

$M \pmod{31}$

| | blocks | defect | matrix |
|-------|----------------------|--------|--|
| $G :$ | 1 | 1 | 17×15 |
| | 2 | 1 | 17×15 |
| | 3 | 0 | $21296876_1 = \chi_3, \varphi_3$ |
| | 4 | 0 | $842609326_1 = \chi_4, \varphi_4$ |
| | 5 | 0 | $18538750076_1 = \chi_5, \varphi_5$ |
| | 6 | 1 | 17×15 |
| | 7 | 0 | $36173193327999_1 = \chi_9, \varphi_9$ |
| | 8 | 0 | $125510727015275_1 = \chi_{10}, \varphi_{10}$ |
| | 9 | 0 | $222879856734249_1 = \chi_{12}, \varphi_{12}$ |
| | 10 | 0 | $1109944460516150_1 = \chi_{14}, \varphi_{14}$ |
| | 11 | 0 | $2374124840062976_1 = \chi_{15}, \varphi_{15}$ |
| | 12 | 0 | $15178147608537368_1 = \chi_{18}, \varphi_{18}$ |
| | 13 | 0 | $39660520552077425_1 = \chi_{19}, \varphi_{19}$ |
| | 14 | 0 | $251098487132187500_1 = \chi_{21}, \varphi_{21}$ |
| | 15 | 0 | $336041615485626050_1 = \chi_{23}, \varphi_{23}$ |
| | 16 | 0 | $2500435234254428856_1 = \chi_{24}, \varphi_{24}$ |
| | 17 | 0 | $2986480825407204125_1 = \chi_{25}, \varphi_{25}$ |
| | 18 | 0 | $3605718753596953125_1 = \chi_{28}, \varphi_{27}$ |
| | 19 | 0 | $8456836343580310400_1 = \chi_{29}, \varphi_{28}$ |
| | 20 | 0 | $28585990950721640625_1 = \chi_{31}, \varphi_{30}$ |
| | 21 | 0 | $30815545786259524745_1 = \chi_{32}, \varphi_{31}$ |
| | 22 | 0 | $31569817307122699605_1 = \chi_{33}, \varphi_{32}$ |
| | 23 | 0 | $47377503606648784400_1 = \chi_{34}, \varphi_{33}$ |
| | 24 | 0 | $49609712911192813665_1 = \chi_{35}, \varphi_{34}$ |
| | 25 | 0 | $155943076739182582850_1 = \chi_{38}, \varphi_{37}$ |
| | 26 | 0 | $172399434201593354756_1 = \chi_{39}, \varphi_{39}$ |
| | $27 = \overline{26}$ | 0 | $172399434201593354756_2 = \chi_{40}, \varphi_{38}$ |
| | 28 | 0 | $640558364167263622626_1 = \chi_{44}, \varphi_{44}$ |
| | $29 = \overline{28}$ | 0 | $640558364167263622626_2 = \chi_{45}, \varphi_{43}$ |
| | 30 | 0 | $643356925889917747200_1 = \chi_{46}, \varphi_{45}$ |
| | 31 | 0 | $691170144025469730622_1 = \chi_{47}, \varphi_{47}$ |
| | $32 = \overline{31}$ | 0 | $691170144025469730622_2 = \chi_{48}, \varphi_{46}$ |
| | 33 | 0 | $776097192277137500000_1 = \chi_{49}, \varphi_{48}$ |
| | 34 | 0 | $918438233727730974720_1 = \chi_{50}, \varphi_{49}$ |
| | 35 | 0 | $1201241700908448332364_1 = \chi_{51}, \varphi_{50}$ |
| | 36 | 0 | $1353006807137391674268_1 = \chi_{52}, \varphi_{51}$ |
| | 37 | 0 | $1480279477146615234375_1 = \chi_{53}, \varphi_{53}$ |
| | $38 = \overline{37}$ | 0 | $1480279477146615234375_2 = \chi_{54}, \varphi_{52}$ |
| | 39 | 0 | $2351753641814605348320_1 = \chi_{57}, \varphi_{56}$ |
| | 40 | 0 | $2382987417506242421875_1 = \chi_{58}, \varphi_{57}$ |

| | blocks | defect | matrix |
|--|----------------------|--------|---|
| | 41 | 0 | 4567199176912486400000 ₁ = χ_{59}, φ_{59} |
| | 42 = $\overline{41}$ | 0 | 4567199176912486400000 ₂ = χ_{60}, φ_{58} |
| | 43 | 0 | 5578077210155766091776 ₁ = χ_{61}, φ_{60} |
| | 44 | 0 | 6566555764392010419123 ₁ = χ_{62}, φ_{61} |
| | 45 | 0 | 7226910362631220625000 ₁ = χ_{63}, φ_{62} |
| | 46 | 0 | 10145274012943412428800 ₁ = χ_{64}, φ_{63} |
| | 47 | 0 | 19795913912408993711352 ₁ = χ_{66}, φ_{65} |
| | 48 | 0 | 21803647757861753437500 ₁ = χ_{67}, φ_{66} |
| | 49 | 0 | 24670833602960142274950 ₁ = χ_{68}, φ_{67} |
| | 50 | 0 | 41209556844092914062500 ₁ = χ_{70}, φ_{69} |
| | 51 | 0 | 42940402913709544921875 ₁ = χ_{71}, φ_{71} |
| | 52 = $\overline{51}$ | 0 | 42940402913709544921875 ₂ = χ_{72}, φ_{70} |
| | 53 | 0 | 70660346341309333984375 ₁ = χ_{74}, φ_{74} |
| | 54 = $\overline{53}$ | 0 | 70660346341309333984375 ₂ = χ_{75}, φ_{73} |
| | 55 | 0 | 86551489469233273849000 ₁ = χ_{76}, φ_{75} |
| | 56 | 0 | 91068387388302451493925 ₁ = χ_{77}, φ_{76} |
| | 57 | 0 | 114212876389603002704448 ₁ = χ_{78}, φ_{77} |
| | 58 | 0 | 115192831837135016250000 ₁ = χ_{79}, φ_{78} |
| | 59 | 0 | 146575737439884098045700 ₁ = χ_{80}, φ_{79} |
| | 60 | 0 | 149614794149226010902528 ₁ = χ_{81}, φ_{81} |
| | 61 = $\overline{60}$ | 0 | 149614794149226010902528 ₂ = χ_{82}, φ_{80} |
| | 62 | 0 | 161649111002260792968750 ₁ = χ_{83}, φ_{83} |
| | 63 = $\overline{62}$ | 0 | 161649111002260792968750 ₂ = χ_{84}, φ_{82} |
| | 64 | 0 | 191259085113459945312500 ₁ = χ_{85}, φ_{85} |
| | 65 = $\overline{64}$ | 0 | 191259085113459945312500 ₂ = χ_{86}, φ_{84} |
| | 66 | 0 | 218028402153522030021875 ₁ = χ_{87}, φ_{86} |
| | 67 | 0 | 220326476909636307378168 ₁ = χ_{88}, φ_{87} |
| | 68 | 0 | 260799524107083767968750 ₁ = χ_{89}, φ_{89} |
| | 69 = $\overline{68}$ | 0 | 260799524107083767968750 ₂ = χ_{90}, φ_{88} |
| | 70 | 0 | 261575621299360905468750 ₁ = χ_{91}, φ_{90} |
| | 71 | 0 | 277540481294528814140625 ₁ = χ_{92}, φ_{91} |
| | 72 | 0 | 303379038247015811718750 ₁ = χ_{93}, φ_{92} |
| | 73 | 0 | 331150814995116217581480 ₁ = χ_{94}, φ_{93} |
| | 74 | 0 | 351532203382732066094400 ₁ = χ_{95}, φ_{94} |
| | 75 | 0 | 391009081837477378329600 ₁ = χ_{96}, φ_{95} |
| | 76 | 0 | 433528694560598978525184 ₁ = χ_{98}, φ_{97} |
| | 77 | 0 | 597787522207315571077947 ₁ = χ_{99}, φ_{99} |
| | 78 = $\overline{77}$ | 0 | 597787522207315571077947 ₂ = χ_{100}, φ_{98} |
| | 79 | 0 | 600020772685064502392907 ₁ = $\chi_{101}, \varphi_{100}$ |
| | 80 | 0 | 626877403613887304040448 ₁ = $\chi_{102}, \varphi_{102}$ |

| | blocks | defect | matrix |
|--|------------------------|--------|---|
| | 81 = $\overline{80}$ | 0 | 626877403613887304040448 ₂ = $\chi_{103}, \varphi_{101}$ |
| | 82 | 0 | 655159231073705404921875 ₁ = $\chi_{104}, \varphi_{103}$ |
| | 83 | 0 | 1037605886984697481755304 ₁ = $\chi_{109}, \varphi_{106}$ |
| | 84 | 0 | 1361549126105752982272875 ₁ = $\chi_{110}, \varphi_{107}$ |
| | 85 | 0 | 1662686180483865572016128 ₁ = $\chi_{112}, \varphi_{109}$ |
| | 86 | 0 | 2181694185821505680397072 ₁ = $\chi_{113}, \varphi_{111}$ |
| | 87 | 0 | 2477548750555298068681032 ₁ = $\chi_{115}, \varphi_{112}$ |
| | 88 | 0 | 3282510540283631442175104 ₁ = $\chi_{116}, \varphi_{114}$ |
| | 89 | 0 | 3537292796538741415074900 ₁ = $\chi_{117}, \varphi_{115}$ |
| | 90 | 0 | 3619209050774375426792424 ₁ = $\chi_{118}, \varphi_{116}$ |
| | 91 | 0 | 4004308274823270400000000 ₁ = $\chi_{119}, \varphi_{117}$ |
| | 92 | 0 | 4239315652979009728125000 ₁ = $\chi_{120}, \varphi_{118}$ |
| | 93 | 0 | 7118465328761788475375616 ₁ = $\chi_{126}, \varphi_{125}$ |
| | 94 | 0 | 7567151576542452425781250 ₁ = $\chi_{128}, \varphi_{127}$ |
| | 95 = $\overline{94}$ | 0 | 7567151576542452425781250 ₂ = $\chi_{129}, \varphi_{126}$ |
| | 96 | 0 | 7850934959207940600000000 ₁ = $\chi_{130}, \varphi_{128}$ |
| | 97 | 0 | 8394037047155083487634450 ₁ = $\chi_{131}, \varphi_{129}$ |
| | 98 | 0 | 8874260875527017936065100 ₁ = $\chi_{132}, \varphi_{130}$ |
| | 99 | 0 | 9416031858681585751556096 ₁ = $\chi_{133}, \varphi_{132}$ |
| | 100 | 0 | 9479495745805305653125000 ₁ = $\chi_{134}, \varphi_{133}$ |
| | 101 | 0 | 9592298143650890255171584 ₁ = $\chi_{135}, \varphi_{135}$ |
| | 102 = $\overline{101}$ | 0 | 9592298143650890255171584 ₂ = $\chi_{136}, \varphi_{134}$ |
| | 103 | 0 | 12650882100466187033706250 ₁ = $\chi_{139}, \varphi_{136}$ |
| | 104 | 0 | 16109407269221032565630370 ₁ = $\chi_{141}, \varphi_{138}$ |
| | 105 | 0 | 22626621365160537099927552 ₁ = $\chi_{142}, \varphi_{139}$ |
| | 106 | 0 | 24546384719289825598186695 ₁ = $\chi_{143}, \varphi_{140}$ |
| | 107 | 0 | 27501917609709102247187500 ₁ = $\chi_{144}, \varphi_{141}$ |
| | 108 | 0 | 29734941419909382162874368 ₁ = $\chi_{145}, \varphi_{145}$ |
| | 109 | 0 | 33722191327002668157047380 ₁ = $\chi_{147}, \varphi_{146}$ |
| | 110 | 0 | 38471795739256565080575180 ₁ = $\chi_{149}, \varphi_{147}$ |
| | 111 | 0 | 41738941151243953804687500 ₁ = $\chi_{150}, \varphi_{148}$ |
| | 112 | 0 | 41762322738385820195625000 ₁ = $\chi_{151}, \varphi_{149}$ |
| | 113 | 0 | 42001454087954515167503490 ₁ = $\chi_{152}, \varphi_{150}$ |
| | 114 | 0 | 42601474860639579669896397 ₁ = $\chi_{153}, \varphi_{151}$ |
| | 115 | 0 | 43527130990147981755651072 ₁ = $\chi_{154}, \varphi_{152}$ |
| | 116 | 0 | 50572542024949598403750000 ₁ = $\chi_{155}, \varphi_{154}$ |
| | 117 | 0 | 51324350389558097414062500 ₁ = $\chi_{156}, \varphi_{155}$ |
| | 118 | 0 | 58437394633227526183321600 ₁ = $\chi_{158}, \varphi_{156}$ |
| | 119 | 0 | 62038057486792249132974080 ₁ = $\chi_{159}, \varphi_{157}$ |
| | 120 | 0 | 64326163427522624205703125 ₁ = $\chi_{161}, \varphi_{158}$ |

| | blocks | defect | matrix |
|--|--------|--------|--|
| | 121 | 0 | 66550339514356152000000000 ₁ = $\chi_{162}, \varphi_{159}$ |
| | 122 | 0 | 74612213529720383654779356 ₁ = $\chi_{164}, \varphi_{161}$ |
| | 123 | 0 | 77423398454853064646282250 ₁ = $\chi_{165}, \varphi_{162}$ |
| | 124 | 0 | 83974774459050335630859375 ₁ = $\chi_{166}, \varphi_{164}$ |
| | 125 | 0 | 88943820620288343261672393 ₁ = $\chi_{168}, \varphi_{165}$ |
| | 126 | 0 | 103354104243912727763091456 ₁ = $\chi_{169}, \varphi_{166}$ |
| | 127 | 0 | 115165062362004433625000000 ₁ = $\chi_{170}, \varphi_{167}$ |
| | 128 | 0 | 121170799240938738783416925 ₁ = $\chi_{171}, \varphi_{168}$ |
| | 129 | 0 | 124058385593021471188320256 ₁ = $\chi_{172}, \varphi_{169}$ |
| | 130 | 0 | 124982156072747647257292800 ₁ = $\chi_{173}, \varphi_{170}$ |
| | 131 | 0 | 125517264890136048242396811 ₁ = $\chi_{174}, \varphi_{171}$ |
| | 132 | 0 | 130287135266837289237316743 ₁ = $\chi_{176}, \varphi_{172}$ |
| | 133 | 0 | 135226984222789977095703125 ₁ = $\chi_{177}, \varphi_{174}$ |
| | 134 | 0 | 136107644194473772613203125 ₁ = $\chi_{178}, \varphi_{175}$ |
| | 135 | 0 | 136574874874360806036041889 ₁ = $\chi_{179}, \varphi_{177}$ |
| | 136 | 0 | 136574874874360806036041889 ₂ = $\chi_{180}, \varphi_{176}$ |
| | 137 | 0 | 161561864971171113287540625 ₁ = $\chi_{182}, \varphi_{178}$ |
| | 138 | 0 | 163216709667196367710937500 ₁ = $\chi_{183}, \varphi_{179}$ |
| | 139 | 0 | 172248852397651745653437500 ₁ = $\chi_{184}, \varphi_{180}$ |
| | 140 | 0 | 175867626988794162227008203 ₁ = $\chi_{186}, \varphi_{182}$ |
| | 141 | 0 | 177966317773633111417870812 ₁ = $\chi_{187}, \varphi_{183}$ |
| | 142 | 0 | 198203900044423845494482560 ₁ = $\chi_{188}, \varphi_{184}$ |
| | 143 | 0 | 200390867219082687273984375 ₁ = $\chi_{189}, \varphi_{185}$ |
| | 144 | 0 | 207467089840006711558593750 ₁ = $\chi_{191}, \varphi_{186}$ |
| | 145 | 0 | 212490247553365721772656250 ₁ = $\chi_{192}, \varphi_{187}$ |
| | 146 | 0 | 258823477531055064045234375 ₁ = $\chi_{194}, \varphi_{188}$ |

| Block 1: | φ_1 | φ_{11} | φ_{16} | φ_{17} |
|--|-------------|----------------|----------------|----------------|
| $1_1 = \chi_1$ | 1 | . | . | . |
| $190292345709543_1 = \chi_{11}$ | 1 | 1 | . | . |
| $8980616927734375_1 = \chi_{16}$ | . | . | . | 1 |
| $8980616927734375_2 = \chi_{17}$ | . | . | 1 | . |
| $290568421805921077_1 = \chi_{22}$ | . | 1 | . | . |
| $8754193822112578125_1 = \chi_{30}$ | . | . | . | . |
| $12810005542623250817856_1 = \chi_{65}$ | . | . | . | . |
| $689763222744895005949242_1 = \chi_{105}$ | . | . | . | . |
| $689763222744895005949242_2 = \chi_{106}$ | . | . | . | . |
| $1599110387863558882812500_1 = \chi_{111}$ | . | . | . | . |
| $5514132424881463208443904_1 = \chi_{123}$ | . | . | . | . |
| $7375892500409609408203125_1 = \chi_{127}$ | . | . | . | . |
| $9592584386918582979657728_1 = \chi_{137}$ | . | . | . | . |
| $14930164283563048960000000_1 = \chi_{140}$ | . | . | . | . |
| $63750812845035828079008441_1 = \chi_{160}$ | . | . | . | . |
| $86206621680977834911875000_1 = \chi_{167}$ | . | . | . | . |
| $129572518017902934396764160_1 = \chi_{175}$ | . | . | 1 | 1 |

| (Block 1): | φ_{22} | φ_{29} | φ_{64} |
|--|----------------|----------------|----------------|
| $1_1 = \chi_1$ | . | . | . |
| $190292345709543_1 = \chi_{11}$ | . | . | . |
| $8980616927734375_1 = \chi_{16}$ | . | . | . |
| $8980616927734375_2 = \chi_{17}$ | . | . | . |
| $290568421805921077_1 = \chi_{22}$ | 1 | . | . |
| $8754193822112578125_1 = \chi_{30}$ | 1 | 1 | . |
| $12810005542623250817856_1 = \chi_{65}$ | . | 1 | 1 |
| $689763222744895005949242_1 = \chi_{105}$ | . | . | . |
| $689763222744895005949242_2 = \chi_{106}$ | . | . | . |
| $1599110387863558882812500_1 = \chi_{111}$ | . | . | 1 |
| $5514132424881463208443904_1 = \chi_{123}$ | . | . | . |
| $7375892500409609408203125_1 = \chi_{127}$ | . | . | . |
| $9592584386918582979657728_1 = \chi_{137}$ | . | . | . |
| $14930164283563048960000000_1 = \chi_{140}$ | . | . | . |
| $63750812845035828079008441_1 = \chi_{160}$ | . | . | . |
| $86206621680977834911875000_1 = \chi_{167}$ | . | . | . |
| $129572518017902934396764160_1 = \chi_{175}$ | . | . | . |

| (Block 1:) | φ_{104} | φ_{108} | φ_{113} |
|--|-----------------|-----------------|-----------------|
| $1_1 = \chi_1$ | . | . | . |
| $190292345709543_1 = \chi_{11}$ | . | . | . |
| $8980616927734375_1 = \chi_{16}$ | . | . | . |
| $8980616927734375_2 = \chi_{17}$ | . | . | . |
| $290568421805921077_1 = \chi_{22}$ | . | . | . |
| $8754193822112578125_1 = \chi_{30}$ | . | . | . |
| $12810005542623250817856_1 = \chi_{65}$ | . | . | . |
| $689763222744895005949242_1 = \chi_{105}$ | 1 | . | . |
| $689763222744895005949242_2 = \chi_{106}$ | 1 | . | . |
| $1599110387863558882812500_1 = \chi_{111}$ | . | 1 | . |
| $5514132424881463208443904_1 = \chi_{123}$ | 1 | . | . |
| $7375892500409609408203125_1 = \chi_{127}$ | . | . | 1 |
| $9592584386918582979657728_1 = \chi_{137}$ | . | . | 1 |
| $14930164283563048960000000_1 = \chi_{140}$ | . | 1 | . |
| $63750812845035828079008441_1 = \chi_{160}$ | . | . | . |
| $86206621680977834911875000_1 = \chi_{167}$ | . | . | . |
| $129572518017902934396764160_1 = \chi_{175}$ | . | . | . |

| (Block 1:) | φ_{120} | φ_{124} | φ_{137} |
|--|-----------------|-----------------|-----------------|
| $1_1 = \chi_1$ | . | . | . |
| $190292345709543_1 = \chi_{11}$ | . | . | . |
| $8980616927734375_1 = \chi_{16}$ | . | . | . |
| $8980616927734375_2 = \chi_{17}$ | . | . | . |
| $290568421805921077_1 = \chi_{22}$ | . | . | . |
| $8754193822112578125_1 = \chi_{30}$ | . | . | . |
| $12810005542623250817856_1 = \chi_{65}$ | . | . | . |
| $689763222744895005949242_1 = \chi_{105}$ | . | . | . |
| $689763222744895005949242_2 = \chi_{106}$ | . | . | . |
| $1599110387863558882812500_1 = \chi_{111}$ | . | . | . |
| $5514132424881463208443904_1 = \chi_{123}$ | 1 | . | . |
| $7375892500409609408203125_1 = \chi_{127}$ | 1 | . | . |
| $9592584386918582979657728_1 = \chi_{137}$ | . | 1 | . |
| $14930164283563048960000000_1 = \chi_{140}$ | . | . | 1 |
| $63750812845035828079008441_1 = \chi_{160}$ | . | . | 1 |
| $86206621680977834911875000_1 = \chi_{167}$ | . | 1 | . |
| $129572518017902934396764160_1 = \chi_{175}$ | . | . | . |

| (Block 1:) | φ_{153} | φ_{163} |
|--|-----------------|-----------------|
| $1_1 = \chi_1$ | . | . |
| $190292345709543_1 = \chi_{11}$ | . | . |
| $8980616927734375_1 = \chi_{16}$ | . | . |
| $8980616927734375_2 = \chi_{17}$ | . | . |
| $290568421805921077_1 = \chi_{22}$ | . | . |
| $8754193822112578125_1 = \chi_{30}$ | . | . |
| $12810005542623250817856_1 = \chi_{65}$ | . | . |
| $689763222744895005949242_1 = \chi_{105}$ | . | . |
| $689763222744895005949242_2 = \chi_{106}$ | . | . |
| $1599110387863558882812500_1 = \chi_{111}$ | . | . |
| $5514132424881463208443904_1 = \chi_{123}$ | . | . |
| $7375892500409609408203125_1 = \chi_{127}$ | . | . |
| $9592584386918582979657728_1 = \chi_{137}$ | . | . |
| $1493016428356304896000000_1 = \chi_{140}$ | . | . |
| $63750812845035828079008441_1 = \chi_{160}$ | 1 | . |
| $86206621680977834911875000_1 = \chi_{167}$ | . | 1 |
| $129572518017902934396764160_1 = \chi_{175}$ | 1 | 1 |

| | |
|--|--|
| $\varphi_1 = 1_1$ | $\varphi_{108} = 1586308846136628284361234_1$ |
| $\varphi_{11} = 190292345709542_1$ | $\varphi_{113} = 2551523298273041205708463_1$ |
| $\varphi_{16} = 8980616927734375_1$ | $\varphi_{120} = 4824369202136568202494662_1$ |
| $\varphi_{17} = 8980616927734375_2$ | $\varphi_{124} = 7041061088645541773949265_1$ |
| $\varphi_{22} = 290378129460211535_1$ | $\varphi_{137} = 13343855437426420675638766_1$ |
| $\varphi_{29} = 8463815692652366590_1$ | $\varphi_{153} = 50406957407609407403369675_1$ |
| $\varphi_{64} = 12801541726930598451266_1$ | $\varphi_{163} = 79165560592332293137925735_1$ |
| $\varphi_{104} = 689763222744895005949242_1$ | |

| Block 2: | φ_2 | φ_7 | φ_{13} | φ_{36} |
|--|-------------|-------------|----------------|----------------|
| $196883_1 = \chi_2$ | 1 | . | . | . |
| $293553734298_1 = \chi_7$ | 1 | 1 | . | . |
| $1044868466775133_1 = \chi_{13}$ | . | 1 | 1 | . |
| $130415350420342968750_1 = \chi_{37}$ | . | . | 1 | 1 |
| $379913824694312370176_1 = \chi_{43}$ | . | . | . | 1 |
| $1768130802583126953125_1 = \chi_{55}$ | . | . | . | . |
| $1768130802583126953125_2 = \chi_{56}$ | . | . | . | . |
| $60683762052057587326065_1 = \chi_{73}$ | . | . | . | . |
| $689766726179555080994223_1 = \chi_{107}$ | . | . | . | . |
| $689766726179555080994223_2 = \chi_{108}$ | . | . | . | . |
| $2216343020913351966796875_1 = \chi_{114}$ | . | . | . | . |
| $10023854998171489083984375_1 = \chi_{138}$ | . | . | . | . |
| $3731071521154662400000000_1 = \chi_{148}$ | . | . | . | . |
| $56356433273146675005489152_1 = \chi_{157}$ | . | . | . | . |
| $69084859008005036431224066_1 = \chi_{163}$ | . | . | . | . |
| $203314261261157852274218750_1 = \chi_{190}$ | . | . | . | . |
| $241866941438795926688759808_1 = \chi_{193}$ | . | . | . | . |

| (Block 2:) | φ_{40} | φ_{54} | φ_{55} | φ_{72} |
|--|----------------|----------------|----------------|----------------|
| $196883_1 = \chi_2$ | . | . | . | . |
| $293553734298_1 = \chi_7$ | . | . | . | . |
| $1044868466775133_1 = \chi_{13}$ | . | . | . | . |
| $130415350420342968750_1 = \chi_{37}$ | . | . | . | . |
| $379913824694312370176_1 = \chi_{43}$ | 1 | . | . | . |
| $1768130802583126953125_1 = \chi_{55}$ | . | . | 1 | . |
| $1768130802583126953125_2 = \chi_{56}$ | . | 1 | . | . |
| $60683762052057587326065_1 = \chi_{73}$ | 1 | . | . | 1 |
| $689766726179555080994223_1 = \chi_{107}$ | . | . | . | . |
| $689766726179555080994223_2 = \chi_{108}$ | . | . | . | . |
| $2216343020913351966796875_1 = \chi_{114}$ | . | . | . | 1 |
| $10023854998171489083984375_1 = \chi_{138}$ | . | . | . | . |
| $3731071521154662400000000_1 = \chi_{148}$ | . | . | . | . |
| $56356433273146675005489152_1 = \chi_{157}$ | . | . | . | . |
| $69084859008005036431224066_1 = \chi_{163}$ | . | . | . | . |
| $203314261261157852274218750_1 = \chi_{190}$ | . | . | . | . |
| $241866941438795926688759808_1 = \chi_{193}$ | . | 1 | 1 | . |

| (Block 2:) | φ_{105} | φ_{110} | φ_{131} |
|---|-----------------|-----------------|-----------------|
| 196883 ₁ = χ_2 | . | . | . |
| 293553734298 ₁ = χ_7 | . | . | . |
| 1044868466775133 ₁ = χ_{13} | . | . | . |
| 130415350420342968750 ₁ = χ_{37} | . | . | . |
| 379913824694312370176 ₁ = χ_{43} | . | . | . |
| 1768130802583126953125 ₁ = χ_{55} | . | . | . |
| 1768130802583126953125 ₂ = χ_{56} | . | . | . |
| 60683762052057587326065 ₁ = χ_{73} | . | . | . |
| 689766726179555080994223 ₁ = χ_{107} | 1 | . | . |
| 689766726179555080994223 ₂ = χ_{108} | 1 | . | . |
| 2216343020913351966796875 ₁ = χ_{114} | . | 1 | . |
| 10023854998171489083984375 ₁ = χ_{138} | 1 | . | 1 |
| 3731071521154662400000000 ₁ = χ_{148} | . | . | 1 |
| 56356433273146675005489152 ₁ = χ_{157} | . | . | . |
| 69084859008005036431224066 ₁ = χ_{163} | . | 1 | . |
| 203314261261157852274218750 ₁ = χ_{190} | . | . | . |
| 241866941438795926688759808 ₁ = χ_{193} | . | . | . |

| (Block 2:) | φ_{142} | φ_{143} | φ_{160} |
|---|-----------------|-----------------|-----------------|
| 196883 ₁ = χ_2 | . | . | . |
| 293553734298 ₁ = χ_7 | . | . | . |
| 1044868466775133 ₁ = χ_{13} | . | . | . |
| 130415350420342968750 ₁ = χ_{37} | . | . | . |
| 379913824694312370176 ₁ = χ_{43} | . | . | . |
| 1768130802583126953125 ₁ = χ_{55} | . | . | . |
| 1768130802583126953125 ₂ = χ_{56} | . | . | . |
| 60683762052057587326065 ₁ = χ_{73} | . | . | . |
| 689766726179555080994223 ₁ = χ_{107} | . | . | . |
| 689766726179555080994223 ₂ = χ_{108} | . | . | . |
| 2216343020913351966796875 ₁ = χ_{114} | . | . | . |
| 10023854998171489083984375 ₁ = χ_{138} | . | . | . |
| 3731071521154662400000000 ₁ = χ_{148} | 1 | . | . |
| 56356433273146675005489152 ₁ = χ_{157} | 1 | 1 | . |
| 69084859008005036431224066 ₁ = χ_{163} | . | . | 1 |
| 203314261261157852274218750 ₁ = χ_{190} | . | 1 | . |
| 241866941438795926688759808 ₁ = χ_{193} | . | . | 1 |

| (Block 2:) | φ_{181} |
|---|-----------------|
| 196883 ₁ = χ_2 | . |
| 293553734298 ₁ = χ_7 | . |
| 1044868466775133 ₁ = χ_{13} | . |
| 130415350420342968750 ₁ = χ_{37} | . |
| 379913824694312370176 ₁ = χ_{43} | . |
| 1768130802583126953125 ₁ = χ_{55} | . |
| 1768130802583126953125 ₂ = χ_{56} | . |
| 60683762052057587326065 ₁ = χ_{73} | . |
| 689766726179555080994223 ₁ = χ_{107} | . |
| 689766726179555080994223 ₂ = χ_{108} | . |
| 2216343020913351966796875 ₁ = χ_{114} | . |
| 10023854998171489083984375 ₁ = χ_{138} | . |
| 3731071521154662400000000 ₁ = χ_{148} | . |
| 56356433273146675005489152 ₁ = χ_{157} | . |
| 69084859008005036431224066 ₁ = χ_{163} | . |
| 203314261261157852274218750 ₁ = χ_{190} | 1 |
| 241866941438795926688759808 ₁ = χ_{193} | 1 |

| | |
|---|--|
| φ_2 = 196883 ₁ | φ_{105} = 689766726179555080994223 ₁ |
| φ_7 = 293553537415 ₁ | φ_{110} = 2155908758380143262109954 ₁ |
| φ_{13} = 1044574913237718 ₁ | φ_{131} = 9334088271991934002990152 ₁ |
| φ_{36} = 130414305845429731032 ₁ | φ_{142} = 27976626939554689997009848 ₁ |
| φ_{40} = 249499518848882639144 ₁ | φ_{143} = 28379806333591985008479304 ₁ |
| φ_{54} = 1768130802583126953125 ₁ | φ_{160} = 66928950249624893169114112 ₁ |
| φ_{55} = 1768130802583126953125 ₂ | φ_{181} = 174934454927565867265739446 ₁ |
| φ_{72} = 60434262533208704686921 ₁ | |

| Block 6: | φ_6 | φ_8 | φ_{20} | φ_{26} |
|--|-------------|-------------|----------------|----------------|
| $19360062527_1 = \chi_6$ | 1 | . | . | . |
| $3879214937598_1 = \chi_8$ | 1 | 1 | . | . |
| $60359800576579350_1 = \chi_{20}$ | . | 1 | 1 | . |
| $3503434660075044981_1 = \chi_{26}$ | . | . | . | 1 |
| $3503434660075044981_2 = \chi_{27}$ | . | . | . | 1 |
| $77316619273928125000_1 = \chi_{36}$ | . | . | 1 | . |
| $286243267692724486144_1 = \chi_{41}$ | . | . | . | . |
| $286243267692724486144_2 = \chi_{42}$ | . | . | . | . |
| $31714653744947491918600_1 = \chi_{69}$ | . | . | . | 1 |
| $392611651975065600000000_1 = \chi_{97}$ | . | . | . | . |
| $4926670174323484069683200_1 = \chi_{121}$ | . | . | . | . |
| $5334046162969208352215625_1 = \chi_{122}$ | . | . | . | . |
| $5514132424881463208443904_2 = \chi_{124}$ | . | . | . | . |
| $5514132424881463208443904_3 = \chi_{125}$ | . | . | . | . |
| $33684388830359981044531200_1 = \chi_{146}$ | . | . | . | . |
| $138988549876584520148320256_1 = \chi_{181}$ | . | . | . | . |
| $173865305251972140447265625_1 = \chi_{185}$ | . | . | . | . |

| (Block 6:) | φ_{35} | φ_{41} | φ_{42} | φ_{68} |
|--|----------------|----------------|----------------|----------------|
| $19360062527_1 = \chi_6$ | . | . | . | . |
| $3879214937598_1 = \chi_8$ | . | . | . | . |
| $60359800576579350_1 = \chi_{20}$ | . | . | . | . |
| $3503434660075044981_1 = \chi_{26}$ | . | . | . | . |
| $3503434660075044981_2 = \chi_{27}$ | . | . | . | . |
| $77316619273928125000_1 = \chi_{36}$ | 1 | . | . | . |
| $286243267692724486144_1 = \chi_{41}$ | . | . | 1 | . |
| $286243267692724486144_2 = \chi_{42}$ | . | 1 | . | . |
| $31714653744947491918600_1 = \chi_{69}$ | . | . | . | 1 |
| $392611651975065600000000_1 = \chi_{97}$ | 1 | . | . | . |
| $4926670174323484069683200_1 = \chi_{121}$ | . | . | . | . |
| $5334046162969208352215625_1 = \chi_{122}$ | . | 1 | 1 | 1 |
| $5514132424881463208443904_2 = \chi_{124}$ | . | . | . | . |
| $5514132424881463208443904_3 = \chi_{125}$ | . | . | . | . |
| $33684388830359981044531200_1 = \chi_{146}$ | . | . | . | . |
| $138988549876584520148320256_1 = \chi_{181}$ | . | . | . | . |
| $173865305251972140447265625_1 = \chi_{185}$ | . | . | . | . |

| (Block 6:) | φ_{96} | φ_{119} | φ_{121} |
|---|----------------|-----------------|-----------------|
| 19360062527 ₁ = χ_6 | . | . | . |
| 3879214937598 ₁ = χ_8 | . | . | . |
| 60359800576579350 ₁ = χ_{20} | . | . | . |
| 3503434660075044981 ₁ = χ_{26} | . | . | . |
| 3503434660075044981 ₂ = χ_{27} | . | . | . |
| 77316619273928125000 ₁ = χ_{36} | . | . | . |
| 286243267692724486144 ₁ = χ_{41} | . | . | . |
| 286243267692724486144 ₂ = χ_{42} | . | . | . |
| 31714653744947491918600 ₁ = χ_{69} | . | . | . |
| 392611651975065600000000 ₁ = χ_{97} | 1 | . | . |
| 4926670174323484069683200 ₁ = χ_{121} | 1 | 1 | . |
| 5334046162969208352215625 ₁ = χ_{122} | . | . | 1 |
| 5514132424881463208443904 ₂ = χ_{124} | . | . | . |
| 5514132424881463208443904 ₃ = χ_{125} | . | . | . |
| 33684388830359981044531200 ₁ = χ_{146} | . | 1 | . |
| 138988549876584520148320256 ₁ = χ_{181} | . | . | 1 |
| 173865305251972140447265625 ₁ = χ_{185} | . | . | . |

| (Block 6:) | φ_{122} | φ_{123} | φ_{144} |
|---|-----------------|-----------------|-----------------|
| 19360062527 ₁ = χ_6 | . | . | . |
| 3879214937598 ₁ = χ_8 | . | . | . |
| 60359800576579350 ₁ = χ_{20} | . | . | . |
| 3503434660075044981 ₁ = χ_{26} | . | . | . |
| 3503434660075044981 ₂ = χ_{27} | . | . | . |
| 77316619273928125000 ₁ = χ_{36} | . | . | . |
| 286243267692724486144 ₁ = χ_{41} | . | . | . |
| 286243267692724486144 ₂ = χ_{42} | . | . | . |
| 31714653744947491918600 ₁ = χ_{69} | . | . | . |
| 392611651975065600000000 ₁ = χ_{97} | . | . | . |
| 4926670174323484069683200 ₁ = χ_{121} | . | . | . |
| 5334046162969208352215625 ₁ = χ_{122} | . | . | . |
| 5514132424881463208443904 ₂ = χ_{124} | . | 1 | . |
| 5514132424881463208443904 ₃ = χ_{125} | 1 | . | . |
| 33684388830359981044531200 ₁ = χ_{146} | . | . | 1 |
| 138988549876584520148320256 ₁ = χ_{181} | . | . | . |
| 173865305251972140447265625 ₁ = χ_{185} | 1 | 1 | 1 |

| (Block 6:) | φ_{173} |
|--|-----------------|
| $19360062527_1 = \chi_6$ | . |
| $3879214937598_1 = \chi_8$ | . |
| $60359800576579350_1 = \chi_{20}$ | . |
| $3503434660075044981_1 = \chi_{26}$ | . |
| $3503434660075044981_2 = \chi_{27}$ | . |
| $77316619273928125000_1 = \chi_{36}$ | . |
| $286243267692724486144_1 = \chi_{41}$ | . |
| $286243267692724486144_2 = \chi_{42}$ | . |
| $31714653744947491918600_1 = \chi_{69}$ | . |
| $392611651975065600000000_1 = \chi_{97}$ | . |
| $4926670174323484069683200_1 = \chi_{121}$ | . |
| $5334046162969208352215625_1 = \chi_{122}$ | . |
| $5514132424881463208443904_2 = \chi_{124}$ | . |
| $5514132424881463208443904_3 = \chi_{125}$ | . |
| $33684388830359981044531200_1 = \chi_{146}$ | . |
| $138988549876584520148320256_1 = \chi_{181}$ | 1 |
| $173865305251972140447265625_1 = \chi_{185}$ | 1 |

| | |
|--|---|
| $\varphi_6 = 19360062527_1$ | $\varphi_{96} = 392534395711732393579279_1$ |
| $\varphi_8 = 3859854875071_1$ | $\varphi_{119} = 4534135778611751676103921_1$ |
| $\varphi_{20} = 60355940721704279_1$ | $\varphi_{121} = 5301762526123535486369718_1$ |
| $\varphi_{26} = 3503434660075044981_1$ | $\varphi_{122} = 5514132424881463208443904_1$ |
| $\varphi_{35} = 77256263333206420721_1$ | $\varphi_{123} = 5514132424881463208443904_2$ |
| $\varphi_{41} = 286243267692724486144_1$ | $\varphi_{144} = 29150253051748229368427279_1$ |
| $\varphi_{42} = 286243267692724486144_2$ | $\varphi_{173} = 133686787350460984661950538_1$ |
| $\varphi_{68} = 31711150310287416873619_1$ | |