

Rank-65900 over GF(16)

January 15, 2021

The equation

The equation of the surface is :

$$X_0^3 + X_3^3 + X_0^2 X_2 + X_0^2 X_3 + X_1^2 X_2 + X_0 X_1 X_2 = 0$$

(1, 0, 0, 1, 0, 1, 1, 0, 1, 0, 0, 0, 0, 0, 0, 1, 0, 0, 0)

The point rank of the equation over GF(16) is 304161046

General information

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|----------------------------|-----------|
| Number of lines | 0 |
| Number of points | 241 |
| Number of singular points | 1 |
| Number of Eckardt points | 0 |
| Number of double points | 0 |
| Number of single points | 0 |
| Number of points off lines | 241 |
| Number of Hesse planes | 0 |
| Number of axes | 0 |
| Type of points on lines | |
| Type of lines on points | 0^{241} |

Singular Points

The surface has 1 singular points:

$$0 : P_2 = \mathbf{P}(0, 0, 1, 0) = \mathbf{P}(0, 0, 1, 0)$$

The 0 Lines

The lines and their Pluecker coordinates are:

Rank of lines: ()

Rank of points on Klein quadric: ()

Eckardt Points

The surface has 0 Eckardt points:

Double Points

The surface has 0 Double points:

The double points on the surface are:

Single Points

The surface has 0 single points:

The single points on the surface are:

The single points on the surface are:

Points on surface but on no line

The surface has 241 points not on any line:

The points on the surface but not on lines are:

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|---------------------------------|----------------------------------|
| 0 : $P_1 = (0, 1, 0, 0)$ | 27 : $P_{708} = (3, 11, 1, 1)$ |
| 1 : $P_2 = (0, 0, 1, 0)$ | 28 : $P_{713} = (8, 11, 1, 1)$ |
| 2 : $P_4 = (1, 1, 1, 1)$ | 29 : $P_{716} = (11, 11, 1, 1)$ |
| 3 : $P_{20} = (1, 0, 1, 0)$ | 30 : $P_{774} = (5, 15, 1, 1)$ |
| 4 : $P_{36} = (1, 1, 1, 0)$ | 31 : $P_{798} = (13, 0, 2, 1)$ |
| 5 : $P_{57} = (6, 2, 1, 0)$ | 32 : $P_{810} = (9, 1, 2, 1)$ |
| 6 : $P_{62} = (11, 2, 1, 0)$ | 33 : $P_{831} = (14, 2, 2, 1)$ |
| 7 : $P_{63} = (12, 2, 1, 0)$ | 34 : $P_{843} = (10, 3, 2, 1)$ |
| 8 : $P_{89} = (6, 4, 1, 0)$ | 35 : $P_{850} = (1, 4, 2, 1)$ |
| 9 : $P_{93} = (10, 4, 1, 0)$ | 36 : $P_{866} = (1, 5, 2, 1)$ |
| 10 : $P_{96} = (13, 4, 1, 0)$ | 37 : $P_{897} = (0, 7, 2, 1)$ |
| 11 : $P_{170} = (7, 9, 1, 0)$ | 38 : $P_{905} = (8, 7, 2, 1)$ |
| 12 : $P_{174} = (11, 9, 1, 0)$ | 39 : $P_{908} = (11, 7, 2, 1)$ |
| 13 : $P_{176} = (13, 9, 1, 0)$ | 40 : $P_{922} = (9, 8, 2, 1)$ |
| 14 : $P_{250} = (7, 14, 1, 0)$ | 41 : $P_{932} = (3, 9, 2, 1)$ |
| 15 : $P_{253} = (10, 14, 1, 0)$ | 42 : $P_{939} = (10, 9, 2, 1)$ |
| 16 : $P_{255} = (12, 14, 1, 0)$ | 43 : $P_{948} = (3, 10, 2, 1)$ |
| 17 : $P_{531} = (1, 0, 1, 1)$ | 44 : $P_{951} = (6, 10, 2, 1)$ |
| 18 : $P_{540} = (10, 0, 1, 1)$ | 45 : $P_{983} = (6, 12, 2, 1)$ |
| 19 : $P_{541} = (11, 0, 1, 1)$ | 46 : $P_{988} = (11, 12, 2, 1)$ |
| 20 : $P_{546} = (0, 1, 1, 1)$ | 47 : $P_{991} = (14, 12, 2, 1)$ |
| 21 : $P_{585} = (8, 3, 1, 1)$ | 48 : $P_{1006} = (13, 13, 2, 1)$ |
| 22 : $P_{624} = (15, 5, 1, 1)$ | 49 : $P_{1033} = (8, 15, 2, 1)$ |
| 23 : $P_{660} = (3, 8, 1, 1)$ | 50 : $P_{1055} = (14, 0, 3, 1)$ |
| 24 : $P_{694} = (5, 10, 1, 1)$ | 51 : $P_{1069} = (12, 1, 3, 1)$ |
| 25 : $P_{699} = (10, 10, 1, 1)$ | 52 : $P_{1078} = (5, 2, 3, 1)$ |
| 26 : $P_{704} = (15, 10, 1, 1)$ | 53 : $P_{1121} = (0, 5, 3, 1)$ |

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| 54 : $P_{1158} = (5, 7, 3, 1)$ | 108 : $P_{2070} = (5, 0, 7, 1)$ |
| 55 : $P_{1176} = (7, 8, 3, 1)$ | 109 : $P_{2089} = (8, 1, 7, 1)$ |
| 56 : $P_{1191} = (6, 9, 3, 1)$ | 110 : $P_{2150} = (5, 5, 7, 1)$ |
| 57 : $P_{1236} = (3, 12, 3, 1)$ | 111 : $P_{2170} = (9, 6, 7, 1)$ |
| 58 : $P_{1261} = (12, 13, 3, 1)$ | 112 : $P_{2191} = (14, 7, 7, 1)$ |
| 59 : $P_{1279} = (14, 14, 3, 1)$ | 113 : $P_{2209} = (0, 9, 7, 1)$ |
| 60 : $P_{1284} = (3, 15, 3, 1)$ | 114 : $P_{2217} = (8, 9, 7, 1)$ |
| 61 : $P_{1287} = (6, 15, 3, 1)$ | 115 : $P_{2223} = (14, 9, 7, 1)$ |
| 62 : $P_{1288} = (7, 15, 3, 1)$ | 116 : $P_{2229} = (4, 10, 7, 1)$ |
| 63 : $P_{1304} = (7, 0, 4, 1)$ | 117 : $P_{2248} = (7, 11, 7, 1)$ |
| 64 : $P_{1327} = (14, 1, 4, 1)$ | 118 : $P_{2264} = (7, 12, 7, 1)$ |
| 65 : $P_{1360} = (15, 3, 4, 1)$ | 119 : $P_{2293} = (4, 14, 7, 1)$ |
| 66 : $P_{1363} = (2, 4, 4, 1)$ | 120 : $P_{2314} = (9, 15, 7, 1)$ |
| 67 : $P_{1388} = (11, 5, 4, 1)$ | 121 : $P_{2325} = (4, 0, 8, 1)$ |
| 68 : $P_{1395} = (2, 6, 4, 1)$ | 122 : $P_{2350} = (13, 1, 8, 1)$ |
| 69 : $P_{1403} = (10, 6, 4, 1)$ | 123 : $P_{2360} = (7, 2, 8, 1)$ |
| 70 : $P_{1406} = (13, 6, 4, 1)$ | 124 : $P_{2375} = (6, 3, 8, 1)$ |
| 71 : $P_{1416} = (7, 7, 4, 1)$ | 125 : $P_{2389} = (4, 4, 8, 1)$ |
| 72 : $P_{1426} = (1, 8, 4, 1)$ | 126 : $P_{2407} = (6, 5, 8, 1)$ |
| 73 : $P_{1442} = (1, 9, 4, 1)$ | 127 : $P_{2408} = (7, 5, 8, 1)$ |
| 74 : $P_{1478} = (5, 11, 4, 1)$ | 128 : $P_{2409} = (8, 5, 8, 1)$ |
| 75 : $P_{1486} = (13, 11, 4, 1)$ | 129 : $P_{2432} = (15, 6, 8, 1)$ |
| 76 : $P_{1489} = (0, 12, 4, 1)$ | 130 : $P_{2480} = (15, 9, 8, 1)$ |
| 77 : $P_{1499} = (10, 12, 4, 1)$ | 131 : $P_{2526} = (13, 12, 8, 1)$ |
| 78 : $P_{1504} = (15, 12, 4, 1)$ | 132 : $P_{2537} = (8, 13, 8, 1)$ |
| 79 : $P_{1526} = (5, 14, 4, 1)$ | 133 : $P_{2561} = (0, 15, 8, 1)$ |
| 80 : $P_{1532} = (11, 14, 4, 1)$ | 134 : $P_{2589} = (12, 0, 9, 1)$ |
| 81 : $P_{1551} = (14, 15, 4, 1)$ | 135 : $P_{2595} = (2, 1, 9, 1)$ |
| 82 : $P_{1555} = (2, 0, 5, 1)$ | 136 : $P_{2617} = (8, 2, 9, 1)$ |
| 83 : $P_{1575} = (6, 1, 5, 1)$ | 137 : $P_{2619} = (10, 2, 9, 1)$ |
| 84 : $P_{1587} = (2, 2, 5, 1)$ | 138 : $P_{2627} = (2, 3, 9, 1)$ |
| 85 : $P_{1606} = (5, 3, 5, 1)$ | 139 : $P_{2660} = (3, 5, 9, 1)$ |
| 86 : $P_{1613} = (12, 3, 5, 1)$ | 140 : $P_{2673} = (0, 6, 9, 1)$ |
| 87 : $P_{1614} = (13, 3, 5, 1)$ | 141 : $P_{2676} = (3, 6, 9, 1)$ |
| 88 : $P_{1625} = (8, 4, 5, 1)$ | 142 : $P_{2684} = (11, 6, 9, 1)$ |
| 89 : $P_{1654} = (5, 6, 5, 1)$ | 143 : $P_{2715} = (10, 8, 9, 1)$ |
| 90 : $P_{1671} = (6, 7, 5, 1)$ | 144 : $P_{2725} = (4, 9, 9, 1)$ |
| 91 : $P_{1681} = (0, 8, 5, 1)$ | 145 : $P_{2744} = (7, 10, 9, 1)$ |
| 92 : $P_{1753} = (8, 12, 5, 1)$ | 146 : $P_{2745} = (8, 10, 9, 1)$ |
| 93 : $P_{1790} = (13, 14, 5, 1)$ | 147 : $P_{2781} = (12, 12, 9, 1)$ |
| 94 : $P_{1805} = (12, 15, 5, 1)$ | 148 : $P_{2789} = (4, 13, 9, 1)$ |
| 95 : $P_{1824} = (15, 0, 6, 1)$ | 149 : $P_{2792} = (7, 13, 9, 1)$ |
| 96 : $P_{1828} = (3, 1, 6, 1)$ | 150 : $P_{2796} = (11, 13, 9, 1)$ |
| 97 : $P_{1841} = (0, 2, 6, 1)$ | 151 : $P_{2802} = (1, 14, 9, 1)$ |
| 98 : $P_{1844} = (3, 2, 6, 1)$ | 152 : $P_{2818} = (1, 15, 9, 1)$ |
| 99 : $P_{1845} = (4, 2, 6, 1)$ | 153 : $P_{2871} = (6, 2, 10, 1)$ |
| 100 : $P_{1887} = (14, 4, 6, 1)$ | 154 : $P_{2876} = (11, 2, 10, 1)$ |
| 101 : $P_{1891} = (2, 5, 6, 1)$ | 155 : $P_{2890} = (9, 3, 10, 1)$ |
| 102 : $P_{1909} = (4, 6, 6, 1)$ | 156 : $P_{2903} = (6, 4, 10, 1)$ |
| 103 : $P_{1923} = (2, 7, 6, 1)$ | 157 : $P_{2923} = (10, 5, 10, 1)$ |
| 104 : $P_{1983} = (14, 10, 6, 1)$ | 158 : $P_{2963} = (2, 8, 10, 1)$ |
| 105 : $P_{1991} = (6, 11, 6, 1)$ | 159 : $P_{2984} = (7, 9, 10, 1)$ |
| 106 : $P_{2023} = (6, 13, 6, 1)$ | 160 : $P_{2988} = (11, 9, 10, 1)$ |
| 107 : $P_{2064} = (15, 15, 6, 1)$ | 161 : $P_{2993} = (0, 10, 10, 1)$ |

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| 162 : $P_{2995} = (2, 10, 10, 1)$ | 202 : $P_{3726} = (13, 7, 13, 1)$ |
| 163 : $P_{3002} = (9, 10, 10, 1)$ | 203 : $P_{3733} = (4, 8, 13, 1)$ |
| 164 : $P_{3026} = (1, 12, 10, 1)$ | 204 : $P_{3747} = (2, 9, 13, 1)$ |
| 165 : $P_{3042} = (1, 13, 10, 1)$ | 205 : $P_{3774} = (13, 10, 13, 1)$ |
| 166 : $P_{3064} = (7, 14, 10, 1)$ | 206 : $P_{3779} = (2, 11, 13, 1)$ |
| 167 : $P_{3083} = (10, 15, 10, 1)$ | 207 : $P_{3797} = (4, 12, 13, 1)$ |
| 168 : $P_{3133} = (12, 2, 11, 1)$ | 208 : $P_{3818} = (9, 13, 13, 1)$ |
| 169 : $P_{3148} = (11, 3, 11, 1)$ | 209 : $P_{3863} = (6, 0, 14, 1)$ |
| 170 : $P_{3163} = (10, 4, 11, 1)$ | 210 : $P_{3877} = (4, 1, 14, 1)$ |
| 171 : $P_{3166} = (13, 4, 11, 1)$ | 211 : $P_{3890} = (1, 2, 14, 1)$ |
| 172 : $P_{3183} = (14, 5, 11, 1)$ | 212 : $P_{3906} = (1, 3, 14, 1)$ |
| 173 : $P_{3186} = (1, 6, 11, 1)$ | 213 : $P_{3932} = (11, 4, 14, 1)$ |
| 174 : $P_{3202} = (1, 7, 11, 1)$ | 214 : $P_{3936} = (15, 4, 14, 1)$ |
| 175 : $P_{3228} = (11, 8, 11, 1)$ | 215 : $P_{3941} = (4, 5, 14, 1)$ |
| 176 : $P_{3246} = (13, 9, 11, 1)$ | 216 : $P_{3959} = (6, 6, 14, 1)$ |
| 177 : $P_{3265} = (0, 11, 11, 1)$ | 217 : $P_{3978} = (9, 7, 14, 1)$ |
| 178 : $P_{3269} = (4, 11, 11, 1)$ | 218 : $P_{3979} = (10, 7, 14, 1)$ |
| 179 : $P_{3279} = (14, 11, 11, 1)$ | 219 : $P_{3981} = (12, 7, 14, 1)$ |
| 180 : $P_{3323} = (10, 14, 11, 1)$ | 220 : $P_{3990} = (5, 8, 14, 1)$ |
| 181 : $P_{3325} = (12, 14, 11, 1)$ | 221 : $P_{4045} = (12, 11, 14, 1)$ |
| 182 : $P_{3333} = (4, 15, 11, 1)$ | 222 : $P_{4048} = (15, 11, 14, 1)$ |
| 183 : $P_{3353} = (8, 0, 12, 1)$ | 223 : $P_{4065} = (0, 13, 14, 1)$ |
| 184 : $P_{3376} = (15, 1, 12, 1)$ | 224 : $P_{4070} = (5, 13, 14, 1)$ |
| 185 : $P_{3386} = (9, 2, 12, 1)$ | 225 : $P_{4075} = (10, 13, 14, 1)$ |
| 186 : $P_{3407} = (14, 3, 12, 1)$ | 226 : $P_{4090} = (9, 14, 14, 1)$ |
| 187 : $P_{3453} = (12, 6, 12, 1)$ | 227 : $P_{4108} = (11, 15, 14, 1)$ |
| 188 : $P_{3481} = (8, 8, 12, 1)$ | 228 : $P_{4122} = (9, 0, 15, 1)$ |
| 189 : $P_{3517} = (12, 10, 12, 1)$ | 229 : $P_{4136} = (7, 1, 15, 1)$ |
| 190 : $P_{3530} = (9, 11, 12, 1)$ | 230 : $P_{4161} = (0, 3, 15, 1)$ |
| 191 : $P_{3539} = (2, 12, 12, 1)$ | 231 : $P_{4189} = (12, 4, 15, 1)$ |
| 192 : $P_{3567} = (14, 13, 12, 1)$ | 232 : $P_{4206} = (13, 5, 15, 1)$ |
| 193 : $P_{3569} = (0, 14, 12, 1)$ | 233 : $P_{4216} = (7, 6, 15, 1)$ |
| 194 : $P_{3571} = (2, 14, 12, 1)$ | 234 : $P_{4240} = (15, 7, 15, 1)$ |
| 195 : $P_{3584} = (15, 14, 12, 1)$ | 235 : $P_{4253} = (12, 8, 15, 1)$ |
| 196 : $P_{3604} = (3, 0, 13, 1)$ | 236 : $P_{4254} = (13, 8, 15, 1)$ |
| 197 : $P_{3622} = (5, 1, 13, 1)$ | 237 : $P_{4256} = (15, 8, 15, 1)$ |
| 198 : $P_{3652} = (3, 3, 13, 1)$ | 238 : $P_{4266} = (9, 9, 15, 1)$ |
| 199 : $P_{3665} = (0, 4, 13, 1)$ | 239 : $P_{4324} = (3, 13, 15, 1)$ |
| 200 : $P_{3670} = (5, 4, 13, 1)$ | 240 : $P_{4340} = (3, 14, 15, 1)$ |
| 201 : $P_{3674} = (9, 4, 13, 1)$ | |

Line Intersection Graph

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Neighbor sets in the line intersection graph:

The surface has 241 points:

The points on the surface are:

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|-----------------------------|------------------------------|-------------------------------|
| 0 : $P_1 = (0, 1, 0, 0)$ | 4 : $P_{36} = (1, 1, 1, 0)$ | 8 : $P_{89} = (6, 4, 1, 0)$ |
| 1 : $P_2 = (0, 0, 1, 0)$ | 5 : $P_{57} = (6, 2, 1, 0)$ | 9 : $P_{93} = (10, 4, 1, 0)$ |
| 2 : $P_4 = (1, 1, 1, 1)$ | 6 : $P_{62} = (11, 2, 1, 0)$ | 10 : $P_{96} = (13, 4, 1, 0)$ |
| 3 : $P_{20} = (1, 0, 1, 0)$ | 7 : $P_{63} = (12, 2, 1, 0)$ | 11 : $P_{170} = (7, 9, 1, 0)$ |

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| 12 : $P_{174} = (11, 9, 1, 0)$ | 66 : $P_{1363} = (2, 4, 4, 1)$ | 120 : $P_{2314} = (9, 15, 7, 1)$ |
| 13 : $P_{176} = (13, 9, 1, 0)$ | 67 : $P_{1388} = (11, 5, 4, 1)$ | 121 : $P_{2325} = (4, 0, 8, 1)$ |
| 14 : $P_{250} = (7, 14, 1, 0)$ | 68 : $P_{1395} = (2, 6, 4, 1)$ | 122 : $P_{2350} = (13, 1, 8, 1)$ |
| 15 : $P_{253} = (10, 14, 1, 0)$ | 69 : $P_{1403} = (10, 6, 4, 1)$ | 123 : $P_{2360} = (7, 2, 8, 1)$ |
| 16 : $P_{255} = (12, 14, 1, 0)$ | 70 : $P_{1406} = (13, 6, 4, 1)$ | 124 : $P_{2375} = (6, 3, 8, 1)$ |
| 17 : $P_{531} = (1, 0, 1, 1)$ | 71 : $P_{1416} = (7, 7, 4, 1)$ | 125 : $P_{2389} = (4, 4, 8, 1)$ |
| 18 : $P_{540} = (10, 0, 1, 1)$ | 72 : $P_{1426} = (1, 8, 4, 1)$ | 126 : $P_{2407} = (6, 5, 8, 1)$ |
| 19 : $P_{541} = (11, 0, 1, 1)$ | 73 : $P_{1442} = (1, 9, 4, 1)$ | 127 : $P_{2408} = (7, 5, 8, 1)$ |
| 20 : $P_{546} = (0, 1, 1, 1)$ | 74 : $P_{1478} = (5, 11, 4, 1)$ | 128 : $P_{2409} = (8, 5, 8, 1)$ |
| 21 : $P_{585} = (8, 3, 1, 1)$ | 75 : $P_{1486} = (13, 11, 4, 1)$ | 129 : $P_{2432} = (15, 6, 8, 1)$ |
| 22 : $P_{624} = (15, 5, 1, 1)$ | 76 : $P_{1489} = (0, 12, 4, 1)$ | 130 : $P_{2480} = (15, 9, 8, 1)$ |
| 23 : $P_{660} = (3, 8, 1, 1)$ | 77 : $P_{1499} = (10, 12, 4, 1)$ | 131 : $P_{2526} = (13, 12, 8, 1)$ |
| 24 : $P_{694} = (5, 10, 1, 1)$ | 78 : $P_{1504} = (15, 12, 4, 1)$ | 132 : $P_{2537} = (8, 13, 8, 1)$ |
| 25 : $P_{699} = (10, 10, 1, 1)$ | 79 : $P_{1526} = (5, 14, 4, 1)$ | 133 : $P_{2561} = (0, 15, 8, 1)$ |
| 26 : $P_{704} = (15, 10, 1, 1)$ | 80 : $P_{1532} = (11, 14, 4, 1)$ | 134 : $P_{2589} = (12, 0, 9, 1)$ |
| 27 : $P_{708} = (3, 11, 1, 1)$ | 81 : $P_{1551} = (14, 15, 4, 1)$ | 135 : $P_{2595} = (2, 1, 9, 1)$ |
| 28 : $P_{713} = (8, 11, 1, 1)$ | 82 : $P_{1555} = (2, 0, 5, 1)$ | 136 : $P_{2617} = (8, 2, 9, 1)$ |
| 29 : $P_{716} = (11, 11, 1, 1)$ | 83 : $P_{1575} = (6, 1, 5, 1)$ | 137 : $P_{2619} = (10, 2, 9, 1)$ |
| 30 : $P_{774} = (5, 15, 1, 1)$ | 84 : $P_{1587} = (2, 2, 5, 1)$ | 138 : $P_{2627} = (2, 3, 9, 1)$ |
| 31 : $P_{798} = (13, 0, 2, 1)$ | 85 : $P_{1606} = (5, 3, 5, 1)$ | 139 : $P_{2660} = (3, 5, 9, 1)$ |
| 32 : $P_{810} = (9, 1, 2, 1)$ | 86 : $P_{1613} = (12, 3, 5, 1)$ | 140 : $P_{2673} = (0, 6, 9, 1)$ |
| 33 : $P_{831} = (14, 2, 2, 1)$ | 87 : $P_{1614} = (13, 3, 5, 1)$ | 141 : $P_{2676} = (3, 6, 9, 1)$ |
| 34 : $P_{843} = (10, 3, 2, 1)$ | 88 : $P_{1625} = (8, 4, 5, 1)$ | 142 : $P_{2684} = (11, 6, 9, 1)$ |
| 35 : $P_{850} = (1, 4, 2, 1)$ | 89 : $P_{1654} = (5, 6, 5, 1)$ | 143 : $P_{2715} = (10, 8, 9, 1)$ |
| 36 : $P_{866} = (1, 5, 2, 1)$ | 90 : $P_{1671} = (6, 7, 5, 1)$ | 144 : $P_{2725} = (4, 9, 9, 1)$ |
| 37 : $P_{897} = (0, 7, 2, 1)$ | 91 : $P_{1681} = (0, 8, 5, 1)$ | 145 : $P_{2744} = (7, 10, 9, 1)$ |
| 38 : $P_{905} = (8, 7, 2, 1)$ | 92 : $P_{1753} = (8, 12, 5, 1)$ | 146 : $P_{2745} = (8, 10, 9, 1)$ |
| 39 : $P_{908} = (11, 7, 2, 1)$ | 93 : $P_{1790} = (13, 14, 5, 1)$ | 147 : $P_{2781} = (12, 12, 9, 1)$ |
| 40 : $P_{922} = (9, 8, 2, 1)$ | 94 : $P_{1805} = (12, 15, 5, 1)$ | 148 : $P_{2789} = (4, 13, 9, 1)$ |
| 41 : $P_{932} = (3, 9, 2, 1)$ | 95 : $P_{1824} = (15, 0, 6, 1)$ | 149 : $P_{2792} = (7, 13, 9, 1)$ |
| 42 : $P_{939} = (10, 9, 2, 1)$ | 96 : $P_{1828} = (3, 1, 6, 1)$ | 150 : $P_{2796} = (11, 13, 9, 1)$ |
| 43 : $P_{948} = (3, 10, 2, 1)$ | 97 : $P_{1841} = (0, 2, 6, 1)$ | 151 : $P_{2802} = (1, 14, 9, 1)$ |
| 44 : $P_{951} = (6, 10, 2, 1)$ | 98 : $P_{1844} = (3, 2, 6, 1)$ | 152 : $P_{2818} = (1, 15, 9, 1)$ |
| 45 : $P_{983} = (6, 12, 2, 1)$ | 99 : $P_{1845} = (4, 2, 6, 1)$ | 153 : $P_{2871} = (6, 2, 10, 1)$ |
| 46 : $P_{988} = (11, 12, 2, 1)$ | 100 : $P_{1887} = (14, 4, 6, 1)$ | 154 : $P_{2876} = (11, 2, 10, 1)$ |
| 47 : $P_{991} = (14, 12, 2, 1)$ | 101 : $P_{1891} = (2, 5, 6, 1)$ | 155 : $P_{2890} = (9, 3, 10, 1)$ |
| 48 : $P_{1006} = (13, 13, 2, 1)$ | 102 : $P_{1909} = (4, 6, 6, 1)$ | 156 : $P_{2903} = (6, 4, 10, 1)$ |
| 49 : $P_{1033} = (8, 15, 2, 1)$ | 103 : $P_{1923} = (2, 7, 6, 1)$ | 157 : $P_{2923} = (10, 5, 10, 1)$ |
| 50 : $P_{1055} = (14, 0, 3, 1)$ | 104 : $P_{1983} = (14, 10, 6, 1)$ | 158 : $P_{2963} = (2, 8, 10, 1)$ |
| 51 : $P_{1069} = (12, 1, 3, 1)$ | 105 : $P_{1991} = (6, 11, 6, 1)$ | 159 : $P_{2984} = (7, 9, 10, 1)$ |
| 52 : $P_{1078} = (5, 2, 3, 1)$ | 106 : $P_{2023} = (6, 13, 6, 1)$ | 160 : $P_{2988} = (11, 9, 10, 1)$ |
| 53 : $P_{1121} = (0, 5, 3, 1)$ | 107 : $P_{2064} = (15, 15, 6, 1)$ | 161 : $P_{2993} = (0, 10, 10, 1)$ |
| 54 : $P_{1158} = (5, 7, 3, 1)$ | 108 : $P_{2070} = (5, 0, 7, 1)$ | 162 : $P_{2995} = (2, 10, 10, 1)$ |
| 55 : $P_{1176} = (7, 8, 3, 1)$ | 109 : $P_{2089} = (8, 1, 7, 1)$ | 163 : $P_{3002} = (9, 10, 10, 1)$ |
| 56 : $P_{1191} = (6, 9, 3, 1)$ | 110 : $P_{2150} = (5, 5, 7, 1)$ | 164 : $P_{3026} = (1, 12, 10, 1)$ |
| 57 : $P_{1236} = (3, 12, 3, 1)$ | 111 : $P_{2170} = (9, 6, 7, 1)$ | 165 : $P_{3042} = (1, 13, 10, 1)$ |
| 58 : $P_{1261} = (12, 13, 3, 1)$ | 112 : $P_{2191} = (14, 7, 7, 1)$ | 166 : $P_{3064} = (7, 14, 10, 1)$ |
| 59 : $P_{1279} = (14, 14, 3, 1)$ | 113 : $P_{2209} = (0, 9, 7, 1)$ | 167 : $P_{3083} = (10, 15, 10, 1)$ |
| 60 : $P_{1284} = (3, 15, 3, 1)$ | 114 : $P_{2217} = (8, 9, 7, 1)$ | 168 : $P_{3133} = (12, 2, 11, 1)$ |
| 61 : $P_{1287} = (6, 15, 3, 1)$ | 115 : $P_{2223} = (14, 9, 7, 1)$ | 169 : $P_{3148} = (11, 3, 11, 1)$ |
| 62 : $P_{1288} = (7, 15, 3, 1)$ | 116 : $P_{2229} = (4, 10, 7, 1)$ | 170 : $P_{3163} = (10, 4, 11, 1)$ |
| 63 : $P_{1304} = (7, 0, 4, 1)$ | 117 : $P_{2248} = (7, 11, 7, 1)$ | 171 : $P_{3166} = (13, 4, 11, 1)$ |
| 64 : $P_{1327} = (14, 1, 4, 1)$ | 118 : $P_{2264} = (7, 12, 7, 1)$ | 172 : $P_{3183} = (14, 5, 11, 1)$ |
| 65 : $P_{1360} = (15, 3, 4, 1)$ | 119 : $P_{2293} = (4, 14, 7, 1)$ | 173 : $P_{3186} = (1, 6, 11, 1)$ |

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|------------------------------------|------------------------------------|------------------------------------|
| 174 : $P_{3202} = (1, 7, 11, 1)$ | 197 : $P_{3622} = (5, 1, 13, 1)$ | 220 : $P_{3990} = (5, 8, 14, 1)$ |
| 175 : $P_{3228} = (11, 8, 11, 1)$ | 198 : $P_{3652} = (3, 3, 13, 1)$ | 221 : $P_{4045} = (12, 11, 14, 1)$ |
| 176 : $P_{3246} = (13, 9, 11, 1)$ | 199 : $P_{3665} = (0, 4, 13, 1)$ | 222 : $P_{4048} = (15, 11, 14, 1)$ |
| 177 : $P_{3265} = (0, 11, 11, 1)$ | 200 : $P_{3670} = (5, 4, 13, 1)$ | 223 : $P_{4065} = (0, 13, 14, 1)$ |
| 178 : $P_{3269} = (4, 11, 11, 1)$ | 201 : $P_{3674} = (9, 4, 13, 1)$ | 224 : $P_{4070} = (5, 13, 14, 1)$ |
| 179 : $P_{3279} = (14, 11, 11, 1)$ | 202 : $P_{3726} = (13, 7, 13, 1)$ | 225 : $P_{4075} = (10, 13, 14, 1)$ |
| 180 : $P_{3323} = (10, 14, 11, 1)$ | 203 : $P_{3733} = (4, 8, 13, 1)$ | 226 : $P_{4090} = (9, 14, 14, 1)$ |
| 181 : $P_{3325} = (12, 14, 11, 1)$ | 204 : $P_{3747} = (2, 9, 13, 1)$ | 227 : $P_{4108} = (11, 15, 14, 1)$ |
| 182 : $P_{3333} = (4, 15, 11, 1)$ | 205 : $P_{3774} = (13, 10, 13, 1)$ | 228 : $P_{4122} = (9, 0, 15, 1)$ |
| 183 : $P_{3353} = (8, 0, 12, 1)$ | 206 : $P_{3779} = (2, 11, 13, 1)$ | 229 : $P_{4136} = (7, 1, 15, 1)$ |
| 184 : $P_{3376} = (15, 1, 12, 1)$ | 207 : $P_{3797} = (4, 12, 13, 1)$ | 230 : $P_{4161} = (0, 3, 15, 1)$ |
| 185 : $P_{3386} = (9, 2, 12, 1)$ | 208 : $P_{3818} = (9, 13, 13, 1)$ | 231 : $P_{4189} = (12, 4, 15, 1)$ |
| 186 : $P_{3407} = (14, 3, 12, 1)$ | 209 : $P_{3863} = (6, 0, 14, 1)$ | 232 : $P_{4206} = (13, 5, 15, 1)$ |
| 187 : $P_{3453} = (12, 6, 12, 1)$ | 210 : $P_{3877} = (4, 1, 14, 1)$ | 233 : $P_{4216} = (7, 6, 15, 1)$ |
| 188 : $P_{3481} = (8, 8, 12, 1)$ | 211 : $P_{3890} = (1, 2, 14, 1)$ | 234 : $P_{4240} = (15, 7, 15, 1)$ |
| 189 : $P_{3517} = (12, 10, 12, 1)$ | 212 : $P_{3906} = (1, 3, 14, 1)$ | 235 : $P_{4253} = (12, 8, 15, 1)$ |
| 190 : $P_{3530} = (9, 11, 12, 1)$ | 213 : $P_{3932} = (11, 4, 14, 1)$ | 236 : $P_{4254} = (13, 8, 15, 1)$ |
| 191 : $P_{3539} = (2, 12, 12, 1)$ | 214 : $P_{3936} = (15, 4, 14, 1)$ | 237 : $P_{4256} = (15, 8, 15, 1)$ |
| 192 : $P_{3567} = (14, 13, 12, 1)$ | 215 : $P_{3941} = (4, 5, 14, 1)$ | 238 : $P_{4266} = (9, 9, 15, 1)$ |
| 193 : $P_{3569} = (0, 14, 12, 1)$ | 216 : $P_{3959} = (6, 6, 14, 1)$ | 239 : $P_{4324} = (3, 13, 15, 1)$ |
| 194 : $P_{3571} = (2, 14, 12, 1)$ | 217 : $P_{3978} = (9, 7, 14, 1)$ | 240 : $P_{4340} = (3, 14, 15, 1)$ |
| 195 : $P_{3584} = (15, 14, 12, 1)$ | 218 : $P_{3979} = (10, 7, 14, 1)$ | |
| 196 : $P_{3604} = (3, 0, 13, 1)$ | 219 : $P_{3981} = (12, 7, 14, 1)$ | |