Rank-67117 over GF(16)

January 15, 2021

The equation

The equation of the surface is :

$$X_1^3 + X_3^3 + X_0^2X_2 + X_1^2X_3 + X_0X_2^2 + X_0X_1X_2 = 0$$

(0, 1, 0, 1, 0, 1, 0, 0, 0, 1, 1, 0, 0, 0, 0, 0, 1, 0, 0, 0)
The point rank of the equation over GF(16) is 287383845

General information

Number of lines	0
Number of points	257
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	257
Number of Hesse planes	0
Number of axes	0
Type of points on lines	
Type of lines on points	0^{257}

Singular Points

The surface has 1 singular points:

$0 : \ P_4 = \mathbf{P}(1,1,1,1) = \mathbf{P}(1,1,1,1)$

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 257 points not on any line:
The points on the surface but not on lines are:

$0: P_0 = (1,0,0,0)$
$1: P_2 = (0,0,1,0)$
$2: P_4 = (1,1,1,1)$
$3: P_{20} = (1,0,1,0)$
$4: P_{36} = (1,1,1,0)$
$5: P_{123} = (8,6,1,0)$
$6: P_{130} = (15,6,1,0)$
$7: P_{134} = (3,7,1,0)$
$8: P_{136} = (5,7,1,0)$
$9: P_{182} = (3,10,1,0)$
$10: P_{187} = (8,10,1,0)$
$11: P_{200} = (5,11,1,0)$
$12: P_{210} = (15,11,1,0)$
$13: P_{216} = (5,12,1,0)$
$14: P_{219} = (8,12,1,0)$
$15: P_{230} = (3,13,1,0)$
$16: P_{242} = (15,13,1,0)$
$17: P_{540} = (10,0,1,1)$
$18: P_{541} = (11,0,1,1)$
$19: P_{636} = (11,6,1,1)$
$20: P_{637} = (12,6,1,1)$
$21: P_{652} = (11,7,1,1)$
$22: P_{654} = (13,7,1,1)$
$23: P_{691} = (2,10,1,1)$
$24: P_{698} = (9,10,1,1)$
$25: P_{709} = (4,11,1,1)$
$26: P_{719} = (14,11,1,1)$
$27: P_{728} = (7,12,1,1)$
$28: P_{731} = (10,12,1,1)$
$29: P_{743} = (6,13,1,1)$
$30: P_{747} = (10,13,1,1)$
$31: P_{810} = (9,1,2,1)$
$32: P_{811} = (10,1,2,1)$
$33: P_{828} = (11,2,2,1)$
$34: P_{852} = (3,4,2,1)$
$35: P_{854} = (5,4,2,1)$
$36: P_{873} = (8,5,2,1)$
$37: P_{880} = (15,5,2,1)$
$38: P_{891} = (10,6,2,1)$
$39: P_{895} = (14,6,2,1)$
$40: P_{915} = (2,8,2,1)$
$41: P_{921} = (8,8,2,1)$
$42: P_{946} = (1,10,2,1)$
$43: P_{954} = (9,10,2,1)$
$44: P_{983} = (6,12,2,1)$
$45: P_{985} = (8,12,2,1)$
$46: P_{997} = (4,13,2,1)$
$47: P_{1004} = (11,13,2,1)$
$48: P_{1016} = (7,14,2,1)$
$49: P_{1020} = (11,14,2,1)$
$50: P_{1087} = (14,2,3,1)$
$51: P_{1088} = (15,2,3,1)$
$52: P_{1098} = (9,3,3,1)$
$53: P_{1107} = (2,4,3,1)$

$54: P_{1110} = (5, 4, 3, 1)$
$55: P_{1156} = (3, 7, 3, 1)$
$56: P_{1160} = (7, 7, 3, 1)$
$57: P_{1173} = (4, 8, 3, 1)$
$58: P_{1184} = (15, 8, 3, 1)$
$59: P_{1206} = (5, 10, 3, 1)$
$60: P_{1213} = (12, 10, 3, 1)$
$61: P_{1224} = (7, 11, 3, 1)$
$62: P_{1232} = (15, 11, 3, 1)$
$63: P_{1256} = (7, 13, 3, 1)$
$64: P_{1258} = (9, 13, 3, 1)$
$65: P_{1286} = (5, 15, 3, 1)$
$66: P_{1290} = (9, 15, 3, 1)$
$67: P_{1324} = (11, 1, 4, 1)$
$68: P_{1327} = (14, 1, 4, 1)$
$69: P_{1339} = (10, 2, 4, 1)$
$70: P_{1341} = (12, 2, 4, 1)$
$71: P_{1371} = (10, 4, 4, 1)$
$72: P_{1406} = (13, 6, 4, 1)$
$73: P_{1408} = (15, 6, 4, 1)$
$74: P_{1418} = (9, 7, 4, 1)$
$75: P_{1419} = (10, 7, 4, 1)$
$76: P_{1428} = (3, 8, 4, 1)$
$77: P_{1440} = (15, 8, 4, 1)$
$78: P_{1446} = (5, 9, 4, 1)$
$79: P_{1449} = (8, 9, 4, 1)$
$80: P_{1474} = (1, 11, 4, 1)$
$81: P_{1487} = (14, 11, 4, 1)$
$82: P_{1507} = (2, 13, 4, 1)$
$83: P_{1516} = (11, 13, 4, 1)$
$84: P_{1541} = (4, 15, 4, 1)$
$85: P_{1552} = (15, 15, 4, 1)$
$86: P_{1609} = (8, 3, 5, 1)$
$87: P_{1615} = (14, 3, 5, 1)$
$88: P_{1619} = (2, 4, 5, 1)$
$89: P_{1620} = (3, 4, 5, 1)$
$90: P_{1647} = (14, 5, 5, 1)$
$91: P_{1677} = (12, 7, 5, 1)$
$92: P_{1679} = (14, 7, 5, 1)$
$93: P_{1701} = (4, 9, 5, 1)$
$94: P_{1705} = (8, 9, 5, 1)$
$95: P_{1716} = (3, 10, 5, 1)$
$96: P_{1725} = (12, 10, 5, 1)$
$97: P_{1735} = (6, 11, 5, 1)$
$98: P_{1737} = (8, 11, 5, 1)$
$99: P_{1750} = (5, 12, 5, 1)$
$100: P_{1757} = (12, 12, 5, 1)$
$101: P_{1796} = (3, 15, 5, 1)$
$102: P_{1802} = (9, 15, 5, 1)$
$103: P_{1882} = (9, 4, 6, 1)$
$104: P_{1884} = (11, 4, 6, 1)$
$105: P_{1913} = (8, 6, 6, 1)$
$106: P_{1990} = (5, 11, 6, 1)$
$107: P_{1993} = (8, 11, 6, 1)$
$108: P_{2003} = (2, 12, 6, 1)$
$109: P_{2009} = (8, 12, 6, 1)$
$110: P_{2018} = (1, 13, 6, 1)$
$111: P_{2027} = (10, 13, 6, 1)$
$112: P_{2180} = (3, 7, 7, 1)$
$113: P_{2244} = (3, 11, 7, 1)$
$114: P_{2256} = (15, 11, 7, 1)$
$115: P_{2258} = (1, 12, 7, 1)$
$116: P_{2267} = (10, 12, 7, 1)$
$117: P_{2276} = (3, 13, 7, 1)$
$118: P_{2282} = (9, 13, 7, 1)$
$119: P_{2291} = (2, 14, 7, 1)$
$120: P_{2300} = (11, 14, 7, 1)$
$121: P_{2374} = (5, 3, 8, 1)$
$122: P_{2383} = (14, 3, 8, 1)$
$123: P_{2403} = (2, 5, 8, 1)$
$124: P_{2416} = (15, 5, 8, 1)$
$125: P_{2423} = (6, 6, 8, 1)$
$126: P_{2425} = (8, 6, 8, 1)$
$127: P_{2451} = (2, 8, 8, 1)$
$128: P_{2469} = (4, 9, 8, 1)$
$129: P_{2470} = (5, 9, 8, 1)$
$130: P_{2494} = (13, 10, 8, 1)$
$131: P_{2496} = (15, 10, 8, 1)$
$132: P_{2502} = (5, 11, 8, 1)$
$133: P_{2503} = (6, 11, 8, 1)$
$134: P_{2515} = (2, 12, 8, 1)$
$135: P_{2519} = (6, 12, 8, 1)$
$136: P_{2554} = (9, 14, 8, 1)$
$137: P_{2560} = (15, 14, 8, 1)$
$138: P_{2595} = (2, 1, 9, 1)$
$139: P_{2603} = (10, 1, 9, 1)$
$140: P_{2628} = (3, 3, 9, 1)$
$141: P_{2634} = (9, 3, 9, 1)$
$142: P_{2647} = (6, 4, 9, 1)$
$143: P_{2652} = (11, 4, 9, 1)$
$144: P_{2693} = (4, 7, 9, 1)$
$145: P_{2699} = (10, 7, 9, 1)$
$146: P_{2732} = (11, 9, 9, 1)$
$147: P_{2738} = (1, 10, 9, 1)$
$148: P_{2739} = (2, 10, 9, 1)$
$149: P_{2780} = (11, 12, 9, 1)$
$150: P_{2783} = (14, 12, 9, 1)$
$151: P_{2788} = (3, 13, 9, 1)$
$152: P_{2792} = (7, 13, 9, 1)$
$153: P_{2809} = (8, 14, 9, 1)$
$154: P_{2816} = (15, 14, 9, 1)$
$155: P_{2820} = (3, 15, 9, 1)$
$156: P_{2822} = (5, 15, 9, 1)$
$157: P_{2834} = (1, 0, 10, 1)$
$158: P_{2844} = (11, 0, 10, 1)$
$159: P_{2851} = (2, 1, 10, 1)$
$160: P_{2858} = (9, 1, 10, 1)$
$161: P_{2869} = (4, 2, 10, 1)$

$162: P_{2877} = (12, 2, 10, 1)$
$163: P_{2901} = (4, 4, 10, 1)$
$164: P_{2907} = (10, 4, 10, 1)$
$165: P_{2931} = (2, 6, 10, 1)$
$166: P_{2943} = (14, 6, 10, 1)$
$167: P_{2949} = (4, 7, 10, 1)$
$168: P_{2954} = (9, 7, 10, 1)$
$169: P_{2990} = (13, 9, 10, 1)$
$170: P_{2991} = (14, 9, 10, 1)$
$171: P_{3004} = (11, 10, 10, 1)$
$172: P_{3019} = (10, 11, 10, 1)$
$173: P_{3020} = (11, 11, 10, 1)$
$174: P_{3026} = (1, 12, 10, 1)$
$175: P_{3032} = (7, 12, 10, 1)$
$176: P_{3042} = (1, 13, 10, 1)$
$177: P_{3047} = (6, 13, 10, 1)$
$178: P_{3067} = (10, 14, 10, 1)$
$179: P_{3071} = (14, 14, 10, 1)$
$180: P_{3090} = (1, 0, 11, 1)$
$181: P_{3099} = (10, 0, 11, 1)$
$182: P_{3109} = (4, 1, 11, 1)$
$183: P_{3119} = (14, 1, 11, 1)$
$184: P_{3123} = (2, 2, 11, 1)$
$185: P_{3132} = (11, 2, 11, 1)$
$186: P_{3159} = (6, 4, 11, 1)$
$187: P_{3162} = (9, 4, 11, 1)$
$188: P_{3186} = (1, 6, 11, 1)$
$189: P_{3197} = (12, 6, 11, 1)$
$190: P_{3202} = (1, 7, 11, 1)$
$191: P_{3214} = (13, 7, 11, 1)$
$192: P_{3242} = (9, 9, 11, 1)$
$193: P_{3244} = (11, 9, 11, 1)$
$194: P_{3259} = (10, 10, 11, 1)$
$195: P_{3260} = (11, 10, 11, 1)$
$196: P_{3275} = (10, 11, 11, 1)$
$197: P_{3290} = (9, 12, 11, 1)$
$198: P_{3295} = (14, 12, 11, 1)$
$199: P_{3299} = (2, 13, 11, 1)$
$200: P_{3301} = (4, 13, 11, 1)$
$201: P_{3315} = (2, 14, 11, 1)$
$202: P_{3320} = (7, 14, 11, 1)$
$203: P_{3381} = (4, 2, 12, 1)$
$204: P_{3387} = (10, 2, 12, 1)$
$205: P_{3442} = (1, 6, 12, 1)$
$206: P_{3452} = (11, 6, 12, 1)$
$207: P_{3462} = (5, 7, 12, 1)$
$208: P_{3471} = (14, 7, 12, 1)$
$209: P_{3508} = (3, 10, 12, 1)$
$210: P_{3510} = (5, 10, 12, 1)$
$211: P_{3542} = (5, 12, 12, 1)$
$212: P_{3701} = (4, 6, 13, 1)$
$213: P_{3712} = (15, 6, 13, 1)$
$214: P_{3714} = (1, 7, 13, 1)$
$215: P_{3724} = (11, 7, 13, 1)$
$216: P_{3755} = (10, 9, 13, 1)$
$217: P_{3759} = (14, 9, 13, 1)$
$218: P_{3769} = (8, 10, 13, 1)$
$219: P_{3776} = (15, 10, 13, 1)$
$220: P_{3824} = (15, 13, 13, 1)$
$221: P_{3877} = (4, 1, 14, 1)$
$222: P_{3884} = (11, 1, 14, 1)$
$223: P_{3892} = (3, 2, 14, 1)$
$224: P_{3904} = (15, 2, 14, 1)$
$225: P_{3910} = (5, 3, 14, 1)$
$226: P_{3913} = (8, 3, 14, 1)$
$227: P_{3942} = (5, 5, 14, 1)$
$228: P_{3951} = (14, 5, 14, 1)$
$229: P_{3955} = (2, 6, 14, 1)$
$230: P_{3963} = (10, 6, 14, 1)$
$231: P_{3974} = (5, 7, 14, 1)$
$232: P_{3981} = (12, 7, 14, 1)$
$233: P_{4011} = (10, 9, 14, 1)$
$234: P_{4014} = (13, 9, 14, 1)$
$235: P_{4034} = (1, 11, 14, 1)$
$236: P_{4037} = (4, 11, 14, 1)$
$237: P_{4058} = (9, 12, 14, 1)$
$238: P_{4060} = (11, 12, 14, 1)$
$239: P_{4091} = (10, 14, 14, 1)$
$240: P_{4148} = (3, 2, 15, 1)$
$241: P_{4159} = (14, 2, 15, 1)$
$242: P_{4195} = (2, 5, 15, 1)$
$243: P_{4201} = (8, 5, 15, 1)$
$244: P_{4213} = (4, 6, 15, 1)$
$245: P_{4222} = (13, 6, 15, 1)$
$246: P_{4244} = (3, 8, 15, 1)$
$247: P_{4245} = (4, 8, 15, 1)$
$248: P_{4281} = (8, 10, 15, 1)$
$249: P_{4286} = (13, 10, 15, 1)$
$250: P_{4292} = (3, 11, 15, 1)$
$251: P_{4296} = (7, 11, 15, 1)$
$252: P_{4334} = (13, 13, 15, 1)$
$253: P_{4336} = (15, 13, 15, 1)$
$254: P_{4345} = (8, 14, 15, 1)$
$255: P_{4346} = (9, 14, 15, 1)$
$256: P_{4357} = (4, 15, 15, 1)$

Line Intersection Graph

Neighbor sets in the line intersection graph:
The surface has 257 points:

The points on the surface are:

$0: P_0 = (1,0,0,0)$
$1: P_2 = (0,0,1,0)$
$2: P_4 = (1,1,1,1)$
$3: P_{20} = (1,0,1,0)$
$4: P_{36} = (1,1,1,0)$
$5: P_{123} = (8,6,1,0)$
$6: P_{130} = (15,6,1,0)$
$7: P_{134} = (3,7,1,0)$
$8: P_{136} = (5,7,1,0)$
$9: P_{182} = (3,10,1,0)$
$10: P_{187} = (8,10,1,0)$
$11: P_{200} = (5,11,1,0)$
$12: P_{210} = (15,11,1,0)$
$13: P_{216} = (5,12,1,0)$
$14: P_{219} = (8,12,1,0)$
$15: P_{230} = (3,13,1,0)$
$16: P_{242} = (15,13,1,0)$
$17: P_{540} = (10,0,1,1)$
$18: P_{541} = (11,0,1,1)$
$19: P_{636} = (11,6,1,1)$
$20: P_{637} = (12,6,1,1)$
$21: P_{652} = (11,7,1,1)$
$22: P_{654} = (13,7,1,1)$
$23: P_{691} = (2,10,1,1)$
$24: P_{698} = (9,10,1,1)$
$25: P_{709} = (4,11,1,1)$
$26: P_{719} = (14,11,1,1)$
$27: P_{728} = (7,12,1,1)$
$28: P_{731} = (10,12,1,1)$
$29: P_{743} = (6,13,1,1)$
$30: P_{747} = (10,13,1,1)$
$31: P_{810} = (9,1,2,1)$
$32: P_{811} = (10,1,2,1)$
$33: P_{828} = (11,2,2,1)$
$34: P_{852} = (3,4,2,1)$
$35: P_{854} = (5,4,2,1)$
$36: P_{873} = (8,5,2,1)$
$37: P_{880} = (15,5,2,1)$
$38: P_{891} = (10,6,2,1)$
$39: P_{895} = (14,6,2,1)$
$40: P_{915} = (2,8,2,1)$
$41: P_{921} = (8,8,2,1)$
$42: P_{946} = (1,10,2,1)$
$43: P_{954} = (9,10,2,1)$
$44: P_{983} = (6,12,2,1)$
$45: P_{985} = (8,12,2,1)$
$46: P_{997} = (4,13,2,1)$
$47: P_{1004} = (11,13,2,1)$
$48: P_{1016} = (7,14,2,1)$
$49: P_{1020} = (11,14,2,1)$
$50: P_{1087} = (14,2,3,1)$
$51: P_{1088} = (15,2,3,1)$
$52: P_{1098} = (9,3,3,1)$
$53: P_{1107} = (2,4,3,1)$
$54: P_{1110} = (5,4,3,1)$
$55: P_{1156} = (3,7,3,1)$
$56: P_{1160} = (7,7,3,1)$
$57: P_{1173} = (4,8,3,1)$
$58: P_{1184} = (15,8,3,1)$
$59: P_{1206} = (5,10,3,1)$
$60: P_{1213} = (12,10,3,1)$
$61: P_{1224} = (7,11,3,1)$
$62: P_{1232} = (15,11,3,1)$
$63: P_{1256} = (7,13,3,1)$
$64: P_{1258} = (9,13,3,1)$
$65: P_{1286} = (5,15,3,1)$
$66: P_{1290} = (9,15,3,1)$
$67: P_{1324} = (11,1,4,1)$
$68: P_{1327} = (14,1,4,1)$
$69: P_{1339} = (10,2,4,1)$
$70: P_{1341} = (12,2,4,1)$
$71: P_{1371} = (10,4,4,1)$
$72: P_{1406} = (13,6,4,1)$
$73: P_{1408} = (15,6,4,1)$
$74: P_{1418} = (9,7,4,1)$
$75: P_{1419} = (10,7,4,1)$
$76: P_{1428} = (3,8,4,1)$
$77: P_{1440} = (15,8,4,1)$
$78: P_{1446} = (5,9,4,1)$
$79: P_{1449} = (8,9,4,1)$
$80: P_{1474} = (1,11,4,1)$
$81: P_{1487} = (14,11,4,1)$
$82: P_{1507} = (2,13,4,1)$
$83: P_{1516} = (11,13,4,1)$
$84: P_{1541} = (4,15,4,1)$
$85: P_{1552} = (15,15,4,1)$
$86: P_{1609} = (8,3,5,1)$
$87: P_{1615} = (14,3,5,1)$
$88: P_{1619} = (2,4,5,1)$
$89: P_{1620} = (3,4,5,1)$
$90: P_{1647} = (14,5,5,1)$
$91: P_{1677} = (12,7,5,1)$
$92: P_{1679} = (14,7,5,1)$
$93: P_{1701} = (4,9,5,1)$
$94: P_{1705} = (8,9,5,1)$
$95: P_{1716} = (3,10,5,1)$
$96: P_{1725} = (12,10,5,1)$
$97: P_{1735} = (6,11,5,1)$
$98: P_{1737} = (8,11,5,1)$
$99: P_{1750} = (5,12,5,1)$
$100: P_{1757} = (12,12,5,1)$
$101: P_{1796} = (3,15,5,1)$
$102: P_{1802} = (9,15,5,1)$
$103: P_{1882} = (9,4,6,1)$
$104: P_{1884} = (11,4,6,1)$
$105: P_{1913} = (8,6,6,1)$
$106: P_{1990} = (5,11,6,1)$
$107: P_{1993} = (8,11,6,1)$
$108: P_{2003} = (2,12,6,1)$
$109: P_{2009} = (8,12,6,1)$
$110: P_{2018} = (1,13,6,1)$
$111: P_{2027} = (10,13,6,1)$
$112: P_{2180} = (3,7,7,1)$
$113: P_{2244} = (3,11,7,1)$
$114: P_{2256} = (15,11,7,1)$
$115: P_{2258} = (1,12,7,1)$
$116: P_{2267} = (10,12,7,1)$
$117: P_{2276} = (3,13,7,1)$
$118: P_{2282} = (9,13,7,1)$
$119: P_{2291} = (2,14,7,1)$
$120: P_{2300} = (11,14,7,1)$
$121: P_{2374} = (5,3,8,1)$
$122: P_{2383} = (14,3,8,1)$
$123: P_{2403} = (2,5,8,1)$
$124: P_{2416} = (15,5,8,1)$
$125: P_{2423} = (6,6,8,1)$
$126: P_{2425} = (8,6,8,1)$
$127: P_{2451} = (2,8,8,1)$
$128: P_{2469} = (4,9,8,1)$
$129: P_{2470} = (5,9,8,1)$
$130: P_{2494} = (13,10,8,1)$
$131: P_{2496} = (15,10,8,1)$
$132: P_{2502} = (5,11,8,1)$
$133: P_{2503} = (6,11,8,1)$
$134: P_{2515} = (2,12,8,1)$
$135: P_{2519} = (6,12,8,1)$
$136: P_{2554} = (9,14,8,1)$
$137: P_{2560} = (15,14,8,1)$
$138: P_{2595} = (2,1,9,1)$
$139: P_{2603} = (10,1,9,1)$
$140: P_{2628} = (3,3,9,1)$
$141: P_{2634} = (9,3,9,1)$
$142: P_{2647} = (6,4,9,1)$
$143: P_{2652} = (11,4,9,1)$
$144: P_{2693} = (4,7,9,1)$
$145: P_{2699} = (10,7,9,1)$
$146: P_{2732} = (11,9,9,1)$
$147: P_{2738} = (1,10,9,1)$
$148: P_{2739} = (2,10,9,1)$
$149: P_{2780} = (11,12,9,1)$
$150: P_{2783} = (14,12,9,1)$
$151: P_{2788} = (3,13,9,1)$
$152: P_{2792} = (7,13,9,1)$

153 : $P_{2809} = (8, 14, 9, 1)$
154 : $P_{2816} = (15, 14, 9, 1)$
155 : $P_{2820} = (3, 15, 9, 1)$
156 : $P_{2822} = (5, 15, 9, 1)$
157 : $P_{2834} = (1, 0, 10, 1)$
158 : $P_{2844} = (11, 0, 10, 1)$
159 : $P_{2851} = (2, 1, 10, 1)$
160 : $P_{2858} = (9, 1, 10, 1)$
161 : $P_{2869} = (4, 2, 10, 1)$
162 : $P_{2877} = (12, 2, 10, 1)$
163 : $P_{2901} = (4, 4, 10, 1)$
164 : $P_{2907} = (10, 4, 10, 1)$
165 : $P_{2931} = (2, 6, 10, 1)$
166 : $P_{2943} = (14, 6, 10, 1)$
167 : $P_{2949} = (4, 7, 10, 1)$
168 : $P_{2954} = (9, 7, 10, 1)$
169 : $P_{2990} = (13, 9, 10, 1)$
170 : $P_{2991} = (14, 9, 10, 1)$
171 : $P_{3004} = (11, 10, 10, 1)$
172 : $P_{3019} = (10, 11, 10, 1)$
173 : $P_{3020} = (11, 11, 10, 1)$
174 : $P_{3026} = (1, 12, 10, 1)$
175 : $P_{3032} = (7, 12, 10, 1)$
176 : $P_{3042} = (1, 13, 10, 1)$
177 : $P_{3047} = (6, 13, 10, 1)$
178 : $P_{3067} = (10, 14, 10, 1)$
179 : $P_{3071} = (14, 14, 10, 1)$
180 : $P_{3090} = (1, 0, 11, 1)$
181 : $P_{3099} = (10, 0, 11, 1)$
182 : $P_{3109} = (4, 1, 11, 1)$
183 : $P_{3119} = (14, 1, 11, 1)$
184 : $P_{3123} = (2, 2, 11, 1)$
185 : $P_{3132} = (11, 2, 11, 1)$
186 : $P_{3159} = (6, 4, 11, 1)$
187 : $P_{3162} = (9, 4, 11, 1)$
188 : $P_{3186} = (1, 6, 11, 1)$
189 : $P_{3197} = (12, 6, 11, 1)$
190 : $P_{3202} = (1, 7, 11, 1)$
191 : $P_{3214} = (13, 7, 11, 1)$
192 : $P_{3242} = (9, 9, 11, 1)$
193 : $P_{3244} = (11, 9, 11, 1)$
194 : $P_{3259} = (10, 10, 11, 1)$
195 : $P_{3260} = (11, 10, 11, 1)$
196 : $P_{3275} = (10, 11, 11, 1)$
197 : $P_{3290} = (9, 12, 11, 1)$
198 : $P_{3295} = (14, 12, 11, 1)$
199 : $P_{3299} = (2, 13, 11, 1)$
200 : $P_{3301} = (4, 13, 11, 1)$
201 : $P_{3315} = (2, 14, 11, 1)$
202 : $P_{3320} = (7, 14, 11, 1)$
203 : $P_{3381} = (4, 2, 12, 1)$
204 : $P_{3387} = (10, 2, 12, 1)$
205 : $P_{3442} = (1, 6, 12, 1)$
206 : $P_{3452} = (11, 6, 12, 1)$
207 : $P_{3462} = (5, 7, 12, 1)$
208 : $P_{3471} = (14, 7, 12, 1)$
209 : $P_{3508} = (3, 10, 12, 1)$
210 : $P_{3510} = (5, 10, 12, 1)$
211 : $P_{3542} = (5, 12, 12, 1)$
212 : $P_{3701} = (4, 6, 13, 1)$
213 : $P_{3712} = (15, 6, 13, 1)$
214 : $P_{3714} = (1, 7, 13, 1)$
215 : $P_{3724} = (11, 7, 13, 1)$
216 : $P_{3755} = (10, 9, 13, 1)$
217 : $P_{3759} = (14, 9, 13, 1)$
218 : $P_{3769} = (8, 10, 13, 1)$
219 : $P_{3776} = (15, 10, 13, 1)$
220 : $P_{3824} = (15, 13, 13, 1)$
221 : $P_{3877} = (4, 1, 14, 1)$
222 : $P_{3884} = (11, 1, 14, 1)$
223 : $P_{3892} = (3, 2, 14, 1)$
224 : $P_{3904} = (15, 2, 14, 1)$
225 : $P_{3910} = (5, 3, 14, 1)$
226 : $P_{3913} = (8, 3, 14, 1)$
227 : $P_{3942} = (5, 5, 14, 1)$
228 : $P_{3951} = (14, 5, 14, 1)$
229 : $P_{3955} = (2, 6, 14, 1)$
230 : $P_{3963} = (10, 6, 14, 1)$
231 : $P_{3974} = (5, 7, 14, 1)$
232 : $P_{3981} = (12, 7, 14, 1)$
233 : $P_{4011} = (10, 9, 14, 1)$
234 : $P_{4014} = (13, 9, 14, 1)$
235 : $P_{4034} = (1, 11, 14, 1)$
236 : $P_{4037} = (4, 11, 14, 1)$
237 : $P_{4058} = (9, 12, 14, 1)$
238 : $P_{4060} = (11, 12, 14, 1)$
239 : $P_{4091} = (10, 14, 14, 1)$
240 : $P_{4148} = (3, 2, 15, 1)$
241 : $P_{4159} = (14, 2, 15, 1)$
242 : $P_{4195} = (2, 5, 15, 1)$
243 : $P_{4201} = (8, 5, 15, 1)$
244 : $P_{4213} = (4, 6, 15, 1)$
245 : $P_{4222} = (13, 6, 15, 1)$
246 : $P_{4244} = (3, 8, 15, 1)$
247 : $P_{4245} = (4, 8, 15, 1)$
248 : $P_{4281} = (8, 10, 15, 1)$
249 : $P_{4286} = (13, 10, 15, 1)$
250 : $P_{4292} = (3, 11, 15, 1)$
251 : $P_{4296} = (7, 11, 15, 1)$
252 : $P_{4334} = (13, 13, 15, 1)$
253 : $P_{4336} = (15, 13, 15, 1)$
254 : $P_{4345} = (8, 14, 15, 1)$
255 : $P_{4346} = (9, 14, 15, 1)$
256 : $P_{4357} = (4, 15, 15, 1)$