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Supplement to A New Lower Bound for Odd Perfect Numbers

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Notation:

N is an odd perfect number (if one exists) and p a prime.

p^k => s means that s = sigma(p^k) or sigma(p^k)/2  and p^k || N implies s | N.

B1 is integer part of log10 (lower bound on N if p^k || N), using LCM and factors of sigma(p^k) shown.

B2 is integer part of log10 (p^2k), so 10^B2 is a lower bound on N if p^k | N.

B3 is integer part of log10 (lower bound on N valid at this point in the proof tree).

D means sigma(p^k) has a divisor which has already been considered.

S means sigma(N) > 2N; worst-case relevant factors of N follow.

n means a number (prime or composite) used in bound only via LCM.

p# means a prime of # decimal digits, equal to 1 mod 4,
  defined by division or the same as on the previous line.

P# means a prime of # decimal digits, equal to 3 mod 4.
  defined by division or the same as on the previous line.

q^m means prime at beginning of line to power m.

... means a number which is irrelevant to the proof.

Factors given explicitly are prime.

 1:    127^2 => 3.5419,  B1 12
 2:      5419^2 => 3.31.313.1009,  B1 23
 3:        1009^1 => 5.101,  B1 29
 4:          101^2 => 10303,  B1 37
 5:            10303^2 => 3.5827.60/3,  B1 53
 6:              6073^2 => 3.7...,  S 3^4.5^2.7^2
 7:              6073^4 => 61.1909811.11677891,  B1 90
 8:                11677891^2 => 3.31.73.97...,  S 3^4.5^2.31^2.61^2.73^2.97^2.101^2
 9:                11677891^4 => 5.11...,  S 3^4.5^2.11^2
10:                11677891^6 => 7...,  S 3^4.5^2.7^2
11:                11677891^10 => 23...,  S 3^4.5^2.23^2.31^2
12:                11677891^12,  B2 169
13:              6073^6 => 239.2591.P17,  B1 113
14:                81026278242304207^2 => 3.5281.P30,  B1 180
15:                81026278242304207^4 => 281.n,  B1 217;  q^6, B2 202
17:              6073^10 => 11...,  S 3^4.5^2.11^2
18:              6073^12 => 280099.1910331582415162583.p22,  B1 181
19:              6073^16 => n,  B1 166
20:              6073^18 => n,  B1 181;  q^22, B2 166
22:            10303^4 => 30241.p12,  B1 77
23:              372649725281^2 => 457.631964743.p12,  B1 123
24:                480831112093^2 => 3.13812131371.P13,  B1 170
25:                480831112093^4 => 31.n,  B1 192;  q^6, B3 170
27:              372649725281^4 => 5.11...,  S 3^2.5^2.11^2.31^2
28:              372649725281^6 => 7...,  S 3^2.5^2.7^2
29:              372649725281^10,  B2 231
30:            10303^6 => 127.2087122493.P13,  B1 97
31:              4513076485163^2 => 19^2.1033.7581127.P13,  B1 145
32:                7204504086883^2 => 3...,  S 3^4.5^2.19^2.31^2
33:                7204504086883^4,  B3 170
34:              4513076485163^4 => 11...,  S 3^2.5^2.11^2.31^2
35:              4513076485163^6 => 7...,  S 3^2.5^2.7^2
36:              4513076485163^10,  B2 253
37:            10303^10 => 1738389269.p31,  B1 149
38:              p31^2 => 3.271.n,  B1 214;  q^4, B2 247
40:            10303^12 => p49,  B1 173
41:            10303^16 => 17...,  S 3^2.5^2.17^2.31^2.101^2.127^2
42:            10303^18 => 191.761.n,  B1 178;  q^22, B2 176
44:          101^4 => 5.31.491.1381,  B1 44
45:            1381^2 => 3.7...,  S 3^4.5^2.7^2
46:            1381^4 => 5.811.1091.822761,  B1 76
47:              822761^2 => 7...,  S 3^2.5^4.7^2
48:              822761^4 => 5.11...,  S 3^2.5^4.11^2.31^2
49:              822761^6 => 87332057.231473537.P20,  B1 170
50:              822761^10 => 89.n,  B1 184
51:              822761^12 => 53.911.n,  B1 210;  q^16, B2 189
53:            1381^6 => 71.2087.P14,  B1 94
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54:          4684851[illegible]^2 => 3.13...,  S 3^4.5^2.13^2
55:          4684851[illegible]^4 => 5.11...,  S 3^2.5^4.11^2.31^2
56:          4684851[illegible]^6,  B2 164
57:        1381^10 => [illegible]1.31560079.P17,  B1 132
58:          8205693[illegible]659^2 => 73.n,  B1 168;  q^4, B3 166
60:        1381^12 => [illegible].P16,  B1 151
61:          P36^2 => [illegible],  S 3^4.5^2.7^2
62:          P36^4, [illegible]
63:        1381^16 => [illegible]0341.92280174781948790 9.p23,  B1 189
64:        1381^18 => [illegible]P52,  B1 207
65:        1381^22 => [illegible],  S 3^2.5^2.23^2.31^2.47^2.101^4.127^2
66:        1381^28,  [illegible]
67:      101^6 => 71 [illegible],  B1 61
68:        1510049791^2 => P21,  B1 101
69:          2280250373564218368 07^2 => 3.13...,  S 3^4.5^2.13^2
70:          2280250373564218368 07^4,  B2 162
71:        15100497917^4 => 41.131.12671.83827171.P25,  B1 162
72:        15100497917^6 => 7...,  S 3^2.5^2.7^2
73:        15100497917^10,  B2 203
74:      101^10 => 23.1876403.P13,  B1 85
75:        2585122674619^2 => 3.7...,  S 3^4.5^2.7^2
76:        2585122674619^4 => 71...,  S 3^2.5^2.23^2.31^2.71^2.101^10.127^2.313^2
77:        2585122674619^6 => 197.n,  B1 211;  q^10, B2 248
79:      101^12 => 79.157.521.60919.p13,  B1 97
80:        2891083442729^2 => 73.13435141.P16,  B1 147
81:          852228716949984 7^2 => 3.7...,  S 3^4.5^2.7^2
82:          852228716949984 7^4,  B3 178
83:        2891083442729^4 => 11.31...,  S 3^2.5^2.11^2.31^2
84:        2891083442729^6 => 421.n,  B1 224;  q^10, B2 249
86:      101^16 => 239.40162093.P23,  B1 121
87:        1233812358044279747257 1^2 => n,  B1 165;  q^4, B2 176
89:      101^18 => 7069.180898282603783 7.P17,  B1 133
90:        9447429862226762 3^2 => 37.n,  B1 168;  q^4, B3 167
92:      101^22 => 47.p43,  B1 157
93:        p43^2,  B2 169
94:      101^28 => 108247113022313 07209.p38,  B1 193
95:      101^30 => 26041.184087221748933.7045802622790 4971.p25,  B1 205
96:      101^36 => n,  B1 169;  q^40, B2 160
98:    1009^2 => 3.37.9181,  B1 34
99:      918[illegible] => 45[illegible],  B1 41
100:       45[illegible] => [illegible]7.5313,  B1 51
101:         [illegible]2780923,  B1 70
102:           [illegible].9.p12,  B1 95
103:             [illegible] => 3.1321.23011.P15,  B1 139
104:               [illegible]847^2 => 3.13.n,  B1 169;  q^4, B3 168
106:             [illegible] => 11.101.n,  B1 165
107:             [illegible] => n,  B1 206;  q^10, B2 222
109:         [illegible] => [illegible]9407336891.P15,  B1 134
110:             [illegible]1^2 => 67.n,  B1 165;  q^4, B3 163
112:         [illegible] => [illegible].127.9857.3641611.10275301.p17,  B1 169
113:         [illegible] => [illegible].n,  B1 187
114:         [illegible] => 5[illegible].n,  B1 213;  q^16, B2 206
116:         [illegible].3191.46411.22926121,  B1 98
117:         [illegible] => [illegible].699157.250590853,  B1 128
118:             [illegible] => 3.7...,  S 3^6.7^2.11^2.31^2.37^2
119:             [illegible] => n,  B1 178;  q^6, B3 161
121:         [illegible] => 5.11^2...,  S 3^4.5^2.11^4
122:         [illegible] => 7...,  S 3^4.7^2.11^2.31^2.37^2
123:         [illegible] => 661.n,  B1 234;  q^12, B2 176
125:       55[illegible] => 43.[illegible].135913.141667.P14,  B1 127
126:         [illegible]^2 => 19.185167.49722523.P14,  B1 182
127:         [illegible]^4 => 11.701.n,  B1 213;  q^6, B3 182
129:       55[illegible] => 23.89.[illegible]447444661.p33,  B1 184
130:       [illegible].1358338049641.68513407781460409.p20,  B1 212
131:       [illegible] => [illegible] n,  B1 198;  q^18, B2 170
133:       45[illegible] => [illegible]^4.5^2.11^2
134:       459[illegible] => [illegible]^4,  B1 100
135:         [illegible] => 3.19.486583.P20,  B1 154
136:             [illegible]97^2 => 3.7...,  S 3^4.7^2.13^2.19^2.31^2
137:             [illegible]7^4,  B3 192
138:         [illegible] => [illegible]1.271.401.n,  B1 188;  q^6, B2 162
140:       45[illegible] => [illegible].30701466148519.p14,  B1 144
141:         [illegible]7.19.n,  B1 173;  q^4, B3 172
143:         [illegible].p42,  B1 166
144:         [illegible].1021.9558012330002962051552 33.p31,  B1 210
145:         [illegible].n,  B1 169;  q^22, B2 161
147:       918[illegible].13.31...,  S 3^4.7^2.13.31^2.37^2.127^2
148:       918[illegible].1.P12,  B1 75
149:         [illegible] => 3.733.P19,  B1 118
150:           [illegible]02188847^2 => 3.34807.2729983.33567189193.P16,  B1 186
151:           [illegible]02188847^4 => n,  B1 231;  q^6, B2 226
153:         [illegible] => 5.181.16381.4874056251580811.P22,  B1 183
154:         [illegible] => n,  B1 186;  q^10, B2 221
156:       918[illegible]431.15251867.P11,  B1 99
157:       [illegible] => 3.541.25981.46153.204245563,  B1 137
158:         [illegible] => 3.7.97.373.n,  B1 160
159:         [illegible] => 11.71.n,  B1 190;  q^6, B3 170
161:         [illegible] => 11.41.n,  B1 163
162:         [illegible] => 7.127.n,  B1 201;  q^10, B2 205
164:       918[illegible]5471.2813416783.p24,  B1 126
165:         [illegible]623747784 9^1 => 3.5^2.7^2...,  S 3^4.5^2.7^2
166:         [illegible]623747784 9^2 => 13.n,  B1 194;  q^4, B3 193
168:       918[illegible]21.241229.21901130430567.P25,  B1 167
169:       918[illegible]3.953.n,  B1 160
170:       918[illegible]1 170;  q^22, B2 174
172:     1009^4 => [illegible],  B1 44
173:       101[illegible] => 3.p12,  B1 68
174:         [illegible] => 3.13.167017549.p13,  B1 112
175:         [illegible]7^2 => 3.3523057633.p16,  B1 162
176:         [illegible]7^4 => 71.191.211.n,  B1 194;  q^6, B3 162
178:         [illegible] => 11.61.1238551.3406226843468 7011.P20,  B1 180
179:         [illegible] => 7.n,  B1 181;  q^10, B2 224
181:       103[illegible] => 727.1399.8269.P15,  B1 100
182:         [illegible]39^2 => 3.43.61.109^2.373.50062963.9383676751,  B1 153
183:         [illegible] => 3.n,  B1 172;  q^4, B3 173
185:         [illegible]39^4 => n,  B1 185;  q^6, B2 169
187:       103[illegible]^4 => 5.331.1001748481.8534349138335561.P20,  B1 160
188:       101[illegible] => n,  B1 174;  q^10, B2 240
190:     1009^6 => [illegible]297.1024823381,  B1 65
191:       102[illegible] => 3.11...,  S 3^4.7^2.11^2.29^2.31^2
192:       102[illegible] 37987.p14,  B1 97
193:         [illegible]^1 => 5...,  S 3^2.5^2.7^2
194:         [illegible]^2 => 3.7.112927.8845231.P14,  B1 156
195:           [illegible]4643^2 => 3.61.n,  B1 184;  q^4, B3 183
197:         [illegible]^4 => 11.41...,  S 3^2.7^2.11^2.29.31^2.41^2
198:         [illegible]^6,  B2 161
199:       102[illegible] 5...,  S 3^2.5.7^2
200:       102[illegible] 7.1471.4271.884081512427.P35,  B1 210;  q^10, B2 180
202:     1009[illegible]47193.16441151.p14,  B1 97
203:       232[illegible] => 3.19.43.10987.431203,  B1 123
204:         41[illegible].P11,  B1 145
205:         [illegible]9471^2 => 3.7.n,  B1 167;  q^4, B3 166
207:         41[illegible]4 => 11.58411.p17,  B1 179
208:         41[illegible] => 71.n,  B1 181;  q^10, B3 168
210:       232[illegible]621^2 => 7.5426779.P20,  B1 157
211:         [illegible]40741233771^2 => 3.7.43.163.n,  B1 199;  q^4, B3 195
213:       232[illegible]621^4 => 5.n,  B1 184;  q^6, B2 160
215:     1009[illegible]7.p34,  B1 94
216:       p34[illegible] => 4583.1682207.29763857.p17,  B1 161
217:       p34^2 => [illegible].7.n,  B1 195;  q^4, B2 270
219:     1009[illegible] 17.443.1531.83774233.49276157093.p22,  B1 143
220:       30[illegible]965600461029^1 => 5.13...,  S 3^2.5^2.13^2.31^2
221:       30[illegible]965600461029^2 => 3.7.61.127.n,  B1 198;  q^4, B3 197
223:     1009^18 => 40260089.91330330501.P36,  B1 171
224:     1009^22 => 139.1013.309811.P56,  B1 215;  q^28, B2 168
226:   5419^4 => 1031.P12,  B1 49
227:     836561914831^2 => 3.109.6157549.P15,  B1 89
228:       347568611538691^2 => 3.7^2.61.2377.20143639.p15,  B1 138
229:         281362890397573^1 => 42299.3325881113,  B1 167
230:         281362890397573^2 => 3.61.127.n,  B1 170;  q^4, B3 175
232:       347568611538691^4 => 5.11.n,  B1 178;  q^6, B2 174
234:     836561914831^4 => 5.11.61.401.14693608681.P32,  B1 159
235:       P32^2 => 3.n,  B1 221;  q^4, B2 251
237:     836561914831^6 => n,  B1 169;  q^10, B2 238
239:   5419^6 => 7.29.211.1499.475483.829621381,  B1 63
240:     829621381^1 => 414810691,  B1 80
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241:        414810691^2 => 3.13^2.3559.p11,  B1 111
242:          95359493521^2 => 3.103.271...,  S 3^4.7^2.13^2.29^2.103^2.127^2.211^2.271^2
243:          95359493521^4 => 5...,  S 3^2.5^2.7^2
244:          95359493521^6 => n,  B1 221;  q^10, B2 219
246:        414810691^4 => 5...,  S 3^2.5^2.7^2
247:        414810691^6 => 7.43.n,  B1 167;  q^10, B2 172
249:      829621381^2 => 3.1483.P15,  B1 105
250:        154702548132607^2 => 3.19.67.P25,  B1 162
251:        154702548132607^4 => 821.n,  B1 192;  q^6, B2 170
253:      829621381^4 => 5...,  S 3^2.5.7^2
254:      829621381^6 => 7.29.43.1363433.P44,  B1 204;  q^10, B2 178
256:    5419^10 => 67.33287.274121.43038337.p18,  B1 99
257:      830088529041623897^1 => 3.5101.P14,  B1 133
258:        27121758120683^2 => 7.79.139.283.n,  B1 167;  q^4, B3 160
260:      830088529041623897^2 => 24675748729.P26,  B1 178
261:      830088529041623897^4 => 31.101.n,  B1 220;  q^6, B2 215
263:    5419^12 => 53.12136610669.p33,  B1 106
264:      p33^1 => p33,  B1 171
265:      p33^2 => 3.n,  B1 195;  q^4, B2 263
267:    5419^16 => 1327.141101.23665157.P45,  B1 177
268:    5419^18 => 4561.7487.P60,  B1 203;  q^22, B2 164
270:  127^4 => 262209281,  B1 16
271:    262209281^1 => 3.3137.13931,  B1 33
272:      13931^2 => 194086693,  B1 49
273:        194086693^2 => 3.12277.740989.1380277,  B1 81
274:          1380277^2 => 3.229.2773167361,  B1 106
275:            2773167361^2 => 3.13.271.P15,  B1 143
276:              7276428436833307^2 => 3.n,  B1 173;  q^4, B3 172
278:            2773167361^4 => 5.n,  B1 163
279:            2773167361^6 => 211.n,  B1 203;  q^10, B2 188
281:          1380277^4 => 31.131^2.13831.p15,  B1 139
282:            493295840179661^2 => 37.79.n,  B1 171;  q^4, B3 168
284:          1380277^6 => 71.p35,  B1 180
285:          1380277^10 => n,  B1 192
286:          1380277^12 => n,  B1 216;  q^16, B2 196
288:        194086693^4 => 11.31.91411.297841.81717006l.P12,  B1 132
289:          187039475551^2 => 3.487.3049.4219.P13,  B1 176
290:          187039475551^4 => 5.11...,  S 3^2.5^2.11^2.31^2
291:          187039475551^6,  B3 177
292:        194086693^6 => 18195851983.28621397146301.p27,  B1 182;  q^10, B2 165
294:      13931^4 => 5.11.491.p13,  B1 74
295:        1394813567261^2 => 7...,  S 3^2.5^2.7^2
296:        1394813567261^4 => 5.11.151...,  S 3^2.5^2.11^2.127^4.151^2.491^2
297:        1394813567261^6 => n,  B1 195;  q^10, B2 242
299:      13931^6 => 7.3658159.p18,  B1 99
300:        285472521588928549^2 => 3.109.6178241683.P23,  B1 168
301:        285472521588928549^4 => 31.61.n,  B1 207;  q^6, B2 209
303:      13931^10 => 23^3.67.6733.200822829241.p21,  B1 146
304:        249789449906249446733^2 => 37.n,  B1 188;  q^4, B3 187
306:      13931^12 => 131.P48,  B1 173
307:      13931^16 => 409.n,  B1 160
308:      13931^18 => 761.n,  B1 176;  q^22, B2 182
310:    262209281^2 => 13.1231.p13,  B1 46
311:      4296301150081^1 => 17443.123152587,  B1 70
312:        123152587^2 => 3.379.p14,  B1 103
313:          13339102733461^2 => 3.43.17491.93979.P15,  B1 154
314:            8391083931201 43^2 => 3.13.151.397.n,  B1 188;  q^4, B3 184
316:          13339102733461^4 => 5.31...,  S 3^2.5^2.13^2.31^2
317:          13339102733461^6 => 7.n,  B1 235;  q^10, B2 262
319:        123152587^4 => 102704422012531.P19,  B1 151
320:          223967507954147269 1^2 => n,  B1 188;  q^4, B3 188
322:        123152587^6 => 3527557625467.P36,  B1 200;  q^10, B2 161
324:      4296301150081^2 => 3.61.5419.4015513.P13,  B1 102
325:        4635303278743^2 => 3.7.5197.947239753.p12,  B1 147
326:          207837725713^1 => 3109.33425173,  B1 169
327:          207837725713^2 => 3.7.n,  B1 172;  q^4, B3 172
329:        4635303278743^4 => 11.31.n,  B1 181
330:        4635303278743^6 => n,  B1 229;  q^10, B2 253
332:      4296301150081^4 => 5.p50,  B1 135
333:        p50^1 => 7^2.n,  B1 184;  q^2, B2 199
335:      4296301150081^6 => n,  B1 184;  q^10, B2 252
337:    262209281^4 => 5.11.421.14621.6579701.477869921.4440731591,  B1 100
338:      4440731591^2 => 7.31.79.6199.75181.2468269,  B1 139
339:        2468269^1 => 5.7.37.953,  B1 150
340:          953^2 => 181.5023,  B1 162
341:          953^4 => 41.n,  B1 170;  q^6, B3 162
343:        2468269^2 => 3...,  S 3^2.5.7^2
344:        2468269^4 => 71.n,  B1 179;  q^6, B3 164
346:      4440731591^4 => 5.1145018551.P29,  B1 195
347:      4440731591^6 => 29.n,  B1 198;  q^10, B2 192
349:    262209281^6 => 43.197.11593.589331.23938847653.P28,  B1 150
350:      234585977024112334884577010 3^2 => 277.n,  B1 207;  q^4, B2 218
352:    262209281^10,  B2 168
353:  127^6 => 7.43.86353.162709,  B1 32
354:    162709^1 => 5.53.307,  B1 42
355:      307^2 => [illegible] 2.5^2.7^2
356:      307^4 => [illegible]231,  B1 67
357:        521[illegible] => [illegible]99,  B1 80
358:          [illegible] => [illegible],  S 3^2.5^2.7^2
359:          [illegible] = [illegible]1551.5396621.12881171.26456251,  B1 146
360:            [illegible] => [illegible],  S 3^2.5^2.7^2
361:            [illegible],  B1 161
362:          [illegible] => [illegible]9.624149.P30,  B1 186
363:          [illegible] [illegible]67.n,  B1 202
364:          [illegible] [illegible]79.n,  B1 225;  q^16, B2 210
366:        521[illegible] => [illegible]p12,  B1 103
367:          749[illegible] => P23,  B1 148
368:            [illegible]4 [illegible]40801583^2 => 3...,  S 3^2.5^2.7^2
369:            [illegible]4 [illegible]40801583^4,  B3 194
370:          749[illegible] => [illegible]5.41.251.n,  B1 176
371:          749[illegible] => 29.n,  B1 218;  q^10, B2 227
373:        521[illegible],  B1 126
374:          [illegible]47^2 => 13.37.n,  B1 170;  q^4, B3 167
376:        [illegible]..37615762 9.p21,  B1 171
377:        [illegible]6981.p32,  B1 193
378:        [illegible],  B1 180
379:        [illegible] 196;  q^22, B2 163
381:      [illegible] 42
382:        [illegible] => [illegible].211.1220002291.P12,  B1 130
383:          [illegible] => [illegible].7...,  S 3^2.5^2.7^2
384:          [illegible] => [illegible]1.521.n,  B1 204;  q^6, B3 176
386:        [illegible] => [illegible]51.13257041891.397488272866021.p20,  B1 203
387:        [illegible] => [illegible].29.127.n,  B1 201;  q^10, B2 242
389:      [illegible],  B1 112
390:        [illegible]^2 => 3...,  S 3^2.5^2.7^2
391:        [illegible]^4 => 431.n,  B1 229;  q^6, B2 229
393:      [illegible].p23,  B1 123
394:        [illegible]21^2 => n,  B1 168;  q^4, B2 178
396:      [illegible]7.p30,  B1 156
397:        [illegible]656428789^2 => 3...,  S 3^2.5^2.7^2
398:        [illegible]656428789^4,  B2 238
399:      [illegible]3.p33,  B1 171
400:      [illegible]607.p42,  B1 201
401:      [illegible] 180
402:      [illegible]6;  q^36, B2 179
404:    16[illegible] [illegible],  B1 48
405:      [illegible]409829,  B1 68
406:        [illegible]29.4252519,  B1 90
407:          [illegible].249541.360541,  B1 117
408:            [illegible]..2287.28663,  B1 138
409:              [illegible]9.241.59809,  B1 156
410:                [illegible]09^2 => 3.13...,  S 3^6.7^2.13^2.19^2.43^2
411:                [illegible]09^4,  B3 166
412:              [illegible]^4 => n,  B1 165
413:              [illegible]^6 => n,  B1 183;  q^10, B3 174
415:              [illegible]^4 => 5...,  S 3^4.5^2.7^2
416:              [illegible]^6 => n,  B1 173;  q^10, B3 161
418:          [illegible] => 311.7681.19441.128351.p11,  B1 157
419:            [illegible] 1481^2 => 7.223.277.n,  B1 184;  q^4, B3 178
421:          [illegible]6 => 71.84449.13342393.P26,  B1 197
422:          [illegible]0 => 23.n,  [illegible]211
423:          [illegible] 2 => n,  B1 [illegible];  q^16, B2 212
425:        24[illegible] => 11.P25,  [illegible].31
426:          [illegible]4467561346 [illegible]1^2 => 3.13...,  S 3^2.7^2.11^2.13^2.43^2
427:          [illegible]4467561346 [illegible]1^4,  B2 195
428:        24[illegible] => 29.127.91[illegible]31,  B1 165
429:        24[illegible] => 23.67.n,  [illegible] 186
430:        24[illegible] => 131.n,  [illegible]10;  q^16, B2 204
```

```
432:      [illegible]^2 => [illegible] p18,  B1 79
433:        [illegible]^1 => 5...,  S 3^2.5^2.7^2
434:        [illegible]^2 => 3.13.31...,  S 3^4.7^2.13.31^2.43^2.61^2
435:        [illegible]^4 => 11^2.281.n,  B1 200;  q^6, B2 211
437:      [illegible]^4 => [illegible] 841.508821419651.p23,  B1 135
438:        [illegible]^1 => 3^2.17.103.n,  B1 161
439:        [illegible]^2 => 7.661.n,  B1 199;  q^4, B3 197
441:      [illegible]^6 => [illegible]9.3851.42323.592057347953.116446518124847.p23,  B1 193;  q^10, B2 198
443:    162[illegible]9^4 => p21,  B1 69
444:      [illegible]^1 => 3.182713.p15,  B1 110
445:        [illegible]^2 => 829.3541.14374663.62478139.155042347,  B1 169
446:        [illegible]^4 => 191.n,  B1 201;  q^6, B2 177
448:      [illegible]1279[illegible]^2 => 19.73.63211.19087279.p27,  B1 146
449:        [illegible]^4 => 23.n,  B1 174;  q^2, B3 168
451:      [illegible]1279[illegible]^4,  B2 166
452:    162[illegible] => 7.71.576723739830[illegible].P16,  B1 106
453:      [illegible]^2 => 1814599.9196436593.P16,  B1 170
454:      [illegible]^4 => 11.n,  B1 202;  q^6, B2 189
456:    162[illegible] => P53,  B1 178
457:    162[illegible]3082859.P53,  B1 210;  q^16, B2 166
459:  127^10 => 23.P2C.  [illegible] 63
460:    478346443548[illegible]39^2 => 3.7.193.4152980103871.P24,  B1 139
461:      135940431627[illegible]451348747^2 => 3.7.103.n,  B1 186;  q^4, B3 185
463:    478346443548[illegible]39^4 => n,  B1 181;  q^6, B2 236
465:  127^12 => 123464[illegible]7.p16,  B1 60
466:    1437263292796[illegible] => 3.67.1511.2366169307,  B1 90
467:      2366169307^2 => 3.31.61.103.5683.1686024841,  B1 126
468:        1686024841^2 => 3.7.127.607.P13,  B1 159
469:          1755966521167^2 => 3.163.n,  B1 185;  q^4, B3 184
471:        1686024841^4 => 5.151.421.n,  B1 187;  q^6, B3 163
473:      2366169307^4 => 521 [illegible],  B1 184
474:      2366169307^6 => n,  [illegible]4;  q^10, B2 187
476:    1437263292796553^2 => [illegible].891859.[illegible]21,  B1 126
477:      925370433206515418[illegible] => 3.7.n,  B1 169;  q^4, B3 168
479:    1437263292796553^4 => [illegible]1,  B1 [illegible]60;  q^6, B2 181
481:  127^16 => 527532101.757[illegible]653.p15,  B1 86
482:    115512048133057^1 => [illegible].6159328577,  B1 114
483:      6159328577^2 => 877 [illegible]17.P11,  B1 153
484:        76126812043^2 => [illegible]^2.283.n,  B1 179;  q^4, B3 175
486:      6159328577^4 => n,  [illegible]3
487:      6159328577^6 => n,  [illegible]2;  q^10, B2 195
489:    115512048133057^2 => [illegible]7.35078521.P18,  B1 146
490:      115370386473455611^2 => [illegible]43.811.n,  B1 184;  q^4, B3 180
492:    115512048133057^4 => 11.n,  B1 175;  q^6, B2 168
494:  127^18 => 496833428679257.p24,  B1 90
495:    149861247689324730312041^1 => 3.2826520111.p13,  B1 136
496:      8836616628937^2 => 3.157.n,  B1 163;  q^4, B3 162
498:    149861247689324730312041^2 => 43.307.47713.P38,  B1 191;  q^4, B2 185
500:  127^22 => p47,  B1 92
501:    p47^1 => 3.11.43.92353.P38,  B1 184;  q^2, B2 185
503:  127^28 => 59.1454119.36157263917.p41,  B1 136
504:    p41^1 => 3.23.n,  B1 178;  q^2, B3 166
506:  127^30 => p64,  B1 126
507:    p64^1 => n,  B1 189;  q^2, B2 252
509:  127^36 => 149.190074632153321.p60,  B1 167;  q^40, B2 168

511:  19^2 => 127...,  D
512:  19^4 => 151.911,  B1 15
513:    911^2 => 830833,  B1 21
514:      830833^1 => 127...,  D
515:      830833^2 => 3.13.61.337.861001,  B1 44
516:        861001^1 => 151.2851,  B1 51
517:          2851^2 => 3.7.67...,  S 3^2.7^2.13^2.19^4.61^2.67^2.151^2.337^2
518:          2851^4 => 5...,  S 3^2.[illegible]^2.13^2.19^4
519:          2851^6 => 185425[illegible],  B1 107
520:            28971231269^2 => [illegible],  B1 149
521:              363190065456[illegible] => 3.13.n,  B1 182;  q^4, B3 184
523:            28971231269^4 => [illegible],  B1 169
524:            28971231269^6 => [illegible],  D
525:            28971231269^10,  [illegible]
526:          2851^10 => 2405C[illegible],  B1 148
527:            147568512247462[illegible]^2 => 3.31.43.223.n,  B1 201;  q^4, B3 196
529:          2851^12 => 53.1144[illegible],  B1 169
530:          2851^16 => 18089 [illegible],  B1 210

531:          2851^18 => 19.191.n,  B1 170
532:          2851^22 => n,  B1 196;  q^28, B2 193
534:        861001^2 => 3.61.18661.217081,  B1 64
535:          217081^1 => 108541,  B1 74
536:            108541^2 => 3.3927085741,  B1 95
537:              3927085741^2 => 3.61.613.p15,  B1 132
538:                1374767329098[illegible]37^2 => 3.13.19.31.73.n,  B1 162;  q^4, B3 160
540:              3927085741^4 => 5...,  S 3^4.5^2.13^2
541:              3927085741^6 => 29.43.953.n,  B1 197;  q^10, B2 191
543:            108541^4 => 5.11...,  S 3^2.5^2.11^2.13^2
544:            108541^6 => 29.197.76511.137117.p17,  B1 155
545:              272827100173155537^2 => 3.139.n,  B1 190;  q^4, B3 188
547:            108541^10 => 23.n,  B1 166
548:            108541^12 => n,  B1 185;  q^16, B2 161
550:          217081^2 => 3.7...,  S 3^4.7^2.13.19^4.61^2
551:          217081^4 => 5...,  S 3^2.5.13^2.19^4.61^2
552:          217081^6 => 29.116235975405131.p17,  B1 139
553:            310451898100317[illegible]^1 => p17,  B1 171
554:            310451898100317[illegible]^2 => 3.139.n,  B1 186;  q^4, B3 184
556:          217081^10 => n,  B1 161
557:          217081^12 => 53.n,  B1 184;  q^16, B2 170
559:        861001^4 => 5.11...,  S 3^2.5.11^2.13^2
560:        861001^6 => 7.29...,  S 3^2.7^2.13.19^4.29^2.61^2
561:        861001[illegible] => 2396970181.P50,  B1 207
562:        861001[illegible] 53.n,  B1 180;  q^16, B2 189
564:      830833^4 [illegible]1.31.621301.p16,  B1 71
565:        224904[illegible]27341^1 => 59.144941.131500009,  B1 101
566:          1315[illegible]^2 => 3.7...,  S 3^2.7^2.11^2.19^4.31^2
567:          1315[illegible]^4 => 11.71.p30,  B1 180
568:          1315[illegible]^6 => n,  B1 182;  q^10, B3 166
570:        224904[illegible]27341^2 => 3.1033663.P25,  B1 142
571:          1631.[illegible]428249395688630[illegible]^2 => 3.7.13...,  S 3^2.7^2.11^2.13.19^4
572:          1631.[illegible]428249395688630[illegible]^4,  B2 193
573:        224904[illegible]27341^4 => 5.11.n,  B1 172;  q^6, B2 184
575:      830833^6 => [illegible]7920029.P28,  B1 113
576:        208279[illegible]22878694249997667^2 => 31.331.n,  B1 172;  q^4, B2 218
578:      830833^10 => 23.617.p56,  B1 137
579:        p56^1 => 3.37.157.n,  B1 196;  q^2, B2 220
581:      830833^12 => 9257.57773.p63,  B1 166;  q^16, B2 189
583:  911^4 => 5.11.701.17884211,  B1 42
584:    178[illegible]^2 => 7.P14,  B1 71
585:      45692[illegible]458538919^2 => 3...,  S 3^2.5.7^2
586:      [illegible]458538919^4 => 11.140731.3622746821.p39,  B1 169;  q^6, B2 163
588:    .788[illegible]^4 => [illegible]11.2381.P24,  B1 110
589:      [illegible]0465434731^2 => 7.109.n,  B1 161;  q^4, B2 191
591:    .788[illegible]^4 => [illegible]7.3955267.P35,  B1 158
592:      [illegible],  S 3^2.5.11^2.13^2
593:      [illegible]
594:      [illegible] => [illegible].n,  B1 174;  q^12, B2 174
596:  91[illegible]  [illegible] 62
597:    [illegible]^2 => 3.19.397.1279.218527.14632890871.P11,  B1 125
598:      [illegible] => 3.1579.p19,  B1 152
599:      [illegible]162413^1 => 619.n,  B1 172;  q^2, B3 167
601:      [illegible]^4 => 11^2.31...,  S 3^2.7^2.11^2.19^4.31^2
602:      [illegible] B3 168
603:      [illegible]^4 => 5.11.31.n,  B1 166;  q^6, B2 202
605:  91[illegible].50390258557.p12,  B1 86
606:    [illegible] 3.141353.291439,  B1 109
607:      [illegible]11,  B1 129
608:        [illegible] => 3.67.229.85243.P12,  B1 168
609:        [illegible]1 => 11.251.n,  B1 196;  q^6, B3 171
611:      [illegible] 31.p20,  B1 163
612:      [illegible]39.n,  B1 166
613:      [illegible]5.199.n,  B1 211;  q^12, B3 163
615:    [illegible] 7.19.P21,  B1 130
616:      [illegible]400191^2 => 3.7.283.n,  B1 173;  q^4, B3 171
618:    [illegible] 5.31.71.5877181.p35,  B1 177
619:    [illegible]n,  B1 201;  q^10, B2 227
621:  91[illegible].260670715787.P19,  B1 113
622:    [illegible]23^2 => 3.7.50378851.P28,  B1 186
623:    [illegible]23^4 => 11.n,  B1 223;  q^6, B2 219
625:  91[illegible],  B1 107
626:    [illegible]98554139504517.P26,  B1 195;  q^2, B2 176
628:  91[illegible].268590802170399.P33,  B1 162
```

```
629:    911^22 => 47.139.134643482719.4760268854260861.P35,  B1 189;  q^28, B2 165
631:  19^6 => 701.70841,  B1 18
632:   70841^1 => 3.11807,  B1 27
633:     11807^2 => 13^2.409.2017,  B1 41
634:       2017^2 => 3.331.4099,  B1 53
635:         4099^2 => 3.7.800281,  B1 68
636:           800281^2 => 3.4441.48071041,  B1 90
637:             48071041^2 => 3.7...,  S 3^6.7^2.13^2.19^6.331^2.409^2
638:             48071041^4 => 5...,  S 3^4.5^2.7^2
639:             48071041^6 => n,  B1 167
640:             48071041^10 => 23...,  S 3^4.7^2.13^2.19^6.23^2
641:             48071041^12,  B2 184
642:           800281^4 => 5...,  S 3^4.5^2.7^2
643:           800281^6 => 1499.1597.184070417581.p18,  B1 162
644:           800281^10 => n,  B1 174
645:           800281^12 => 13...,  S 3^4.7^2.13^4.19^6.331^2.409^2.701^2
646:           800281^16,  B2 188
647:         4099^4 => 765181.369023021,  B1 89
648:           369023021^2 => 13.73.487.577.643.794191,  B1 124
649:             794191^2 => 3.307.684842713,  B1 147
650:               684842713^2 => 3.7.13...,  S 3^4.7^2.13^4.19^6.73^2
651:               684842713^4,  B3 165
652:             794191^4 => 5...,  S 3^2.5^2.13^4.19^6
653:             794191^6 => 449.n,  B1 185;  q^10, B3 171
655:           369023021^4 => 5.11...,  S 3^2.5^2.11^2.13^2
656:           369023021^6 => n,  B1 175;  q^10, B2 171
658:         4099^6 => 281.p20,  B1 111
659:           168836816312856878 21^2 => 45427579.p31,  B1 188
660:           168836816312856878 21^4 => 5.11...,  S 3^2.5^2.11^2.13^2
661:           168836816312856878 21^6,  B2 230
662:         4099^10 => p37,  B1 154
663:           p37^2 => 13.193.n,  B1 230;  q^4, B2 289
665:         4099^12 => 359243.2344750835831.p26,  B1 176
666:         4099^16 => 239.n,  B1 164
667:         4099^18 => n,  B1 176
668:         4099^22 => n,  B1 205;  q^28, B2 202
670:       2017^4 => 11^2.31.7151.617341,  B1 72
671:         617341^2 => 3.7...,  S 3^2.7^2.11^2.13^2.19^6
672:         617341^4 => 5...,  S 3^2.5^2.11^2.13^2
673:         617341^6 => 728953.P29,  B1 164
674:         617341^10 => n,  B1 176
675:         617341^12 => n,  B1 199;  q^16, B2 185
677:       2017^6 => 7.29.192062921.1727870509,  B1 94
678:         1727870509^2 => 3.21529.925669.49936897,  B1 130
679:           49936897^2 => 3...,  S 3^4.7^2.13^2.19^6.29^2
680:           49936897^4 => n,  B1 176;  q^6, B3 161
682:         1727870509^4 => 71...,  S 3^2.7^2.13^2.19^6.29^2.71^2
683:         1727870509^6 => 7.29.43...,  S 3^2.7^2.13^2.19^6.29^2.43^2
684:         1727870509^10,  B2 184
685:       2017^10 => 23.683.16061.P25,  B1 133
686:         4419297420801248089593523^2 => 3.n,  B1 182;  q^4, B2 197
688:       2017^12 => 131.55767167.p30,  B1 153
689:         6209208890707853925020664738 73^2 => 3.7.19.n,  B1 212;  q^4, B2 238
691:       2017^16 => 144773.7200821496360885409 8577.p25,  B1 193
692:       2017^18 => 191^2.544807.389916367.8056011857.P31,  B1 208
693:       2017^22 => n,  B1 180;  q^28, B2 185
695:     11807^4 => 11.61.181.571.280257881,  B1 68
696:       280257881^2 => 31.43.98779.596514349,  B1 101
697:         596514349^2 => 3.7...,  S 3^2.7^2.11^2.19^6.31^2
698:         596514349^4 => 395851.P30,  B1 189
699:         596514349^6 => n,  B1 189;  q^10, B2 175
701:       280257881^4 => 5...,  S 3^2.5^2.11^2.19^6
702:       280257881^6 => 7.29...,  S 3^2.7^2.11^2.19^6.29^2
703:       280257881^10,  B2 168
704:     11807^6 => 1499.P22,  B1 92
705:       1807475964966137691443^2 => 1087.1579.8454841.938710207.P21,  B1 177;  q^4, B2 170
707:     11807^10 => 23.67.3191.5632115967.p24,  B1 141
708:       1901014627394180576447 1^2 => 3.n,  B1 187;  q^4, B3 187
710:     11807^12 => 90793.653641.[illegible]9785361919919.P25,  B1 165
711:     11807^16 => 1176367.3439[illegible]3.P51,  B1 214
712:     11807^18 => n,  B1 165;  q^22, B2 179
714:   70841^2 => 39103.128341,  B1 47
715:     39103^2 => 3.7561.67411,  B1 55
716:       67411^2 => 3.1514770111,  B1 74
717:         1514770111^2 => 3.70051.p14,  B1 102
718:           10918371332761^1 => 2063.7883.335689,  B1 128
719:             335689^2 => 3.7.13.2179.189433,  B1 149
720:               189433^2 => 3.n,  B1 160;  q^4, B3 160
722:             335689^4 => n,  B1 161
723:             335689^6 => 211.421.n,  B1 188;  q^10, B3 172
725:           10918371332761^2 => 3.7.13^2.697507.p17,  B1 148
726:             481571915117527 81^1 => 103...,  S 3^4.7^2.13^2.19^6.103^2
727:             481571915117527 81^2 => 3.13.n,  B1 194;  q^4, B3 193
729:           10918371332761^4 => 5.31.41...,  S 3^4.5.19^6.31^2.41^2
730:           10918371332761^6,  B3 162
731:         1514770111^4 => 5.14461.465931.P27,  B1 165
732:         1514770111^6 => 7.n,  B1 166;  q^10, B2 183
734:       67411^4 => 5.11...,  S 3^2.5.11^2.19^6
735:       67411^6 => 7.71.166757061431 9.P15,  B1 132
736:         113227114128619^2 => 3.n,  B1 160;  q^4, B3 161
738:       67411^10 => 67.190141270816 3.555641661987 73.p21,  B1 175
739:       67411^12 => n,  B1 161
740:       67411^16 => n,  B1 200;  q^18, B2 173
742:     39103^4 => 11.57344741.3706509671,  B1 80
743:       3706509671^2 => 7.19^2.1171.p13,  B1 108
744:         4642673454589^1 => 5.179.11353.228457,  B1 133
745:           228457^2 => 3...,  S 3^2.5^2.7^2
746:           228457^4 => 11^2.n,  B1 165
747:           228457^6 => 29.43.n,  B1 190;  q^10, B3 176
749:         4642673454589^2 => 3.7.P25,  B1 162
750:         4642673454589^4 => 11.n,  B1 18[illegible],  B3 164
752:       3706509671^4 => 5.41.17791.158141.[illegible]4331.p18,  B1 166
753:       3706509671^6 => 197.n,  B1 178;  [illegible],  B2 191
755:     39103^6 => 7.43.7547.13004671.p15,  [illegible]
756:       121012813720289^1 => 3.5...,  S 3[illegible].7^2
757:       121012813720289^2 => 19.670297.81[illegible].P13,  B1 163
758:       121012813720289^4 => n,  B1 195;  [illegible] 168
760:     39103^10 => 23.89.386919193.9927162[illegible]989.P19,  B1 155
761:       1063037650348979867^2 => 7.13.n,  [illegible];  q^4, B3 191
763:     39103^12 => 53.274847.P48,  B1 193
764:     39103^[illegible] => [illegible],  B1 179;  q^18, B2 165
766:   70841^4 [illegible],  B1 68
767:     116301[illegible].43.373.p26,  B1 106
768:       281[illegible]40809^1 => 5.131...,  S 3^2.5^2.19^6.43^2.61^2.71^2.131^2
769:       281[illegible]40809^2 => 3.n,  B1 179;  q^4, B2 203
771:     116301[illegible]^4 => [illegible].71.203945906144095145206 1.P37,  B1 195;  q^6, B2 180
773:   70841^6 => [illegible],  B1 77
774:     988117[illegible]^1 => 3.5^3...,  S 3^2.5^4.7^2
775:     988117[illegible]^2 => 109.P44,  B1 188;  q^4, B2 183
777:   70841^10 => [illegible]4047.P38,  B1 156
778:     p38^2 => [illegible]...,  S 3^2.7^2.11^2.19^6.37^2
779:     p38^4,  [illegible]
780:   70841^12 => [illegible]4011.6363119073190553676 7.p26,  B1 162
781:   70841^16 => n,  [illegible];  q^18, B2 174
783: 19^10 => [illegible],  B1 30
784:   6206002[illegible].673,  B1 44
785:     673^2 => [illegible]1201,  B1 55
786:       1512[illegible] => 3.853.8933917,  B1 75
787:         89[illegible] => 3.439.189337.320083,  B1 103
788:           [illegible]^2 => 3.P11,  B1 124
789:             [illegible]148991^2 => 3.2124921121.P12,  B1 166
790:             [illegible]148991^4 => 5.11...,  S 3^6.5^2.11^2
791:             [illegible]148991^6,  B3 166
792:           [illegible]^4 => 11.31.41.p18,  B1 158
793:           [illegible]1489[illegible] => n,  B1 194;  q^4, B3 194
795:           [illegible]679.63799247.P17,  B1 191
796:           [illegible]^10 => [illegible],  B1 206
797:           [illegible]^12 => [illegible],  B1 226;  q^16, B3 180
799:         89[illegible] => [illegible].p26,  B1 143
800:           [illegible]5036[illegible]0821^2 => 7...,  S 3^4.7^2.11^2.19^10
801:           [illegible]5036[illegible]0821^4,  B2 205
802:         89[illegible] => [illegible].1479[illegible]2697.P32,  B1 186
804:         89[illegible] => [illegible],  B1 204;  q^12, B2 166
805:       1512[illegible] 5...,  S [illegible]^2.19^10.47^2.109^2
806:       1512[illegible] => 7.[illegible].P25,  B1 138
807:         4[illegible]19^2 => 3.43...,  S 3^4.7^2.19^10.29^2.43^2.47^2.109^2
808:         4[illegible]19^4,  B2 197
809:       1512[illegible] => 147[illegible].146,  B1 200
```

810: 151201^12 => n, B1 169; q^16, B2 165
812: 673^4 => 421.2531.192811, B1 72
813: 192811^2 => 3.20323.609757, B1 94
814: 609757^2 => 3.397.523.596899, B1 116
815: 596899^2 => 3.7^2.31.7549.10357, B1 137
816: 10357^2 => 3.7^2.13..., S 3^6.7^4.13^2.19^10.31^2
817: 10357^4 => n, B1 161
818: 10357^6 => n, B1 177; q^10, B3 169
820: 596899^4 => 201451858141.p12, B1 174
821: 596899^6 => 43.n, B1 175; q^10, B3 162
823: 609757^4 => 11.151.705751.P15, B1 151
824: 117925236645991^2 => 3.19.31.n, B1 179; q^4, B3 180
826: 609757^6 => 7.917141.p28, B1 186
827: 609757^10 => [illegible] n, B1 199
828: 609757^12 => [illegible].n, B1 224; q^16, B2 185
830: 192811^4 => 5.[illegible]..., S 3^2.5^2.11^2.19^10
831: 192811^6 => 10[illegible]33713.46515617.p16, B1 157
832: 299241933757[illegible]^2 => n, B1 188; q^4, B3 188
834: 192811^10 => 2[illegible].n, B1 168
835: 192811^12 => n, B1 189; q^16, B2 169
837: 673^6 => 7.88709[illegible].49854447, B1 89
838: 149854447^2 => [illegible]41.103.P13, B1 122
839: 1690099754311^2 => 3.1327.20731.P17, B1 170
840: 1690099754311^4 => 5..., S 3^4.5^2.7^2
841: 1690099754311^6, B3 171
842: 149854447^4 => 191.22091.38351.1350760001.P13, B1 171
843: 149854447^6 => 7.673.n, B1 167; q^10, B2 163
845: 673^10 => 23.991.20021.P20, B1 123
846: 418320528279664143 11^2 => 7.31.n, B1 165; q^4, B3 163
848: 673^12 => 1251524428753.p22, B1 140
849: 690855518022075633567 7^2 => 3.n, B1 184; q^4, B3 184
851: 673^16 => 243101.675071.P35, B1 174
852: 673^18 => P51, B1 191
853: 673^22 [illegible], B1 163
854: 673^26 [illegible] 929.n, B1 203; q^30, B2 169
856: 6206002[illegible]^2 [illegible]^4, B1 64
857: 177486[illegible] => 3.P27, B1 117
858: 105[illegible]093655187^2 => 3.n, B1 169; q^4, B2 208
860: 177486[illegible]^4 => 1171.145381.295225751.p37, B1 165
861: 177486[illegible] => n, B1 197; q^10, B2 264
863: 6206002[illegible].23159681.61511921.p12, B1 105
864: 116856[illegible] => [illegible]11.13..., S 3^2.5^2.11^2.13^2
865: 116856[illegible] => [illegible]9.1249.p18, B1 140
866: 5754[illegible]^1 => 389651.p12, B1 175
867: 5754[illegible]^2 => 3.139.n, B1 188; q^4, B3 185
869: 116856[illegible]^4 => [illegible]5.71.n, B1 172
870: 116856[illegible] => [illegible] n, B1 220; q^10, B2 221
872: 6206002[illegible]1435401390488 9.P28, B1 149
873: 204164[illegible]^2 => n, B1 204; q^4, B2 218
875: 6206002[illegible] n, B1 176; q^12, B2 187
877: 19^12 => 5[illegible]8869, B1 37
878: 13333886[illegible] => [illegible]..., S 3^2.5^2.7^2
879: 133338869^2 => [illegible]3.316950847, B1 70
880: 316950847^2 => [illegible], B1 104
881: 3348594657[illegible]^2 => 3.7.31.433.P28, B1 169
882: 3348594657[illegible]^4 => 211.n, B1 206; q^6, B2 198
884: 316950847^4 => [illegible]1.1951.1182431.2395275511.P12, B1 155
885: 2907704869[illegible] => n, B1 178; q^4, B3 178
887: 316950847^6 => [illegible]724488416 3.21414089265143.p27, B1 188; q^10, B2 170
889: 133338869^4 => [illegible], B1 127
890: P32^2 => 7.6[illegible], B1 191; q^4, B2 251
892: 133338869^6 => [illegible].P44, B1 171; q^10, B2 162
894: 19^16 => 3044803[illegible], B1 61
895: 99995282631947[illegible].87403.1311127.10050613.129574807, B1 110
896: 129574807^2 => [illegible].6, B1 142
897: 5596543579[illegible] => 3.73.n, B1 175; q^4, B3 174
899: 129574807^4 => [illegible]4240307451.P21, B1 191
900: 129574807^6 => [illegible].n, B1 194; q^10, B3 175
902: 99995282631947^4 => 119507174196006511.P39, B1 201; q^6, B2 167
904: 19^18 => p24, B1 46
905: 10991220309223964384022 1^1 => 3262949.P17, B1 91
906: 168424641470399392 => 7.1801.70537.18982297.P17, B1 156
907: 16804815986052307^2 => 3.907.n, B1 192; q^4, B3 188
909: 168424641470399394 => 61.n, B1 190; q^6, B2 194

911: [illegible]223964384022 1^2 => 3.13.157.183361.p38, B1 124
912: [illegible] => 37.211.n, B1 164
913: [illegible]8^2 => 3.n, B1 229; q^4, B2 296
915: [illegible]223964384022 1^4, B2 184
916: 19^[illegible] => [illegible]2347.16497763013.P13, B1 74
917: [illegible]23^2 => 3.463.37968763.P13, B1 122
918: [illegible]0579^2 => 3.499159.1347919.P13, B1 171
919: [illegible]0579^4 => 11.n, B1 198; q^6, B3 172
921: [illegible]23^4 => 31.41.271.p43, B1 162
922: 1335495[illegible] > 127..., D; q^10, B2 242
924: 19^28 => [illegible]003021451861.P18, B1 92
925: 1650492[illegible]^2 => 3187.67057.604799557.P18, B1 161
926: 1650498[illegible]^4 => 11.131.n, B1 199; q^6, B2 206
928: 19^30 => [illegible]
929: p39^1 => [illegible]579.327689.886799.10857851.p11, B1 152
930: 4883[illegible] => 3.163.283.691.n, B1 182; q^4, B3 174
932: p39^2 => [illegible], B1 192; q^4, B2 307
934: 19^36 => [illegible]4588084451.P29, B1 135
935: 2140675[illegible]11281103559^2 => 7.31.853.n, B1 197; q^4, B2 226
937: 19^40 => [illegible]713456133.P35, B1 143
938: P35^2 => [illegible] 212; q^4, B2 272
940: 19^42 => [illegible]1496888895557513.p29, B1 132
941: 2846194[illegible]738949960037^1 => 7.223.n, B1 164
942: 2846194[illegible]738949960037^2 => 3.67.97.397.433.n, B1 202; q^4, B2 227
944: 19^46 => [illegible]7
945: p59^1 => [illegible].n, B1 180; q^2, B2 235
947: 19^52 => [illegible]21687153.255108985570167525120478 3.p26, B1 173
948: 19^58 => [illegible] 48
949: p75^1 => [illegible] 222; q^2, B2 296
951: 19^60 => [illegible]3
952: p77^1 => [illegible] 231; q^2, B2 306
954: 19^66, B[illegible]
955: 7^2 => 19..., D
956: 7^4 => 2801, B1 6
957: 2801^1 => 3.467, B1 13
958: 467^2 => 19..., D
959: 467^4 => 11.31.41.3409261, B1 39
960: 3409261^2 => 3.7.31.43..., S 3^2.7^4.11^2.31^2.41^2.43^2
961: 3409261^4 => 5..., S 3^2.5^2.7^4
962: 3409261^6 => 1009.44129.387199.p26, B1 144
963: 910777201027417052531946 53^2 => 43..., S 3^2.7^4.11^2.31^2.41^2.43^2
964: 910777201027417052531946 53^4, B2 207
965: 3409261^10 => 74449.16180057477.138855190541.P40, B1 222
966: 3409261^12 => 53..., S 3^2.7^4.11^2.31^2.41^2.53^2.467^4
967: 3409261^16, B2 209
968: 467^6 => 449.104707.221110919, B1 55
969: 221110919^2 => 13.p16, B1 89
970: 37607722093950 37^2 => 3.7.2371.164173.741859.P16, B1 148
971: 2332276869007711^2 => 19..., D
972: 2332276869007711^4, B3 179
973: 37607722093950 37^4 => 41.n, B1 184; q^6, B2 186
975: 221110919^4 => 41.3994171.66010998331.p15, B1 139
976: 2211128328623 21^2 => 31.151.n, B1 171; q^4, B3 167
978: 221110919^6 => 7.12741233.958351537841377.P28, B1 187; q^10, B2 166
980: 467^10 => p27, B1 87
981: 494424256962371823779424877^2 => 3.7.43.241.367^2.1117.1667227.628652797.124244862031.p14,
B1 186; q^4, B2 213
983: 467^12 => 157.14610077.p23, B1 103
984: 470090390424470302314 89^2 => 7.1414087563904649934285 1.P23, B1 192; q^4, B2 181
986: 467^16 => 137.50287.180279447719577 77.P20, B1 135
987: 412931999739489158477^2 => 3.619.n, B1 177; q^4, B3 175
989: 467^18 => 154734729607724347493.p28, B1 151
990: 722848049902867272765513992 9^2 => 13.n, B1 208; q^4, B2 222
992: 467^22 => 1151.61213091380071615958083 11.p30, B1 183
993: 467^28 => 349.182353.173298607.n, B1 173; q^30, B2 160
995: 2801^2 => 37.43.4933, B1 20
996: 4933^1 => 2467, B1 27
997: 2467^2 => 3.271.7489, B1 40
998: 7489^2 => 3.61.306517, B1 55
999: 306517^2 => 3.13..., S 3^4.7^4.13^2.37^2.43^2.61^2
1000: 306517^4 => 41081.59471.P13, B1 110
1001: 3613045528091^2 => 181.124249.p18, B1 160
1002: 3613045528091^4 => 5..., S 3^2.5^2.7^4
1003: 3613045528091^6, B3 160

```
1004:          306517^6 => 7.29.82316396807.P20,  B1 141
1005:            496302456426162835277^2 => 3.199.739.n,  B1 186;  q^4, B3 180
1006:          306517^10 => 67.12188089.30861871474787.1204468334955733.P18,  B1 208
1007:          306517^12 => n,  B1 175;  q^16, B2 175
1008:        7489^4 => 11.P15,  B1 79
1009:          285996443195311^2 => 19...,  D
1010:          285996443195311^4 => 5...,  S 3^2.5^2.7^4
1011:          285996443195311^6,  B2 173
1012:        7489^6 => 29.21567673.P15,  B1 102
1013:          282097794109643^2 => 1693.622513.p20,  B1 160
1014:          282097794109643^4 => 151.n,  B1 191;  q^6, B2 173
1015:        7489^10 => 1321.25741.P32,  B1 149
1016:          P32^2 => 13.n,  B1 212;  q^4, B2 249
1017:        7489^12 => 13.53.161773.5187859.20437301.P25,  B1 172
1018:        7489^16 => 647.1192109.3264851.19405739.69662533.P32,  B1 218
1019:        7489^18 => 229.n,  B1 174;  q^22, B2 170
1020:      2467^4 => 11.331.p11,  B1 61
1021:        101772864012^2 => 3.7.13...,  S 3^2.7^4.11^2.13^2
1022:        101772864014^4 => 5.4021.1644691.8908465760191.p17,  B1 161
1023:        101772864016^4 => 43.68111.22154288135626151.106821915193868183.P21,  B1 217;  q^10, B2 200
1024:      2467^6 => 43.P19,  B1 78
1025:        524472254970526711 9^2 => 3.73.127466959.1640101794427.P15,  B1 153
1026:          6008035548771432 => 3.7.n,  B1 181;  q^4, B3 182
1027:        524472254970526711 9^4 => 131.n,  B1 192;  q^6, B2 224
1028:      2467^10 => 23.89.P31,  B1 122
1029:        P31^2 => n,  B1 183;  q^4, B2 244
1030:      2467^12 => 79.P39,  B1 142
1031:        P39^2 => 3.7.31^2.n,  B1 219;  q^4, B2 310
1032:      2467^16 => 12377.p51,  B1 183
1033:      2467^18 => 13187.P57,  B1 203
1034:      2467^22 => n,  B1 169;  q^28, B2 189
1035:    4933^2 => 127...,  D
1036:    4933^4 => [illegible]..31.7541.230329301,  B1 52
1037:      [illegible]^1 => 3.7^3...,  S 3^2.7^4.11^2.31^2.37^2.43^2
1038:      [illegible]^2 => 223.p15,  B1 80
1039:        [illegible]38541611 => 7.31.438833.1249121,  B1 103
1040:          [illegible]^1^2 => 13.P12,  B1 127
1041:            [illegible]23424751^2 => 3.13...,  S 3^2.7^4.11^2.13^2
1042:            [illegible]23424751^4 => 5.31.n,  B1 196;  q^6, B3 172
1043:          12[illegible]^4 => 5.11.881.1032851.p14,  B1 162
1044:          12[illegible]^6 => n,  B1 164
1045:          12[illegible]^10 => 67.n,  B1 215;  q^12, B3 164
1046:        2378[illegible]38541612 => 3.13...,  S 3^2.7^4.11^2.13.31^2
1047:        2378[illegible]38541614 => 5.241.n,  B1 179;  q^6, B2 172
1048:      230329[illegible]^4 => 5.11.191.565564190431.P18,  B1 138
1049:        4737 [illegible]419673897 1^2 => 127...,  D;  q^4, B3 174
1050:      230329[illegible]^6 => 29.43.547.25999.148781473163.P29,  B1 187;  q^10, B2 167
1051:    4933^6 => [illegible].p14,  B1 70
1052:      124004[illegible] 23^2.151.77619973,  B1 92
1053:        7761[illegible] .829.386641.895087,  B1 122
1054:          89[illegible].p11,  B1 143
1055:          [illegible]^2 => 3.31^2.n,  B1 165;  q^4, B3 165
1056:          89[illegible] 61.181.n,  B1 164
1057:          89[illegible] B1 182;  q^10, B3 170
1058:        7761[illegible]60351.P24,  B1 171
1059:        7761[illegible] => 29.n,  B1 173
1060:        7761[illegible] => n,  B1 234;  q^12, B2 189
1061:      124004[illegible] => 19...,  D
1062:      124004[illegible]^4 => 11.P52,  B1 210
1063:      124004[illegible]^6 => 7.827.n,  B1 212;  q^10, B2 261
1064:    4933^10 => [illegible].34156917917.P18,  B1 116
1065:      159091[illegible]^2 => 3.13.691.5005129.3968312611.P14,  B1 185
1066:      159091[illegible]^4 => 131.n,  B1 222;  q^6, B2 206
1067:    4933^12 => [illegible] p35,  B1 115
1068:      p35^1 => [illegible]8477513.p18,  B1 183
1069:      p35^2 => [illegible] 208;  q^4, B2 274
1070:    4933^16 => [illegible].44711.P46,  B1 191
1071:    4933^18 => [illegible],  B1 153
1072:      p63^1 => [illegible].401.n,  B1 222;  q^2, B2 248
1073:    4933^22,  B2 167
1074:  2801^4 => 5.[illegible].6294091,  B1 44
1075:    6294091^2 => [illegible]...,  S 3^2.5.7^4
1076:    6294091^4 => [illegible].2692801.P14,  B1 104
1077:      593762846[illegible]^2 => 3...,  S 3^2.5^2.7^4
1078:      593762846[illegible]^4 => 5.41.151.n,  B1 192;  q^6, B2 165
1079:    6294091^6 => p41,  B1 112
1080:      p41^1 => 43.809.1523.P33,  B1 193;  q^2, B2 163
1081:    6294091^10 => 11.23.n,  B1 168;  q^12, B2 163
1082:  2801^6 => 7.[illegible]597.p13,  B1 51
1083:    288462903[illegible] => 3.P12,  B1 75
1084:      480771[illegible] => 10099.P20,  B1 122
1085:        22887[illegible]785399^2 => 3.7.10632289.1906532083.P22,  B1 197;  q^4, B3 161
1086:      480771[illegible] => 61.101.5403481.p37,  B1 192
1087:      480771[illegible] => 127...,  D;  q^10, B2 233
1088:    288462903[illegible] => 619.p23,  B1 91
1089:      134427862[illegible]55269097^1 => p22,  B1 135
1090:        672134[illegible]2677634549^2 => 3.373.n,  B1 181;  q^4, B3 178
1091:      134427862[illegible]55269097^2 => 19...,  D;  q^4, B2 177
1092:    288462903[illegible] => 11.281.421.4091.p41,  B1 148
1093:      p41^1 => [illegible],  B1 188;  q^2, B3 185
1094:    288462903[illegible] => 127...,  D;  q^10, B2 249
1095:  2801^10 => [illegible]637.10196539.454377789.P13,  B1 99
1096:    203312599[illegible] => 3.109.54907.p18,  B1 138
1097:      230225[illegible]257^1 => 2423.55163.861235321,  B1 172
1098:      230225[illegible]257^2 => 3.7.103.223.n,  B1 186;  q^4, B3 183
1099:    203312599[illegible] => 5.n,  B1 173
1100:    203312599[illegible] => 617.n,  B1 225;  q^10, B2 246
1101:  2801^12 => [illegible]2457.22867937.P24,  B1 120
1102:      770146437[illegible]784879^2 => 3.7.43.n,  B1 169;  q^4, B2 191
1103:  2801^16 => 1460743.1155061928281837112683.p28,  B1 140
1104:      851110082706758504812750789 3^1 => 73.n,  B1 170;  q^2, B3 168
1105:  2801^18 => 229.576613.1371021392040182353.P36,  B1 171
1106:  2801^22 => 47.599.7867.1174901503.n,  B1 172;  q^28, B2 193
1107:  7^6 => 29.4733,  B1 11
1108:  4733^1 => 3^2.263,  B1 17
1109:    263^2 => 7^2.13.109,  B1 23
1110:      109^2 => 3.7.571,  B1 30
1111:        571^2 => 3.7.103.151,  S 3^4.7^6.13^2.29^2.103^2.109^2.151^2
1112:        571^4 => 5...,  S 3^4.5^2.7^6
1113:        571^6 => 29^2.p14,  B1 71
1114:          412840130109997^2 => 3.13.43...,  S 3^4.7^6.13^2.29^4.43^2
1115:          412840130109997^4 => 11...,  S 3^4.7^6.11^2.13^2
1116:          412840130109997^6,  B2 163
1117:        571^10 => 419.2277499309493.P13,  B1 107
1118:          386767575548 3^2 => 541.1279.25117.P15,  B1 157
1119:            860725245075571^2 => 3.n,  B1 187;  q^4, B3 187
1120:          386767575548 3^4 => 151...,  S 3^4.7^6.13^2.29^2.109^2.151^2.263^2.419^2.571^10
1121:          386767575548 3^6 => 7.n,  B1 232;  q^10, B2 251
1122:        571^12 => 79...,  S 3^4.7^6.13^2.29^2.79^2.109^2.263^2
1123:        571^16 => p45,  B1 157
1124:          p45^2,  B2 176
1125:        571^18 => 19...,  D
1126:        571^22 => 47...,  S 3^4.7^6.13^2.29^2.47^2.109^2
1127:        571^28 => n,  B1 179;  q^30, B2 165
1128:      109^4 => 31.191.24061,  B1 44
1129:        24061^2 => 19...,  D
1130:        24061^4 => 5...,  S 3^2.5^2.7^6
1131:        24061^6 => 29.3828 p27,  B1 111
1132:          175024075697414[illegible] => 945649657.19063784705143.p21,  B1 196;  q^4, B2 169
1133:        24061^10 => 23...,  S 3^2.7^6.13^2.23^2.29^2.31^2
1134:        24061^12 => 66821.27[illegible]8187223.P34,  B1 193
1135:        24061^16 => 307.n,  B1 178
1136:        24061^18 => 229.n,  B1 [illegible];  q^22, B2 192
1137:      12[illegible] 113.281.53[illegible],  B1 56
1138:        5[illegible]37^2 => 19...,  D
1139:        5[illegible]37^4 => 47711.P27,  B1 133
1140:          [illegible]467659971786247769359 1^2 => 3.7.13...,  S 3^4.7^6.13^2.29^2.109^6.113^2.263^2.281^2
1141:          [illegible]467659971786247769359 1^4,  B2 209
1142:        5[illegible]37^6 => 127...,  D
1143:        5[illegible]37^10 => 89.617.n,  B1 200;  q^12, B2 185
1144:      109[illegible] => 9967.p17,  B1 80
1145:        2[illegible]9450302115 3^2 => 7.p32,  B1 144
1146:          [illegible] => 3.7.103.n,  B1 210;  q^4, B2 255
1147:        2[illegible]9450302115 3^4 => 31.421.n,  B1 183;  q^6, B2 196
1148:      109[illegible] => 292631.P19,  B1 93
1149:        [illegible]967080761011^2 => 24967.3556843.p28,  B1 168
1150:        [illegible]967080761011^4 => 5...,  S 3^2.5^2.7^6
1151:        [illegible]967080761011^6,  B2 227
```

```
1197:       109^16 => p33,  B1 117
1198:         p33^2 => 61.193.337.n,  B1 189;  q^4, B2 260
1200:       109^18 => 1787.p34,  B1 129
1201:         p34^2 => 7.13.n,  B1 194;  q^4, B2 267
1203:       109^22 => 5521.7039.454297.p32,  B1 154
1204:         p32^2 => 7.37.n,  B1 218;  q^4, B2 252
1206:       109^28 => 7193.73951.22601114563.p38,  B1 190
1207:       109^30 => 373.209623.118912328583511.P40,  B1 203
1208:       109^36 => n,  B1 166;  q^40, B2 162
1210:     263^4 => 4802611441,  B1 41
1211:       4802611441^2 => 3.103.151.223.10651.208124989,  B1 80
1212:         208124989^2 => 3.7.37.P14,  B1 111
1213:           55747762232143^2 => 3.7.67.17299.1578961.1692337.47783893,  B1 164
1214:           55747762232143^4 => 11...,  S 3^4.7^6.11^2.29^2.37^2
1215:           55747762232143^6,  B3 166
1216:         208124989^4 => 41.1471.P29,  B1 163
1217:         208124989^6 => n,  B1 163;  q^10, B2 166
1219:       4802611441^4 => 5...,  S 3^2.5^2.7^6
1220:       4802611441^6 => 6007.1983409.60895591.174312179508652866 53.P21,  B1 196;  q^10, B2 193
1222:     263^6 => 239.721[illegible]/50517,  B1 56
1223:       192750517^2 => 3.157189.p11,  B1 89
1224:         78785754721[illegible] => 3.7.434479.p15,  B1 130
1225:           6803107199[illegible]^2 => 3.7.13.73.97...,  S 3^6.7^6.13^2.29^2.73^2.97^2
1226:           6803107199[illegible]^4 => 11.n,  B1 220;  q^6, B3 189
1228:         78785754721[illegible] => 5...,  S 3^4.5^2.7^6
1229:         78785754721[illegible] => 29.n,  B1 196;  q^10, B2 217
1231:       192750517^4 => 11.1291.20065811.P22,  B1 139
1232:         484402709746706022943 1^2 => 13^2...,  S 3^2.7^6.11^2.13^2
1233:         484402709746706022943 1^4,  B3 182
1234:       192750517^6 => 7.29.661459.1389277.557597259471113.P21,  B1 184;  q^10, B2 165
1236:     263^10 => 67.7591.p19,  B1 85
1237:       3124914562747294549^2 => 19...,  D
1238:       3124914562747294549^4 => 71.151.691.n,  B1 203;  q^6, B2 221
1240:     263^12 => 677.301211.P21,  B1 99
1241:       53909331005945379034 3^2 => 3.5599146555434347.p26,  B1 182;  q^4, B2 165
1243:     263^16 => 84004624433.130165273538 81.p15,  B1 128
1244:       481003352262457^2 => 19...,  D
1245:       481003352262457^4 => n,  B1 216;  q^6, B3 187
1247:     263^18 => p44,  B1 143
1248:       p44^2,  B2 174
1249:     263^22 => 47.5107.272509811686691.P34,  B1 172
1250:     263^28 => 59.349.18308281.46818679613.P46,  B1 215
1251:     263^30 => 57845061941.236710809243580736963.P42,  B1 230;  q^36, B2 174
1253:   4733^2 => 22406023,  B1 28
1254:     22406023^2 => 19...,  D
1255:     22406023^4 => 304018940824561.p15,  B1 88
1256:       829007553280001^1 => 3.P15,  B1 117
1257:         138167925546667^2 => 3.7.13.14449.p22,  B1 171
1258:         138167925546667^4 => 11.41.n,  B1 205;  q^6, B3 174
1260:       829007553280001^2 => 7.307.1543.301681.p18,  B1 143
1261:         687015720002749009^1 => 5.37.n,  B1 163
1262:         687015720002749009^2 => 19...,  D;  q^4, B3 182
1264:       829007553280001^4 => 5.41.151.n,  B1 183;  q^6, B2 179
1266:     22406023^6 => 211.449.62316423268709.P26,  B1 133
1267:       214317369051222150241059 43^2 => 3.n,  B1 184;  q^4, B2 202
1269:     22406023^10 => n,  B1 160;  q^12, B2 176
1271:   4733^4 => 11.41.101.P11,  B1 50
1272:     11018941331^2 => 19...,  D
1273:     11018941331^4 => 5.1553418542761.p28,  B1 125
1274:       189802091462818689492398470 1^1 => 3...,  S 3^2.5^2.7^6
1275:       189802091462818689492398470 1^2 => 13.n,  B1 195;  q^4, B2 218
1277:     11018941331^6 => 113.60089.1767059981.p45,  B1 168;  q^10, B2 200
1279:   4733^6 => 7.70001.69655517.329422297,  B1 63
1280:     329422297^1 => 4663.35323,  B1 80
1281:       35323^2 => 3.73.5697487,  B1 98
1282:         5697487^2 => 3.13.P12,  B1 124
1283:           832342661863^2 => 3.43...,  S 3^4.7^6.13^2.29^2.43^2
1284:           832342661863^4 => 11^2...,  S 3^2.7^6.11^2.13^2
1285:           832342661863^6,  B3 172
1286:         5697487^4 => 11^2.811.13626931.p15,  B1 164
1287:         5697487^6 => n,  B1 166
1288:         5697487^10 => n,  B1 220;  q^12, B3 166
1290:       35323^4 => 4241.p15,  B1 125
1291:         367091516400121^2 => 3.7.43.103.439.n,  B1 160
1292:         [illegible].6400121^4 => 5.n,  B1 213;  q^6, B3 184
1294:       [illegible] => 7.106961.961003.p16,  B1 151
1295:         [illegible]94173475 3^2 => n,  B1 182;  q^4, B3 182
1297:       [illegible] => 23.67.n,  B1 165
1298:       [illegible] => 79^2.131.n,  B1 182
1299:       [illegible] => n,  B1 216;  q^18, B2 163
1301:     329422[illegible] => 3.13.397.1423.2131.2311333,  B1 98
1302:       [illegible] => 41.71.397,  B1 107
1303:       [illegible] => 3.31...,  S 3^2.7^6.13^2.29^2.31^2.41^2
1304:       [illegible]^4 => p11,  B1 133
1305:         [illegible]25661^2 => 19...,  D
1306:         [illegible]25661^4 => 5...,  S 3^2.5^2.7^6
1307:         [illegible]25661^6,  B3 174
1308:         [illegible] => 127...,  D
1309:         397^10 => 11...,  S 3^2.7^6.11^2.13^2
1310:         397^12 => n,  B1 164
1311:         397^16 => 137.n,  B1 187
1312:         397^18 => n,  B1 195
1313:         397^22 => 47...,  S 3^2.7^6.13^2.29^2.41^2.47^2.71^2
1314:         397^28,  B3 174
1315:       2311333^2 => 3.p13,  B1 118
1316:         1780754182741^1 => P12,  B1 142
1317:           890377091371^2 => 3.n,  B1 167;  q^4, B3 166
1319:         1780754182741^2 => 3.7.1351093.35941459.3109622749,  B1 168
1320:         1780754182741^4 => 5...,  S 3^2.5.7^6
1321:         1780754182741^6,  B3 172
1322:       2311333^4 => 31.101051.84438671.P12,  B1 162
1323:       2311333^6 => n,  B1 162
1324:       2311333^10 => 419.n,  B1 215;  q^12, B3 162
1326:     329422297^4 => 181.2161.28015921.p22,  B1 136
1327:       1074666521961382602401^1 => 3^2.163.4729.P14,  B1 177
1328:       1074666521961382602401^2 => 7.31.241.709.n,  B1 197;  q^4, B3 191
1330:     329422297^6 => 7.29.337.1634305793.1675411861177363.P22,  B1 194;  q^10, B2 170
1332:   4733^10 => 23^2.89.800251343.p24,  B1 92
1333:       149756169433403613317161^1 => 19...,  D
1334:       149756169433403613317161^2 => 3.433.n,  B1 162;  q^4, B2 185
1336:   4733^12 => 13.53.34910890042656523169.p22,  B1 118
1337:       525472120563558064650 1^1 => 6004651.10688807.40935743,  B1 161
1338:       525472120563558064650 1^2 => 19...,  D
1339:       525472120563558064650 1^4,  B2 173
1340:   4733^16 => 63284371.7563524537.7816625987881598827.p23,  B1 162
1341:   4733^18 => 1787.58217.68166590347557994264460641 7.p32,  B1 175;  q^22, B2 161
1343: 7^10 => 1123.293459,  B1 25
1344:   293459^2 => 277.310897033,  B1 38
1345:     310897033^1 => 7.263.84437,  B1 53
1346:       84437^2 => 61.5023.23269,  B1 73
1347:         23269^2 => 3.43.619.6781,  B1 90
1348:           6781^2 => 3.37.414313,  B1 105
1349:             414313^2 => 3.7^2.13...,  S 3^4.7^10.13^2.37^2.43^2.61^2
1350:             414313^4 => 11^2.11321.p17,  B1 159
1351:               2151023372845770 1^2 => 3...,  S 3^4.7^10.11^2.37^2.43^2
1352:               2151023372845770 1^4,  B3 191
1353:             414313^6 => 953.n,  B1 164
1354:             414313^10 => n,  B1 206;  q^12, B3 161
1356:           6781^4 => 5...,  S 3^2.5^2.7^10
1357:           6781^6 => 29.P22,  B1 152
1358:             335296113059602902470 3^2 => 31.n,  B1 196;  q^4, B3 195
1360:           6781^10 => 67.n,  B1 161
1361:           6781^12 => n,  B1 175
1362:           6781^16 => n,  B1 205
1363:           6781^18 => n,  B1 220;  q^22, B2 168
1365:         23269^4 => 11.672151.p11,  B1 116
1366:           396524484012 => 3.2829217.p15,  B1 159
1367:             185247563104753^2 => 3.7.31.751.n,  B1 190;  q^4, B3 187
1369:           396524484012 => 5.11.n,  B1 180
1370:           396524484012 => 43.883.n,  B1 227;  q^10, B2 211
1372:         23269^6 => 7.2311.5573.P19,  B1 141
1373:           176075103997416547 1^2 => 19...,  D;  q^4, B3 177
1375:         23269^10 => 23.81894979.P35,  B1 195
1376:         23269^12 => n,  B1 169
1377:         23269^16 => n,  B1 204
1378:         23269^18 => n,  B1 221;  q^22, B2 192
1380:       84437^4 => 41.241.p16,  B1 102
1381:         5144408211938741^2 => 7^2.43.61.379.P24,  B1 162
```

```
1382:         5144408211938741^4 => 5.11.281.n,  B1 201;  q^6, B2 188
1384:       84437^6 => 449.18376499.p20,  B1 132
1385:         439230808891244541372^2 => 3.13.n,  B1 173;  q^4, B3 171
1387:       84437^10 => 11.23.199.397.332835636078133.p28,  B1 191
1388:       84437^12 => 79.n,  B1 163
1389:       84437^16 => 443.n,  B1 203;  q^18, B2 177
1391:     310897033^2 => 3.139.1667353.139017523,  B1 75
1392:       139017523^2 => 3.523.1950391.6315307,  B1 106
1393:         6315307^2 => 19...,  D
1394:         6315307^4 => 11.9011.p23,  B1 158
1395:           160476802820644380602 81^1 => 3.17...,  S 3^4.7^10.11^2.17^2
1396:           160476802820644380602 81^2,  B3 174
1397:         6315307^6 => n,  B1 174;  q^10, B3 161
1399:       139017523^4 => 131.38903141.P23,  B1 155
1400:         7328620352535233792479 1^2 => 7.n,  B1 200;  q^4, B3 200
1402:       139017523^6 => 7.29.71.281.n,  B1 161;  q^10, B2 162
1404:     310897033^4 => 160651.5492801.7795811.15221321.89222701,  B1 124
1405:       89222701^1 => 44611351,  B1 139
1406:         44611351^2 => 3.439.p13,  B1 170
1407:         44611351^4 => 5.11.n,  B1 187;  q^6, B3 170
1409:       89222701^2 => 3.13.p15,  B1 149
1410:         20412026280977^1 => 7.23.37.n,  B1 165
1411:         20412026280977^2 => 3.13.457.n,  B1 186;  q^4, B3 185
1413:       89222701^4 => 5.41.71.n,  B1 176
1414:       89222701^6 => 7.29.463.n,  B1 207;  q^10, B3 188
1416:     310897033^6 => 71.197.1709.87202669.2161081063.P27,  B1 175;  q^10, B2 169
1418:   293459^4 => 751.P19,  B1 80
1419:     98753222436661782 31^2 => 3.7.1303.36919.p29,  B1 125
1420:       965359139591288250451923532 69^1 => 5.7^2...,  S 3^2.5^2.7^10
1421:       965359139591288250451923532 69^2 => 3.n,  B1 211;  q^4, B2 231
1423:     98753222436661782 31^4 => 5.11.n,  B1 195;  q^6, B2 227
1425:   293459^6 => 491.8429.2568495973.P17,  B1 103
1426:     600827281905837437^2 => 3.P34,  B1 170
1427:     600827281905837437^4 => n,  B1 204;  q^6, B2 201
1429:   293459^10 => 11.23.1013.1093159.1452947.13051721.606299233.p22,  B1 157
1430:     147047599328703832528 1^1 => 3^2.n,  B1 178;  q^2, B3 169
1432:   293459^12 => 49999.P61,  B1 211;  q^16, B2 174
1434: 7^12 => p11,  B1 20
1435:   16148168401^1 => 103.709.110563,  B1 40
1436:     110563^2 => 3.17971.226741,  B1 60
1437:       226741^2 => 3.7^4.1867.3823,  B1 74
1438:         3823^2 => 3.4873051,  B1 88
1439:           4873051^2 => 19...,  D
1440:           4873051^4 => 5...,  S 3^4.5^2.7^12
1441:           4873051^6 => 7.29.71.9311.1862687.4580731.P20,  B1 193
1442:           4873051^10 => 23.397.n,  B1 212;  q^12, B2 160
1444:         3823^4 => 41.p13,  B1 109
1445:           5211310507321^2 => 3.7^2.13.4519.P19,  B1 157
1446:             3144784374425079307^2 => 3.n,  B1 193;  q^4, B3 194
1448:           5211310507321^4 => 5...,  S 3^2.5^2.7^12
1449:           5211310507321^6,  B3 160
1450:         3823^6 => 7.29.491.p17,  B1 129
1451:           313301066588924 41^2 => 19...,  D;  q^4, B3 162
1453:         3823^10 => 42307.85009.P27,  B1 174
1454:         3823^12 => 13.10687.31721.369097.22260629.P21,  B1 195
1455:         3823^16 => n,  B1 181
1456:         3823^18 => n,  B1 195
1457:         3823^22 => 47.829.n,  B1 229;  q^28, B2 200
1459:       226741^4 => 5...,  S 3^2.5^2.7^12
1460:       226741^6 => 197.94907.3727678613.p16,  B1 146
1461:         194975178991516 1^2 => 193.n,  B1 178;  q^4, B3 176
1463:       226741^10 => 10253.66529.6894992169142128891 1.p26,  B1 210
1464:       226741^12 => n,  B1 178;  q^16, B2 171
1466:     110563^4 => 67.,  B1 90
1467:       149431854172152538041^2 => 7^2.37.103.2494707 43.12246841879.p17,  B1 163;  q^4, B2 161
1469:     110563^6 => 11.36107.140533.P19,  B1 120
1470:       318577676888984931^2 => 3.103.65119.P30,  B1 190
1471:       318577676888984931^4 => 5.11^2.n,  B1 232;  q^6, B2 222
1473:     110563^18 => 7.8537.43287773.P38,  B1 181
1474:     110563^12 => 7919.27829610537.549068487193155955077.P26,  B1 211;  q^16, B2 161
1476:   16148168401^2 => 3.433.p18,  B1 54
1477:     200741601281 897^1 => 7^2.4966373.412450637,  B1 84
1478:       412450637^2 => 7.p17,  B1 117
1479:         2430222 65201^2 => 3.4759.46489.809359.p19,  B1 182
1480:         2430222 165201^4 => 5...,  S 3^2.5^2.7^12
1481:         2430222 165201^6,  B2 196
1482:         4224 11.31.110713695745721.p18,  B1 170
1483:         4224 n,  B1 170;  q^10, B2 172
1485:     200741601 897^2 => 3.1327.2630809123.59954796907.P11,  B1 137
1486:       641 => 3.P22,  B1 180
1487:       641 => 61.601.n,  B1 206;  q^6, B3 180
1489:     200741601 897^4 => 191.n,  B1 174;  q^6, B2 207
1491:   16148168401^4 => 61.p39,  B1 94
1492:     p39^1 => 26956151.P25,  B1 170
1493:     p39^2 => 3...,  S 3^2.5.7^12
1494:     p39^4,  B2 206
1495:   16148168401^6 => 11.911.3938257.445646455759.p38,  B1 155
1496:     p38^1 => 5.4...,  B1 196;  q^2, B3 185
1498:   16148168401^8,  B2 204
1499: 7^16 => 14009.2769 .689,  B1 31
1500:   2767163169 => 2767 3169,  B1 49
1501:     2767163169 => ...,  D
1502:     2767163169^4 => 2621.345221.9327281.P16,  B1 133
1503:       2767163169^6 => 3...,  S 3^2.5^2.7^16
1504:       2767163169^8,  B3 165
1505:     2767163169^16 => 197.449.92779.290627.P34,  B1 184;  q^10, B2 168
1507:   2767163169^2 => 109.751.2659.34199239,  B1 69
1508:     2767163169^3 => 43.103.139.1567.4441,  B1 96
1509:       4441 => 7 ,  B1 103
1510:         2221 => 7.235003,  B1 115
1511:           2221 => 19...,  D
1512:           2221 => 93877591.P14,  B1 169
1513:           2221 => 29...,  S 3^4.7^16.13^2.29^2.43^2
1514:           2221 => 23...,  S 3^4.7^16.13^2.23^2.43^2
1515:           2221,  B3 169
1516:         2221 => ...,  S 3^2.5^2.7^16
1517:         2221 => 1429.p16,  B1 157
1518:           2221 => 98753^2 => 109.n,  B1 185;  q^4, B3 187
1520:         2221 => ...,  S 3^2.7^16.13^2.23^2.43^2.103^2.109^2.139^2
1521:         2221 => 9.n,  B1 180
1522:         2221 => ...,  B1 204
1523:         2221 => 7.n,  B1 220;  q^22, B3 170
1525:       4441 => 6575641,  B1 108
1526:         6 => 3287821,  B1 121
1527:           2 => 3.965647.3731443,  B1 146
1528:             2 => 3.7.3049.6709.32413,  B1 171
1529:             4 => 31...,  S 3^4.7^16.13^2.31^2.43^2.103^2
1530:             6,  B3 173
1531:           7 => 5...,  S 3^4.5^2.7^16
1532:           7 => 43.n,  B1 185;  q^10, B3 173
1534:           7 => 19...,  D
1535:           4 => 5...,  S 3^4.5.7^16
1536:           4 => 29...,  S 3^4.7^16.13.29^2.43^2.103^2
1537:           6,  B3 165
1538:       4441^4 => ...,  S 3^2.5.7^16
1539:       4441^6 => 1119655719.P11,  B1 155
1540:         2 => 3.31...,  S 3^4.7^16.13.31^2.43^2.103^2
1541:         2 4,  B3 175
1542:       4441 => 199...,  S 3^2.7^16.13.23^2.43^2.103^2.109^2.139^2.199^2
1543:       4441 => n,  B1 178
1544:       4441 => n,  B1 206
1545:       4441 => n,  B1 223;  q^22, B3 169
1547:   341992 => 29,  B1 144
1548:     4412 1345349953741 91^2 => 7.n,  B1 201;  q^4, B2 229
1550:   341992 => 211.5923.32999.5977948054670257.p17,  B1 176
1551:   341992 => n,  B1 204;  q^12, B2 180
1553:   276763 => 1.5228501.323352761.P22,  B1 126
1554:     6.5490 80946 51^2 => 3.7^3.n,  B1 167;  q^4, B2 171
1556:   276763 => 27...,  D;  q^10, B2 188
1558: 7^18 => 4 ,  B1 45
1559:   45 => 31.199.229.373.8263.P13,  B1 93
1560:     4721 => 3.7.37.101173.248875867.1139535451,  B1 140
1561:       1 => 3.95239.877543.5179063,  B1 175
1562:       1 => 5...,  S 3^2.5.7^18
1563:       1,  B3 176
1564:     4721 => n,  B1 169
1565:     4721 => 29.n,  B1 222;  q^10, B2 253
1566:   45 => 11^2.131.4071031.191993326 31.388940209901.P18,  B1 158
```

```
1568:     8771217798677655 11^2 => 7.31.n,  B1 195;  q^4, B3 194
1570:   4534166740403^6 => n,  B1 172;  q^10, B2 253
1572: 7^22 => 47.3083.p14,  B1 42
1573:   31479823396757^1 => 3.11.577.826632619,  B1 68
1574:     826632619^2 => 3.157.859.1117.3769.401173,  B1 103
1575:       401173^2 => 127...,  D
1576:       401173^4 => 11.31.2861.12301.p13,  B1 157
1577:         2158316902961^2 => 7.n,  B1 181;  q^4, B3 182
1579:       401173^6 => 29.n,  B1 161
1580:       401173^10 => 199.n,  B1 206
1581:       401173^12 => 53.n,  B1 228;  q^16, B3 181
1583:     826632619^4 => p36,  B1 157
1584:       p36^2 => 193.643.n,  B1 234;  q^4, B2 285
1586:     826632619^6 => 7.491.2843.28602463.25382064170452123.P23,  B1 209;  q^10, B2 178
1588:   31479823396757^2 => 1051.708196039.P16,  B1 109
1589:     13313994253015 63^2 => 3.7.696451621.p21,  B1 148
1590:       1212010778394813720 13^1 => n,  B1 168
1591:       1212010778394813720 13^2 => 3.n,  B1 199;  q^4, B3 200
1593:     13313994253015 63^4 => n,  B1 200;  q^6, B2 181
1595:   31479823396757^4 => 8161.p51,  B1 140
1596:     p51^1 => 11.17.n,  B1 192;  q^2, B2 200
1598:   31479823396757^6,  B2 161
1599: 7^28 => 59.127540261.P14,  B1 63
1600:   7131692298499^2 => 19...,  D
1601:   7131692298499^4 => 71.241.1931.154054921.p40,  B1 169;  q^6, B2 166
1603: 7^30 => 311.21143.p19,  B1 57
1604:   399908827939994644 09^1 => 5.43.89.3917.P11,  B1 94
1605:     26677735199^2 => 15313.p17,  B1 135
1606:       4647695130768897 7^2 => 19...,  D
1607:       4647695130768897 7^4,  B3 169
1608:     26677735199^4 => 11.120340858267169 8561.P23,  B1 198
1609:     26677735199^6 => 43.71.n,  B1 198;  q^10, B2 208
1611:   399908827939994644 09^2 => 3.7.61.463.2240060022926953.p17,  B1 132
1612:     1203738652758514 9^1 => 5^2...,  S 3^2.5^2.7^30
1613:     1203738652758514 9^2 => 3.13.31.n,  B1 167;  q^4, B3 165
1615:   399908827939994644 09^4 => 11.n,  B1 188;  q^6, B2 223
1617: 7^36 => 223.2887.p25,  B1 66
1618:   480534510949231576798140 1^1 => 107.157.2269.6726821.9370586851,  B1 115
1619:     9370586851^2 => 3.7321.45613.P11,  B1 155
1620:       876502747 87^2 => 3.421.n,  B1 179;  q^4, B3 177
1622:     9370586851^4 => 5.n,  B1 176
1623:     9370586851^6 => 953.n,  B1 218;  q^10, B2 199
1625:   480534510949231576798140 1^2 => 3.7.5659.p45,  B1 144
1626:     p45^1 => 829.n,  B1 191;  q^2, B3 188
1628:   480534510949231576798140 1^4,  B2 197
1629: 7^40 => 83.20515909.P25,  B1 94
1630:     436213933622906865609478 3^2 => 3.88903.29845969.72381100807.786631291189.P14,
          B1 188;  q^4, B2 197
1632: 7^42 => 166003607842448777.p19,  B1 88
1633:   219253706227117864 1^1 => 3.13127.153113.181810157,  B1 124
1634:     181810157^2 => 7^2.13.67.1579.4093.119839,  B1 154
1635:       119839^2 => 3.n,  B1 163;  q^4, B3 164
1637:     181810157^4 => n,  B1 173
1638:     181810157^6 => n,  B1 206;  q^10, B3 190
1640:   219253706227117864 1^2 => 19...,  D
1641:   219253706227117864 1^4 => 5.n,  B1 200;  q^6, B2 220
1643: 7^46 => 13722816749522711.P23,  B1 116
1644:   636815119964185504594 87^2 => 3.n,  B1 162;  q^4, B2 182
1646: 7^52 => 8269.319591.P35,  B1 128
1647:   P35^2 => 61.241.n,  B1 201;  q^4, B2 276
1649: 7^58 => 459257.134927809.550413361.p27,  B1 120
1650:   3546393236845456129885776 49^1 => 5^2.16453.117781303.P13,  B1 171
1651:   3546393236845456129885776 49^2 => 3.7.13.n,  B1 192;  q^4, B2 212
1653: 7^60 => 367.4759.177237331.P37,  B1 152
1654:   P37^2 => 3.607.n,  B1 228;  q^4, B2 290
1656: 7^66 => 228337.147300841.206244761.p35,  B1 133
1657:   p35^1 => 3.n,  B1 167
1658:   p35^2 => 7.163.n,  B1 228;  q^4, B2 272
1660: 7^70 => 9906434529631 63.P45,  B1 177
1661: 7^72 => 439.3675989.359390389.1958423494433591.p28,  B1 154
1662:   722260522810553620275760696 9^1 => 5.11.83.197.n,  B1 188;  q^2, B3 174
1664: 7^78 => 913242407367610843676812931.P40,  B1 197
1665: 7^82 => 167.66733.76066181.7685542369.62911130477521.303567967057423.p17,  B1 191
1666: 7^88 => 1805633.184896053147409877659 13.p46,  B1 177;  q^96, B2 162
1668: 11^2 => 19...,  D
1669: 11^4 => 5.3221,  B1 9
1670:   3221^1 => 3^2.179,  B1 14
1671:     179^2 => 7...,  D
1672:     179^4 => 11.93853931,  B1 34
1673:       93853931^2 => 19...,  D
1674:       93853931^4 => 5.71...,  S 3^2.5^2.11^4.71^2.179^4
1675:       93853931^6 => 449.122921.50479787.P33,  B1 162
1676:       93853931^10 => 23...,  S 3^2.5^2.11^4.23^2
1677:       93853931^12,  B2 191
1678:     179^6 => 71...,  S 3^2.5^2.11^4.71^2.179^6
1679:     179^10 => 23...,  S 3^2.5^2.11^4.23^2
1680:     179^12 => 79...,  S 3^2.5^2.11^4.79^2.179^12
1681:     179^16 => 103...,  S 3^2.5^2.11^4.103^2.179^16
1682:     179^18 => p41,  B1 131
1683:       p41^2,  B2 162
1684:     179^22 => 3271712442424532693.p32,  B1 158
1685:       p32^2 => 7...,  D
1686:       p32^4,  B2 248
1687:     179^28 => 2437.10151.189661.P51,  B1 199
1688:     179^30 => 52081.2488953079621.252727836768067.P37,  B1 212;  q^36, B2 162
1690:   3221^2 => 10378063,  B1 25
1691:     10378063^2 => 3.769.P11,  B1 51
1692:       466858266 19^2 => 3.13...,  S 3^2.5.11^4.13^2
1693:       466858266 19^4 => 11.31.p41,  B1 119
1694:         p41^1 => 11...,  S 3^2.5^2.11^4.31^2
1695:         p41^2,  B2 160
1696:       466858266 19^6 => 29023.235304740037879.p46,  B1 180;  q^10, B2 213
1698:     10378063^4 => 11.33151.p23,  B1 72
1699:       3181089837645620175555 81^1 => 41.547.133333987.5319047759,  B1 116
1700:         5319047759^2 => 7...,  D
1701:         5319047759^4 => 11.n,  B1 173
1702:         5319047759^6 => 43.n,  B1 215;  q^10, B2 194
1704:       3181089837645620175555 81^2 => 3.208519.7753171.p33,  B1 152
1705:         p33^1 => 5.23...,  S 3^2.5^2.11^4.23^2
1706:         p33^2,  B3 184
1707:       3181089837645620175555 81^4,  B2 180
1708:     10378063^6 => 127...,  D
1709:     10378063^10 => 23.1195278922619.9794878649711.P44,  B1 222;  q^12, B2 168
1711:   3221^4 => 5.11.P13,  B1 43
1712:     1957650063931^2 => 7...,  D
1713:     1957650063931^4 => 5.41.2317501006871.4665519492197925 1.p18,  B1 149
1714:       6626229152532462 01^1 => n,  B1 166;  q^2, B3 165
1716:     1957650063931^6 => 43.n,  B1 168;  q^10, B2 245
1718:   3221^6 => 7...,  D
1719:   3221^10 => 381510691.p27,  B1 84
1720:     3151631182030856706832246 21^1 => 264071.p21,  B1 136
1721:       5967393583602244674 41^2 => 7...,  D;  q^4, B3 178
1723:     3151631182030856706832246 21^2 => 7...,  D
1724:     3151631182030856706832246 21^4,  B2 211
1725:   3221^12 => p43,  B1 89
1726:     p43^1 => 7...,  D;  q^2, B2 168
1728:   3221^16 => 1429.12547.22951667.p42,  B1 132
1729:     p42^1 => 3.13...,  S 3^2.5^2.11^4.13^2
1730:     p42^2,  B3 170
1731:   3221^18 => 1597.9269332682900903447.94970877087337775013.p22,  B1 172
1732:   3221^22 => 23.47.n,  B1 162;  q^28, B2 196
1734: 11^6 => 43.45319,  B1 18
1735:   45319^2 => 127...,  D
1736:   45319^4 => 151.P17,  B1 65
1737:     2793533661172831 1^2 => 43.151.7621.p26,  B1 98
1738:       1577068121771804272742796 1^1 => 839.4679.p19,  B1 148
1739:         2008655468658564301^2 => 7...,  D;  q^4, B3 184
1741:       1577068121771804272742796 1^2 => 3.109.n,  B1 172;  q^4, B2 201
1743:     2793533661172831 1^4 => 5.31.n,  B1 165;  q^6, B2 197
1745:   45319^6 => 7...,  D
1746:   45319^10 => 23.38677.1806482129.1670048579431.p20,  B1 130

1747:     1361662180025496566 9^1 => 3.5...,  S 3^2.5^2.11^6.23^2
1748:     1361662180025496566 9^2 => 7...,  D;  q^4, B3 178
1750:   45319^12 => 13.79.24576241.254169641233.P35,  B1 165
1751:   45319^16 => 919.n,  B1 161;  q^18, B2 167
1753: 11^10 => 15797.1806113,  B1 25
1754:   1806113^1 => 3.17.17707,  B1 36
```

```
1755:     17707^2 => 7...,  D
1756:     17707^4 => p17,  B1 79
1757:       98311534883794601^2 => 31.61.123007.10113553.28612693.P12,  B1 147
1758:         143590301611^2 => 127...,  D;  q^4, B3 169
1760:       98311534883794601^4 => 5...,  S 3^2.5^2.11^10.17^2
1761:       98311534883794601^6,  B2 203
1762:     17707^6 => p26,  B1 104
1763:       308243871793534241553709 57^2 => 3.1213.79423.P43,  B1 205;  q^4, B2 203
1765:     17707^10 => 1013.394300646587.P28,  B1 155
1766:       75864301875465441121063817 47^2 => 3.163.n,  B1 213;  q^4, B2 223
1768:     17707^12 => 13.8528599.18103947594851.p30,  B1 181
1769:     17707^16 => 137^2.n,  B1 164
1770:     17707^18 => n,  B1 181;  q^22, B2 186
1772:   1806113^2 => 19...,  D
1773:   1806113^4 => 4051.37680901.P14,  B1 86
1774:     69710210289691^2 => 3.P28,  B1 141
1775:       16198378062110035614503883 91^2 => 127...,  D;  q^4, B2 217
1777:     69710210289691^4 => 5.11^2.251.n,  B1 170;  q^6, B2 166
1779:   1806113^6 => 7...,  D
1780:   1806113^10 => 11.199.155697059523919.398749653853719592 61.p26,  B1 178
1781:   1806113^12 => 313.n,  B1 167;  q^16, B2 200
1783: 11^12 => 1093.3158528101,  B1 28
1784:   3158528101^1 => 1579264051,  B1 46
1785:     1579264051^2 => 19...,  D
1786:     1579264051^4 => 5.41^2.1091.291271.1232941.p19,  B1 135
1787:       18889348908934988 21^2 => 7...,  D;  q^4, B3 171
1789:     1579264051^6 => 7...,  D;  q^10, B2 183
1791:   3158528101^2 => 3.p19,  B1 57
1792:     332543325598839810 1^1 => 17.11719.269117.31012561,  B1 93
1793:       31012561^2 => 3.p15,  B1 122
1794:         320592990263761^2 => 3.1579.3187.p22,  B1 180
1795:         320592990263761^4 => 5...,  S 3^2.5^2.11^12.17^2
1796:         320592990263761^6,  B3 180
1797:       31012561^4 => 5...,  S 3^2.5^2.11^12.17^2
1798:       31012561^6 => 71.n,  B1 170
1799:       31012561^10 => n,  B1 228;  q^12, B2 179
1801:     332543325598839810 1^2 => 3.3196717033.p28,  B1 121
1802:       1153110751423583890061382397^1 => 7...,  D
1803:       1153110751423583890061382397^2 => 3.13.n,  B1 194;  q^4, B2 216
1805:     332543325598839810 1^4 => 5.n,  B1 184;  q^6, B2 222
1807:   3158528101^4 => 5.11^2.31.4491267603001.P22,  B1 115
1808:     1181552381011924006951^2 => 3.37...,  S 3^2.5.11^12.31^2.37^2
1809:     1181552381011924006951^4,  B2 168
1810:   3158528101^6 => 7...,  D;  q^10, B2 189
1812: 11^16 => p17,  B1 33
1813:   50544702849929377^1 => 23.4591.p12,  B1 66
1814:     239337374873^2 => 127...,  D
1815:     239337374873^4 => 11.101.6421.13831.782671.56468006409121.P15,  B1 177
1816:     239337374873^6 => 967.n,  B1 182;  q^10, B2 227
1818:   50544702849929377^2 => 3.31.37.3529.123127.4416852373.p12,  B1 105
1819:     386855506153^1 => 13.43.18503.18701,  B1 127
1820:       18701^2 => 7...,  D
1821:       18701^4 => 5...,  S 3^2.5^2.11^16.13^2
1822:       18701^6 => 127...,  D;  q^10, B3 162
1824:     386855506153^2 => 7...,  D
1825:     386855506153^4 => 151.n,  B1 178
1826:     386855506153^6 => n,  B1 223;  q^10, B2 231
1828:   50544702849929377^4 => 37721621798058891122049 31.P43,  B1 217;  q^6, B2 200
1830: 11^18 => p19,  B1 37
1831:   611590904484145462 9^1 => 5.31.70911041.278218153,  B1 74
1832:     278218153^2 => 3...,  S 3^2.5^2.11^18.31^2
1833:     278218153^4 => 11.31.61.691.23251.40841.3737791.P12,  B1 153
1834:       117442848251^2 => 79.n,  B1 177;  q^4, B3 176
1836:     278218153^6 => 337.n,  B1 161;  q^10, B2 168
1838:   611590904484145462 9^2 => 3.79.17881.353461951.p23,  B1 109
1839:     249711887012463934996 93^1 => 148913.60025093.1396830683,  B1 153
1840:       1396830683^2 => 19...,  D;  q^4, B3 171
1842:     249711887012463934996 93^2 => 7...,  D;  q^4, B2 179
1844:   611590904484145462 9^4 => 101.n,  B1 169;  q^6, B2 225
1846: 11^22 => 829.28878847.P13,  B1 65
1847:   3740221981231^2 => 3.73.283.487.811.1692283.337708039,  B1 116
1848:     337708039^2 => 7...,  D
1849:     337708039^4 => 11.41.971.n,  B1 170
1850:     337708039^6 => 29.n,  B1 202;  q^10, B3 184
1852:   3740221981231^4 => 5.283541.51360941.83871721.66933648671.P18,  B1 186
1853:   3740221981231^6 => 7...,  D;  q^10, B2 251
1855: 11^28 => 523.P27,  B1 87
1856:   303309617049998388989376043^2 => 3.571.1879.115327.4100539.22718419879.p25,
          B1 169;  q^4, B2 211
1858: 11^30 => 50159.2428541.P21,  B1 87
1859:   157571957584602258799^2 => 3.316926683894353432 63.p21,  B1 154
1860:     261142645694888227909^1 => 19...,  D
1861:     261142645694888227909^2,  B3 168
1862:   157571957584602258799^4,  B2 161
1863: 11^36 => 2591.36855109.136151713.P19,  B1 104
1864:   2615418118891695851^2 => 331.1129.16363.53611.172153.P18,  B1 178
1865:   2615418118891695851^4 => 5.211.n,  B1 217;  q^6, B2 221
1867: 11^40 => 83.1231.27061.509221.14092193.29866451.P12,  B1 117
1868:   840139875599^2 => 43.163.181.26683.P14,  B1 165
1869:   840139875599^4 => 71.491.n,  B1 193;  q^6, B3 165
1871: 11^42 => 1416258521793067.P29,  B1 131
1872:   4253465609158326804591565 4719^2 => 3.n,  B1 189;  q^4, B2 229
1874: 11^46 => 2069.226668790663551 77.p29,  B1 115
1875:   1880632704182469059574711 3889^1 => 5.41.p26,  B1 171
1876:   1880632704182469059574711 3889^2 => 3.13.n,  B1 185;  q^4, B2 226
1878: 11^52 => 107.351497.6005113.P40,  B1 155
1879:   P40^2 => 7...,  D;  q^4, B2 318
1881: 11^58 => 1181.70845409351.P47,  B1 178
1882: 11^60 => 440177.520518327319589.p43,  B1 145
1883:   p43^1 => 31.n,  B1 188;  q^2, B3 172
1885: 11^66 => 15277.2160349.763941482182035 59.P42,  B1 199
1886: 11^70 => 1847.64327.159248456569.1273880539247.P42,  B1 207
1887: 11^72 => p76,  B1 150
1888:   p76^1 => n,  B1 224;  q^2, B2 300
1890: 11^78,  B2 162

1891: 31^2 => 3.331,  B1 8
1892:   331^2 => 7...,  D
1893:   331^4 => 5.37861.63601,  B1 29
1894:     63601^1 => 7...,  D
1895:     63601^2 => 3.2203.612067,  B1 47
1896:       612067^2 => 3.4801.26010319,  B1 71
1897:         26010319^2 => 3.43.9949.527135461,  B1 95
1898:           527135461^1 => 7...,  D
1899:           527135461^2 => 3.41233.p13,  B1 126
1900:             2246354414917^1 => 521.10391.207469,  B1 150
1901:               207469^2 => 3.37...,  S 3^6.5^2.31^2.37^2.43^2
1902:               207469^4,  B3 161
1903:             2246354414917^2 => 7...,  D
1904:             2246354414917^4 => n,  B1 208;  q^6, B3 183
1906:           527135461^4 => 5.491.2537551.3563501.p19,  B1 171
1907:           527135461^6 => 29.n,  B1 188;  q^10, B2 174
1909:         26010319^4 => 11...,  D
1910:         26010319^6 => 29.71.P42,  B1 189
1911:         26010319^10 => n,  B1 204;  q^12, B2 177
1913:       612067^4 => 11...,  D
1914:       612067^6 => 7...,  D
1915:       612067^10 => 67.397.1453.69442146841.439603198057.P28,  B1 202
1916:       612067^12 => 13.n,  B1 176;  q^16, B2 185
1918:     63601^4 => 5.41.271.1381.4231.50408381,  B1 73
1919:       50408381^1 => 3.8401397,  B1 86
1920:         8401397^2 => 7...,  D
1921:         8401397^4 => 11...,  D
1922:         8401397^6 => 281.7765926788407 2001.P23,  B1 197
1923:         8401397^10 => 23.89...,  S 3^2.5^2.23^2.31^2.41^2.89^2
1924:         8401397^12,  B2 166
1925:       50408381^2 => 7...,  D
1926:       50408381^4 => 5.241.p28,  B1 130
1927:         535826216022480550477892452 1^1 => 11...,  D
1928:         535826216022480550477892452 1^2 => n,  B1 208;  q^4, B2 221
1930:       50408381^6 => 105585173.P39,  B1 196
1931:       50408381^10 => 11...,  D
1932:       50408381^12,  B2 184
1933:     63601^6 => 43.p28,  B1 83
1934:       153929563429034097618918454 9^1 => 11...,  D
1935:       153929563429034097618918454 9^2 => 3.67.n,  B1 162;  q^4, B2 217
1937:     63601^10 => 23.2927.P44,  B1 164
1938:     63601^12 => 157.191621.309632867830373738 83.P31,  B1 192
```

```
1939:     63601^16 => n,  B1 173;  q^18, B2 172
1941:   331^6 => 2180921.604842197,  B1 40
1942:     604842197^1 => 3.1373.73421,  B1 56
1943:       73421^2 => 823.6550081,  B1 75
1944:         6550081^2 => 3.409.p11,  B1 103
1945:           34966232809^2 => 19...,  D
1946:           34966232809^4 => 461.n,  B1 169
1947:           34966232809^6 => 29.n,  B1 210;  q^10, B2 210
1949:         6550081^4 => 5.701.p24,  B1 144
1950:           525168569656564073834261^2 => n,  B1 191;  q^4, B3 191
1952:         6550081^6 => 29.3221.P36,  B1 185
1953:         6550081^10 => 23.n,  B1 200;  q^12, B2 163
1955:       73421^4 => 5.101.131.2935811.149622301,  B1 105
1956:         149622301^2 => 3.p16,  B1 137
1957:           746227770205230 1^2 => 7...,  D
1958:           746227770205230 1^4,  B3 169
1959:         149622301^4 => 11...,  D
1960:         149622301^6 => 29.n,  B1 188;  q^10, B3 170
1962:       73421^6 => 1339297.P24,  B1 134
1963:         1169636173072533373134 91^2 => 3.67.n,  B1 182;  q^4, B2 184
1965:       73421^10 => 331.1423812141489779666087.P25,  B1 187
1966:       73421^12 => 53.n,  B1 165
1967:       73421^16 => n,  B1 202;  q^18, B2 175
1969:     604842197^2 => P18,  B1 78
1970:       365834083876629007^2 => 19...,  D
1971:       365834083876629007^4 => 41.n,  B1 185;  q^6, B2 210
1973:     604842197^4 => 11...,  D
1974:     604842197^6 => 7...,  D;  q^10, B2 175
1976:   331^10 => 11...,  D
1977:   331^12 => 53.37181.10999171.P17,  B1 90
1978:     8003742162353925 1^2 => 7...,  D
1979:     8003742162353925 1^4 => 11...,  D
1980:     8003742162353925 1^6,  B2 202
1981:   331^16 => 307.7580566663.136219001651.P17,  B1 124
1982:     6568772403215916 7^2 => 3.13.238702081.P24,  B1 182
1983:     6568772403215916 7^4 => 11...,  D;  q^6, B2 201
1985:   331^18 => 282349518620419.P31,  B1 140
1986:     P31^2 => 3.13.n,
1988:   331^22 => 47.7499.1177877.15592774385477.p31,  B1 139
1989:     p31^1 => 3^2.5^2.17...,  S 3^4.5^2.17^2.31^2
1990:     p31^2 => 7...,  D;  q^4, B2 245
1992:   331^28 => 59.110267770812013954428 49.P47,  B1 193
1993:   331^30 => 311.1117.4902713.29458195409.2236471251785237.P38,  B1 215;  q^36, B2 181
1995: 31^4 => 11...,  D
1996: 31^6 => 917087137,  B1 17
1997:   917087137^1 => 11...,  D
1998:   917087137^2 => 3.43.4447.38047.38533987,  B1 62
1999:     38533987^2 => 19...,  D
2000:     38533987^4 => 93151.347071.p20,  B1 118
2001:       6819773464826283580 1^1 => 3^2.379.3903337.2561074343,  B1 156
2002:         2561074343^2 => 7...,  D
2003:         2561074343^4,  B3 175
2004:       6819773464826283580 1^2 => 13.n,  B1 178;  q^4, B3 178
2006:     38533987^6 => 11243.2402107.412544161.p27,  B1 157
2007:       2938452578328852927247443 17^1 => 3.n,  B1 183;  q^2, B3 175
2009:     38533987^10 => 67.947.n,  B1 204;  q^12, B2 182
2011:   917087137^4 => 317475941851 91.P23,  B1 116
2012:     2228084147010730175973 1^2 => 19...,  D;  q^4, B2 178
2014:   917087137^6 => 7...,  D;  q^10, B2 179
2016: 31^10 => 23.397.617.150332843,  B1 41
2017:   150332843^2 => 211.840241.127473943,  B1 71
2018:     127473943^2 => 7...,  D
2019:     127473943^4 => 11...,  D
2020:     127473943^6 => 21728981.74739449.24535058270740753.p18,  B1 190;  q^10, B2 162
2022:   150332843^4 => 6158702739701.p20,  B1 106
2023:     829327836597848641 01^1 => 11...,  D
2024:     829327836597848641 01^2 => 7...,  D
2025:     829327836597848641 01^4 => 5.811.n,  B1 236;  q^6, B2 239
2027:   150332843^6 => 113.4945369090710721.p32,  B1 144
2028:     p32^1 => 3.47.79.n,  B1 179
2029:     p32^2 => 13.n,  B1 223;  q^4, B2 250
2031:   150332843^10,  B2 163
2032: 31^12 => 42407.2426789.7908811,  B1 47
2033:   7908811^2 => 3.43.73.349.571.33331,  B1 74
2034:     33331^2 => 7...,  D
2035:     33331^4 => 5.4451.87541.633530171,  B1 120
2036:       633530171^2 => p18,  B1 144
2037:         4013604782008194 13^1 => 179.n,  B1 163
2038:         4013604782008194 13^2 => 3.13...,  S 3^2.5.13^2.31^12.43^2.73^2
2039:         4013604782008194 13^4,  B3 190
2040:       633530171^4 => 5.31^2.41.181.n,  B1 173
2041:       633530171^6 => 7...,  D
2042:       633530171^10,  B3 190
2043:     33331^6 => 71.113.39887.473971.P13,  B1 147
2044:       9040306524047^2 => n,  B1 173;  q^4, B3 173
2046:     33331^10 => 11...,  D
2047:     33331^12 => 53.n,  B1 176
2048:     33331^16 => n,  B1 210;  q^18, B2 162
2050:   7908811^4 => 11...,  D
2051:   7908811^6 => 7...,  D
2052:   7908811^10 => 23.67.89.n,  B1 176;  q^12, B2 165
2054: 31^16 => p24,  B1 47
2055:   751670559138758105956097^1 => 11...,  D
2056:   751670559138758105956097^2 => 19...,  D;  q^4, B2 191
2058: 31^18 => 571.14251.p20,  B1 60
2059:   887706663326107621 69^1 => 11...,  D
2060:   887706663326107621 69^2 => 3.9285003751.P30,  B1 160
2061:   887706663326107621 69^4 => 41.n,  B1 200;  q^6, B2 239
2063: 31^22 => 1509997.61562537.p19,  B1 79
2064:   717637476132373311 7^1 => 73.167.988007.297903607,  B1 116
2065:     297903607^2 => 3.307.13933.6915876949,  B1 150
2066:       6915876949^2 => 7...,  D;  q^4, B3 170
2068:     297903607^4 => n,  B1 167
2069:     297903607^6 => 7...,  D;  q^10, B3 184
2071:   717637476132373311 7^2 => 3.13.9949.p33,  B1 141
2072:     p33^1 => 11...,  D;  q^2, B3 166
2074:   717637476132373311 7^4 => 11...,  D;  q^6, B2 226
2076: 31^28 => 349.10789.49823.1482570191.1124578713.p12,  B1 114
2077:   189343400041^1 => 311.304410611,  B1 135
2078:     304410611^2 => p17,  B1 169
2079:     304410611^4 => 5.31.n,  B1 186;  q^6, B3 169
2081:   189343400041^2 => 3.13.272571007.P13,  B1 160
2082:   189343400041^4 => 11...,  D;  q^6, B3 160
2084: 31^30 => p45,  B1 89
2085:   p45^1 => 71713.p40,  B1 178;  q^2, B2 179
2087: 31^36 => 149.4219.152597832677.257803457371.386626708057.p14,  B1 147
2088:   528124930229 53^1 => 7...,  D
2089:   528124930229 53^2 => 3.61.n,  B1 179;  q^4, B3 176
2091: 31^40 => 83.4248179715443317661 2759.p36,  B1 143
2092:   p36^1 => n,  B1 178;  q^2, B3 178
2094: 31^42 => 146982701137.p52,  B1 136
2095:   p52^1 => 7...,  D;  q^2, B2 205
2097: 31^46 => 3128573142495569.170942984502845969696543.P30,  B1 190
2098: 31^52 => 218149.2210276655188599.n,  B1 170;  q^58, B2 172
2100: 13^1 => 7,  D
2101: 13^2 => 3.61,  B1 4
2102:   61^1 => 31,  D
2103:   61^2 => 3.13.97,  B1 8
2104:     97^1 => 7...,  D
2105:     97^2 => 3.3169,  B1 15
2106:       3169^1 => 5...,  S 3^4.5^2.13^2
2107:       3169^2 => 3.3348577,  B1 25
2108:         3348577^1 => 1674289,  B1 37
2109:           1674289^2 => 3.p12,  B1 62
2110:             934415109937^2 => 127...,  D
2111:             934415109937^4 => 17200201.p41,  B1 182
2112:             934415109937^6 => 7...,  D;  q^10, B2 239
2114:           1674289^4 => p25,  B1 99
2115:             7858179685661558917710821^2 => 270241.837937.3345409.984243979.p23,
                    B1 199;  q^4, B2 199
2117:           1674289^6 => 7...,  D
2118:           1674289^10 => 11...,  D
2119:           1674289^12 => n,  B1 174;  q^16, B2 199
2121:         3348577^2 => 3.p13,  B1 45
2122:           3737657091169^1 => 5...,  S 3^6.5^2.13^2
2123:           3737657091169^2 => 3.181.26042690887.P12,  B1 104
2124:             987900542491^2 => 7...,  D
```

```
987900542491^4 => 11...,  D
987900542491^6 => 127...,  D;  q^10, B2 239
3737657091169^4 => p51,  B1 133
p51^1 => 3.317.n,  B1 185;  q^2, B2 201
3737657091169^6 => 7...,  D
3737657091169^10,  B2 251
3348577^4 => 86524531.P19,  B1 95
1453121857811448551^2 => 199.182701.3478781116501.P17,  B1 157
16694867096928847^2 => 3.103.673.n,  B1 194;  q^4, B3 189
1453121857811448551^4 => 31...,  D
1453121857811448551^6,  B2 217
3348577^6 => 7...,  D
3348577^10 => 11...,  D
3348577^12 => 313.443.937.n,  B1 180;  q^16, B2 208
3169^4 => 61.p13,  B1 37
1653850268201^1 => 19...,  D
1653850268201^2 => 78049.1577431459.p11,  B1 88
22216443433^1 => 41.53.71.71999,  B1 108
71999^2 => 7...,  D
71999^4 => 11...,  D
71999^6 => 14939.1302194107229.P13,  B1 186
71999^10 => 23.n,  B1 197
71999^12 => 131.157.521.911.n,  B1 225;  q^16, B3 176
22216443433^2 => 7...,  D
22216443433^4 => 1199813191.P33,  B1 197
22216443433^6 => 743.n,  B1 200;  q^10, B2 206
1653850268201^4 => 5.6474751.P42,  B1 170
1653850268201^6 => n,  B1 170;  q^10, B2 244
3169^6 => 71.491.8429.P13,  B1 70
3447899565839^2 => 2362573.p19,  B1 106
503180702400146475 7^1 => 211.1103.P14,  B1 142
10810256869463^2 => 7...,  D;  q^4, B3 169
503180702400146475 7^2 => 3.2809087.6149624869.P21,  B1 188
503180702400146475 7^4 => 41.n,  B1 232;  q^6, B2 224
3447899565839^4 => 11...,  D
3447899565839^6 => 7...,  D;  q^10, B2 250
3169^10 => 11...,  D
3169^12 => 53.13751549137.51206126365213.p17,  B1 121
27495050288861117^1 => 3.181.p14,  B1 152
2531772586451 3^2 => n,  B1 179;  q^4, B3 179
27495050288861117^2 => 7...,  D
27495050288861117^4 => n,  B1 222;  q^6, B2 197
3169^16 => 103.5458633.P48,  B1 172
3169^18 => 4447.427951609310474819.P42,  B1 199
3169^22 => n,  B1 164;  q^28, B2 196
97^4 => 11...,  D
97^6 => 43.967.20241187,  B1 41
20241187^2 => 3.72229.1890771811,  B1 66
1890771811^2 => 3.2017.6829.152407.567661,  B1 102
152407^2 -> 3.7742682019,  B1 122
7742682019^2 => 127...,  D
7742682019^4 => 41.n,  B1 183;  q^6, B3 162
152407^4 => 41.267270691.P11,  B1 153
49236515971^2 => 3.43.n,  B1 174;  q^4, B3 175
152407^6 -> 3515044995197.p19,  B1 172
152407^10 => 23.89.n,  B1 198
152407^12 => n,  B1 216;  q^16, B3 174
1890771811^4 => 11...,  D
1890771811^6 => 127...,  D;  q^10, B2 185
20241187^4 => 31...,  D
20241187^6 => 7...,  D
20241187^10 => n,  B1 172;  q^12, B2 175
97^10 => 89.P18,  B1 64
83719733507500048 3^2 => 3.P36,  B1 136
P36^2 => 19...,  D
P36^4,  B2 282
83719733507500048 3^4 => n,  B1 171;  q^6, B2 215
97^12 => 53.79.20359.p16,  B1 62
8224356155341457^1 => 11...,  D
8224356155341457^2 => 43.79^2.4657.1079059.P17,  B1 134
5015679192790360 3^2 => 3.37.n,  B1 169;  q^4, B3 167
8224356155341457^4 => 191.n,  B1 174;  q^6, B2 190
97^16 => p32,  B1 70
p32^1 => 11...,  D
p32^2 => 31...,  D;  q^4, B2 254
97^18 => 21433.280314943.p23,  B1 91
9719915834548161102949 3^1 => 13^2.29.101.151.1109.p12,  B1 134
586297360433^2 => 2089.12475678441.P11,  B1 181
586297360433^4 => 11...,  D;  q^6, B3 181
9719915834548161102949 3^2 => 3.7239072467504749.p30,  B1 176;  q^4, B2 183
97^22 => 47.10021699.160026187716961.P21,  B1 123
6858803855131204641 79^2 => 19...,  D
6858803855131204641 79^4,  B2 166
97^28 => 243311.105668621839502584913.P31,  B1 153
P31^2 => 19...,  D;  q^4, B2 241
97^30 => 894227.5234599.P47,  B1 184
97^36 => p72,  B1 149
p72^1 => 11...,  D;  q^2, B2 286
97^40 => n,  B1 164;  q^42, B2 166
61^4 => 5.131.21491,  B1 23
21491^2 => 421.1097113,  B1 35
1097113^1 => 548557,  B1 47
548557^2 -> 7...,  D
548557^4 => 11...,  D
548557^6 => 2311.5349886613.p22,  B1 139
2203874382642540199649^2 => 19...,  D
2203874382642540199649^4,  B3 181
548557^10 => P58,  B1 208
548557^12 => 131.n,  B1 171;  q^16, B2 183
1097113^2 => 3.37.5743.1888171,  B1 62
1888171^2 => 3...,  S 3^4.5.13^2.37^2.61^4
1888171^4 => 5...,  S 3^2.5^2.13^2.37.61^4
1888171^6 => 43...,  S 3^2.5.13^2.37^2.43^2.61^4
1888171^10 => 23^2...,  S 3^2.5.13^2.23^2.37^2
1888171^12 => 53...,  S 3^2.5.13^2.37^2.53^2.61^4.131^2
1888171^16,  B2 200
1097113^4 => 311.881.22511.p15,  B1 87
2348955314897 41^1 => 79...,  S 3^2.5^2.13^2.61^4.79^2.131^2
2348955314897 41^2 => 19...,  D
2348955314897 41^4 => 5...,  S 3^2.5^2.13^2.61^4.131^2.311^2.421.881^2
2348955314897 41^6,  B2 172
1097113^6 => 43.113.1287161692889297.p18,  B1 121
2788229754846845 41^1 => ...,  S 3^2.5^2.13^2.43^2.61^4
2788229754846845 41^2 => 3.37...,  S 3^2.5.13^2.37^2.43^2.61^4
2788229754846845 41^4 => 11...,  D
2788229754846845 41^6,  B2 209
1097113^10 => 23...,  S 3^2.5.13^2.23^2.61^4.131^2
1097113^12 => 53.313.n,  B1 176;  q^16, B2 193
21491^4 => 31...,  D
21491^6 => 7...,  D
21491^10 => 23...,  S 3^2.5.13^2.23^2.61^4.131^2
21491^12 => 8581.5781439.P42,  B1 167
21491^16 => 137.1361.380461.5609838841.1984523607510683.P34,  B1 214
21491^18 => n,  B1 171;  q^22, B2 190
61^6 => P11,  B1 35
52379047267^2 => 3.6619231.p15,  B1 63
1381612956072491^1 => 5^3.53.61...,  S 3^2.5^4.13^2.53^2.61^6
1381612956072491^2 => 3.67.16603.10822630597.p12,  B1 122
5285150196611^1 => 7...,  D
5285150196611^2 => 3.6102253.27763969.549568273,  B1 169
5285150196611^4 => 5...,  S 3^4.5.13^2.61^6.67^2
5285150196611^6,  B3 170
1381612956072491^4 => 491.911.n,  B1 167;  q^6, B2 169
52379047267^4 => 297134095231.P32,  B1 142
P32^2 => n,  B1 205;  q^4, B2 251
52379047267^6 => 7...,  D;  q^10, B2 214
61^10 => 199.859.P13,  B1 56
4242586390571^2 => 19...,  D
4242586390571^4 => 5.151.761.37571.p41,  B1 142
p41^1 => 3.17...,  S 3^2.5^2.13^2.17^2
p41^2,  B3 180
4242586390571^6 => 113.n,  B1 183;  q^10, B2 252
61^12 => 187123.P17,  B1 67
1442146675646079 1^2 => 3.73.367.1133191.P22,  B1 129
2283523948634855486611^2 => 19...,  D
2283523948634855486611^4,  B3 172
1442146675646079 1^4 => 11...,  D
1442146675646079 1^6,  B2 193
```

```
2307:   61^16 => 103.P27,  B1 88
2308:     36275943774350895510464675 9^2 => 13.27397.412621813.p39,  B1 153
2309:       p39^1 => n,  B1 192;  q^2, B3 184
2311:     36275943774350895510464675 9^4,  B2 212
2312:   61^18 => 229.P30,  B1 97
2313:     607127818287731216605774270 51^2 => 3.97.1063.60091.76469299.n,  B1 174;  q^4, B2 238
2315:   61^22 => 47.p38,  B1 83
2316:     p38^1 => 5^2...,  S 3^2.5^2.13^2.47^2.61^22
2317:     p38^2 => 3.61.n,  B1 192;  q^4, B2 300
2319:   61^28 => 12703.37991.59503651.129924628343.p23,  B1 130
2320:     265822565199367947754 01^1 => 3.6733.18451.22571.1580015219,  B1 174
2321:     265822565199367947754 01^2 => 7...,  D;  q^4, B3 198
2323:   61^30 => 1489.P51,  B1 160
2324:   61^36 => p65,  B1 131
2325:     p65^1 => n,  B1 195;  q^2, B2 257
2327:   61^40 => 83.5413.26873095187.p56,  B1 162
2328:   61^42 => 5956707000538571084106691363703.p45,  B1 183;  q^46, B2 164
2330: 13^4 => 30941,  B1 8
2331:   30941^1 => 3^4.191,  B1 15
2332:     191^2 => 7...,  D
2333:     191^4 => 11...,  D
2334:     191^6 => 127...,  D
2335:     191^10 => 34179328063.P13,  B1 79
2336:       1900421426047^2 => 7...,  D
2337:       1900421426047^4 => 31...,  D
2338:       1900421426047^6 => 43.n,  B1 203;  q^10, B2 245
2340:     191^12 => 131.1483.9049.92041.301627.48552947,  B1 92
2341:       48552947^2 => 7...,  D
2342:       48552947^4 => 11...,  D
2343:       48552947^6 => 29.631.n,  B1 174
2344:       48552947^10 => 23.n,  B1 232;  q^12, B2 184
2346:     191^16 => p37,  B1 120
2347:       p37^2 => 3.157.n,  B1 196;  q^4, B2 291
2349:     191^18 => 19...,  D
2350:     191^22 => 47.139.41615143.65741959.12070833277819.P18,  B1 161
2351:     191^28 => 523.1145849.7498509527.238463492857.p34,  B1 202
2352:     191^30 => 62683.851032722564092 5409.P45,  B1 216;  q^36, B2 164
2354:   30941^2 => 157.433.14083,  B1 28
2355:     1408[illegible] => 3.4591.14401,  B1 43
2356:       144[illegible]^1 => 19...,  D
2357:       144[illegible]^2 => 7...,  D
2358:       144[illegible]^4 => 5.41.93871.2235195191,  B1 86
2359:         [illegible]195191^2 => 223.144967.p12,  B1 115
2360:           [illegible]54545688753^1 => ...,  S 3^2.5^2.13^4.41^2.157^2
2361:           [illegible]54545688753^2 => 19...,  D
2362:           [illegible]54545688753^4 => 11...,  D
2363:           [illegible]54545688753^6,  B3 169
2364:         [illegible]195191^4 => 11...,  D
2365:         [illegible]195191^6 => 29...,  S 3^2.5.13^4.29^2.41^2.157^2
2366:         [illegible]195191^10,  B2 186
2367:       144[illegible]^6 => 6343.34721.47462563.853390763,  B1 109
2368:         [illegible]90763^2 => 1531.P15,  B1 145
2369:           [illegible]5686345674143^2 => 7...,  D;  q^4, B3 175
2371:         [illegible]90763^4 => 11...,  D
2372:         [illegible]90763^6 => 7...,  D;  q^10, B3 181
2374:       1446[illegible]^10 => 23^2.1871.3499.3917.340583.p23,  B1 138
2375:         [illegible]370595060262182526 1^1 => 59.n,  B1 163
2376:         [illegible]370595060262182526 1^2 => 3.n,  B1 203;  q^4, B3 203
2378:       144[illegible]^12 => 1804219.6535049.P37,  B1 182
2379:       1446[illegible]^16 => 137.443.n,  B1 174
2380:       14401^18 => [illegible].n,  B1 189;  q^22, B2 182
2382:     14083^4 => [illegible],  D
2383:     14083^6 => p[illegible],  B1 72
2384:       7801927[illegible]3459681093^1 => 17.9133.P20,  B1 122
2385:         251257[illegible]2138527^2 => 31...,  D;  q^4, B3 160
2387:       7801927[illegible]3459681093^2 => 31...,  D;  q^4, B2 199
2389:     14083^10 => [illegible]45777657.p29,  B1 118
2390:       6485217[illegible]41955185923109^1 => 5.735349796563.p16,  B1 175
2391:       6485217[illegible]41955185923109^2 => 7...,  D;  q^4, B2 230
2393:     14083^12 => [illegible]48,  B1 169
2394:     14083^16 => [illegible]834505641003.P50,  B1 219
2395:     14083^18 => [illegible],  B1 169;  q^22, B2 182
2397:   30941^4 => 11...,  D
2398:   30941^6 => 7...,  D
2399:   30941^10 => 23.4027.P40,  B1 139
2400:     p40^2 => 19...,  D;  q^4, B2 319
2402:   30941^12 => 13.53.79.2393.1006822744067353 3.P30,  B1 147
2403:     587062252516880486410662191647^2 => 7...,  D;  q^4, B2 238
2405:   30941^16 => 17.55829.30982393921.9435532782008 9003.P39,  B1 209;  q^18, B2 161
2407: 13^6 => 5229043,  B1 20
2408:   5229043^2 => 31...,  D
2409:   5229043^4 => 151.151841.P20,  B1 82
2410:     326079077134287233 11^2 => 3.4992178363.p29,  B1 136
2411:       709961041808957251207353216 97^1 => n,  B1 165;  q^2, B3 160
2413:     326079077134287233 11^4 => 11...,  D;  q^6, B2 234
2415:   5229043^6 => 7...,  D
2416:   5229043^10 => 23.27457.38611.373559364091.P46,  B1 203;  q^12, B2 161
2418: 13^10 => 23.419.859.18041,  B1 29
2419:   18041^1 => 31...,  D
2420:   18041^2 => 7...,  D
2421:   18041^4 => 5.26801.p[illegible],  B1 64
2422:     790579404481^1 => [illegible],  D
2423:     790579404481^2 => [illegible].32443.P18,  B1 116
2424:       493975465285[illegible]^2 => 3.13.193.211.4357.2528385577.p17,  B1 172
2425:       493975465285[illegible]^4 => n,  B1 223;  q^6, B2 212
2427:     790579404481^4 => [illegible],  D
2428:     790579404481^6 => [illegible],  B1 190;  q^10, B2 237
2430:   18041^6 => 197.75[illegible]4507.p13,  B1 88
2431:     9108709959749^1 => [illegible].5^3...,  S 3^2.5^4.13^10.23^2
2432:     9108709959749^2 => 277.236773.10723561.P12,  B1 146
2433:       1179676082715 => [illegible],  D;  q^4, B3 168
2435:     9108709959749^4 => [illegible],  D
2436:     9108709959749^6 => [illegible],  D;  q^10, B2 259
2438:   18041^10 => 11...,  D
2439:   18041^12 => 588043.110285890904411.p32,  B1 146
2440:     p32^1 => 3^2.41.701.n,  B1 182;  q^2, B3 178
2442:   18041^16 => 307.n,  B1 163
2443:   18041^18 => 457.n,  B1 178;  q^22, B2 187
2445: 13^12 => 53.264031.1803647,  B1 38
2446:   1803647^2 => 31...,  D
2447:   1803647^4 => 41.53738676221.p13,  B1 90
2448:     4803254465101^1 => 37.101.642661823,  B1 114
2449:       642661823^2 => 171980953.2401511401,  B1 150
2450:         2401511401^2 => 7...,  D;  q^4, B3 168
2452:       642661823^4 => 131.n,  B1 169
2453:       642661823^6 => 659.n,  B1 205;  q^10, B3 185
2455:     4803254465101^2 => 3.151.2719.9697.87421.p11,  B1 142
2456:       220958450171^1 => 13.849840193,  B1 160
2457:       220958450171^2 => 3.n,  B1 162;  q^4, B3 163
2459:     4803254465101^4 => 11...,  D
2460:     4803254465101^6 => 7...,  D;  q^10, B2 253
2462:   1803647^6 => 8737.2064077.327668647153.p16,  B1 124
2463:     582621336411730 1^1 => 3^2.13.22273.1117871311,  B1 152
2464:       1117871311^2 => 7...,  D;  q^4, B3 170
2466:     582621336411730 1^2 => 97.787.n,  B1 165;  q^4, B3 160
2468:   1803647^10 => 13729.7400153443.116489924189.455350252171.p26,  B1 189
2469:   1803647^12 => 13.131.n,  B1 177;  q^16, B2 200
2471: 13^16 => 103.443.p14,  B1 40
2472:   157984613575091 => 5.13.73.21487.77477,  B1 63
2473:     77477^2 => 193.271.114769,  B1 83
2474:       114769^2 => 7...,  D
2475:       114769^4 => 41.97802791.P11,  B1 134
2476:         43268024731^2 => 3.13...,  S 3^2.5^2.13^16.41^2.73^2
2477:         43268024731^4 => 31...,  D;  q^6, B3 176
2479:       114769^6 => 29.55511.1493913401.p15,  B1 164
2480:       114769^10 => n,  B1 174
2481:       114769^12 => 53.n,  B1 196;  q^16, B2 161
2483:     77477^4 => 11...,  D
2484:     77477^6 => 7...,  D
2485:     77477^10 => [illegible]67.23167330357931.p33,  B1 200
2486:     77477^12 => [illegible]547.n,  B1 175
2487:     77477^16 => [illegible].953.n,  B1 215;  q^18, B2 176
2489:   157984613575[illegible] => 3.p26,  B1 80
2490:     831971275[illegible]045240141197^1 => 277288183141.P15,  B1 131
2491:       150019[illegible]39^2 => 7...,  D;  q^4, B3 160
2493:     831971275[illegible]045240141197^2 => 31...,  D;  q^4, B2 207
2495:   157984613575[illegible] => 41.9221.288197171658101.p33,  B1 152
2496:     p33^1 => [illegible].n,  B1 190;  q^2, B3 171
```

```
2498:   15798461357509^6 => n,  B1 185;  q^10, B2 263
2499: 13^18 => 12865927.p13,  B1 47
2500:   9468940004449^1 => 5^2.17.59.151.1250413,  B1 71
2501:     1250413^2 => 3...,  S 3^2.5^2.13^18.17^2
2502:     1250413^4 => 585691.P19,  B1 132
2503:       41739353464536245 51^2 => 7...,  D;  q^4, B3 169
2504:     1250413^6 => 29.43.71.7048567.83513081.p17,  B1 168
2505:     1250413^10 => 23.67.n,  B1 184
2506:     1250413^12 => n,  B1 205;  q^16, B2 195
2507:   9468940004449^2 => 7...,  D
2508:   9468940004449^4 => 911.7338571546216666972607 41.P26,  B1 166
2509:   9468940004449^6 => 463.n,  B1 192;  q^10, B2 259
2510: 13^22 => 1381.P22,  B1 70
2511:   2519545342349331183143^2 => 127...,  D;  q^4, B2 171
2512: 13^28 => 1973.2843.3539.p21,  B1 72
2513:   8460411039748728669 61^1 => 11...,  D
2514:   8460411039748728669 61^2 => 3.11959.85093.79236309623407.p19,  B1 158
2515:     2959025653654433029^1 => 5.n,  B1 177;  q^2, B3 172
2516:   8460411039748728669 61^4,  B2 167
2517: 13^30 => 311.1117.p28,  B1 72
2518:   8170509011431363408568150369^1 => 3^2.5.8563.P23,  B1 126
2519:     1060182569897798462191 1^2 => 31...,  D
2520:     1060182569897798462191 1^4,  B2 176
2521:   8170509011431363408568150369^2 => 271.1019154672897905893.p36,  B1 176;  q^4, B2 223
2522: 13^36 => 1481.67495678093.4287755796749.p14,  B1 106
2523:   3196404424993 3^1 => 89.827.217138189,  B1 133
2524:     217138189^2 => 7...,  D
2525:     217138189^4 => 11...,  D;  q^6, B3 166
2526:   3196404424993 3^2 => 3.13.67.151.p22,  B1 150
2527:     2589447375480485612221^1 => 13.131.n,  B1 172
2528:     2589447375480485612221^2 => 3.73.241.n,  B1 206;  q^4, B3 202
2529:   3196404424993 3^4 => 11...,  D;  q^6, B2 162
2530: 13^40 => 6740847065723.P32,  B1 133
2531:   p32^2 => 3.457.n,  B1 197;  q^4, B2 254
2532: 13^42 => 119627.p42,  B1 98
2533:   p42^1 => 3.5.153817.6945564277.p26,  B1 181;  q^2, B2 166
2534: 13^46 => 183959.19216136497.p36,  B1 118
2535:   p36^1 => 139999.112793887499.P20,  B1 188
2536:   p36^2 => 7...,  D;  q^4, B2 285
2537: 13^52 => 107.194723.18954118C943969.8403659652641423.P21,  B1 159
2538:   2746903224980017184 03^2 => 7...,  D;  q^4, B3 200
2539: 13^58 => 273997.5311771.p53,  B1 141
2540:   p53^1 => 3.5.13.n,  B1 193;  q^2, B2 209
2541: 13^60 => 4027.4759.7687.27817.92110001.4672993939.48401662036451.P20,  B1 192
2542: 13^66 => 586079017.10935610212 97.119586024259 7359.p38,  B1 182
2543: 13^70 => 6959.12923.201499.p65,  B1 169;  q^72, B2 160
2544: 3^2 => 13,  D
2545: 3^4 => 11...,  D
2546: 3^6 => 1093,  B1 5
2547:   1093^1 => 547,  B1 11
2548:     547^2 => [illegible] 21
2549:       61[illegible] => [illegible]
2550:       61[illegible] => [illegible]1,  B1 49
2551:         [illegible] => [illegible],  B1 67
2552:           [illegible] => [illegible]59.p14,  B1 102
2553:             [illegible] => 19...,  D
2554:             [illegible] => 571.n,  B1 188;  q^6, B2 167
2555:           [illegible] => [illegible]01.191.1238101.34441858081.P15,  B1 157
2556:             [illegible] => 13...,  D
2557:             [illegible]^4,  B3 185
2558:           [illegible] => ...,  D;  q^10, B2 179
2559:         [illegible] => ...,  D
2560:         [illegible] => ...,  D
2561:         [illegible]'.425683567.12796663573.17834829893.P12,  B1 181
2562:         [illegible]581.93150539.4173211667.p30,  B1 210
2563:         [illegible],  B1 189;  q^18, B2 170
2564:       61[illegible]2410911,  B1 65
2565:         [illegible] p15,  B1 94
2566:           [illegible] => 7...,  D
2567:           [illegible] => 11...,  D;  q^6, B2 171
2568:         [illegible],  B1 150
2569:           [illegible]
2570:         [illegible]...,  D;  q^10, B2 169
2571:       613^10 => 2332903.7221259.P15,  B1 99
2572:         4454553652643 39^2 => 29947.136328481943.p14,  B1 158
2573:           48603603235441^2 => 7...,  D;  q^4, B3 185
2574:         4454553652643 39^4 => n,  B1 187;  q^6, B2 175
2575:       613^12 => 15263.42017.18910643831.p15,  B1 116
2576:         2325216984602 21^2 => 7...,  D
2577:         2325216984602 21^4 => 11...,  D
2578:         2325216984602 21^6,  B3 173
2579:       613^16 => 17.1123.72504389.P33,  B1 149
2580:         P33^2 => 37.181.n,  B1 218;  q^4, B2 259
2581:       613^18 => 1103.2053.2538097.728015095055701.p23,  B1 166
2582:       613^22 => 47.139.25815256247831656853726042407.p30,  B1 199
2583:       613^28 => n,  B1 171;  q^30, B2 167
2584:     547^4 => 431.208097431,  B1 38
2585:       208097431^2 => 19...,  D
2586:       208097431^4 => 11...,  D
2587:       208097431^6 => 347509.p45,  B1 171;  q^10, B2 166
2588:     547^6 => 7...,  D
2589:     547^10 => [illegible].10847.p22,  B1 88
2590:       963009[illegible]723696266677^2 => 7...,  D;  q^4, B2 175
2591:     547^12 => [illegible]...,  D
2592:     547^16 => [illegible]437.83156401152671221.p23,  B1 137
2593:       14647[illegible]554227155833^2 => n,  B1 181;  q^4, B3 181
2594:     547^18 [illegible],  B1 153
2595:       p50^2,  [illegible] 197
2596:     547^22 => [illegible]0427577437.667510106368754435379 1.P26,  B1 186
2597:     547^28 => [illegible].n,  B1 161;  q^30, B2 164
2598:   1093^2 => [illegible]4581,  B1 14
2599:     398581^[illegible] 9...,  D
2600:     398581^[illegible].1621.32668561,  B1 34
2601:       32668[illegible]^4 => 19...,  D
2602:       32668561^2 => 7...,  D
2603:       32668561^4 => 5.12081356831.P20,  B1 113
2604:         188553377772621697912 => 43.409.541.1939009.264660373.P17,  B1 185
2605:         188553377772621697914 => 11...,  D
2606:         188553377772621697916,  B2 231
2607:       32668561^6 => 140813.5973911539633252 7.p24,  B1 138
2608:         1445035458788648937251 17^1 => 19...,  D
2609:         1445035458788648937251 17^2 => 13...,  D;  q^4, B3 202
2610:       32668561^10 => n,  B1 173;  q^12, B2 180
2611:     398581^4 => 5.1866871.P16,  B1 75
2612:       27038534288097912 => 3.250801819.75619334851.P12,  B1 136
2613:         1284936013392 => 3.211.n,  B1 160
2614:         1284936013394 => 11...,  D;  q^6, B3 180
2615:       27038534288097914 => 11...,  D
2616:       27038534288097916,  B2 185
2617:     398581^6 => 7...,  D
2618:     398581^10 => 89.P55,  B1 175
2619:     398581^12 => 13...,  D;  q^16, B2 179
2620: 1093^4 => 11...,  D
2621: 1093^6 => 7...,  D
2622: 1093^[illegible] 6491.2608387.p19,  B1 75
2623:   62544[illegible]1062673^1 => 13...,  D
2624:   62544[illegible]1062673^2 => 1009.226063.p30,  B1 139
2625:   [illegible]1418354276159131850 9^1 => 5.n,  B1 169;  q^2, B3 166
2626:   62544[illegible]1062673^4 => 41.n,  B1 206;  q^6, B2 225
2627: 1093^[illegible]...,  D
2628: 1093^[illegible]183137093.p37,  B1 111
2629:   p37[illegible] 59.79.38146383106717.p18,  B1 184
2630:   p37^2 => 7...,  D;  q^4, B2 294
2631: 1093^18 => 7076597938951485524293843.p30,  B1 137
2632:   7010288917463594698695521949 01^1 => n,  B1 166;  q^2, B3 166
2633: 1093^22 => 47.8489623.P59,  B1 203;  q^28, B2 170
2634: 3^10 => 23.3851,  B1 14
2635:   3851^2 => 13...,  D
2636:   3851^4 => 5.2289401.19218301,  B1 43
2637:     1921830[illegible] 211.45541,  B1 57
2638:       45541[illegible] => [illegible].691342741,  B1 74
2639:         691[illegible]^2 => 3.103.8517919.181591213,  B1 109
2640:           1[illegible]^3^2 => 3.97.421.787...,  S 3^10.5^2.23^2.97^2.103^2.211^2.421^2.787^2
2641:           1[illegible]^3^4 => 31...,  D
2642:           1[illegible]^3^6 => n,  B1 191;  q^10, B3 175
2643:         691[illegible]^4 => 5.61.661.4231.19217251.p20,  B1 161
2644:         691[illegible]^6 => 29....  S 3^10.5^2.23^2.29^2
```

```
2685:         691342741^10,  B2 176
2686:       45541^4 => 31...,  D
2687:       45541^6 => 43.71...,  S 3^10.5^2.23^2.43^2.71^2
2688:       45541^10 => 11...,  D
2689:       45541^12 => 131.n,  B1 161
2690:       45541^16 => 307.n,  B1 199;  q^18, B2 167
2692:     19218301^2 => 7...,  D
2693:     19218301^4 => 11...,  D
2694:     19218301^6 => 16022208959.p34,  B1 133
2695:       p34^1 => 3.239.n,  B1 168;  q^2, B3 160
2697:     19218301^10 => n,  B1 175;  q^12, B2 174
2699:   3851^6 => 7...,  D
2700:   3851^10 => 11...,  D
2701:   3851^12 => 131.84449.P36,  B1 131
2702:     P36^2 => 7...,  D;  q^4, B2 287
2704:   3851^16 => 22271.P54,  B1 179
2705:   3851^18 => 624607.P59,  B1 201
2706:   3851^22 => n,  B1 165;  q^28, B2 200
2708: 3^12 => 797161,  B1 11
2709:   797161^1 => 398581,  B1 22
2710:     398581^2 => 3.1621.32668561,  B1 44
2711:       32668561^2 => 7...,  D
2712:       32668561^4 => 5.12081356831.P20,  B1 119
2713:         188553377772626179 91^2 => 43.409.541.n,  B1 164
2714:         188553377772626179 91^4 => 11...,  D
2715:         188553377772626179 91^6,  B2 231
2716:       32668561^6 => 140813.59739115396332527.p24,  B1 164
2717:       32668561^10 => n,  B1 179;  q^12, B2 180
2719:     398581^4 => 5.1866871.P16,  B1 78
2720:       270385342880979 1^2 => 3.250801819.75619334851.P12,  B1 139
2721:         1284936013 39^2 => 3.211.n,  B1 163;  q^4, B3 161
2723:       270385342880979 1^4 => 11...,  D
2724:       270385342880979 1^6,  B2 185
2725:     398581^6 => 7...,  D
2726:     398581^10 => 89.P55,  B1 179
2727:     398581^12 => 13...,  D;  q^16, B2 179
2729:   797161^2 => 3.61.151.22996651,  B1 38
2730:     22996651^2 => 3.43.p13,  B1 56
2731:       4099581241957^1 => P13,  B1 80
2732:         2049790620979^2 => 3.249811.p19,  B1 128
2733:           5606427245471608837^2 => 19...,  D;  q^4, B3 166
2735:         2049790620979^4 => 101.661.46601.p40,  B1 203
2736:         2049790620979^6 => 43.673.n,  B1 204;  q^10, B2 246
2738:       4099581241957^2 => 31...,  D
2739:       4099581241957^4 => 11...,  D
2740:        4099581241957^6 => 127...,  D;  q^10, B2 252
2742:     22996651^4 => 5.47700750211981.p16,  B1 98
2743:       1172635890975721^1 => 331.P13,  B1 128
2744:         177135330963 1^2 => 13...,  D
2745:         177135330963 1^4 => 11...,  D
2746:         177135330963 1^6,  B3 177
2747:       1172635890975721^2 => 19...,  D
2748:       1172635890975721^4 => 31...,  D;  q^6, B2 180
2750:     22996651^6 => 4159.300780188654076 0499.p23,  B1 135
2751:       1182359206261956109497 7^1 => 43.139.773.n,  B1 164
2752:       1182359206261956109497 7^2 => 19...,  D;  q^4, B3 200
2754:     22996651^10 => 23.67.n,  B1 174;  q^12, B2 176
2756:   797161^4 => 5.2671.178601.P15,  B1 71
2757:     169299992707751^2 => 31...,  D
2758:     169299992707751^4 => 11...,  D
2759:     169299992707751^6,  B2 170
2760:   797161^6 => 7...,  D
2761:   797161^10 => 23^2.67.9791.75252409.P43,  B1 172
2762:   797161^12 => 13...,  D;  q^16, B2 188
2764: 3^16 => 1871.34511,  B1 23
2765:   34511^2 => 19...,  D
2766:   34511^4 => 11...,  D
2767:   34511^6 => 7...,  D
2768:   34511^10 => 87573858439.P35,  B1 150
2769:     P35^2 => 3.n,  B1 218;  q^4, B2 275
2771:   34511^12 => 79.P53,  B1 177
2772:   34511^16 => 17.468717183488261171349569.p48,  B1 184;  q^18, B2 163
2774: 3^18 => 1597.363889,  B1 20
2775:   363889^1 => 5.36389,  B1 31
2776:     36389^2 => 1429.926659,  B1 49
2777:       926659^2 => 3.178987.1599181,  B1 72
2778:         1599181^2 => 3.p12,  B1 96
2779:           852460489981^2 => 7...,  D
2780:           852460489981^4 => 31...,  D
2781:           852460489981^6 => 29.n,  B1 216;  q^10, B2 238
2783:         1599181^4 => 5.271.73121.P17,  B1 132
2784:           660099401844660 71^2 => n,  B1 166;  q^4, B3 166
2786:         1599181^6 => 43.71.1499.112682270804881.p17,  B1 171
2787:         1599181^10 => 11...,  D
2788:         1599181^12 => n,  B1 208;  q^16, B2 198
2790:       926659^4 => 41.701.332191.P14,  B1 108
2791:         7723079837305 1^2 => 3001.638767.P19,  B1 164
2792:         7723079837305 1^4 => 11...,  D
2793:         7723079837305 1^6,  B2 166
2794:       926659^6 => 2549.15107.P29,  B1 144
2795:         1644266060607490661195397954 7^2 => 13...,  D
2796:         1644266060607490661195397954 7^4,  B2 225
2797:       926659^10 => 23.707939.2027719.3754697.30569710139.p30,  B1 216
2798:       926659^12 => n,  B1 180;  q^16, B2 190
2800:     36389^4 => 701.881.3911.10091.71941,  B1 76
2801:       71941^2 => 19...,  D
2802:       71941^4 => 5.284758421.p11,  B1 123
2803:         188133154 61^2 => 109.41593.P14,  B1 164
2804:         188133154 61^4 => 5.61^2.n,  B1 186;  q^6, B3 164
2806:       71941^6 => 197.1009.52409388389.P14,  B1 154
2807:         133075582216 51^2 => 31...,  D;  q^4, B3 180
2809:       71941^10 => 11...,  D
2810:       71941^12 => n,  B1 183
2811:       71941^16 => 137.613.n,  B1 227;  q^18, B2 174
2813:     36389^6 => 29.43.71...,  S 3^18.5^2.29^2.43^2.71^2
2814:     36389^10 => 11...,  D
2815:     36389^12 => 4073950982430381 1.P39,  B1 186
2816:     36389^16 => 103.n,  B1 169;  q^18, B2 164
2818:   363889^2 => 3.193.1063.215143,  B1 44
2819:     215143^2 => 3.P11,  B1 64
2820:       15428908531^2 => 31...,  D
2821:       15428908531^4 => 11...,  D
2822:       15428908531^6 => 7...,  D;  q^10, B2 203
2824:     215143^4 => 11...,  D
2825:     215143^6 => 45767.1549240304333.P16,  B1 120
2826:       1398601879456363^2 => 3.P30,  B1 180
2827:       1398601879456363^4 => 181.n,  B1 213;  q^6, B2 181
2829:     215143^10 => 683.160818910703638048857029.P28,  B1 173
2830:     215143^12 => 53.n,  B1 163;  q^16, B2 170
2832:   363889^4 => 11...,  D
2833:   363889^6 => 7...,  D
2834:   363889^10 => 23^2.331.15872245247.P41,  B1 175
2835:   363889^12 => 53.18219371.44671538238653.121495592320552579793.P25,  B1 195;  q^16, B2 177
2837: 3^22 => 47.1001523179,  B1 31
2838:   1001523179^2 => 61.p17,  B1 51
2839:     1644342096845556 1^1 => 227.5505377.6578839,  B1 83
2840:       6578839^2 => 3.10477.1377020431,  B1 109
2841:         1377020431^2 => 3.53719.294247.39987067,  B1 145
2842:           39987067^2 => 13...,  D;  q^4, B3 160
2844:         1377020431^4 => 5.n,  B1 165
2845:         1377020431^6 => 43.n,  B1 202;  q^10, B3 182
2847:       6578839^4 => 11...,  D
2848:       6578839^6 => 7...,  D
2849:       6578839^10 => n,  B1 206;  q^12, B2 163
2851:     1644342096845556 1^2 => 3.3373.120103.P24,  B1 128
2852:       2224809852600634443458219^2 => 3.n,  B1 174;  q^4, B2 186
2854:     1644342096845556 1^4 => 11...,  D
2855:     1644342096845556 1^6,  B2 194
2856:   1001523179^4 => 181.1099298734488491.P19,  B1 119
2857:     5056496574263951471^2 => 7...,  D
2858:     5056496574263951471^4 => 5.n,  B1 232;  q^6, B2 224
2860:   1001523179^6 => 421.246441901979636368 7.P33,  B1 173;  q^10, B2 180
2862: 3^28 => 59.28537.20381027,  B1 35
2863:   20381027^2 => 7...,  D
```

```
2864:   2[illegible],  B1 84
2865:     [illegible]^2 => 7...,  D;  q^4, B3 170
2866:     [illegible]
2868:     [illegible]^2 => 19...,  D;  q^4, B2 233
2870:   2[illegible] => 4[illegible] 463.3557.351023.837313.478880543.p16,  B1 141
2871:     [illegible]^1 => 3.1034879.1158061627,  B1 171
2872:     [illegible]^2 => 61.n,  B1 184;  q^4, B3 183
2874:   2[illegible],  B1 167;  q^12, B2 175
2876: 3^3[illegible] => 6[illegible]4404047,  B1 38
2877:   44[illegible],  D
2878:   44[illegible]^4 => [illegible].211.461.2770771.P14,  B1 104
2879:     [illegible]^2 => 7...,  D
2880:     [illegible]^4 => 5.n,  B1 183
2881:     [illegible]^6 => 71.n,  B1 236;  q^10, B2 260
2883:   44[illegible] => [illegible].268088311.21392848667.p19,  B1 128
2884:     [illegible]^1 => 3^2.127709.500153.1315747,  B1 162
2885:     [illegible]^2 => 223.n,  B1 180;  q^4, B3 178
2887:   44[illegible],  B1 160
2888:   44[illegible],  B1 187;  q^16, B2 212
2890: 3^3[illegible],  B1 51
2891:   [illegible] => 19...,  D
2892:   17189128703^4 => 151.4801.P36,  B1 150
2893:     P36^2 => 3.n,  B1 220;  q^4, B2 280
2895:   17189128703^6 => 211.372902827337738410409421 2939.p32,  B1 184;  q^10, B2 204
2897: 3^40 => 83.2526913.P11,  B1 51
2898:   869506966191^2 => p22,  B1 79
2899:     7560423642616328727781^1 => 7...,  D
2900:     7560423642616328727781^2 => 3.61.79.997.16747.2064379.P27,  B1 181;  q^4, B2 175
2902:   869506966191^4 => 31...,  D
2903:   869506966191^6 => 547.n,  B1 163;  q^10, B2 218
2905: 3^42 => 431.P18,  B1 60
2906:   380808546861411923^2 => 19...,  D
2907:   380808546861411923^4 => 101.n,  B1 165;  q^6, B2 210
2909: 3^46 => 1223.2[illegible]997.5112661.96656723,  B1 59
2910:   96656723^2 => 7...,  D
2911:   96656723^4 => 11...,  D
2912:   96656723^6 => 547.4261210359825834719543.p24,  B1 170
2913:   96656723^10 => n,  B1 203;  q^12, B2 191
2915: 3^52 => 107.24169.P19,  B1 70
2916:   374760703111230766 7^2 => 31...,  D
2917:   374760703111230766 7^4 => 41.n,  B1 183;  q^6, B2 222
2919: 3^58 => 14425532687.P18,  B1 83
2920:   489769993189671059^2 => 61.1861.21277.11549803.P19,  B1 149
2921:     859850936878093749 1^2 => 19...,  D;  q^4, B3 187
2923:   489769993189671059^4 => n,  B1 189;  q^6, B2 212
2925: 3^60 => 603901.p24,  B1 63
2926:   105293313660391861035901^1 => 13...,  D
2927:   105293313660391861035901^2 => 7...,  D;  q^4, B2 184
2929: 3^66 => 221101.441019876741.p15,  B1 80
2930:   475384700124973^1 => 101429.2343435803,  B1 108
2931:     2343435803^2 => 7...,  D
2932:     2343435803^4 => 11...,  D
2933:     2343435803^6 => 113.491.n,  B1 207;  q^10, B2 187
2935:   475384700124973^2 => 19...,  D
2936:   475384700124973^4 => 71.n,  B1 173;  q^6, B2 176
2938: 3^70 => p34,  B1 66
2939:   p34^1 => 853.2131.82219.3099719989.P13,  B1 133
2940:     4052490063499^2 => 3.97813.P20,  B1 182
2941:     4052490063499^4 => 11...,  D;  q^6, B3 183
2943:   p34^2 => 7...,  D;  q^4, B2 268
2945: 3^72 => 11243.20149.15768033143.p16,  B1 87
2946:   946037533697736 1^1 => 7...,  D
2947:   946037533697736 1^2 => 3.p32,  B1 134
2948:     p32^1 => 47.53.647.n,  B1 172;  q^2, B3 162
2950:   946037533697736 1^4 => 11...,  D;  q^6, B2 191
2952: 3^78 => 432853009.392038110671.P18,  B1 103
2953:   1451711772644079 47^2 => 7...,  D
2954:   1451711772644079 47^4 => 11...,  D;  q^6, B2 205
2956: 3^82 => 167.12119.10367745531.P24,  B1 117
2957:   9509960596272108979433 51^2 => 19...,  D;  q^4, B2 191
2959: 3^88 => 179.161147989151 9807.p25,  B1 101
2960:   504293943956599604916219 7^1 => 13...,  D
2961:   504293943956599604916219 7^2 => 7...,  D;  q^4, B2 197
2963: 3^96 => 76631.2549[illegible]42947.p29,  B1 109
2964:   488459628280284 2[illegible]1 => 11...,  D
2965:   488459628280284 2[illegible]^2 => 3.n,  B1 194;  q^4, B2 229
2967: 3^100 => 3303427[illegible]9326319.P29,  B1 135
2968:   503167756680[illegible]2962964023^2 => 277.907.n,  B1 198;  q^4, B2 229
2970: 3^102 => p49,  B1 [illegible]
2971:   p49^1 => 619.166[illegible]p17,  B1 194;  q^2, B2 195
2973: 3^106 => 55077.2[illegible] p41,  B1 111
2974:   p41^1 => [illegible],  D;  q^2, B2 162
2976: 3^108 => [illegible].521402591.3499901929.239789806103.P20,  B1 145
2977:   106243468[illegible]538929960 3^2 => 241.n,  B1 185;  q^4, B3 183
2979: 3^112 => 227.1583.2172539.P42,  B1 160
2980: 3^126 => [illegible]843.681229.21520151.76082653.p36,  B1 145
2981:   p36^1 => 7...,  D;  q^2, B3 172
2983: 3^130 => 2[illegible].P60,  B1 186
2984: 3^136 => 4[illegible].217629707.P54,  B1 191
2985: 3^138 => [illegible]9.5430731.P57,  B1 194
2986: 3^148 => [illegible]1.177941761.P59,  B1 203
2987: 3^150 => [illegible]1.6263783.6474507936 1.p51,  B1 164
2988: 3^156 => 5[illegible]1.3381925092493.98911091253375 66719.P40,  B1 211
2989: 3^162 => 5[illegible]7348213873.8882811705390167.P49,  B1 219
2990: 3^166 => [illegible]51.88177.1767863.10063060897082377.p48,  B1 190;  q^172, B2 164
2992: 5^1 => 3,  D
2993: 5^2 => 31,  D
2994: 5^4 => 11...,  D
2995: 5^6 => 19531,  B1 12
2996:   19531^2 => 3...,  D
2997:   19531^4 => 5[illegible]1 4760281.32009891,  B1 47
2998:     3200989[illegible],  D
2999:     3200989[illegible],  D
3000:     3200989[illegible] => [illegible]7247.P41,  B1 167
3001:     3200989[illegible],  D;  q^12, B2 180
3003:   19531^6 => [illegible]
3004:   19531^10 => [illegible]59.31567260539.p27,  B1 104
3005:     1163015[illegible]759559809^1 => 31...,  D
3006:     1163015[illegible]759559809^2 => 3...,  D;  q^4, B2 208
3008:   19531^12 => [illegible]79077.12859742299.9743710678547.P18,  B1 149
3009:     5424847[illegible]^2 => 181.193.n,  B1 189;  q^4, B3 185
3011:   19531^16 => [illegible],  B1 210
3012:   19531^18 => [illegible]22168331817 01.n,  B1 163;  q^22, B2 188
3014: 5^10 => 122[illegible] 21
3015:   12207031^2 => [illegible],  D
3016:   12207031^4 => [illegible].P26,  B1 89
3017:     338999396[illegible]8917156831^2 => 163.20324089.P42,  B1 185;  q^4, B2 204
3019:   12207031^6 [illegible] P38,  B1 134
3020:     P38^2 => [illegible],  D;  q^4, B2 303
3022:   12207031^10 => 11...,  D;  q^12, B2 170
3024: 5^12 => 305175781,  B1 16
3025:   305175781^1 => 3499.43609,  B1 33
3026:     43609^2 => 3...,  D
3027:     43609^4 => 11...,  D
3028:     43609^6 => 17137.67241197577.P13,  B1 107
3029:       5968930061879^2 => 691.4243.237373.p14,  B1 158
3030:         511930002494 29^2 => 3...,  D;  q^4, B3 185
3032:       5968930061879^4 => 11...,  D
3033:       5968930061879^6 => 7...,  D;  q^10, B2 255
3035:     43609^10 => 67.p45,  B1 163
3036:     43609^12 => p56,  B1 190
3037:     43609^16 => 919.n,  B1 175;  q^18, B2 167
3039:   [illegible]75781^2 => 3...,  D
3040:   [illegible]75781^4 => 11...,  D
3041:   [illegible]75781^6 => 7...,  D;  q^10, B2 169
3043: 5^16 => 409.466344409,  B1 25
3044:   466344409^1 => 7...,  D
3045:   466344409^2 => 19...,  D
3046:   466344409^4 => 11...,  D
3047:   466344409^6 => 29.43.281.p47,  B1 125
3049:     p47^1 => 79.n,  B1 174;  q^2, B2 185
3051:   [illegible]10,  B2 173
3052: 5^18 => 191.6271.3981071,  B1 37
3054:   [illegible]071^2 => 13...,  D
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```
3053:   [illegible] =  [illegible] 11.p22,  B1 80
3054:   [illegible] 863601^1 => 127...,  D
3055:   [illegible] 863601^2 => 7...,  D
3056:   [illegible] 863601^4,  B2 173
3057:   [illegible] .,  D
3058:   [illegible] 486952646035843483.p46,  B1 177
3059:   [illegible] n,  B1 185;  q^16, B2 211
3061: 5^[illegible] 1 34
3062:   [illegible] 271.612928711,  B1 57
3063:   [illegible] ...,  D
3064:   [illegible] .296741.p29,  B1 143
3065:   [illegible] .7819041034586 81^2 => 193.n,  B1 203;  q^4, B2 231
3067:   [illegible] -9.83777.86689.p42,  B1 197;  q^10, B2 175
3069:   [illegible] 19...,  D
3070:   [illegible] 31...,  D
3071:   [illegible] 7...,  D;  q^10, B2 230
3073: 5^[illegible] ",  B1 45
3074:   [illegible] > 3...,  D
3075:   [illegible] => 31...,  D
3076:   [illegible] > 428927270253065646276383171.P27,  B1 192;  q^6, B2 160
3078: 5^[illegible] 1 59
3079:   [illegible] ^2 => 13...,  D
3080:   [illegible] ^4 => 5.n,  B1 165;  q^6, B2 213
3082: 5^[illegible] 971.P13,  B1 73
3083:   [illegible] 7...,  D
3084:   [illegible] 11...,  D
3085:   [illegible] 43.379.n,  B1 207;  q^10, B2 258
3087: 5^[illegible] ,  B1 65
3088:   [illegible] => 3...,  D
3089:   [illegible] => 739.3301.9649.265837681.p19,  B1 140
3090:   [illegible] ^1 => 211949.P13,  B1 176
3091:   [illegible] ^2 => 3...,  D;  q^4, B3 186
3093:   [illegible] => n,  B1 186;  q^6, B2 224
3095: 5^[illegible] B1 79
3096:   [illegible] ^2 => 7...,  D
3097:   [illegible] ^4,  B2 161
3098: 5^[illegible]
3099:   [illegible]
3100:   [illegible]
3101: 5^[illegible] 4094481.p17,  B1 92
3102:   [illegible] => 11...,  D
3103:   [illegible] => 19...,  D
3104:   [illegible] => 31...,  D;  q^6, B2 197
3106: 5^[illegible] 081.P25,  B1 105
3107:   [illegible] 5051^2 => 31...,  D;  q^4, B2 194
3109: 5^[illegible] 061.P27,  B1 114
3110:   [illegible] 1699259^2 => 19...,  D;  q^4, B2 209
3112: 5^[illegible] .2454335007529.p24,  B1 114
3113:   [illegible] 1141^1 => 7...,  D
3114:   [illegible] 1141^2 => 3...,  D;  q^4, B2 190
3116: 5^[illegible] 44
3117:   [illegible]
3118: 5^[illegible] .P37,  B1 144
3119:   [illegible]
3120:   [illegible]
3121: 5^[illegible] .5852312322168839267 9.P21,  B1 163
3122: 5^[illegible] .457067018689623837 41.p26,  B1 146
3123:   [illegible] 76781^1 => n,  B1 171
3124:   [illegible] 76781^2 => 3...,  D;  q^4, B2 207
3126: 5^[illegible] .4597959.834019001.8157179360521.p24,  B1 161
3127: 5^[illegible]
3128: 5^[illegible] .3434487311396589821473854121.p30,  B1 180
3129: 5^[illegible] .1789771319873837160398480 9.P35,  B1 185
3130: 5^[illegible] 3791.354118852889789 41.172163150940018661.p24,  B1 198
3131: 5^[illegible] .528399.p61,  B1 166
3132: 5^[illegible] 499.308491.304247586761.2084303944451.620216264269531.P22,  B1 223;  q^126, B2 176

End of proof to 10^160
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