	.	1	1	1	.	.	.	.	.	1	.	.	.	.

(Blocks 3, 4:)	φ_{57}	φ_{58}	φ_{59}	φ_{60}	φ_{61}	φ_{62}	φ_{63}	φ_{64}	φ_{65}	φ_{66}	φ_{67}	φ_{68}	φ_{69}	φ_{70}	φ_{71}
$1440_{23} = \chi_{89}$	1	.	.	.	1	.	.	.	.	1	.	.	.	.	.
$1440_{25} = \chi_{90}$	.	.	1	1	.	.	.	.	.	.	1	.	.	.	.
$1440_{27} = \chi_{91}$	.	.	.	.	1	.	.	.	1	.	.	1	.	.	.
$1440_{29} = \chi_{92}$	.	1	.	.	1	1	.	.	.	.	.	.	.	1	.
$1440_{31} = \chi_{93}$	.	.	.	1	.	.	.	1	.	.	.	.	.	.	1
$1440_{33} = \chi_{94}$	.	.	.	.	.	1	1	.	.	.	.	.	.	.	.
$1440_{35} = \chi_{95}$	1	.	.	1	.	.	.	.	.	1	.	.	.	.	1

(Blocks 3, 4:)	φ_{72}	φ_{73}	φ_{74}	φ_{75}	φ_{76}	φ_{77}	φ_{78}	φ_{79}	φ_{80}	φ_{81}
$1440_{23} = \chi_{89}$.	1	1	.	.	.	.	.	.	.
$1440_{25} = \chi_{90}$	1	.	.
$1440_{27} = \chi_{91}$	1	.	.	.
$1440_{29} = \chi_{92}$	1	.	.	.
$1440_{31} = \chi_{93}$	1	.	.	.	.
$1440_{33} = \chi_{94}$	1	.
$1440_{35} = \chi_{95}$	1	.	.	.	.	.

- $\varphi_{42} = 3_1$
- $\varphi_{43} = 6_1$
- $\varphi_{44} = 15_1$
- $\varphi_{45} = 15_3$
- $\varphi_{46} = 21_1$
- $\varphi_{47} = 24_1$
- $\varphi_{48} = 36_1$
- $\varphi_{49} = 42_1$
- $\varphi_{50} = 45_1$
- $\varphi_{51} = 48_1$
- $\varphi_{52} = 60_1$
- $\varphi_{53} = 63_1$
- $\varphi_{54} = 66_1$
- $\varphi_{55} = 75_1$
- $\varphi_{56} = 87_1$
- $\varphi_{57} = 90_1$
- $\varphi_{58} = 90_3$
- $\varphi_{59} = 99_1$
- $\varphi_{60} = 105_1$
- $\varphi_{61} = 120_1$
- $\varphi_{62} = 132_1$
- $\varphi_{63} = 159_1$
- $\varphi_{64} = 165_1$
- $\varphi_{65} = 171_1$
- $\varphi_{66} = 183_1$
- $\varphi_{67} = 231_1$
- $\varphi_{68} = 267_1$
- $\varphi_{69} = 276_1$
- $\varphi_{70} = 330_1$
- $\varphi_{71} = 354_1$
- $\varphi_{72} = 378_1$
- $\varphi_{73} = 465_1$
- $\varphi_{74} = 480_1$
- $\varphi_{75} = 561_1$
- $\varphi_{76} = 597_1$
- $\varphi_{77} = 693_1$
- $\varphi_{78} = 714_1$
- $\varphi_{79} = 852_1$
- $\varphi_{80} = 990_1$
- $\varphi_{81} = 1155_1$