

Update 1 to: Factorizations of $a^n \pm 1$, $13 \leq a < 100$

Richard P. Brent
Computer Sciences Laboratory
Australian National University
Canberra, ACT 0200, Australia
rpb@cslab.anu.edu.au

Peter L. Montgomery
CWI, Kruislaan 413
1098 SJ Amsterdam
The Netherlands
pmontgom@cwi.nl

and

Herman J. J. te Riele
CWI, Kruislaan 413
1098 SJ Amsterdam
The Netherlands
herman@cwi.nl

with the assistance of

Henk Boender, Thomas Denny, Harvey Dubner,
Marije Huizing, Wilfrid Keller, Arjen Lenstra,
Robert Silverman, Thomas Sosnowski,
and Samuel Wagstaff, Jr.

Abstract

In an earlier Report (NM-R9212, June 1992), two of us gave tables of factorizations of $a^n \pm 1$ for $13 \leq a < 100$. The exponents n satisfied $a^n < 10^{255}$ if $a < 30$, and $n \leq 100$ if $a \geq 30$. The factorizations were complete for $n \leq 46$, and the tables contained no composite numbers smaller than 10^{80} . In this Report we update the original tables. The factorizations are now complete for $n \leq 58$, and there are no composite numbers smaller than 10^{86} .

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Keywords and Phrases: Factor Tables.

1. Introduction

For many years there has been an interest in the prime factors of numbers of the form $a^n \pm 1$, where a is a small integer (the *base*) and n is a positive exponent. Such numbers often arise. For example, if a is prime then there is a finite field F with a^n elements, and the multiplicative group of F has $a^n - 1$ elements. Also, for prime a the sum of divisors of a^n is $\sigma(a^n) = (a^{n+1} - 1)/(a - 1)$. Numbers of the form $a^n + 1$ arise as factors of $a^{2n} - 1$ and in other ways.

An extensive table of factors of $a^n \pm 1$ for $a \leq 12$ has been published by Brillhart *et al* [3]. The computation of [3] is referred to as the *Cunningham Project* in recognition of the pioneering computations of Cunningham and Woodall [4]. For a history, see the Introduction in [3].

The tables [3] are limited to $a \leq 12$, but many applications require larger bases. In 1992 two of us published an extension [2] covering the range $13 \leq a < 100$. The exponents n satisfied $a^n < 10^{255}$ if $a < 30$, and $n \leq 100$ if $a \geq 30$.

Since the publication of our tables [2], many new factors have been found. The factorizations are now complete for $n \leq 58$ (formerly $n \leq 46$) and there are no composite numbers with under 87 decimal digits (formerly 81 decimal digits). This report gives all the new (complete or partial) factorizations found from the publication of [2] to the end of August 1994. Altogether, 785 factorizations are listed, some involving several new factors. For example, see the entry for $17^{187} - 1$ (formerly c96.c98, now complete).

2. Availability of Updates

These updates are available by anonymous ftp from `nimbus.anu.edu.au:pub/Brent/rpb134u1.txt.Z`. We shall add new factors to `rpb134u2.txt` as they are found.

A more comprehensive list of over 180,000 factors, for bases $2 \leq a < 1000$ with various exponent ranges, and complete for exponents $n \leq 30$, is available in machine-readable form from the first author, or by anonymous ftp from `nimbus.anu.edu.au:pub/Brent/rpb117.exe` (a self-extracting IBM PC archive).

3. Factorization Methods

Most (about 700) new factors have been found by variants of the elliptic curve method (ECM) and the multiple-polynomial quadratic sieve (MPQS). References describing these methods are given in [1, 3]. ECM is useful for finding factors up to about 30 decimal digits, or up to about 40 digits if we use a lot of computer time and are lucky. If the number remaining on division by known factors is composite, but not too large, the factorization can be completed by MPQS [9, 10].

The old Pollard $p \pm 1$ methods are still useful: 38 new factors were found by the $p - 1$ method, and 16 by the $p + 1$ method.

The Special Number Field Sieve (SNFS) [6, 7] was not used in the computation of the original tables [2], but SNFS was used to complete 37 difficult factorizations for these updates. For example, see the entries for $18^{158} + 1$ (formerly c96.c98, now complete) and $73^{73} + 1$ (formerly c135, now complete).

4. Format of the Updates

The format of the updates is the same as the format of the tables [2], except that only those entries which have changed are given. For each base a , not a perfect power, in the range $13 \leq a < 100$, we give two separate tables –

Table a–: factorizations of $a^n - 1$, n odd.

Table a+: factorizations of $a^n + 1$.

The exponent ranges are as in the tables [2] –

$13 \leq a < 30$, exponents n such that $a^n < 10^{255}$.

$30 \leq a < 100$, exponents $n \leq 100$.

The entries are similar in format to those of the “short” tables in [3]. All known factors, including algebraic and Aurifeuillian factors, are listed. Factors which are given as decimal numbers are primes. Exponents are indicated by a hat ($\hat{}$), for example “ $2^{\hat{3}}$ ” means 2^3 . Multiplication is indicated by a period ($.$), for example $3^3 + 1 = 2^2 7$ is written as “ $2^{\hat{2}} 7$ ”. A period at the end of a line implies that the factorization is continued on the next line.

The largest factor of $a^n \pm 1$ may be found by division by the smaller factors. Thus, such factors are abbreviated. The notation “ pxy ” means a prime factor of xy decimal digits. For example, the prime 1238926361552897 might be abbreviated as p16 . Similarly, the notation “ cxy ” means a composite number of xy decimal digits.

An indication of the person and method used to find the new factor(s) is given in square brackets after each entry. We apologise for any errors or omissions in these attributions. Factors found by the authors using ECM and/or MPQS are not usually indicated, except for factors of at least thirty decimal digits which were found using ECM. (Our records of these are probably incomplete.)

5. Probable Primes

Numbers listed as prime in these updates have not in all cases been rigorously proved to be prime; they may merely have passed a probabilistic primality test [5]. There is a positive but extremely small probability (less than 10^{-12}) that a composite number will pass such a test and be mistaken for a prime. In applications where it is essential for primality to be proven rigorously, the reader should apply an algorithm such as Morain’s elliptic curve primality test [8], which can easily prove or disprove the primality of numbers of the size considered here.

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R.P. Brent, P.L. Montgomery and H.J.J. te Riele

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CWI
P.O. Box 94079
1090 GB Amsterdam
The Netherlands

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P.O. Box 94079, 1090 GB Amsterdam (NL)
Kruislaan 413, 1098 SJ Amsterdam (NL)
Telephone +31 20 592 9333
Telefax +31 20 592 4199

Update 1, Tables 13- to 14+

- 13 155- 2^2.3.311.1117.30941.100860853831.46458503064581.
100889415553845820735921.8170509011431363408568150369.p86
- 13 183- 2^2.3^2.61^2.367.4027.4759.7687.27817.92110001.4672993939.
6274983367069.48401662036451.71639002544177046079.
87103671046409436847.417324063726420174777931.
715867003033745576109669960047077.p41 [Boender, PPMPQS]
- 13 113+ 2.7.227.9719.1267183.2158975289.4427870101287797057.
852333015613949705733446242454881.p52
- 13 138+ 2.5.17.461.28393.160081.159686609.1445443990517.6533247341521.
602053110178724749481.54836637716450236990971812089.p57
- 13 144+ 2.97.2017.2657.47521.54721.88993.441281.1590049.283763713.
127028743393.403791981344275297.8299042833797200969471889569.p61
- 14 119- 13.103.8108731.2709038809.22771730193675277.
243116937361539697.613350110243193333262258716906211.p51
- 14 121- 13.67.4027.1154539.123299243.831510853163.
2879003390005532849687.810996712531202185567281370471.p55
- 14 143- 13^2.67.157.2861.4027.1154539.4710563287.
29914249171.2196081241344228616463801.c101 [Montgomery, p-1]
- 14 149- 13.73309.2921184325571.3614646313204739.
86461323974510452851899.c114 [Montgomery, p+1]
- 14 171- 13.211.229.397.18973.428299.5231917.37573673070907.
459715689149916492091.979597292881313378323.
172583931359406979929545569880861.
77539436470813023431659196734275560557.p45
- 14 211- 13.14771.1162074863209299261199.c216
- 14 94+ 197.123517.23688237358867852955597637113063638372710957829.p54
[Silverman, SNFS]
- 14 101+ 3.5.13933873747.91345330859266674719.7123648631838627559411601057.p57
- 14 108+ 41.73.937.1475750641.44030132882434030723817977.
390267551541285967420352592033193.p50
- 14 113+ 3.5.227.634157.107957226976725674039073017.
744005452906228391543944913.p68
- 14 117+ 3^3.5.19.61.79.911.7307.40639.100621.132049.84710027970100651637689.
57287251477993448670440574107507690535463.p42
- 14 119+ 3.5.137.239.19993.134471.7027567.1058810593.
14837638311110071.175314700664902074282791.p66
- 14 123+ 3^2.5.61.83.5167.86501473.95263009.888639331.
1848816684520172381645083.1691706120726315819380014153.p56

Update 1, Tables 14+ to 15+

- 14 124+ 41.937.2729.118269961.146631476887771020062843377.c100
- 14 127+ 3.5.119881397.9269534484051658649690279633719.p106 [Montgomery, p-1]
- 14 170+ 197.1061.2857.1383881.2774129.1253535423961.20442260426821.
475021736393117.10174250577999853023931141.p109
- 14 180+ 41.73.937.61001.698521.51111761.1475750641.59203797481.1411198114321.
44030132882434030723817977.80123309993635647613346281.
21501568166958140736048377191561.p67 [Montgomery, ECM]
- 14 201+ 3².5.61.3217.86029.16731682871.56826978889.
742346622710948405402237.14202676205029365909616903.
3852085297030630362064662312050526769.p112
- 15 107- 2.7.643.1499.194527.609913483.17221279121951.
8296079506365811612150733.8238863910860240211186514584551.p36
- 15 161- 2.7².829.25439.31741.45403.1743463.164006995391.
3046462151831565769.3001167062138973417187.c114
- 15 171- 2.7.241.541.7867.21061.4272113.8413543.292582141.370649274902657.
2735617627328384723056183.2766875514023345913942661.
6969521913939651515520634098282421.p68
- 15 97+ 2⁴.323912067331561466926628163233.p84 [Brent & Silverman, SNFS]
- 15 104+ 2.7121.179953.736921904993.290340653215025713.
58816865685030314339215849136647366687489.p43
- 15 112+ 2.257.673.2526721.31845722644513.12779004583099009.
14986572761868048510608408236729729.p56 [Montgomery, ECM]
- 15 113+ 2⁴.227.3391.6781.5171333.676653946487.
5358063355525776963451.16414664743082353095967141.p57
- 15 132+ 2.17.89.1489.2562840001.3089451817.856420938543915930300022777.
1242372349304878460334100748539075308315312809.p58
- 15 168+ 2.337.2129.3169.7121.66529.179953.198017.363217.745249.
1659649.1248882721.12515552561.1038405709913713.
777453109529036081.5840270932038540650689.p78
- 15 177+ 2⁴.211.709.7907.12391.565322071603278863.
892626845495887994245891.769999878418004456634773071.
34273355136165018967113536849036352969191495671.p79
- 15 178+ 2.113.4761857.402910119444039736424873.c177
- 15 183+ 2⁴.211.1831.7270591.234519435023.14563562998279.
1805790344137304843.107888962684389357049.
42046850228759333970319.581297171188805516982412738813981.
81395548488086772908775498506472824274649.p43

- 15 194+ 2.113.389.21341.928867025493931347538364789.p192
- 15 202+ 2.113.1213.6869.78749749441179985117.c209
- 17 115- 2^4.47.88741.335430126425379392951.
1070187968644717154676571.26552618219228090162977481.p64
- 17 173- 2^4.57170070771999284093.c192
- 17 183- 2^4.307.15103230859721.80513057603299.
1655148745882817700457.15139473539268769064239.
4722743517602912319810923441122498349478034813612513477513781.c91
[Montgomery, p+1]
- 17 187- 2^4.1123.10949.1749233.2699538733.2141993519227.
91770558155114643603180232777103.
5614979831517665327057800827580950979.
17698418369793929863938391176790894606430914025048146677182899.p64
[Aurifeuillian; Brent & Keller, ECM; Arjen Lenstra, PPMPQS]
- 17 189- 2^4.19.43.127.307.433.757.6427.13567.24733.1270657.
25646167.940143709.12135432683683.1313154695584063.
41643373496311819.219769291604284568749.1768003906672034233419799.
37387216988215606147063933.607701480905421954959792340923587.p36
[Boender, PPMPQS]
- 17 199- 2^4.760579.598591665856686529.1760811787300683499.c202
- 17 76+ 2.41761.11355003629541687711335762857918877977.p52 [Silverman, SNFS]
- 17 89+ 2.3^2.2171241054689323653068865180801586551155489.p66
[Silverman, SNFS]
- 17 94+ 2.5.29.8837.5863828311202467185926649.
238824108369072337553839623931699681.p50
- 17 98+ 2.5.29.197.578789.5766433.100688449.
139005288056819459473501243273273125071599637.p52
[Brent & Silverman, SNFS]
- 17 193+ 2.3^2.6949.138207259471.2249401867464340847383.c200
- 17 202+ 2.5.29.1213.33342121.255192827795307979630237.c213
- 18 103- 17.16327518523053828584399.9780184826774860381450393.
15936754604932361311519937275763087.p47 [Boender, PPMPQS]
- 18 109- 17.223795967.163382228315181914965513289.p102
- 18 125- 17.41.2711.602401.74813517001.21162386787273369601.
36775924395863544366841001.p90
- 18 173- 17.1039.12457.184073.85205658777352805361851273.c178
- 18 181- 17.65536068769.346355593522241.250524183190568846758799.c178
- 18 183- 7^3.17.367.1831.367831.5608951.4110876980385153863.
4169249212024569235842583.
1450744996988333189921892673782384233809551686747567.c114

Update 1, Tables 18- to 19-

- 18 193- 17.24697464417501280623919.35642806830567716625687623.p194
- 18 79+ 19.1735973262881810486884626006469367486329.p59
[Brent & Silverman, SNFS]
- 18 89+ 19.179.9134249.5913313191525493627.
19707963950138874818292198421797573337.p46
- 18 92+ 113.929.18313945455473.124292740483707572652291223230113.p66
[Silverman, SNFS]
- 18 109+ 19.169490612692287574588118884321.c107
[Montgomery, p+1]
- 18 111+ 19.307.1259.239539.57095169829153516132919139336069139.
1164939463722239475169554761379636729267089.p51
- 18 115+ 11.19.9041.24841.1930773408050211089575377161.
3913037558632733048069409307.7516342403453194393474042331.p51
- 18 116+ 113.929.5569.26932417.51523455970414686913.p110
- 18 145+ 11.19.59.1451.4931.9041.1270201.21584216281.
312275133902139621761.1586801117788981679412251.
2255781524824231358697279947382689.p73
- 18 155+ 11.19.1427.8681.9041.19531.70619.984938339908206953441.
427906142457974033788659934939.c122
- 18 156+ 113.929.1249.1873.27457.11019855601.260800658620746193.
113633993486079374108113.3666313911384869983836065484314196953809.p90
- 18 158+ 5^2 .13.317.185026990267721725625447928330141280148587909.
3735633632419115668144385885859007488592446776521.
15711715905379982612012445487652618547579630505057.p52
[Montgomery, SNFS on Aurifeuillian factors]
- 18 181+ 19.17377.28356547.5085109086273659366850369361.c187
- 18 184+ 97.113607841.7309231059435841.5034160949052476449940737.c181
- 18 189+ 19.43.73.307.379.6427.46747.465841.32222107.337268233.607371619.
31865908033.1234749313729.443134151361467421266377.
4591020241431358911787281317666857153.c106
- 18 190+ 5^3 .13.15101.60497.145501.199501.269117.74792209.284647361.
6261053129.223962569921.3189146193161.54531393851401.
3697367283002441.202438500542522921.211447769376727722511921.
1659352458887702863021373641.p64
- 18 194+ 5^2 .13.389.1254793.62531633.3852395353.
285724807097.11986688438966689033246328331593.
42483571366125079581250704287511077869290098582519955732360841.p111
[Montgomery, ECM]
- 19 119- $2 \cdot 3^2$.701.70841.3044803.1543628017.99995282631947.19987548346939727.
19334422649069921660849.3733480699267356089008872256290307.p42

Update 1, Tables 19- to 19+

- 19 135- 2.3⁵.31.127.151.211.487.523.811.911.4861.29989.216919.
584911.907471.2460181.362063089.8374006851436085760993151.
2650228472822453446927731244021.p56 [Montgomery, ECM]
- 19 159- 2.3³.107.127.1226209.87097657.4739153047.323930821687153.
4086918000521042669809.2551089855701675251204783.
37334173314913678536474517.p88
- 19 165- 2.3³.31.67.127.151.211.331.911.2113.104281.2460181.
4378771.34451077.62060021.384180191671.484536191701.
7302593769703.3047899314965432210712031612351.
2762720155370058278742863792112809157901.p52
- 19 171- 2.3⁴.127.229.523.6841.29989.35232500053.7766130173689.
80558460464029837.81403978301424181910737.109912203092239643840221.
340801506876062492779357.652098348208287400914289.
1754584723733815131518876941.p41
- 19 111+ 2².5.7³.13167515699865341218291.
10300379826060720504760427912621791994517454717.p70
- 19 112+ 2.97.391311355715212577.1486811410142377153.
670126218677699760257.28563711086984951561342849.p59
- 19 113+ 2².5.231494967593408932347161.c120
- 19 120+ 2.241.577.1009.4657.14929.15073.29569.563377.2772481.
45741970047992830418106206245201.
30008663379835140331261614092712001.p51
- 19 123+ 2².5.7³.83.3651133.13912531.36743833051.
962356121193062757435287872191585643.
4429573350928242996724590665849673929793119.p49
- 19 128+ 2.257.136816129.33225725139813889.754656840241231034881.
12318752177608821548801.p94
- 19 150+ 2.13².181.769.171434401.16936647121.1687178375041.
675303194549101.590165627314172101.3545449651653764401.
50354695689851837101.593988948836648425018473546817927201.p47
- 19 154+ 2.29.181.617.3697.5237.774797.50515081.61170649.
14533200697.289300378289693.48381877771677135533.
48565026713061620388848761.c92 [Montgomery, p-1]
- 19 156+ 2.17.2393.3833.4297.7177.3952393.69034016679735329.
43041847333075341359490337.258736314675653076939912808873.
20240476166390259493325765865267467809.p68 [Montgomery, ECM]
- 19 165+ 2².5².7³.11².23.61.271.859.2251.489061.519553.
1081291.181258778383.253239693257.150669382018464871.
8158445832086761035157741.2481953419044452308291386601.
897434095443561438837961170946421.p50
[Montgomery, p-1; Boender, PPMPQS]

Update 1, Tables 19+ to 20+

- 19 178+ 2.181.586549711036607087773.692955604336994802553.c184
- 19 198+ 2.13².37.73.109.181.769.35533.211573.774797.100719037.
34422653233.205228610269.48381877771677135533.
7862946704190742877769.3361794780923866459042010713.
6904106678390844708671787430617658644229.p85 [Montgomery, p-1]
- 20 71- 19.201161092255316201234202042361.p62 [Silverman, SNFS]
- 20 117- 19.79.421.1171.3121.142559.363871.9690539.64008001.
172311318287603732461390609.50676846610970769808122928009.p60
- 20 143- 19.3121.142559.461891.9690539.1037966360861.10778947368421.
89069400431539529.821651084995160038985081.p98
- 20 181- 19.5431.1679681.45404357846358829.p208
- 20 189- 19.29.71.379.421.6679.17389.32719.47251.460951.64008001.
879338701.8442733531.298114935351301.554814907753599944037466111.
10287600958458182504983419994609358363826919.c103
- 20 191- 19.473879719151.206106071370102461.c219
- 20 193- 19.6949.817549.1751408411659171.1921978129885688939.c207
- 20 94+ 401.637455173.4378474774721.5634378340885013.
267067556675321437729722313331881.p51
- 20 97+ 3.7.389.1002204583.9446725241.1814565957918978949.
2645332912014287669339495089951567.p52
- 20 103+ 3.7.10301.1023409.13949254290107.
41006820590689355038289.466124620389646774905361.p64
- 20 108+ 73.31177.160001.821113.4468393.160408194049.51433451961886233152209.
6035615984109698790059593.52814134683963054037760473.p32
- 20 121+ 3.7.23.740521.149810827.424016563147.343040240510243.
90903843289299418643.c95
- 20 125+ 3.7.101.152381.3990001.1035087720001.3404655742001.
1038193734970398415809901.38210640834394202642216462501.
95504977065720311620692469001.p42
- 20 127+ 3.7.22861.206249.78732889.2824620209.57564425105062873850506481.c112
- 20 129+ 3².7.127.947.6233315089.775312780916617188490043761.
5678139079547159397912939375079489.
740035581691937571153523632895280600341.p52
[Montgomery, ECM; Boender, PPMPQS]
- 20 138+ 13.277.401.12277.6373576093.103759810117.
10725299405489.1492150591772283530192019071401.
25671002444875098778617582252548213.p71 [Montgomery, ECM]

Update 1, Tables 20+ to 22-

- 20 150+ 13.41.401.601.2801.12277.71161.222361.
55191001.167283841.795206712572651793400201.
109951162777589262581760001048575999998976000000001.p78
- 20 191+ 3.7.383.70018911943.1757822589992389.32976171945298018943903.c196
- 21 85- 2^2.5^2.40841.1502097124754084594737.
11500287881306297400572689205013166485061.p45
- 21 107- 2^2.5.1734899.4272624310883.352523466309500183.
55837009494804076861723.16339864316070753885738065827.p53
- 21 117- 2^2.5.79.463.547.1171.189437.61045219.85775383.516094151.
80459337199345300130638393.479667952955520596219571126379.p58
- 21 123- 2^2.5.83.463.14122861.83218931.17222085343.914531249431.
52899783148909.1474011104949958983856849.
367541000424902470501250402608394113.p47
- 21 153- 2^2.5.463.15607.38047.80031547.85775383.
625770304116639832567.1502097124754084594737.
34098331055594280023053.847586878961383719143557147.
5123356912470572184950009982296618143.p45
- 21 108+ 2.73.7993.97241.816769.518118697.808208209.14697355609.
81967288802253121.30399041735797255948625080033.p53
- 21 116+ 2.233.2089.97241.554017.1221702721.12064146485993225890171648153.c100
- 21 123+ 2.11.421.1231.1766117.342306022057032544447.
380770063539669474313312691529545132713.
33985282117517881270903492784746835442538163.p47
- 21 132+ 2.73.353.3433.97241.313433209.518118697.715521049.
29831330140869137.32775913825604401.1860536006903334289.
121328963242175651825534959690920155497.p46
- 21 135+ 2.11.19.31.37.199.271.421.541.613.2551.5077.17497.185641.
501001.658261.7101932659132249.82207575664095002495707981.
2810321698513575079231344181.p63 [Sosnowski, MPQS]
- 21 143+ 2.11^2.23.859.2003.6073.207923.5023019.10362529.944156929.
165238453381.7021471715414521.19725500031525136314134334713235761.p86
[Montgomery, ECM]
- 21 171+ 2.11.19^2.37.199.421.613.609673.5285953.67505443.
89287241422177.987749814642143197.1343456427753441154701241543.
1168393184916024427650240126995059.c101
- 21 187+ 2.11^2.23.1871.6073.11969.1172491.10362529.
114089969144083169.21871159470059504243.p183
- 22 95- 3.7.45943.245411.341203.50218172111.97404596002423.
9624357919068403555091512367414261.p52 [Boender, PPMPQS]

Update 1, Tables 22- to 23-

- 22 111- 3².7.13².310727.1084328143.1886989139768881.
310496548763781474766081.3795521911775341204317584693.
35781628429886658331140591695821.p33
- 22 135- 3⁴.7.13².61.109.127.163.271.433.541.13591.245411.
297613.396091.2558953.858794191.1818246421.24678723493.
30694259777925236834701.230578992060497937475215676741.p53
- 22 147- 3².7³.13².883.2647.51647.737353.16968421.1545133367.
1987506739.1204702623931759.12271836836138419.
20193916006425315875862331.294211349582600267301405853.p67
- 22 159- 3².7.13².18127.8432873783478996906159449.
9862008558133776140745690163.
794707274884890838322656596210406344305917819.c108
- 22 89+ 23.136883.333826506151251038246163009989.p84
- 22 95+ 23.191.571.224071.15187651.23967703.58167002655376561.
77671055466842897847630169138452481.p50
- 22 103+ 23.12546019.8721794305834592252284543.c105
- 22 159+ 23.107.463.44839.180413.359129.94763047.103442452777.3157235118397.
9726491634314765764189.660681544043841038937651312571.
279553697320395979848008032335324462330605717.p65 [Montgomery, p-1]
- 22 173+ 23.347.2423.9689.28374708516071709023.c202
- 22 174+ 5.97.157.929.1489.8229211681.5905440414034349.
29261015312845339213.978945816468151236645229.
272587378658923696504296965026924118844464526649734902689.p97
- 23 83- 2.11.338309.364419547069027138439.
27736074503263071062950778805992164759.p49
- 23 89- 2.11.11393.66751.70667.460843.31062781.470991383.
12394735435562113296770410018912233353.p48
- 23 111- 2.7.11.79.258631.1736163069253.1925658337781.
318133754124000327882209421002909251.
5713839242138307627889538424597962861.p45
- 23 127- 2.11.509.7621.98317389091.123971678128031.
231341492176352686686007.p117
- 23 129- 2.7.11.79.173.4129.92107.127711.810379.
23148176671.1797644324682323365144170343.
102219917850387811990824636930475340357519336809223.p63
- 23 133- 2.11.29.2129.16759.5336717.63877469.24939218613613.
770041982060401.28422100122687079956425111.p103

Update 1, Tables 23- to 24-

- 23 153- 2.7.11.19.79.103.23869.42331.7792003.
189909327709.62246266355102810647.
2820969191101751999389.40333150102393233358849567.
849890089913739257948662758708499908691.p69
- 23 163- 2.11.4317384634959051641.1395279662546069925421.p181
- 23 124+ 2.139921.32809657.21488713821793.120377277700913.
193794572237529420929.903306714396084899161.
24826733754645519536393.p65
- 23 138+ 2.5.37.53.3313.7549.428353.20694209521.43166461432817.
212620343166625553.209243275915196555829361.
15934243655985916238122009.
1227182118873258920078252510377225905361.p42
- 23 147+ 2³.3².13².71.673.2969.8821.11173.315569899.171913108319.
14284335193633.1414566930063953.22865554874031409.
448514601593253553.7739770426348672785518131.p74
- 23 162+ 2.5.37.53.73.109.757.2269.4789.5689.7549.30781.101089.
289657.1636741.6908329.18996553.558162674404286293.
917439914123974009.13170527857973946114645049.
447148164091972971050844303563713.p67
- 23 164+ 2.139921.23838755702749293353.c199
- 24 107- 23.643.20343269.10066705949.247528789079201840261.c106
- 24 109- 23.4842653.5449327253.6639169291.11290904027914827389.
527454078571971053333.75294105085463689224779559136415429.p49
[Brent, ECM; Denny, MPQS]
- 24 111- 23.601.3701.319681.48844975391.49955829499.
211905972652074960927395011.281157146581942701610362334290780811.p57
- 24 115- 23².47.3911.124799.304751.346201.5576648219381.58769065453824529.
34280564819457878501.823726680813589047661907783761.p56
[Montgomery, ECM]
- 24 123- 23.601.2789.33457.40462534363.5079389540237737.
27686031035363235611677891.29418461615149475645830439.
90435365932534444012977337.p55
- 24 135- 19.23.241.379.601.2017.2377.4987.14851.17881.24481.346201.
2400571.4965841.3227151869857.1656768093832648777312531.
1333639297121560770726162830707201.p65
- 24 153- 19.23.307.601.1531.2017.2347.4987.120574031.6166060753.
16533114211.178335684937.341563234253.61083809012629860337.
14009384780947966376136889.6350554777870593623521962481.p67
- 24 177- 23.601.2872003.3156383.155993712571.40322995067713.
20058520782729629621.10326478712952941483977.
46099269535984502131186978763710590316939.c121

Update 1, Table 24+

- 24 101+ 5².8978093.5225862612935168717.p113
- 24 104+ 17.1249.2801.2311681.2599263473.3380092707925929556799057.p96
- 24 106+ 577.152010807624705722836249.c121
- 24 108+ 97.433.114769.331777.1134793633.101611758035521.
213069751616028318695713.377988824364409346206939489.
11621045551065915778030078129.p33
- 24 109+ 5².2617.5233.25288982524482034441820933473.c114
- 24 112+ 193.12097.349409.2356609.76243169.446839545624518415611873.p105
- 24 113+ 5².227.80438852477.205842102561384701.26520848092753869657567871.c99
- 24 115+ 5³.11.461.5791.98809.124281991781.492913612417684781.
22496867303759173834520497.2489094227090357421904887101.p63
[Sosnowski, MPQS]
- 24 125+ 5⁵.11.151.251.5791.7951.86501.46739551.
165634351.1458251299382174656724501.c111
- 24 129+ 5².7.79.173.3011.20641.597271.6559590140985663005209.
831104803596232295006163713627588347048485714991.p89
- 24 130+ 61.577.8581.20749.854881.1801385941.680640416821.
30030953107741.2136732643031689.27044102599337764964721361.
684989928644194001785075922656446841.p50
- 24 141+ 5².7.79.659.22091.9127777.48198971.202112597.12844652726099.
857469439154338058761.1627548898476976781051146901.c100
- 24 144+ 193.349409.436417.2356609.76243169.256684033.13240554433.
1216141647361.1719691754689.14499137918017.29754067200769.
20891409541764481.29446799425050925604161.p63
- 24 153+ 5².7.79.103.127.199.409.919.7561.10133.36941239.131771863.
1585038487.11144891198810483.4146858975988480745287927.
6385317686386273298723473.c97
- 24 154+ 577.1321.11617.178333.97238233.374925097.261501808988233731193.
1374124786713429050917.31083421303458348569053.p117
- 24 156+ 97.521.24337.331777.2999569.3714049.1134793633.14694225937.
64223630017.456617644577953.156981927006735707137.
53162539811946412295200682252826346188916755684835193.p71
- 24 159+ 5².7.79.107.1061.450077.1918728367.818799399503055904719731503.
11088423904415956889454488540574123529397364921550868803137707.c108
[Montgomery, p+1]

Update 1, Tables 24+ to 26+

- 24 165+ 5³.7.11².31.79.991.3391.5791.9241.126127.1090681.28295741.65397751.
60867245726761.3625112557571473.11135075053055350258751725441.
16368540352878007335186846657001.
826992956635033305972373470696688983601.p52
[Montgomery, p-1; Boender, PPMPQS]
- 26 71- 5².1475239.2270440490478175159386113.
440314247117511584166211925609.p39
- 26 79- 5².936941.4153979.621140503.
1387918246483342737485362978347016364503363.p47 [Sosnowski, MPQS]
- 26 97- 5².46670952869.35885926471387445068822183.p100
- 26 101- 5².607.2836081.1164723277843.123325145485121572437880777.p95
- 26 123- 5².19.37.83.739.34687.2633923.2227332988104129559.
1889235471403240170024149023898147623088722803599.c88
- 26 125- 5⁵.11.751.4001.8641.295751.317701.2906801.
4315817869647001.20099560745902897862501.c107
- 26 159- 5².19.37.4241.150097.358043142577.1344577540363.
1971203353831.264386780671677019.1471041807055513352503.
87728430468489003278234446945154202781697.p97
- 26 112+ 33377.101377.77143422497.430164069753779201.
6667728191868202646773601.p96 [Montgomery, p-1]
- 26 119+ 3³.71².239.953.3299.4999.59011.1935281.6024019.1315750871.
5432384987.11829879544883.11845893623281649.
196194737038969543419763.p62
- 26 126+ 29.181.677.757.1621.2521.4733.7309.77768062633.
694230517093.95340546766204237.95658746231358073.
1549314255062038569719906776599544873717.p59 [Montgomery, ECM]
- 26 132+ 17.89.26881.240769.262153.2383015361.208826607601.
12295864997249593.49540453900511641.2412690603599756569.p97
- 26 140+ 17.41.113.281.1721.2081.26881.748217.16947835297.
296985885709361.6355345293012073.1299094038835798965481.p113
- 26 154+ 29.677.4733.11518277.18244381.648056861.52999049489.
694230517093.1290219273113.2665780306333.28031538253489.
15522208618145378743441.c105 [Montgomery, p+1]
- 26 159+ 3⁴.7.31.107.2333.504200449.5156527199.867851084599.
5878320799289242027.54865399436668796181164201.
516736695528450131690916268175579.p108
- 26 169+ 3³.937.4057.6449.38299.397073.1470977.96128103348353458186897.c188

- 26 180+ 17.41.73.1721.1801.2081.26881.1586737.3555001.208826607601.
1209711929761.2253596398489.34886419791409.296985885709361.
7528533299625721.277836197703837841.13016305794792229561.
252602537987029726871796517081.
45132311008608215665287883318562521.p43
- 28 93- 3^4.271.373.1117.10789.1675799.14307617.104175305182941687128096479.
9751283154942605850592828466642659513447.p42
- 28 121- 3^3.11617.70423.6077039.50545507.2510904286447886473.
334379886633189962093.c112
- 28 129- 3^4.271.1549.3613.56503.60029.684217.44447209.
105942074311.23321405465263.17068111104046291434149.
1709917733284391730017137.164657088579005200672613311.p56
- 28 153- 3^5.19^2.103.271.307.57427.444979.8061059901399457.
366725909655733758769.148020807352107352204781.
412037760199357579738273.c116
- 28 165- 3^4.31.199.271.15991.637421.734941.2054581.6077039.
50545507.16071033331.829366011211.94275090945167441.
5906633396655970661.38681906982937869421.75223260922213952461.
425141076149786955572181811.4554890187723982098962291325301.p40
[Boender, PPMPQS]
- 28 173- 3^3.123736064025936372104807.c226
- 28 73+ 29.877.1081277.361030699.8196570580777833295687571.p62
- 28 87+ 29^2.757.40427.1074509.25404189355843522469778697943.
78986076594620414501936740817451437263.p44
- 28 104+ 17.22223646961.19789341205087347551633.c117
- 28 107+ 29.249636137.4043254583.15468214205115032095625543.c111
[Montgomery, p-1]
- 28 111+ 29.757.1999.6661.57930214687.1004690609843.1089656681875662196152019.
9326836611649785960038304217039.20716530271154998370621650655677.p41
- 28 117+ 29.37.79.127.547.757.2237.102547.114661.284467.1598039.
1672698885245389.362421235545671159911.
2485157691702736928051924257.p69
- 28 140+ 41.449.23633.29201.41641.614657.23803361.54034289.213827041.
856213121.439840060577.2863024493281.15463990974881.
3003033748840445350801.488349141962958580399201.p65
- 28 141+ 29.757.34687.40763101.175323719489.1892292333735833.
29837733926988190223311.10794451258505794581848338245438995963581.c99
- 28 161+ 29.1289.13007.35771.1227143.115152031.140668620541.1490362205711.
4099849287367.536040416747899465689376645876122041.
138091054920126109539774449081329277913451.
193923659970367322531852332259333153573791709.p49
[Aurifeuillan; Arjen Lenstra, PPMPQS]

Update 1, Tables 28+ to 29+

- 28 176+ 97.353.1409.3169.453377.2012449.4338337.168542177.
1113035644744321.9322693790553541578049.c180
- 29 103- 2^2.7.1031.340519.1469224961.636627836172717848527.
15290755863085981013017.p89
- 29 119- 2^2.7^2.239.3911.199921.1977917.9118019.88009573.
33505187587603.94537265603472288554609.c103
- 29 123- 2^2.7.13.67.83.1231.2789.446983.40053229.248807517236987713.
40120564516124841276673.1260314033917609966966100427937.
913895996627083667480895272358121.p51
- 29 133- 2^2.7^2.1386659.88009573.82876670522336069.
78885870548026497089.157193380600163813309.c122
- 29 135- 2^2.7.13.67.181.811.14437.22111.41203.52813.120691.732541.
2284147.1710290161.1744612878442321.208015951433360864196786211.
125179767972033304003588319121811441.p67
- 29 141- 2^2.7.13.67.283.179917.659693.4440937.7823903.4225321621.
16200263293163.100338952626091.1830331915418999963.
6871818784474993543.3576995681195463204429511.p77
- 29 163- 2^2.7.2609.25092000277.1719379794329501.135064014764676865979.c188
- 29 165- 2^2.7.13.23.67.181.991.22111.120691.338141.732541.17607980281.
1193512007711.18944890940537.13323049382040421.2018520940769719651.
9705731115425038321.5625377963242179726741631.p96
- 29 167- 2^2.7.4270376106287262589.638712371513198542453.
640330616130442247229277.c180
- 29 169- 2^2.7.521.148123.501931.3616939.82162393.4748492087.
449033250265336621.749736600837401225647.c170
- 29 171- 2^2.7.13.67.571.2053.3079.11971.14437.41203.73303.1386659.82947313.
25870658059.644657071033.274773085966123.157193380600163813309.
119916055173246032971792999.310629920727179958380414509.p95
- 29 83+ 2.3.5.2776655773.192681282257.644438830301978050660247.p76
[Montgomery, p+1]
- 29 96+ 2.193.577.31805569.63354497.675108764149059653091508213868465857.
2560773582536027001020194716916748801.p48
- 29 103+ 2.3.5.619.14627.42052841.10617820935965413.1151869947110526846443.c98
- 29 109+ 2.3.5.30088361.34203329.210063929.1667721246450941189582189.p111
- 29 110+ 2.421.1061.470925821.402546025333.439165605149799397.
9582461125713211290721.c96
- 29 115+ 2.3.5^2.11.31.47.401.13878779543775756973646971.
3061504055141429624638878278539.p104

Update 1, Tables 29+ to 33+

- 29 117+ 2.3³.5.19.53.79.271.937.1171.3407.7489.10435069.252918667.
69535037994881363782489.1639193821682322095416837009042879.p77
- 29 120+ 2.17.673.2161.26209.561377.1056241.128971441.209522641.
4966942978351201.92552932737272641.371837256582239379457.
9296366635981728214417365633736628881.p45
- 29 123+ 2.3².5.271.20747.812129.1453369.5055629.3711544517.
155330423557.350069058439.188259475347389.
13632739973262903470899.6620482918172811043131908071.p56
- 29 129+ 2.3².5.271.241800198061.1137465695629.39746663511671707.
1331779577899082090671.2027049776208383967809.
3892812829976928715760488423.11045615817704604074776549073.p47
- 29 130+ 2.157.421.1061.6917.470925821.6184621210242371870741.
115137932261932697952213846689.c119
- 30 92+ 241.1289.3361.2772697.36889506708553.97438392848375667399943137953.
182423437296421993495294761731633.p46
- 30 94+ 17.53.834123355493.24274869980616021618875753.p99
- 31 71- 2.3.5.17609.611127785361198601.642443809919609072204778169817.p53
- 31 91- 2.3.5.2549.42407.1661479.2426789.7908811.917087137.
473516688426601.1122399563430440797573237387545143.p51
- 31 59+ 2⁵.1048987974531167443121633837864965091749.p48 [Montgomery, SNFS]
- 31 74+ 2.13.37².593.1071373.1939097.50121089.
144448803773715099122659251615737.p51
- 33 67- 2⁵.4289.1084112663.11098897650130502135455967441.
18560847411975948968564462623.p32
- 33 97- 2⁵.2565353211241239499.3437522810185564004611846021.p100
[Montgomery, p-1]
- 33 61+ 2.17.353384347.4481450375424591159680464717.p55
- 33 68+ 2.97.137.6113.20809.2430316601.21373531350655016111130353.p57
- 33 71+ 2.17.6108983.3648534830043396481338793.p75
- 33 73+ 2.17.9895446145087.54100708138621.
156957493352355866475767518819303.p51
- 33 81+ 2.7.17.19.151.271.307.221401.253681903999.31332290054833.
167141010572952350425554799.p56
- 33 88+ 2.881.72718097.136394897.703204309121.1981665371137.
421026213204368695355652881.2855001160608486740759630129.p37

Update 1, Tables 34+ to 38+

- 34 71+ 5.7.569.853.1847.2699.2862814878908925903954231791.p68
- 34 86+ 13.89.1033.9353799977.182195626458311509.
2937307532258518368425474683873.p68 [Montgomery, ECM]
- 35 71- 2.17.79379.23281886333.12680264331981888792633271.
6582672768514974369599903678066543.p34
- 35 62+ 2.613.6664269889.3669026207719481442068577030169696656277.p44
- 35 80+ 2.577.641.632016012663361.4394231174092284521569.
403648570530480065054722418881.p52
- 35 91+ 2^2.3^2.29.5209.11831.6276271.594780551.1172027872471.
3285353271721733941.3281197532676737263885470301062301.p51
- 35 97+ 2^2.3^2.109553159.641512217.334359797147.540510568883.
420479896307899.512705972068271235272141.
30507933086604255124118443.p45
- 37 95- 2^2.3^2.11.41.4271.4413131.101607631.3933538789573170812717.
182229645794191581409666510841.p76 [Montgomery, ECM]
- 37 58+ 2.5.137.188862267838638894183617588461.p59 [Boender, SNFS]
- 37 82+ 2.5.137.17802405001.10845656230655112050361336077.c88
- 37 85+ 2.19.103.2551.1824841.1826651.77002351.116629519884015113797687.
316372126753167962183045224725520484341.p45
- 37 89+ 2.19.179.1069.2137.280631007582181377323746981.c103 [Montgomery, p-1]
- 37 95+ 2.19^2.191.671081.1824841.8096700889.559698440382833.
1519466836675201951.5046607859578109026483575611.
106393530323861507393584927231.p33 [Montgomery, ECM & p-1]
- 37 99+ 2.19.23.31.43.199.2069.4621.10099.9181261.12892843.
173042431.2533429537.11722233667.98389112119.
10698834482745861633993249769.p56
- 38 71- 37.80230427.570576242805599.
136443734867987898193481.2854759056470259667283977.p41
- 38 81- 37.109.163.1483.169471.87158971.313179008463693424243.
511662075163970762060417538436484323.p50
- 38 93- 37.373.1483.36767.1687081567.18418137757.
11856360601067224569639354253.4097278601877296041323283851155027.p54
- 38 59+ 3.13.13018462432992822178052993720857.p61 [Montgomery, SNFS]
- 38 97+ 3.13.839682247.115049291380938731911.164174702417842847479337.p100

Update 1, Tables 39- to 42+

- 39 85- 2.19.31.191.401.312971.729665161.
93931363225910189411.75081570809262748250653381.p68
- 39 59+ 2^3.5.362647729469645531483708582635843944440410721.p48
[Montgomery, SNFS]
- 39 68+ 2.953.1156721.150946477016946024834952969.p73
- 39 71+ 2^3.5.72955773291998591122529.p89
- 39 76+ 2.1217.44537.1156721.380121424810577.
58916353431905811424543698977.p64
- 39 81+ 2^3.5.1483.2089.1684387.331056937.131601316519221960979.
2443003616566663069989278441133518059.p50 [Boender, PPMPQS]
- 39 97+ 2^3.5.11059.8891275693.2127445285204501121.
254552381969898653477.46491169452204542786178421631.
239044748808095530515651355267.p42 [Boender, PPMPQS]
- 40 79- 3.13.66361.10816997.21644432937199.8047516900168147.
1018774689088212533894469599893.p54
- 40 58+ 1601.74435461.13376719841263353095343548507171021.p48
- 40 62+ 1601.27281.29683741.9934573793351813543760747276183581.p51
- 40 68+ 137.769.3329.399433.117735340397457825448150313.p69
- 41 67- 2^3.5.269.466723.862559.168225209.
196633877057848946743623103.77245547442917125165296411739.p30
- 41 87- 2^3.5.59.349.523.1723.248879.69238518539.
278057920943764716235993.4155835943262726558454439.p65
- 41 59+ 2.3.7.13003324711223675162020886035234448231.p57 [Montgomery, SNFS]
- 41 77+ 2.3.7^2.71.2311.3851.9329993.92058854581.
5669871130991.356755209367280970164431505609.p53
- 41 95+ 2.3.7.11.61.191.4111.565441.10402647689418130106591.
547785610778958259612376471.p89
- 41 98+ 2.29^2.7057.51941.3286442518717.22550075621233982641.
2501527808687760597697.80912207359051153602360341.p68
- 41 100+ 2.137.241.1801.6121.10313.391810481.110312844281.
234370420227297398931574601.p100
- 42 97- 41.389.24381429986184461.46190532124990391411467.
1079650278318606699092022251.c88 [Montgomery, p-1]
- 42 61+ 43.17863283569307161736407.p76

Update 1, Tables 42+ to 44+

- 42 73+ 43.439.14466235327009612050469.18483720164101215791756623.p67
- 42 80+ 97.193.14401.10043121927253601.5007945605667365550817.
23229276764984558747824749716321.p53
- 42 82+ 5.353.81094229.131135713.45676172916135264172887757.c89
- 42 83+ 43.47543671084663933191696637271683.p102 [Montgomery, p-1]
- 42 93+ 43.1723.4093.33727567.804009677.1196618911.36645078004273990859.
226634051949035225389.4682209247052541960246153960553101.p44
- 43 79- 2.3.7.317.5531.6637.81078518121351668623.
79263731889777621129071.20289339883578060906341264491.p47
- 43 85- 2.3.7.647.1871.302941.3500201.56770350869.3807926835707.
18453718955996787521171.87041952219155048989901.p51
- 43 89- 2.3.7.179.38115923664687505891753.c119
- 43 97- 2.3.7.4657.31801792993.71062007093773.
5834938594675376449.1803081421171876152421.p89
- 43 59+ 2^2.11.26147589158960053404590254331.p67 [Montgomery, SNFS]
- 43 74+ 2.5^2.37^2.149.99901.571873.950934337.
3598090687436719312725762257.p67 [Montgomery, p-1]
- 43 98+ 2.5^2.29.37.210113.297641.327517.22021301.
52467916531840016964523539382797601.c97
- 43 99+ 2^2.11^2.13.23.67.109.139.397.1321.359063.3470039.57993427.
323084645463491298110593.5463702075727620831520459.
911285680033119157086050677.p50
- 44 61- 43.384694061.275843501360449314073499968475209143446929.p49
[Sosnowski, MPQS]
- 44 67- 43.269.3217.1638692011329379.299522412766607399011109.p64
- 44 83- 43.167.3955048804740417253.26903824533771823904209.
232064176047748437960887531.75048842198470377644392568946943.p34
- 44 87- 7.43.283.5569.9803.44371.19147377833.115405672188757938511.
56648818007927162212177715982079.p64
- 44 62+ 13.149.8751214858349487946085643199510773255089.p59
[Montgomery, SNFS]
- 44 68+ 41.113.809.2528816564858441012283673.
1119621333527322644718469008960761.p48 [Boender, PPMPQS]
- 44 88+ 17.241.3457.43649.243233.479777.991873.6634933537.
395612100929.1976143084961.908242511106268785917537.p59

- 45 59- 2^2.11.31271.277301.950432036620886988739.p65
- 45 67- 2^2.11.2614999599612154178059.1066441441821674655676171.
137914194447007338401767571.p38
- 45 77- 2^2.11^2.29.71.89.4621.4124569.35571508524949.
222101449727389.64687804330310691163789.p59
- 45 89- 2^2.11.179.1069.169404559.767932051.66636889149731.
5818835324058714516026011.8849562088743751306779488337329.p54
[Montgomery, ECM]
- 45 88+ 2.17.2141569.27471841.494562511489.1026131109915448312699969.p95
- 45 93+ 2.7.23.283.42409.655363379581.74999688216238523724061.
58931558307762420139014419513777627401.p72
- 46 59- 3^2.5.130981.564930745883083815362557.p68
- 46 61- 3^2.5.367.3360847507788056693645113.p73
- 46 79- 3^2.5.1423.2030617.65834651.8432588956006810871491.p91
- 46 95- 3^2.5^2.191.915391.58970111.276082234861.3706109078315291.
18254961833120995439504011.869333244926326187979597262939.p58
- 46 93+ 19.47.109.311.4217.59707.391903.2119123858693091.
592690622763143178419592301.18930771954364706010963048721.
26882805694269553531578915803.p35
- 46 94+ 29.73.2156623201.3671212028717.363925016054632301.
112810559107383355962517.313806317842016451257381.
6703192326316997427388609.p43
- 47 67- 2.23.269.229409.72611395774462081.
21270964162538089013014983761851.p55
- 47 59+ 2^4.3.709.827.8568354271357992900601687308271230418637.p52
[Montgomery, SNFS]
- 47 85+ 2^4.3.4778021.11048879.12760031.50246304977640328639.
68545359223301743931.7016363100695431830821915787351722798941.p41
- 47 99+ 2^4.3^3.7.103.331.3691.389357.973459.132277876039.
9370321586592865273.1568665617454316058283.
8536274287173599105813570362819.p61
- 48 53- 47.107.9013085165975591837557.p64
- 48 59- 47.52511.2265887836608864040905434730500399.p60 [Montgomery, SNFS]
- 48 61- 47.6295979327493762037.3318484479336240782385604991.p55
- 48 73- 47.292944651683.51577085552086923203.
646113161323644351556787.73939661219892732024148919.p41

Update 1, Tables 48- to 51-

- 48 83- 47.167.27059.1219271.86355193.
1036025257.8640831774471025854185361157.
206141870463331942059518176565252778683.p42
- 48 91- 47.71.313.1093.5279.883871.175926983.1250142349.
552210939047.1810004030108166357193.p84
- 48 59+ 7².7789.369724681.947530325982934315368121.p62
- 48 64+ 417813806500107334422529.171384369229251163605657601.p58
- 48 67+ 7².1239936656006667118209397.p87 [Montgomery, p-1]
- 48 68+ 137.5308417.20098184481655402257929.p84
- 48 76+ 132241.5308417.207097721.16341411017.39986966380937.
5404868180956712984378881.p60
- 48 77+ 7³.3631.1711569511.17515852613887.61372621551821240431.
3224590896954934485840296282463314623.p45
- 48 83+ 7².499.997.2231153209843.183893115800039602309.c100
- 48 88+ 17.113.881.132186737.14669068417.4464648416273.
14140059079954176981052919809.p83 [Montgomery, p+1]
- 48 89+ 7².58741.615665543287.265620987707426380466137.p108
- 50 61- 7².2441.1339016086140839.815287727075024814767183.p60
- 50 77- 7³.23.991.9241.73679.59337433.2277696793.297842950080182981049577.
1534013434856381533446745640561328671.p39
- 50 85- 7².137.7481.6377551.20968481.43339993937.16225824203761.
262231331604679.253380322737436551640187714549655738141191.p43
- 50 99- 7².23.199.991.1783.2551.73679.79399.59337433.66802033.15625125001.
3373772242039.41469060507073.77148921314064477415231.p69
- 50 71+ 3.17.22721.43434716570537.12112473003064913460563.p79
- 50 91+ 3.17.6091.23297.31643.2219491.2514961.4381982190587.7564186515866657.
18800581319579759287771.7485427528834834718525333728553683.p43
- 50 95+ 3.11.17.457.571.3307.160817.557041.
15387836214379711097.36286237463378266197881.c98
- 50 96+ 641.1153.3491200714753.255775794274527295827073.
36774112300765382067961168652800897.
902356153132180389917213293605712129.p51
- 51 79- 2.5².317.159865212423677.8667843515302747948661.
44643469364848569644419172636159.p63 [Montgomery, ECM]

Update 1, Tables 51- to 54-

- 51 93- 2.5^2.7.373.379.1303.16741.22073.
15284179.13500481538706912326593219339.
3573701539999612422562206333151480554239.p65
- 51 99- 2.5^2.7.199.379.61395401.1977725861.17596420453.127921310235379.
108608477363132635219.4195580121064479897289.p79
- 51 74+ 2.149.1301.5883593.10160439842909796023929.c92
- 51 79+ 2^2.13.279187.9337347626233495645144409.p103
- 51 98+ 2.1301.1373.78172361.172931389.2690698193.
3959332221041.175382600903614882429793.c100
- 52 79- 3.17.8329129.1739831063.124363234831214061799.
9729560410459011531921223.395909555076878787009316423.p47
- 52 85- 3.17^2.311.6971.23971.61507.5367751.164744893257491.
399777287281405829.101774437076509767975839381.p63
- 52 53+ 53^2.181194015068926422899222020415627.p56 [Montgomery, SNFS]
- 52 58+ 5.233.349.541.5801.42689.31781442789179720313978785299510141.p49
- 52 76+ 89.82153.466917123045716747467729.p100
- 53 59- 2^2.13.943970114867362247759443.12466526280783961115381107.p51
[Boender, PPMPQS]
- 53 71- 2^2.13.106783806009603620550498441966157.p89 [Montgomery, p+1]
- 53 73- 2^2.13.293.15900493483923389125171.p100
- 53 59+ 2.3^3.36109.9297103.3800202410345894347927417.
21885671994461001493726693163797.p33
- 53 62+ 2.5.281.92440192126938595012573.
93510080383641146298112331285100865253.p43
- 53 82+ 2.5.281.1754675971393.1697801594239406192321.p105
- 53 96+ 2.193.93297618587882497.3283525959862263846587393.
5127247556880055622590849.2288007150328269593943818504897.p67
- 53 98+ 2.5.113.281.6469.8821.163661.96764229776378081.4345876805521190969.
4031498042425101730301.17542382505879886894289.p72
- 54 59- 53.4013.105786647.3107096944460816323298986967.p62
- 54 61- 53.4637.32904029059528723344352074697.p72
- 54 67- 53.269.106517687723052678547.1050445009419437545768796471.p65
- 54 99- 19^2.23.53.67.811.2971.84691.9422227.762902713.9339586579414037.
6156213440537633519377.853524717060369852457081.p76

Update 1, Tables 54+ to 56+

- 54 52+ 8503057.5591921701284129982288753.p59
- 54 56+ 17.113.14593.291444977.181196478954035444944590621654811625681.p43
- 54 62+ 2917.4458230758773551238806221.p80
- 54 80+ 28961.343489.3024737.3790433.1327427713.
161019141207591521.5994536046495833388554881.p65
- 54 92+ 8503057.127138398069217.223004774901752741561.
9488128373728604761433849.p94
- 55 79- 2.3^3.65390411266245619112083669.c110
- 55 95- 2.3^3.211.571.647.44171.180311.18145951.1100748661.
7003229692931.3222383446162535363.5189244107146937791.
6188102018723802695847391561.p52
- 55 99- 2.3^5.13.19.23.67.73.79.463.118603.409267.6652441.40420381.
83050969.684322521301.24226294794769.44322821478541.
515380816883043913429.112611957077496183101421436084969.p33
- 55 53+ 2^3.7.107.40387.15864430941373883788902097606862887.p50
- 55 68+ 2.41.137.409.29921.111593.3179977156744880801.p84
- 55 74+ 2.17.89.149.76961.353893435429.9273135550604494698134101.
146330794943168471546612209614194857.p47
- 55 85+ 2^3.7.9419.8987221.9935311.2737667946491.731093457576076242351059.
4246909375066856974122813056503111.p59 [Montgomery, ECM]
- 55 87+ 2^3.7.59.2971.4583.185137.183097130989.
267862906957.575643146160797207527306501.
18379424785609680810740070309607.p55 [Montgomery, ECM]
- 55 100+ 2.41.401.1801.111593.4485234541681.1563211806048721.
8345850723306601.95021874303431401.660117653270710430147201.p77
- 56 53- 5.11.107.9011.2040934778651647001242890014795164381.p49
- 56 79- 5.11.5531.13709977.3274232553511.
97677070602539.77086679597668061819.p80
- 56 97- 5.11.40294042963357433179287469.6100486770067279068883093021.p115
- 56 99- 5.11^2.31.67.103.199.2663.7723.30841155073.57914451739.
103372829011.10542455001277.13045372096150426269073.
20253459833663799903733.20967659705735466509413.p44
- 56 64+ 461386369.2215526385443140481.
1120971223480359091305712645673434758493441.p43

Update 1, Tables 56+ to 58+

56 74+ 149.3137.49876297.1552048621.1849954152780169681337.p86

56 83+ 3.19.4483.16198400300755689379579.c118

56 86+ 1033.3137.296518196858312552166810677.p118

56 91+ 3.19.157.911.5227.15737.28393.1925393.1138721034165079.
9154782737309206383569.48079083062064127908199.p74

56 93+ 3^2.13.19.79.2538157.991072699096717.58481197332297157566066019.
10800292046938016842013532724813231590022178893.p65

56 96+ 3329.4289.88321.192961.12324161.112790017.
478998073521217.34335621206267137.9204182701393835713.
232559086557407467762901333407938321409.p47

57 61- 2^3.7.8297.275599.454102852372034133722600077.p70

57 85- 2^3.7.41.71.2551.3691.4931.318436803674534765469421.
12638179502096199521694978001.p82

57 59+ 2.29.2243.27967.427076792183.1596893930485278504731083498402051.p50

57 61+ 2.29.977.431898667.3519003390903618764755673.
20500212815560871346128284471.p41

57 78+ 2.5^3.13^2.577.1301.18289.421774848457.
193892745203299008515581193.473828132744064133969715982253.p55

57 88+ 2.17.769.3361.1268017.4443926186627307609853361.c116

57 96+ 2.193.2753.144961.228929.247553.2562959486619658177.
159452332908596307521.195688992282395942401.
3098555588266309798721.p67

57 98+ 2.5^3.13.113.197.3613.33371436584977.
2880170603124053.19522006634428762789109.c110

58 71- 3.19.12121973.1028171591.32562234989.91551995051796931943293.
95085985158747661769992579201260241.p39

58 79- 3.19.8059.1813784934677363880586328633.c107

58 91- 3.19.211.313.10986067.183585613.8889251160791.1212370332055146811.
4711342997396831407.126415678477358581218727.p66

58 93- 3^2.7.19.163.1117.16493.1594951.109960597.32365401511.4386278573077.
106644259178537.802184537927239.75701865042739143157590250368211.p54

58 61+ 59.3295264409.7192041338831.
82283126277816266983540643657458661879089.p43

58 62+ 5.373.673.1061074599281.249371498676153979530497.
964617068107856200086067220798377.p35

Update 1, Tables 58+ to 60-

- 58 67+ 59.4423.11927.16508181083213.264147380958609467499443.p73
- 58 73+ 59.293.11773707677440648014056551.p100
- 58 74+ 5.149.673.1977434348109526529.19469841499343565027595314917.p79
[Montgomery, p+1]
- 58 81+ 37.59.1009.3307.26407.1019701.1567837.154323841033.
357495730946887939129.536644200621524414731489.p61
- 58 82+ 5.673.451413146924684437.19091233489460737861.
6598268945704961769209233.6836781007244490090861277270844081.p46
- 58 83+ 59.4257948084391.25040231924905264883.391207641578723500693.p92
- 58 88+ 17.2507800241.76138295377.1824260537089.7533122454001.
156998023470731873.14759380195279967414944129.
62057338333442627487392257.p41 [Boender, PPMPQS]
- 58 96+ 193.449.1153.1169473.142003009.19166983681.
24779314612061953.1078686229606297409.22411195734132103169.
21447478665303915002497.2443124414434060193381953.p37
- 58 99+ 37.59.67.1009.3307.32077.93941.1019701.2168893.2366629.
19837621.215363413.67286189741.370407316388289387307.
10924686900226761218173.p66
- 59 83- 2.29.1163.34031.1150206683760653789705431999.p111
- 59 85- 2.11.29.41.137.151.181.443.1871.2381.361353204962363828785531.
3199317382737594726138578711.192052183634195717382812875959337681.p44
[Boender, PPMPQS]
- 59 89- 2.29.179.6284491657091.22081571409593.972952819169180091071.
1576049713367183058451.2689941424488348023848649808389.p55
- 59 53+ 2^2.3.5.107.8022818909743261064775318842663140367.p54
[Montgomery, SNFS]
- 59 62+ 2.1741.17782728218837.13494230716102089497969.p71
- 59 64+ 2.257.1409.1202561.4574180655836929.
111968557792759804050783233.29475258058422871838362537601.p32
- 59 68+ 2.17^2.409.593.601.6257.87721.218775313.6387105089.
592889059371965032485521.p59
- 59 90+ 2.13.37.61.1741.8101.64921.695581.931837.8117401.17687953.18083161.
2718597042181.7828781701952161.32811926888533202800287661.p56
- 60 59- 59^2.18438666190697.16425604942648361673173.p66
- 60 61- 59.7687.20979773866271054688241.p81
- 60 93- 7.59.523.45943.544919.15159311.1021987913.
43936251520677021083041.26630515725327518496027801653933.p80

Update 1, Tables 60- to 62-

- 60 95- 11.59.191.229.419.5701.1198151.630359771.3978405096481.
64556007798559201.180893703656849813663962631.
1076396409273334959634234211.p58
- 60 61+ 61^2.22742387.1039052667517004801929647383.
2372500211008333003222944301.p44
- 60 62+ 13.277.205345690403737102561.1030666135876718040915373.p63
- 60 64+ 769.7937.2998657.1861390422206123777.510074661605448557441.p62
- 60 68+ 17^2.281.2713.80159131586592971777.25316340388412815172453873.p68
- 60 77+ 23.61.199.5839.6955411.7859419.129943035204533.
56912098228911161551547.28326240214010151734543185302263.p46
- 60 84+ 17.281.2713.8233.80449.2087802049.4527011833.14864600138249.
70414988866482578753.521640178455554385122799142877619913.p46
- 61 77- 2^2.3.5.199.859.2209747.52379047267.4242586390571.
3961245677218061.274716561670738992113.536231864510166445391.p45
- 61 56+ 2.17.2017.12401.454677073.49612704073664599841.p63
- 61 58+ 2.349.1861.2089.340577.74377979811140665117606674668924409296393.p48
[Montgomery, SNFS]
- 61 64+ 2.257.641.635460808229535772106113.p85
- 61 68+ 2.409.6922921.1117521521.517003551730740124849.
32489476451994002012646170985629171047873.p42
- 61 76+ 2.761.6922921.81808851457.24921518840870416053329.p93
- 61 77+ 2.23.31.331.2179.254735251.42308091563.50689400581.
99378115904791571.248674825901920213864150772728778587.p47
- 61 78+ 2.53.157.1861.13842121.104537472457740640338604679102420447737.
132899538208493324278041866839368705218957.p46
- 61 80+ 2.14593.436801.13483201.93392020920424417.
477302672608932495361.588894575109458165761.p68
- 61 86+ 2.173.1033.1549.1861.744327119102324603336237.c118
- 61 96+ 2.193.2689.4801.3853313.8346049.20653663489.30458644417.
1375331651522671169.15268700241795042824137537.
32237809504004235157528971453329857.p50
- 61 98+ 2.29.1373.1861.3529.67667377.383188373.
14772114406812806149.20684950677229314209153477.c103
- 62 59- 61.175939.416346224106125980339.p79

Update 1, Tables 62- to 65+

- 62 83- 61.167.13917773.50847633637.896693202481.3147670338047876848577.
4598013902236094553023.37625952989032573239059.p50
- 62 89- 61.1069.113209.13199053338144175145770349.
341022854370850822171851671.3916898265747514256035560079891.
14787347055415598644147515432551.p37
[Montgomery, ECM; Boender, PPMPQS]
- 62 67+ 3^2.7.238181896118874631502446507.p92
- 62 76+ 761.1217.19417.222685736740348949017.c106
- 62 73+ 3^2.7.86752070770418407.65432313506671795111.
3666080117346530964816143.p68
- 62 77+ 3^2.7^2.29.617.446293.825977153711699903.
1944570301126531071533.12612329335902807392056883401.p59
- 62 81+ 3^6.7.13.37.97.2269.225523.417961.44723293315793981214013.
922413536504838656150599.61084237387009883015241899131051.p45
- 63 81- 2.19.31.37.109.7759.32563.424117.4045709593.
244416145091043028178779946569153.
2690789284820183534382908106678035211319.p44
- 63 87- 2.31.37.59.109.233.2257684668341.6234157146631867.
98320012313450183689981.1346656302316159090351145179.
7881575283766767688770837925803503.p35
- 63 95- 2.31.6271.6841.16007041.7276280816848801.34132594278730273.
189909884456431980821.c102
- 63 59+ 2^6.4957.15714233391032039935117.p79
- 63 61+ 2^6.121921140573675260771.11175088171868851962194339.p63
- 63 78+ 2.5.13^2.157.193.397.1613.6277.
2430864277571523073367801216145682041601.
9471732225267841318029469061851867771781.p44 [Denny, MPQS]
- 63 79+ 2^6.5531.309523.650969323.820243275110700598907.
165695508949074804907743781387.2157637353342309035414711254507471.p39
[Montgomery, ECM; Boender, PPMPQS]
- 63 85+ 2^6.11.137.443.701.2011.254033013499721.998815040186013059391691.
3591323202985413939316891.45070574721020948041235981.p51
- 65 58+ 2.349.2113.102020995273688537018953156037.p70 [Montgomery, SNFS]
- 65 64+ 2.3086374001630689712164224112834049.p83 [Montgomery, ECM]
- 65 78+ 2.53.157.2113.433681.17846401.411649760653.
21774289614406929996917.392587488969111824365693.p64
- 65 79+ 2.3.11.45233189.312940520202413780726963.c111

- 66 67- 5.13.269.19163.262751771813.280398855775900743919.p82
- 66 81- 5.13.19.109.433.487.541.4423.5563.39910303.
13329319933.32507878377259.576011454061449347819497.
39309783697839329997528684405172591.p38
- 66 53+ 67.107.1061.41558467.4184407992037056944231.
38628841569152224765408183.p35
- 66 59+ 67.516959.1644517470193804889531004576869.p70 [Montgomery, SNFS]
- 66 73+ 67.51977.5641434022284215528209.p105
- 67 67- 2.3.11.269.4021.730837.10960933.
1514954885096604023562287915730049.p69
- 67 91- 2.3.11.79.157.5279.175897.522061.313053662923.126867415853933.
1211402282562606737840693.12895179568846374618089908729.p68
- 67 99- 2.3^3.7^2.11^2.31.89.397.19801.1658053.30152894311.
203710056661.1890149702927663.25881410068524979.
126467431119400579891.2515208214206285121254951932641469.p52
- 67 58+ 2.5.449.1973.475429302637.131768881218084245002085505137.p59
[Arjen Lenstra, PPMPQS]
- 67 59+ 2^2.17.58057.245715671929457.28020829164464935802242406119.
28402548066325733698407160691.p30 [Boender, PPMPQS]
- 67 76+ 2.937.10753.31769.1408889.4499809.111358697.251237060797388605801.
315618216027848486834301078445774290254513.p45 [Boender, PPMPQS]
- 67 81+ 2^2.17.19.37.163.4423.31159.215893.128674369.
12256396849.419361622219.8977627086301.
54977338966483541273621004824942193321511.p45
- 67 98+ 2.5.197.449.4201.371617.624541.3118080052837.
2469255772339392031213.10279578282652478747427593.p100
- 67 99+ 2^2.17.19.23.37.199.2179.4423.10891.231859.1011583.
128674369.1239598499009707.78088320271718681.
705909673097573677393.22549044987192939329269.p67
- 67 100+ 2.41.281.937.2281.10753.53401.5022387641.1249312628801.
1849012040801206840001.517659950783431114264201.c97
- 68 47- 67.532420380710380271214511372540831.p52 [Brent & Keller, ECM]
- 68 61- 67.1606582845287075553706929519320297.p77 [Montgomery, ECM]
- 68 67- 67^2.2939291.1048921527777202484633.p92
- 68 95- 67.191.457.3041.54721.85577.10485721.21700501.11262858773345981.
13504583962441789501.25079639001129379803320837.p80

Update 1, Tables 68+ to 71-

- 68 58+ 5^3 .37.2876650193550608549.531122791155838357642686743681.p55
- 68 67+ 3.23.416075897.1813394616463470622032961.p89
- 68 68+ 41.521497.56170993.13867852023937.14691746818289338236289.
9625115733670717754307586206809489.p41
- 68 87+ $3^2.7^2$.23.31.15661.91757.19075122136237.306249709725017.
3771118783001168489041.4574830381550807762173926989.p68
- 68 89+ 3.23.599149.35877266507.1118083891596247.
55857695968238948524814197.p105
- 68 93+ $3^2.7^2$.23.31².311.1303.13331.3981517.8664498426445342506211.
2245453602407358901426923710490370639221775585177.p77
- 68 96+ 193.8641.8886721.39878593.52508646185194976897.
2901086919538347908106839041.108082964834366664873459710209.p79
- 69 77- 2^2 .17.419.1453.3037.3109.9241.35069.38281.35221999.
3339035393.7646104667650387952250996980453.p66 [Montgomery, ECM]
- 69 64+ 2.2488226819470849.11828196661731412748033.
38543621958537449850241.p58
- 69 87- 2^2 .17.1103.3307.4831.199289.6678701.28327259.159286793.
470955155592475006949.1232064297351474483488503.p76
- 69 71+ 2.5.7.2131.12781.17609.13093271044107203.4257929443236536737.
15405958032914724487571.373282844717282676749958779.p34
- 70 53- 3.23.8065270482236460090947.p75
- 70 81- 3^5 .23.37.1657.3889.4861.1059903991.589047714789665319655161571.
139574320554594072199674895003.p69
- 70 97- 3.23.1769863.20955906313967.
438112486007625823.43179374901768608243159.c118
- 70 62+ 13^2 .29.1101129053.391039294057.92127160427094708349397.
3288436727713312382598251701998253.p34
- 70 67+ 71.197651.458683.1018451856790517.1247324391760250662188199.p72
- 70 87+ 59.71.349.4831.7019.8361843239.
433916579258242870004910217.56476537654063551106920429541.
1309650871115770577910672000538130249.p46
[Montgomery, p-1; Boender, PPMPQS]
- 71 77- $2.5.7^2$.23.883.3697.22639.21020917.1125438469.143554218709131407.
6902861817667290192729108442204980121.p58 [Dubner, p-1]
- 71 83- 2.5.7.12451.3579429715865569.38115878606127128603063.p110

Update 1, Tables 71- to 73+

- 71 89- 2.5.7.53669137.1293644801117.971048012563753719841.c123
- 71 91- 2.5.7^2.883.911.1636363.21020917.886835041.3202878953.
5196608121641.3882322774998252313.27887919387363206472757.p75
- 71 59+ 2^3.3^2.27118879.900779405751911261.78993160358022469676832549127.p54
- 71 80+ 2.641.190404353.290886721.92521929281.433220107361.
1095031748345506649537.743547688326470658877906390103962081.p49
- 71 81+ 2^3.3^6.19.73.109.1657.2917.26947.198127.282439.522877001113.
49730068812216907.13789032932570637979477.
1310845466777598335055925663800787.p36 [Montgomery, ECM & p-1]
- 71 94+ 2.2521.143257.428032009.4259588251012186447409597.p132
- 72 53+ 73.107.5329416315673.208807002421134351454687665963420115403.p44
- 72 65+ 11.41.73.131.521.547.23011.46307.58771.32842040219.
39865436109311425721390415997468325725681.p44
- 72 93+ 73.3163.5113.5277008419.1248843522994363.5307745541404934414612251.
41445416033725620014442132774070078039771.p74
- 72 95+ 11.41.73.2243.58771.885971.273547768779311555491.
1188954673932515847876989341331.p108
- 72 97+ 73.3881.218168005786123.89268137546412403.
781429666482717601.2058215880562955759799353.p102
- 73 81- 2^3.3^6.19.109.181.1801.20359.5845771.14668471.13909795579.
37427131197853489.2009977828902371214483211.p70
- 73 85- 2^3.3^2.137.1021.71741.28792661.155072369.909139159.
34140570383.12967740568396231.14722734308685531840841.
19250592558570034555860761.p48 [Montgomery, ECM & p+1]
- 73 95- 2^3.3^2.2851.3041.15581.48527.67679.28792661.555221041.
1563996781.1141839571451.1069952429562890572890811.
22698013460334370106164771.p68
- 73 58+ 2.5.13.41.1443968516745477842918236813.
19788736375368452459770083706049791973.p40 [Boender, PPMPQS]
- 73 61+ 2.37.50387.289954641019880677.932700571021098638040617.p66
- 73 64+ 2.20353.19076619727317467194441217.c90
- 73 65+ 2.11.37.131.5669.19441.2644669.29055911.1506911267681.
248380181650421165093551141.1020117713193898296876417091.p29
- 73 67+ 2.37.269.5897.20771.9637951.251409461.199263416662169.
4517800091393843724052550386409.p53

Update 1, Tables 73+ to 75+

- 73 73+ 2.37.4596369165585291112352829637852339157090144708807832677.p80
[Huizing, SNFS]
- 73 82+ 2.5.13.41^2.193357.229673309.34042076797.
11286185289777638361749216221.p96
- 73 86+ 2.5.13.41.4129.13933.18061.2753549.
8070929.7386946497137444546453.p110
- 73 94+ 2.5.13.41.5077.8273.12186913.2376784513409.
435534443943920522904037.c121
- 74 47- 73.27699458426667769672995217.p61
- 74 87- 7.13.59.61.73.233.17401.22853.
4736801615289553951.10739323591982963442124501.
4042701287213544967586096712292303888961.p61
- 74 91- 29.73.1093.58787.22380359.555596887.5739858419.
45010053661.6569223442084213.45799287036622431523667.
6300454649733691099786120178647.p54 [Boender, PPMPQS]
- 74 95- 73.761.8627.304457.30397351.30852961.59168348971.
557808517889906238725941.1708811086661766636385909.p90
- 74 53+ 3.5^2.107.6023557.2328027798886698982960368225677.p59
- 74 56+ 17.113.4481.69233.170497.378799428782212012296401.
437168372580782413973744497.p38 [Montgomery, MPQS & ECM]
- 74 68+ 462401.29986577.89799169.1070845580422230445509851591041.p76
[Montgomery, ECM]
- 74 79+ 3.5^2.61918147.2146245736890394393893313.p114
- 74 91+ 3.5^2.953.1009.168491.94842747662501021.
575179649309204419481.26604254463708507384163.c97
- 75 53- 2.37.107.18030279714813727590084874539683.p65
- 75 89- 2.37.179.712923109.26734565669740573924433197.p129 [Dubner, p-1]
- 75 93- 2.37.373.5701.12277.2296729.18938149.63741651301.
641519755183702411992493993.401973824886224118275254445543873713.p76
- 75 53+ 2^2.19.9788744224382406571751339979772159036422997861.p52
[Montgomery, SNFS]
- 75 58+ 2.29^2.97.1277.792049.39391213493074486590239586854831921833.p57
[Montgomery, SNFS]
- 75 59+ 2^2.19.49757179.353245019035850849725843.p78
- 75 64+ 2.224914177.68799038786512319388821350925569.
151113908786421917036806943723393.p48
[Boender, PPMPQS; Montgomery, ECM]

- 75 71+ 2^2.19.46565209.39275484368822788526017.c101 [Dubner, p-1]
- 75 85+ 2^2.19.1327.1531.10711.7814119.29078671.31224301.
7776741223.12265331599.1240960890576268730161.p85
- 75 89+ 2^2.19.1069.8663311077317900433187.6381563056587517660786387.p116
- 75 91+ 2^2.19.43^2.2731.6007.16381.132523.94990099.3220769917.
39267562275241.17833563645262574879671.c96
- 75 93+ 2^2.7.13.19.61.1117.85933.599479.929629.10079341.
4037825845717.11761353438989893.3333828269908555249489.
303854948516540751887608046770993969.p57
- 76 53- 3.5^2.107.5552138646978793697.7872488842371152092422001573931.p47
- 76 93- 3^2.5^2.683.1951.6252019.8972965400127301.
4257921088587343041001099.7027212900036500553680494346153.c89
- 76 97- 3.5^2.389.61431847.2773051909.14457328939358853241.
799518144061061436525295079.c115 [Dubner, p-1]
- 76 52+ 17.569.3449.263537.23564470269859185345121.p63
- 76 53+ 7.11.1061.1410440437267.332507171426341041442847.p60
- 76 56+ 113.241.337.1341217.3443441.
4868699568817220592890920460964327586529.p47
- 76 59+ 7.11.709.16993.179243.533712478627.
471586815074704431240140019672222092489.p47
- 76 61+ 7.11.1145093.7401497.697153507.7224503521474238769282944789.p64
- 76 64+ 3329.632502515329.26989952536738183783635329.p80
- 76 65+ 7.11.131.128389.32928901.285468477137495809.
6846972758185420866990543131.p61
- 76 71+ 7.11.22721.25561.1838191.2623451.92437763271359374690583.c88
- 76 96+ 193.769.19346177.48211314087558529.161213578793010967941313.
411038485863389954249926135104278722910272015342657.p78
- 77 67- 2^2.19.204887.7827343.72654344170107008443882249.c87
- 77 89- 2^2.19.179.121662931852937084609.126485886119896947189521.c121
- 77 91- 2^2.19.53.757.911.1249.47861659.278949511.13891200467.
1365056329785331093.963745516044660410392241.c91
- 77 95- 2^2.19^2.191.4637.66083.388133.35615581.2436403172761391.
3141018192118591.469273734201834941.4059281499675137711.
1254200040785197567017611121581711.p52

Update 1, Tables 77+ to 79-

- 77 53+ 2.3.13.107.36677.85974663105743207113629733.
8508101816450689975658227843439.p35 [Boender, PPMPQS]
- 77 56+ 2.337.449.2689.5233.262965473.1012150698878576321944657793.p58
- 77 67+ 2.3.13.38861.8129535482905892478369742915919.p90
- 77 77+ 2.3.13.5413.20063.10255211.1336181169712841.209901342080016148409.p93
- 77 78+ 2.5.157.593.829.2393.26417.26573.42397.2366053.7765837.
144626910195417124541228033.67355722098906575755356654353233.p51
- 77 81+ 2.3^5.13.37.1567.1951.21601.348949.1198261.3303829.
74550727.1625573233.263513947859528941.
222109114828896738824347.3091931350876041449059657027.p34
- 77 98+ 2.5.29.197.593.5461289.1392053978561.
1141997132127045448409.54695004239790005421793.c115
- 78 71- 7.11.1279.119608589.16914250382532342187651.
305837502825766887404700574819.p70 [Montgomery, ECM]
- 78 87- 7.11.59.523.1451.6163.10093.11833.64381.2629967778089.
2970136500712302512053.55707035189973735821819.
208432417719556926180781.p59
- 78 95- 7.11.31.41.191.29501.25131669779.71888587949.6403618168573.
1115054051116059285693229291.c107
- 78 80+ 97.274081.19949249.483587969.16814078881.
2006041300321.2141900414789922435841.p85
- 78 87+ 79.349.6007.167911.116183250585011.158700668002654067886475189.
4818298655188397286104318948946851.p78
- 78 94+ 5.1217.8273.781010093.11635877309726430857.
25655365976898116357.30565409510519482117.p104
- 78 96+ 193.577.24645865729.8300601922966849.4539080612444648899393.
6107331207818788920817594451369498612615958706659644214721.p71
- 78 99+ 19.37.67.79.163.199.397.6007.9439.21011.68311.1965277.1968401734883.
3063044826024596717041.111281466031115101977659947417843.
6208190490259001708597091388464657473203.p45
- 79 61- 2.3.13.1470088206121531.51654148211991912025138901129.
8488027283167969732334771399300677.p37 [Boender, PPMPQS]
- 79 71- 2.3.13.3334860272717.17819939508359.
55061768623379715431630488283.p79 [Montgomery, p+1]
- 79 79- 2.3.13.317.1558537597.171355071830508389477.
54493132908043378263202913.p91 [Wagstaff, ECM]

Update 1, Tables 79+ to 82+

- 79 61+ 2^4.5.101265247.19988054291981.4063397958991669828833661.
1196357394461850643354453266906583.p35 [Boender, PPMPQS]
- 79 62+ 2.3121.1553465677.72788832917566660513.
403561630512148848794856930813419331533.p47
- 79 64+ 2.257.1153.19841.1120001.2154881.34208273921.
215386569839518549140714113.4632753314747725303432820353.p35
- 79 70+ 2.29.1601.3121.152641.6207041.291081421.2037311871464044411349.
147615170805625227125517526558855379013761.p42
- 79 80+ 2.1021793.25442332411138694561.
396144390380137134275041.1126264880017822513862177.p79
- 79 86+ 2.173.3121.410393.668221.1830253.154770761.
20958563609.29736112673.105972000877474558577693.c88
- 79 91+ 2^4.5.131.313.547.6343.37844689.912422057.222311290358977.
282849240792301.1423136530102144391.267751585685780139418969313.p70
- 80 79- 79^2.181113265579.197183559969156707942711022984269.c103
[Montgomery, ECM]
- 80 58+ 37.173.121941637.48895060432213.
587407531780545617292693056474932755332969.p44
- 80 61+ 3^4.102481.5320657002569.70926612762932632406255735749.p68
- 80 62+ 37.173.1489.1613.8427213701681.61871704368094663869508095568493.p64
[Montgomery, ECM]
- 80 65+ 3^4.521.1301.40454321.67871088134320987654321.
3416871674919158699528742801241.p55
- 80 93+ 3^5.7^2.43.683.132247.4464317552407.344300248085770063.
136665080954300415515606341.5199319892113098319475513872107057149.p71
- 80 99+ 3^6.7^2.23.43.67.4423.8867.2625479407.87381162667.270688839961.
51999634801181.1455230640830802919381.115643429310177548142661.
11935171798229644025656192643827.p51 [Boender, PPMPQS]
- 80 100+ 1201.2081.23293201.40960001.765229481571856001.
1126223781314339980867121.31611307638369813222834001.c102
- 82 61- 3^4.539466825906912102863.9702738009758101987933.p73
[Dubner, p-1; Montgomery, ECM]
- 82 81- 3^8.19.2269.2593.5347.19927.40357.132157.1956961.3576360169.
131414993533098799813.3575689551585164000764563144607.p59
[Montgomery, ECM]
- 82 83- 3^4.331337.95736019.27018958129.1945606940604200995787.c112
- 82 47+ 83.3610901231487745685879252983237.p58
- 82 52+ 313.45212177.7848266615855338102572684881.p62

Update 1, Tables 82+ to 83+

- 82 59+ 83.12037.5003349305691009047543.p86
- 82 61+ 83.1373272557803015990137.c94
- 82 65+ 53.83.131.157.191.233861.585391.899159.
12203656388509.23387041636723181171.p65
- 82 68+ 137.7481.45212177.1470978687089.3065499403698317751553.
9241855378580566956862595601843404638609.p43 [Boender, PPMPQS]
- 82 74+ 5^2.269.2881968198115050354780649.c114
- 82 89+ 83.14319211.1908685399493751442462113629.p134
- 82 91+ 43.53.83.157.38669.180629.899159.12203656388509.
6551045825238966871.16582022129542741900757.c97
- 82 93+ 7.13.73.83.5209.455547823729.182157665915263.17889333238011394700041.
14083282102276714582655785344289987236119461.p78
- 83 53- 2.41.107.12228937541870956832177477.p73
- 83 71- 2.41.853.10212125386042418786383.p110
- 83 83- 2.41.2657.11155201.1008505707601323349156769489.p120 [Wagstaff, ECM]
- 83 53+ 2^2.3.7.1061.222139460635868520895921678931797619.p62
[Montgomery, SNFS]
- 83 56+ 2.10289.13553.16001.6840289.5468858517063028721502978911873.p58
[Montgomery, SNFS]
- 83 58+ 2.5.13.53.1514033.91115953886988263631638237.p76
- 83 64+ 2.4481.9601.418006605129272833.10566898200188433869569.
157005708357848517121017735788460161.p41
- 83 69+ 2^2.3^2.7.277.691.1289.2269.14868719.
123740629183355101341553615847.1266533344481312075928611997127.p52
- 83 71+ 2^2.3.7.3543183809806621.48386572774554953092559.c97
[Montgomery, p+1]
- 83 79+ 2^2.3.7.317.8849.5648659.
438059909707819135381.865867692801688791317.p95 [Dubner, p-1]
- 83 90+ 2.5^2.13.53.181.241.613.2161.4861.20809.10417501.47451433.
3877668305389.450393067843421.4330817185987598043158341.
270213819618398588401481604071775331921.p45
- 83 91+ 2^2.3.7^2.113.197.911.2731.2073121.2820403.37447665332413207.
449855879732140337.423069505493445934206442451.p88
- 83 93+ 2^2.3^2.7.2269.119971.307158218997877404253.
238596223390252661314081.7238814005038116548387491.
221879191128785139779631347760509508857893.p58 [Boender, PPMPQS]

- 84 53- 83.6888270050151991.597917147920646215525390305042295218747647.p43
- 84 69- 37.47.83.193.277.88873.20411397948205858222339.
18391449250674660517686067.1887982739679387224526553023955943.p38
- 84 85- 83.101.3061.498881.41323091.3202754101.2193859673250534781.
5244714676004808500014071100291.6218272796370530483675222621221.p54
- 84 87- 37.59.83.193.993367.17029966233667.7712615417181253823791.
763757353906950671924429042891236853237.
2904043752413366850400636076474517615769.p41 [Boender, PPMPQS]
- 84 93- 37.83.193.1117.190993075212913.
362239718191301029.72518554319038627705021.
28350593443558100121673202707618714806482677.p72
- 84 95- 83.101.498881.2078753.27643481.20436490956722362771.
498378772882721787199081.21106948661620915564673807237.c89
- 84 53+ 5.17.107.88874399854793717.847470140789797092110542481.p55
- 84 65+ 5².11.17.271.3301.121958421052367004564733.
42186728070839948124422921.355227715335542091345459614619071.p35
- 84 71+ 5.17.15837119.6499874486385417337237.1400442648963873478350251.
133184106044570646620234096956423.p50 [Boender, PPMPQS]
- 84 77+ 5.17.23.347165113597.751493770656900107.217749291259749458749.c96
- 84 80+ 414977.816769.29916001.42887777.422680067617.
312677776854788321.386315540589357025384481.p75
- 84 82+ 7057.5104876734569.29071871041325883973.30004602959586575909.p103
- 84 85+ 5².11.17².271.3301.8501.15446485683128361212797330891.
357174146781144657539822475821.c92 [Dubner, p-1]
- 84 88+ 673.15137.40045457761.3683148456289.157759434072769.
41547226873454249729.546306935281973320057629841.
5198715286685146590917094257.p51
- 84 90+ 13.41.61.181.2381.4357.7057.2058841.3829237.416197681.
28324605695874417613.95349961122240600258397863301.
6145116522379702609676302584721.p55
- 84 95+ 5².11.17.191.271.3301.20939.3426119.27969901.
52762051.59261698224389.6757400716814714663403271.p107
- 84 96+ 449.45121.2936890241.15398245441.256264545281.
866886861130177.319670343495409537.2856100170514349249.
4689996480918894175489.2035093048692257081864341495489.p44
[Montgomery, ECM]
- 85 53- 2².3.7.107.820303318133971464730048176040049209645602298607.p51
[Montgomery, SNFS]

Update 1, Tables 85- to 86+

85 61- 2^2.3.7.1709.959138381.21208648252153.
2044305096014703944518400567.p63

85 65- 2^2.3.7.17291.52822061.8324279184997583471.
4631190240325080936566413651.p65 [Montgomery, SNFS]

85 73- 2^2.3.7.10771589.647261707763917.478514681375515340527.
392836124647246761540329.11945250898828113769606946321.p45
[Boender, PPMPQS]

85 77- 2^2.3.7^2.23.331.134443.191071.2546237.13695512557.
54519912973.95748702960652214449439.p82

85 49+ 2.43.113.3298796957.3758764285376474420836921873335003362471.p42

85 58+ 2.1973.3613.107881.10800749343742479792389.
4344540223936255809023218884586841.p45 [Boender, PPMPQS]

85 68+ 2.41.137.337.1889.11246318949507946411282084363679513.p88
[Montgomery, p-1]

85 84+ 2.41.337.673.1873.1889.14449.217489.6689233.61807441154215373401.
486405391922154778302937.417853034519604425165658163094593.p56
[Montgomery, ECM]

85 91+ 2.43.113.873419.942709.3298796957.170744724671.
58121572576262710400851311347.c111

85 99+ 2.37.43.67.89.193.199.397.419.1607.1783.4159.127579.
949997233.1631686607.61669088713.699929929521261548351551.
45877879485419685677243605106377.p75 [Montgomery, p-1]

86 53- 5.17.107.62497257174478674019474247260071439.p64 [Montgomery, SNFS]

86 77- 5.17.379.463.617.24179.761531.
1080018073.198397549967.22390512687494871811.
135497890432087828757018337065183642667872453.p45 [Sosnowski, MPQS]

86 56+ 113.61057.149921.326881.583114533685641932017.p71

86 58+ 13.569.38629.5022207248402018055838757.
129094951090723152084884804969621.p47 [Boender, PPMPQS]

86 67+ 3.29.3612271501.343596395614661316577.c98

86 68+ 137.7129.7673.4232593.263879849.
13213939335687215569.94687053596956686868961377.p62

86 74+ 13.569.3109.696197471618461.5289703145538433673693.
54364334181729325511337533.p74

86 85+ 3.29.41.3911.1318831.1935281.113271378251.31340873638421.
3156754409305371616681.74974651047271950927008821.
8850227171918080146144607529831.p43 [Dubner, p-1; Brent, MPQS]

86 88+ 353.12497.61057.149921.326881.1056743978753.
853029039354231472224280097.c110

- 87 73- 2.43.1753.2180556073006521365676397.c113
- 87 91- 2.43.79.342889.26494339.130598833.438668366137.
90880697724181.35122470482816904187183.p104
- 87 93- 2.13.19.31^2.43.10789.89109439.588842447957.
310075367684506654831.295580351269350516085981639904716176779.p91
- 87 49+ 2^3.11.428698630543.325861315738805549503997378183191.p49
- 87 62+ 2.5.757.4217.400563855701.1041338854119585772648861.
2410772995818105279620017757284931941.p41
- 87 65+ 2^3.11.131.151.443.2003.375091.
209499473746622749.1923321250743814922261.p70
- 87 70+ 2.5^2.41.197.701.757.2341.92317.6838193281.10337743401241313.
3842711687217470621.456733465483466438396179104755692741.p37
[Boender, PPMPQS]
- 87 77+ 2^3.11^2.89.463.2971.1097987353.428698630543.
8443913253667.50449463184737.21451120650117847441575131.
51615095815580963524071777103.p37 [Boender, PPMPQS]
- 87 88+ 2.2113.27457.37361.909284993.43924369201.
787526070373346993170489921.c112 [Dubner, p-1]
- 87 99+ 2^3.7.11^2.67.89.199.397.1009.1069.2971.6211.9967.69193.
2407219.6088699.67284291889.8443913253667.5771374584900871.
2194420122938555321041.p84
- 88 59- 3.29.58851220409.7725521132266118912657.p81
- 88 58+ 5.1549.13371212353.44799531828170304797849114157924326540503453.p56
[Montgomery, SNFS]
- 88 78+ 5.37.53.157.313.1549.848849.1620589.2998997.141186602129.
2441474682589859476873.931523402064812789529181.p65 [Dubner, p-1]
- 88 85+ 61.71.89.6257.13691.98737.993481.675903307.5263358951.
30625611289787.1471673423616147468811.40835958833675091391031.
43722530020252396296833010211.p37 [Boender, PPMPQS]
- 88 89+ 89^2.407987015619859919.34157350625398046867.
67108459912186790985737.p110
- 88 98+ 5.1549.286188251441.64001676103429.93302370467461.
4678151437433860849.4787272673461127236297.
215643309319960967180737.p84
- 89 49- 2^3.11.502628805631.184091274583648974139291062968551.p50
- 89 53- 2^3.11.107.1851821.13254129233417996561269.
267694193510397744911116957.p45 [Boender, PPMPQS]

- 89 67- 2^3.11.171253.2516667443363477227.2332203907087289455109.
17345460386856072657168883886351357651503.p44 [Boender, PPMPQS]
- 89 81- 2^3.11.73.109.8011.266367259.6807972547.
3841288505945752455073.4227783894087055163599861.p84
- 89 93- 2^3.11.311.1117.8011.294082927.
510212029609.1548833765803.4558100617091098108644427.
8826610687052803757339214201280076570804527787798773.p60
- 89 53+ 2.3^2.5.41023.1472319649.279342654341701943919635651.p62
- 89 64+ 2.257.769.211073.443789979316995682177.153316525308739316934017.
244152836910662902827452033.p44 [Boender, PPMPQS]
- 89 71+ 2.3^2.5.5981609.3837161497390813550891.24481346707380610569341.p86
- 89 73+ 2.3^2.5.108627797.2588878009886986271.57661436440314954151.p95
- 89 74+ 2.17.149.233.15855599753721406213361.c116 [Dubner, p-1]
- 89 79+ 2.3^2.5.33181.1123045757479.28032870649840319321659.c114
[Dubner, p-1]
- 89 81+ 2.3^6.5.7.19.163.373.1459.163205767.166111399.
8718957649.1306087722019.168827868376319468539351.
340218215106581902954107241981.p53
- 89 96+ 2.193.2113.14657.254209.1380289.33636481.38611201.
356028464377153.4029994312437697.29584120708058315653717121.
2840449656592064630121544321.p68
- 90 67- 89.766398825481.9059751671298162413.103524390485859633447667.p76
- 90 69- 89.277.1289.1427.8191.238879.227068662973.
99810365260096801591.12884520863384224540819554769.p56
- 90 85- 89.281.236111.71041879.1885164443.4559542121.139916513426003.
759189770413511.1287593068182741791.2403248704569170449552153951.p56
- 90 87- 89.8191.5745307.12029459824653037000298387.
160701124333400091045003481.15896409689085203242013831809.
439943232052881001865630195693.p49
- 90 53+ 7.13.743.18127.23321.9489924173557135357172998117171.p60
- 90 59+ 7.13.1063.443917.7175019338267903.127851366937703287420357.p66
- 90 85+ 7.11.13.103.571.10133.10331.32063.10568527.51818803933489.
58218277989371.14130796360868003101001.c90
- 90 91+ 7^2.13^2.53.157.449.606607.25392641.167229077.
4256816590001.3797755755452569.23600091863117277039589331.
655211766004146018049488653.172793767563236816127267289063.p37

Update 1, Tables 90+ to 92+

90 96+ 193.769.699520193.56689410049.8330734280131598017.
 16652257579474188645491242177.257015063438823952763368170817.
 302236128616798495258275923431870081.p51
 [Montgomery, ECM; Brent, MPQS]

91 67- 2.3^2.5.15277.560676495103249543.12443384968544192232347.p86

91 79- 2.3^2.5.22279.27708180499.277416556367197964829157.p115

91 49+ 2^2.23.29.19368853799.1973477381415193908914896600393.p52

91 53+ 2^2.23.107.93919990593165564962923689602815558532229739.p56
 [Montgomery, SNFS]

91 58+ 2.41.101.192189961.3396039829069.2953343274543523476943798195457.p59
 [Arjen Lenstra, PPMPQS]

91 64+ 2.1153.9484137857.1262827566337.1385974681247149313.
 88755127460670915785729.249581554366319519739942707201.p30

91 69+ 2^2.23^2.47.691.8191.487981440901001.
 23546979029321704972477211.41217173698458135898443309227623.p52

91 74+ 2.41.101.149.6217.12271034474892782977.785629489775752252209661.p93

91 99+ 2^2.19.23.73.397.991.1123.6247.8191.65539.309277.5692910095027.
 38518333422551932951.50599839653050733577487064143.
 4414142252331501646741496953231.p71

92 47- 7.13.1043213.43932580249894969744841.p62

92 59- 7.13.130549301.177945107711794360326454613.p80

92 61- 7.13.18830579.31554569.271578918735040633.214959811682646703590881.
 191911822792686064401103103981.p34 [Montgomery, ECM]

92 77- 7^2.13.67.2311.9241.159293.549767.70930159351591.
 283098362712506281645677127.p89

92 85- 7.11.13.41.160591.19907681.523699469143.2554164508667.
 10457508510821.318161607693540708996913621.c87

92 53+ 3.31.4134875081696262631169448264626001501226578903643.p54
 [Montgomery, SNFS]

92 58+ 5.1693.337781842637950869637.
 6626558993887147623735118796231412419509.p50 [Arjen Lenstra, PPMPQS]

92 64+ 29569.937392635769275109720833.p98

92 72+ 17.1153.125617.163980913.301893454786801.1109006809493857.
 400451391763096107844228177.130970703849139517836886307532081.p36

92 73+ 3.31.76990181.151208843.175251977.54805309075642117957.p98

92 80+ 75521.487489.1294081.234342416697530081.21171125713554552854861761.
 54030677973162173435518913.140847249527735303607758632321.p43

Update 1, Tables 92+ to 95-

- 92 84+ 281.449.673.94777.159553.1550753.2040193.54150148873.
571933838897.542391790646909823727719641.
2465152715658748428830880994824343639019833.p43
- 92 87+ 3^2.31.59.349.1567.2791.187573.472469.
6446372437608695088883.10127992394070979564027.
628411741359943372493232295836064870462577.p61 [Boender, PPMPQS]
- 92 95+ 3.31.151.469331.2916092290021.11380284618168161.19379057316609181973.
8762737884041269800349113221.p101 [Montgomery, p+1]
- 93 47- 2^2.23.941.70982406059317733590219683677138756939.p50
- 93 53- 2^2.23.53551837.39288830696483057447.p76
- 93 99- 2^2.7.19.23.67.89.307.1249.1783.2179.11243.31527541.
110919079.33579740503.48893642129509.17637300797804158757023.
472666715689349516409031.3466732593888008254791613360081.p55
- 93 53+ 2.47.107.1697.66463.7200157.
19192699869550253389095978550167828173.p49
- 93 59+ 2.47.87557.414889.12083083.1945374583246264671089182890061.p67
[Montgomery, ECM]
- 93 64+ 2.769.1153.87041.261862052609.3694978116380869889.
148324960671376917001170219902369341986433.p44
- 93 71+ 2.47.569.1847.8237.19769433071135659777.44726732058017538313849607.
1871598891695207952802939248474557.p50 [Boender, PPMPQS]
- 93 83+ 2.47.499.1993.2455307.40601941.
22878602972021.66615542090436822705899.c106
- 94 47- 3.31.109793.672251739162372807423337763.p59
- 94 67- 3.31.100423655950075240295365583.c105
- 94 97- 3.31.389.1747.5821.67353697.20058398027810183201.
9812928379049068526833.8313428336447647909151947.c106
- 94 47+ 5.19.22279.246187976242324303866857.929302038929506744573399.p40
- 94 58+ 929.8837.215285788565526133317584749.p82 [Montgomery, SNFS]
- 94 61+ 5.19.4238281.5018274493160363.621175625587799306273057.p73
- 94 68+ 17^2.137.409.5441.4592641.50597849.108829197325897050143209.p86
- 94 93+ 5.7.19.1249.4651.48733.6896261.13267381.8434732199261.
352153660378171.2825593093592083.70902254836553857.
315447870958699927924365271.p69
- 95 49- 2.47.742912017121.266802089568643172667458962133414677626851.p42

Update 1, Tables 95- to 96+

- 95 53- 2.47.30636863.429521963927223727460311.
77742129575018807483006681285339.p40 [Boender, PPMPQS]
- 95 59- 2.47.188801.2647996912138688405753.c89
- 95 65- 2.31.47.53.61.101.431.160681.10303935834594643009757.
22499826460568814294276301.p65
- 95 69- 2.7.47.1303.11317.6099371.10737957332273321.
499238814880462836331.248539535535015622139533.p60
- 95 73- 2.47.293.877.4673.1716168973.88785471967.100991307611.13095871909823.
215362616586516043136734973503543.p57 [Sosnowski, MPQS]
- 95 47+ 2^5.3.147299.1916795441362970859214415553495319.p53
[Brent & Keller, ECM]
- 95 59+ 2^5.3.2833.254700271723.2764614209155534746799.
463449906520855962766537779089.p49 [Montgomery, ECM & p+1]
- 95 62+ 2.4513.184296453763149753123068189.c93 [Montgomery, p-1]
- 95 71+ 2^5.3.284295626179975541.64227585121659404371046707.c96
- 95 79+ 2^5.3.317.12415290501157.475910418041586627787.c118
- 95 80+ 2.139361.241441.1901761441.4740322802977.4642370223978828769.
611951334156673698241.45089758099791867831637486244759667041.p49
[Boender, PPMPQS]
- 95 85+ 2^5.3.11.103.311.23561.8195021.1075346110691.1978585518583.
213716476796014769.922044896494029899750851.
281289638163607011615897272191705681.p49
- 95 87+ 2^5.3^2.13.229.349.523.1820969.3536196872066707.
215371288505438813430607.6988317746081737807072328981509.p85
- 95 91+ 2^5.3.127.1093.2003.12377.25117.5727832153.6003873331.9045912887467.
266965220543926357727.2450122715045680775503467793.p81
- 95 93+ 2^5.3^2.13.229.216743011.603776225641.749626729897.1705032931779013.
49440158420444293.206324951240926797425830422443707.
2706612060976713280587566986071893488633.p43
- 96 79- 5.19.2213.1970515487.195280730961194975807.p122
- 96 93- 5.19.67.139.441937.20693963570947.100605444393211.95355785680634543.
236914327467607809296659.134470956963020142262546561.
30953950682891990821056701597.p51 [Boender, PPMPQS]
- 96 53+ 97.107.15430424857451.23167802598191869429543145554673041.p54
- 96 59+ 97.1128553.24335023.3551346850619.12936350749337580776597.p67
- 96 91+ 29.53.79.97.443.421279.26713383509.776028725239.
329603812319885860849.p123 [Dubner, p-1]

- 96 95+ 11.97.2671.2861.4447.7639.43254697035227.
323031429688091.18678603767474551.29726301838260871.
4267170954942514877369621.2418476990688796014581890831.p58
[Dubner, p-1; te Riele, MPQS]
- 97 81- 2⁵.3⁵.109.163.1153.3169.7129.94336327.240813217.
1191351082918035367.18735466069698085279332883.
278856236925277313004506899.p57
- 97 47+ 2.7².1289964727.12602264015610453293264963895231983273.p46
- 97 58+ 2.5.941.72617.1423901.75332940401.
123093637925039887516471947128929.p58 [Arjen Lenstra, PPMPQS]
- 97 59+ 2.7².142493969.14166793643345394367439027.p82
- 97 62+ 2.5.373.941.59273.118970465277811384782721375187869.p80
[Montgomery, ECM]
- 97 67+ 2.7².269.2011.384581.1574501.1518924844504411.
614351464575168613106999257.p72
- 97 70+ 2.5².29.941.14869.15541.103527550008317.
1567320142178381.284225985943330650521.p75
- 97 79+ 2.7².7901.779321264864104832312057.
5176524352482729069165373.c103 [Montgomery, p+1; Dubner, p-1]
- 97 95+ 2.7².3931.4561.22291.778051.593222898884496505984481.
713428557507196622404413721.735239464611390368629403564683.c89
- 97 98+ 2.5.29.941.14869.15541.236377.2865142309.94714419462041.
103527550008317.2717627312508473.4837515647801870647517.
394691811469267364982735233.p75 [Montgomery, ECM & p+1]
- 98 53- 97.955697.36265021366481.2194186108309843959035480493844477436167.p45
- 98 81- 31.97.313.328768633.1547829271.885843322057.
449103362936100593060685223.17137208372660770211412511446199.p68
[Montgomery, ECM]
- 98 53+ 3².11.107.1697.266972873.628497076573149095788432070857.p61
- 98 56+ 1249.6811553423393.95782966933379901856146593.p70
- 98 59+ 3².11.305857.291788015339.11230052393249.
29037047448209810589475647292291.p55
- 98 69+ 3³.11.139.3169.126041.230507.7092649.308006668689852742992203489.
462193137180723704170653896405596993.p50 [Montgomery, ECM]
- 98 72+ 1249.2593.6811553423393.143720156259649.
27913525668819735815130683617.76265829428582445883785020346500737.p47
- 98 91+ 3².11.521.547.16787.116923.8571473.52236521.54420092273.
605579541659.12751642138057577.677746156534623307340272337.
150856027763097994901861400756223948651.p47

Update 1, Tables 98+ to 99+

- 98 95+ 3².11.761.1481.11971.14251.61651.1665161.35380091.
8685521280214455930772382971.688113761858477110820120706302509387.p91
[Dubner, p-1]
- 99 65- 2.7².53.131.157.97039801.1734834401.821456624786426851.
550780160268332441039460497501.p57 [Montgomery, ECM]
- 99 71- 2.7².14627.158047.15490781.482044561.17179549507.
6787613924430123425819.2123069070360192515833718179.p56
- 99 77- 2.7³.397.12979.5526137.10468417.113089684775453.32982101201754013.
230128580234081233.8698520189091630442361145439816553.p49
- 99 95- 2.7².571.3041.97039801.2334201491.25872120641.39740734591141.
37151009801325375691.207055472356835604911.p101
- 99 47+ 2².5².13260878740517132985360700296254354341931.p52
[Huizing & Montgomery, SNFS]
- 99 53+ 2².5².2.4571887.285543362926494449131396642507.
1543189276339384293014267210278307.p35
- 99 61+ 2².5².2.53681.31515054111561916184539981.c90
- 99 65+ 2².5³.521.2861.19019801.1684301387713950072653.
10171089960370790140312481.p68 [Montgomery, SNFS]
- 99 67+ 2².5².2.232105698061110266693.c112
- 99 76+ 2.2617.18353.26033801.677502728081.13702449083684826241681.c103
[Dubner, p-1]
- 99 91+ 2².5².2.521.6007.932065347907.1684301387713950072653.
5697585119133460028477.6961703058707154579277.p97