

## Supplement to Tables of Fibonacci and Lucas Factorizations

By John Brillhart, Peter L. Montgomery and Robert D. Silverman

TABLE 2 FIBONACCI FACTORIZATIONS  $2 < n < 1000, n$  odd

<u><math>n</math></u>	<u>Prime Factors</u>
3	2
5	5
7	13
9	(3) 17
11	89
13	233
15	(3,5) 61
17	1597
19	37.113
21	(3,7) 421
23	28657
25	(5) $5^* \cdot 3001$
27	(3,9) 53.109
29	514229
31	557.2417
33	(3,11) 19801
35	(5,7) 141961
37	73.149.2221
39	(3,13) 135721
41	2789.59369
43	433494437
45	(3,5,9,15) 109441
47	2971215073
49	(7) 97.6168709
51	(3,17) 6376021
53	953.55945741
55	(5,11) 661.474541
57	(3,19) 797.54833
59	353.2710260697
61	4513.555003497
63	(3,7,9,21) 35239681
65	(5,13) 14736206161
67	269.116849.1429913
69	(3,23) 137.829.18077
71	6673.46165371073
73	9375829.86020717
75	(3,5,15,25) 230686501
77	(7,11) 988681.4832521

- 79 157.92180471494753
- 81 (3,9,27) 2269.4373.19441
- 83 99194853094755497
- 85 (5,17) 9521.3415914041
- 87 (3,29) 173.3821263937
- 89 1069.1665088321800481
- 91 (7,13) 13\* 7.41469.159607993
- 93 (3,31) 4531100550901
- 95 (5,19) 761.29641.67735001
- 97 193.389.308.4989.361040209
- 99 (3,9,11,33) 197.18546805133
- 101 743519377.770857978613
- 103 519121.5644193.512119709
- 105 (3,5,7,15,21,35) 8288823481
- 107 1247833.8242065050061761
- 109 827728777.32529675488417
- 111 (3,37) 1459000305513721
- 113 677.2726024014668140271129
- 115 (5,23) 1381.2441738887963981
- 117 (3,9,13,39) 29717.39589685693
- 119 (7,17) 159512939815855788121
- 121 (11) 97415813466381445596089
- 123 (3,41) 68541957733949701
- 125 (5,25) 5\* 158414167964045700001
- 127 27941.5568053048227732210073
- 129 (3,43) 257.5417.8513.39639893
- 131 1066340417491710595814572169
- 133 (7,19) 3457.42293.351301301942501
- 135 (3,5,9,15,27,45) 1114769954367361
- 137 1913470240039278081449423917
- 139 277.2114537501.85526722937689093
- 141 (3,47) 108289.1435097.142017737
- 143 (11,13) 8581.19295841153750850496621
- 145 (5,29) 349619996930737079890201
- 147 (3,7,21,49) 293.3529.347502052673
- 149 110557.162709.4000949.85607646594577
- 151 5737.2811666624525811646469915877
- 153 (3,9,17,51) 17\* 7175323114950864593
- 155 (5,31) 21701.12370533881.61182778621
- 157 313.11617.7636481.10424204306491346737
- 159 (3,53) 317.97639037.229602768949
- 161 (7,23) 8693.612606107755058997065597
- 163 977.4892609.33365519393.32566223208133
- 165 (3,5,11,15,33,55) 86461.518101.900241
- 167 18104700793.1966344318693345608565721
- 169 (13) 337.89909.104600156609.126213229732669
- 171 (3,9,19,57) 6841.5741461760879844361
- 173 1639343785721.389678749007629271532733
- 175 (5,7,25,35) 701.17231203730201189308301
- 177 (3,59) 2191261.805134061.1297027681
- 179 21481.156089.341881664090389829534613769
- 181 8689.422453.8175789237238547574551461093
- 183 (3,61) 1097.14297347971975757800833
- 185 (5,37) 170294551319130556907097618161
- 187 (11,17) 373.10157807305963434099105034917037
- 189 (3,7,9,21,27,63) 38933.955921950316735037
- 191 48707236713.13.757810806256989128439975793
- 193 9465278929.1020930432032326933976826008497
- 195 (3,5,13,15,39,65) 88999250837499877681
- 197 15761.25795969.227150265697.717185107125886549
- 199 397.436782169201002048261171378550055269633
- 201 (3,67) 5050260704396247169315999021
- 203 (7,29) 1217.56470541.2586982700656733994659533
- 205 (5,41) 821.125598581.36448117857891321536401
- 207 (3,9,23,69) 4072353155773627601222196481
- 209 (11,19) 57314120955051297736679165379998262001
- 211 22504837.38490197.800972881.80475423858449593021
- 213 (3,71) 1277.185790722054921374395775013
- 215 (5,43) 2607553541.67712817361580804952011621
- 217 (7,31) 433.44269.217221773.2191174861.6274653314021
- 219 (3,73) 123953.4139537.3169251245945843761
- 221 (13,17) 203572412497.90657498718024645326392940193
- 223 4013.108377.251534180.164344610046410138896156070813
- 225 (3,5,9,15,25,45,75) 11981661982050957053616001
- 227 23609.5219534137983025159078847113619467285727377
- 229 457.2749.40487201.132605449901.47831560297620361798553
- 231 (13,11,21,33,77) 91642596017481592335188401
- 233 139801.25047390419633.631484089583693149557829547141
- 235 (5,47) 389678426275593986752662955603693114561
- 237 (3,79) 1668481.40762577.7698999052751136773
- 239 10037.62141.2528536579597318057.28546908862296149233369
- 241 11042621.7005329677.1342874889289644763267952824739273
- 243 (3,9,27,81) 448607550257.16000411124306403070561
- 245 (5,7,35,49) 12895507391.4024460192651484843195641

247 (13,19) 409100738617.46773060433679046769263121474328153  
 249 (3,83) 1033043205255409.2381221528400987769  
 251 582416774750273.21937080329465122026187124199656961913  
 253 (11,23) 4322114369.2201228236641589.1378497303338047612061  
 255 (3,5,15,17,51,85) 20778644396941.20862774425341  
 257 5653.32971978671645905645521.123002672171931347113600714649  
 259 (7,37) 1553.404656773798.3041266742295771985148799223649  
 261 (3,9,29,87) 2089.20357.36017.40193.322073.6857029027549  
 263 4733.93629.9283622964639019423252912169844256646308930281  
 265 (5,53) 15901.2741218753681.926918599457468125920827581  
 267 5381.122887425153289.64455877349703042877309  
 269 (3,9,29,87) 2089.20357.36017.40193.322073.6857029027549  
 271 449187076348273.4302671219525676121951740619093594938058573  
 273 (3,7,13,21,39,91) 640457.1483547330843905886515273  
 275 (5,11,25,55) 7239101.15806979101.5527278404454199355821801  
 279 (3,9,31,93) 11717.594960058508093.6279830352252706321  
 281 174221.119468273.1142059735200417842620494388293215303693455057  
 283 10753.825229.15791401.444111888848805843163235784298630863264881  
 285 (3,5,15,19,57,95) 956734616715046328502480330601  
 287 (7,41) 19816007100185326796700692507490184570501064382201  
 289 (17) 577.1733.98837.101232653.106205194357.658078658277725444483848541  
 291 (3,9,7) 76674415738994499773.227993117754975870677  
 293 64390759997.118869391634972852522952098964476155238134997314729  
 295 (5,59) 1181.35401.75521.160481.737501.11209692506253906608469121  
 297 (3,9,11,27,33,99) 593.4157.1360418597.12369243068750242280033  
 299 (13,23) 2056992872342752084634853420271392820560402848650171521  
 301 (7,43) 63806927452714047340778158846369278969435365966728521  
 303 (3,101) 8550224389674481.96049657917279874851369421  
 305 (5,61) 2441.6101.20415253966247698801.647277670717998240943861  
 307 613.914368950702786773937.216913841513988014390392583520681471857  
 309 (3,103) 617.318889.32386142297.883364563627459323040861  
 311 837833.687477.603717553.12722327040132186089258010295231047801838093  
 313 1877.5009.7901346123803597.15585832514231328406554387926119705876273  
 315 (3,5,7,9,15,21,35,45,63,105) 9761221.120570028745492370271501  
 317 1307309.503546330416533380504238521909.12055334654946982453464994276837  
 319 (11,29) 1913.578029.1435522969.1535414556003613.186262431846883463348283529  
 321 (3,107) 264438702655226193752458581121055151414928921  
 323 (17,19) 1109581873.8554264643577.22469617515126274977549349854327642081  
 325 (5,13,25,65) 1301.4235401.605410501.880262501.49284706967787569058301  
 327 (3,109) 653.1746181.1589546141427272679433846363646380457  
 329 (7,47) 1973.26321.127391874411097592672469891375644477141948573020237  
 331 29129.2296686648632120276391228028485200841318497622533370591664502461  
 333 (3,9,37,111) 12653.124134848933957.93050731557590226767593761  
 335 (5,67) 20404106545895102906154128520186891133003217651144766361  
 337 673.15229266824729.117126646222833267851409604104331211834067048447153001  
 339 (3,113) 149161.258317.220987865057977688842215348691420033  
 341 (11,31) 761227065342913.197907265243868721.4558282384863830953845866874337  
 343 (7,49) 46649.549038756620509.108944170944009875978306751482234414702393  
 345 (3,5,15,23,69,115) 186301.25013864044961447973152814604981  
 347 324097.1434497.3345860598013.34201673799023762317333.P26  
 349 1358309.2663569.27520930737677877058673.P38  
 351 (3,9,13,27,39,117) 2623373.8023861.65790321679740490371744098034257  
 353 73635735980201012573915498603692536252974949247991832187257385201689  
 355 (5,71) 4261.75309701.309273161.9207609261398081.492797226433918664192801  
 357 (3,7,17,21,51,119) 1429.2584669.276538662398362584638816230982961  
 359 475420437734698220747368027166749382927701417016557193662268716376935476241  
 361 (19) 6567762529.1196762644057.3150927827816930878141597.P26  
 363 (3,11,33,121) 949059604335963796081847699035385001836615801  
 365 (5,73) 210241.27583781.758275080626801.481086261779233475625991833542941  
 367 733.17969789.75991753.5648966761.43397676601.114150315493.P27  
 369 (3,9,41,123) 8117.199261.84738793193.9382599520669.1178385186333551469  
 371 (7,53) 207017.10668914543308923609111846991549277021286402568532457966113  
 373 2237.9697.371509.20580639.P58  
 375 (3,5,15,25,75,125) 9001.169501.41510105455501.9906293406944653501  
 377 (13,29) 104264251753.361575655741.P48  
 379 757.1188989.642738983137.P58  
 381 (3,127) 18995897.3185450213669826968628420712039093359617657693  
 383 1639241.15318508443810774614619603643486769.P40  
 385 (5,7,11,35,55,77) 37807001.75954341.13837648441.2638710957802673148692221  
 387 (3,9,43,129) 773.116101.14279673833.38074001361639245985686714500108609  
 389 2333.  
 391 (17,23) 1493656753.P65  
 393 (3,131) 2006657.1416637080946563927852098387072423060828193983  
 395 (5,79) 1472561.14895360564424284043176235563438185533394886582362797645241  
 397  
 399 (3,7,19,21,57,133) 1059009573400125529504166094598642626708730201  
 401 13885829.P77  
 403 (13,31) 15313.5068933.42136290591640129.P48  
 405 (3,5,9,15,27,45,81,135) 23692245912756822601.58441864401139948168370041  
 407 (11,37) 140997186409836049132841.P53  
 409 4909.25357.8097429243052573.P62  
 411 (3,137) 5449861.972663078773.5687182485808243129.30362561855982035333  
 413 (7,59) 456512029.P65

C78

C83

C88

497 (7,71)  
 499 997.492013.3074837.P.89  
 501 (3,167) 9022468601088975.4273.P.51  
 503 10061.58726221.395657789.5195875312324446209.2430014747700999423017017501.  
 .196745364145020787213452779187514784417

505 (5,101) 44614641121.960700389041.P.62  
 507 (3,13,39,169) 1013.10069148777.17340889195212892399797173.P.27  
 509 P107

511 (7,73) 20441.3545317.78439756057054169.P.63

513 (3,9,19,27,57,171) 8209.33857.347813.593029.25355537.P.41

515 (5,103) 8438893892141.P.72

517 (11,47) 1033.58937.2442882935400038849127521.641466124349607697016238097.P.38

519 (3,173) 6229.1174427453.3231124141939501.P.44

521 9377.

523 8369.353786857.

525 (3,5,7,15,21,25,35,75,105,175) 4201.823201.2553601.23169301.82061511001.  
 .84811116649425701

527 (17,31) 471137.163545836607653.P.81

529 (23) 45981737.306211903657739796051001.

531 (3,9,59,177) 7433.2043289.2192843129417.P.51

533 (13,41) 25647961.14821985227373.107776264469061.P.65

535 (5,107) 2141.8489567590713897905501.P.64

537 (3,179) 11813.142240444249423907190721.P.48

539 (7,11,49,77) 6469.18253437603966181.P.68

541 54101.12364910977.P.98

543 (3,181) 35837.16094521.P.64

545 (5,109) 2398001.

547 1093.20266379551129.

549 (3,9,61,183) 620903629.5883010433.10424083697.80256319951861.P.33

551 (19,29) 32365741.1116312758369.P.86

553 (7,79) 152629.221201.7998082133.

555 (3,5,15,37,111,185) 40719241.49649320649221.2992628320901882161.  
 .196447231496394995461

557 753249714226730309.

559 (13,43) 11117.14533.23417629.433586113.13631732633.

26093837057017247269531221521.P.44

561 (3,11,17,33,51,187) 32083440797931137.P.51

563 10133.6281953.12158771296959377863294133.

565 (5,113) 6781.66199696261.43583206934709081001.P.60

567 (3,7,9,21,27,63,81,189) 13043111509.49114912141.3936504300121.  
 .737066046375289.27719393687911890721

569 P119

C83

415 (5,83) 8454176658230648601.200996663240698258054501.P.25  
 417 (3,139) 9173.68394733939029925033711768294717540495219762245783337  
 419 116293061.41725948237.P.70

421 11789.64049169.45688564527041.P.62

423 (3,9,47,141) 50590011062939973161728794842994673444156809986180713505281

425 (5,17,25,85) 62815601.1418795434303564388390001.P.35

427 (7,61) 853.249493868964998482871252335667356281.P.39

429 (3,11,13,33,39,143) 857.48049.2663396138301998847157242280783003329461657

431 P90

433 P91

435 (3,5,15,29,87,145) 6961.7196661390635764407916551386458559471906041

437 (19,23)

439 877.163309.

441 (3,7,9,21,49,63,147) 135829.34032420633346414828319055060933998254447317949

443 8861.104549.15170977.1303309310797189261.P.58

445 (5,89) 1801361.6877921.156525289282548414081799081.P.35

447 (3,149) 46482.2041439879348543749772391551430740910004881655249657303909

449 P94

451 (11,41) 855997.928157.1027729298220237292846693.P.48

453 (3,151) 650485110124585564207518444489238632181884291012150730878874501

455 (5,7,13,35,65,91) 202021.36768087721.40281313801.3126295447311401.

.1204966861388885141

457 6397.16856134241.P.82

459 (3,9,17,27,51,153) 2753.2043118036369.13095384194065076117.P.26

461 26737.21176476637.9208154892884357.57907365333787128886141126177.P.37

463 2777.69783361.P.86

465 (3,5,15,31,93,155) 5581.76261.6936488411701.59666387254501.627655040817361

467

469 (7,67) 937.52529.976457.37924737.293548037.104712482697806353.P.37

471 (3,157) 9947521.40729012583008994401.516975898656776821074144595127483817001

473 (11,43) P86

475 (5,19,25,95) 1901.5701.3630901.P.62

477 (3,9,53,159) 1558450527658669.P.51

479 2637373.

481 (13,37) 6733.1529581.278574997.P.72

483 (3,7,21,23,69,161) 1795220677069.6341452905360146056272600296395866384176869

485 (5,17,82) 16892304192301.511715857773521.417359272422721.P.30

487 1949.94477.1694761.P.87

489 (3,163) 5501048350408487052485570744297.P.37

491 141600090215093.1621212105820049.P.73

493 (17,29)

495 (3,5,9,11,15,33,45,55,99,165) 1250839626281.P.39

C84

415 (5,83) 8454176658230648601.200996663240698258054501.P.25  
 417 (3,139) 9173.68394733939029925033711768294717540495219762245783337  
 419 116293061.41725948237.P.70

421 11789.64049169.45688564527041.P.62

423 (3,9,47,141) 50590011062939973161728794842994673444156809986180713505281

425 (5,17,25,85) 62815601.1418795434303564388390001.P.35

427 (7,61) 853.249493868964998482871252335667356281.P.39

429 (3,11,13,33,39,143) 857.48049.2663396138301998847157242280783003329461657

431 P90

433 P91

435 (3,5,15,29,87,145) 6961.7196661390635764407916551386458559471906041

437 (19,23)

439 877.163309.

441 (3,7,9,21,49,63,147) 135829.34032420633346414828319055060933998254447317949

443 8861.104549.15170977.1303309310797189261.P.58

445 (5,89) 1801361.6877921.156525289282548414081799081.P.35

447 (3,149) 46482.2041439879348543749772391551430740910004881655249657303909

449 P94

451 (11,41) 855997.928157.1027729298220237292846693.P.48

453 (3,151) 650485110124585564207518444489238632181884291012150730878874501

455 (5,7,13,35,65,91) 202021.36768087721.40281313801.3126295447311401.

.1204966861388885141

457 6397.16856134241.P.82

459 (3,9,17,27,51,153) 2753.2043118036369.13095384194065076117.P.26

461 26737.21176476637.9208154892884357.57907365333787128886141126177.P.37

463 2777.69783361.P.86

465 (3,5,15,31,93,155) 5581.76261.6936488411701.59666387254501.627655040817361

467

469 (7,67) 937.52529.976457.37924737.293548037.104712482697806353.P.37

471 (3,157) 9947521.40729012583008994401.516975898656776821074144595127483817001

473 (11,43) P86

475 (5,19,25,95) 1901.5701.3630901.P.62

477 (3,9,53,159) 1558450527658669.P.51

479 2637373.

481 (13,37) 6733.1529581.278574997.P.72

483 (3,7,21,23,69,161) 1795220677069.6341452905360146056272600296395866384176869

485 (5,17,82) 16892304192301.511715857773521.417359272422721.P.30

487 1949.94477.1694761.P.87

489 (3,163) 5501048350408487052485570744297.P.37

491 141600090215093.1621212105820049.P.73

493 (17,29)

495 (3,5,9,11,15,33,45,55,99,165) 1250839626281.P.39

C85

415 (5,83) 8454176658230648601.200996663240698258054501.P.25  
 417 (3,139) 9173.68394733939029925033711768294717540495219762245783337  
 419 116293061.41725948237.P.70

421 11789.64049169.45688564527041.P.62

423 (3,9,47,141) 50590011062939973161728794842994673444156809986180713505281

425 (5,17,25,85) 62815601.1418795434303564388390001.P.35

427 (7,61) 853.249493868964998482871252335667356281.P.39

429 (3,11,13,33,39,143) 857.48049.2663396138301998847157242280783003329461657

431 P90

433 P91

435 (3,5,15,29,87,145) 6961.7196661390635764407916551386458559471906041

437 (19,23)

439 877.163309.

441 (3,7,9,21,49,63,147) 135829.34032420633346414828319055060933998254447317949

443 8861.104549.15170977.1303309310797189261.P.58

445 (5,89) 1801361.6877921.156525289282548414081799081.P.35

447 (3,149) 46482.2041439879348543749772391551430740910004881655249657303909

449 P94

451 (11,41) 855997.928157.1027729298220237292846693.P.48

453 (3,151) 650485110124585564207518444489238632181884291012150730878874501

455 (5,7,13,35,65,91) 202021.36768087721.40281313801.3126295447311401.

.1204966861388885141

457 6397.16856134241.P.82

459 (3,9,17,27,51,153) 2753.2043118036369.13095384194065076117.P.26

461 26737.21176476637.9208154892884357.57907365333787128886141126177.P.37

463 2777.69783361.P.86

465 (3,5,15,31,93,155) 5581.76261.6936488411701.59666387254501.627655040817361

467

469 (7,67) 937.52529.976457.37924737.293548037.104712482697806353.P.37

471 (3,157) 9947521.40729012583008994401.516975898656776821074144595127483817001

571 P119	
573 (3,191) 2670181.4817807925924421.P58	
575 (5,23,25,115) 66701.	
577 1153.2309.492757.1698689.1240154177.P93	
579 (3,193)	
581 (7,83) 11621.P99	
588 (11,53)	
585 (3,5,9,13,15,39,45,65,117,195) 2341.P57	
587 3080261369.P113	
589 (19,31) 3533.23561.1484249136401.2746348619173417.881811033467161969.P60	
591 (3,197) 4729.22221.540969737.6556208367360005292317.P44	
593 3557.3164852861.1143800237963593361.4315428922959401898689. .36595087477983000594301.P49	
595 (5,7,17,35,85,119) 2381.8310112721.9022425301.2535918135079661. .61859474392640261.4651115729702571326164661	
597 (3,199) 1193.55092353.1226244816494972899766403949.P45	
599 4304994428485397.P110	
601 22549039789436761.P109	
603 (3,9,67,201) 3617.16054441098650821.P64	
605 (5,11,55,121) 109981741.P84	
607 1213.123829.582721.10223093.28549637.P99	
609 (3,7,21,29,87,203) 369282510197.2139244501969.P47	
611 (13,47) 157637.2555795333678066429.P92	
613	
615 (3,5,15,41,123,205) 19681.299259001.1846858344247612322281.P33	
617 234461.6643248296130757140737.	
619 1237.3354287957.P117	
621 (3,9,23,27,69,207) 10656361.17642247580301401.P60	
623 (7,89) 115877.92579793601.P95	
625 (5,25,125) 5* 532501.	
627 (3,11,19,33,57,209) 4061919171.116439969.2126105960876701042477457.P33	
629 (17,37) 26417.666111001.31886344849.1405898788412057400553.P76	
631 593141.P126	
633 (3,211) 155717.9320165401.41773163881.192347474285460831200493920089.P33	
635 (5,127) 2553105939466879921.P88	
637 (7,13,49,91) 2549.170301425972639233.P85	
639 (3,9,71,213) 7669.66490765817401.P71	
631 149993.1468997178779718281.	
643 5077129.	
645 (3,5,15,43,129,215) 19148761.72846749180048315217661.P40	
647 4381535761.	
649 (11,59) 1297.468577.100213776846657651262073.	
651 (3,7,21,31,93,217) 5209.23143579913.16312246063516015073.P42	
653	
655 (5,131) 149341.2901110281.480405122406661.P80	
657 (3,9,73,219) 290393.30300841.613192553.2424917505169.22700849209613. .9456946117108451513.720459916231157618930389	C137
659	
661 25117.115013.	C138
663 (3,13,17,39,51,221) 340399154629.54220278846273966380018208818089.P36	C129
665 (5,7,19,35,95,133) 7129481.1655770201.127654132789883268521.P54	
667 (23,29) 9337.108713769721.5636517080386809396781.P93	
669 (3,223) 13381.46871477.524888033.404275734463249277.P55	
671 (11,61) 13421.93941.197273.575717.844117.12239041.	C93
673 282661.47010552106184753.	C119
675 (3,5,9,15,25,27,45,75,135,225) 394201.6641555895901.P57	
677 212741833.970100381.	C124
679 (7,97)	C121
681 (3,227) 208109513.17505440236343865677.1316534463290847218590097513564513.P34	
683 238173.34482885205518361.205151568022959109.393867451788289513.P86	
685 (5,137) 2741.3516376261.121200596585497061.162302467515721218821.P64	
687 (3,229) 1373.3331306969.	C83
689 (13,53) 4133.3955824601.8663131853.582233977115909.	C93
691 8346682124689.	C132
693 (3,7,9,11,21,33,63,77,99,231) P76	
695 (5,139) 97536301.183060221.3038624652573481.3717101226883686821.P66	C134
697 (17,41)	
699 (3,233) 13953397457.245701220509.P76	
701 42061.96737.242836213.274479353.8302568897206778357.	C101
703 (19,37) 37*.25309.63246097.138259218819774258197.	C102
705 (3,5,15,47,141,235) 28201.P73	
707 (7,101) P126	
709 63428557.228680861.	C132
711 (3,9,79,237) 212375701.8771441328469.461740953705414265853. .7376884504680981519249993.P32	
713 (23,31)	C139
715 (5,11,13,55,65,143) 7096612381.	C91
717 (3,239) 1433.7099733.	C90
719	C150
721 (7,103) 173040421686336917.	C111
723 (3,241) 5303337419059397.	C85
725 (5,25,29,145) 374166701.	C109
727 1453.2909.10177.326233981.	C133
729 (3,9,27,81,243)	C102
C88	
C81	
C109	
C128	
C102	
C99	
C111	
C128	
C126	
C90	
C99	
C111	
C128	
C126	
C90	

C133	815 (5,163) 6521.4720481.2668186121.P116	C144
C118	817 (19,43) 166669.2210448070697.40785018272633.P127	C84
C139	819 (3,7,9,13,21,39,63,91,117,273) 1637.148950950810490737.P70	C146
C138	821 39409.394375561.140229188484397.	C159
C155	823 29629.4360974949.942072341591041.P143	C125
C124	825 (3,5,11,15,25,33,55,75,165,275)	C126
C90	827 183593.6254838942964147339957.	C158
C151	829 1657.9949.12982141.	C161
C87	831 (3,277) 47877233.1454976293.46878833122606699500317.P76	C164
C126	833 (7,17,49,119) 13052171822937661.	C179
C92	835 (5,167) 52285211663261.	C175
C128	837 (3,9,27,31,93,279) 45197.4603546943052380929.9304861037267580847793. .136299772702544437679660333.P42	C144
C85	839 15422497.13567893533.	C104
C138	841 (29) 2294249.55079759333.2301751898421269953.P135	C124
C118	843 (3,281) 46628959837.2576582465657.818303948755277.2385377797192381.P63	C117
C87	845 (5,13,65,169) 6761.586281391556115841.P109	C126
C106	847 (7,11,77,121) 1693.453722653.P127	C180
C105	849 (3,283) 1697.179068261321.P104	C100
C106	851 (23,37) 91909.	C181
C87	853 13649.6918474869.	C165
C139	855 (3,5,9,15,19,45,57,95,171,285) 113523481.657727932781.P71	C113
C106	857 108233.	C129
C141	861 (3,7,21,41,123,287) 2400469.P94	
C110	863 327941.90147673417.P164	
C105	865 (5,173)	
C131	867 (3,17,51,289) 20809.1180853.	
C145	869 (11,79) 144253.7565513.5890430821204665088535469913.	
C151	871 (13,67) 151553.	
C151	873 (3,9,97,291) 5237.	
C99	875 (5,7,25,35,125,175)	
C101	877 1753.	
C104	879 (3,293) 3383288581.15342452091961.	
C105	881 264301.1866056170744477.P164	
C105	883 5297.	
C105	885 (3,5,15,59,177,295) 3541.6782641.101501176368069526561.P67	
C105	887 74509.2498744410754149.	
C105	889 (7,127) 1777.5333.37337.195581.P142	
C105	891 (3,9,11,27,33,81,99,297)	
C105	893 (19,47) 54649813.17672296363133261.P150	
C105	895 (5,179) 3306742181.113760088381.	
C133	731 (17,43) 5849.14621.	
C118	733 379693.19600421.21585122600554804312561.	
C139	735 (3,5,7,15,21,35,49,105,147,245) 11456220552597241.P55	
C138	737 (11,67)	
C155	739 76566426675034441.	
C124	741 (3,13,19,39,57,247) 4207397.1408536153375781.669652072271051271698436113.P42	
C90	743	
C151	745 (5,149)	
C87	747 (3,9,83,249) 1493.5301729413.	
C126	749 (7,107) 4493.61417.16093097817593.P112	
C128	751 551233.	
C106	753 (3,251) 12049.221903616003409.	
C105	755 (5,151)	
C105	757 10597.39742501.40252717.1595003877233.P126	
C105	759 (3,11,23,33,69,253)	
C105	761 36529.580534937.1688091012426475049.	
C105	763 (7,109) 228901.17075535700033.359131890245101.2020608234013767329.	
C105	765 (3,5,9,15,17,45,51,85,153,255) 3061.26030477521.72208475461.P56	
C105	767 (13,59) 264016593.	
C105	769 50753.129453018593.1608513413473.31679977709229.	
C105	771 (3,257) P108	
C105	773 4637.1647000181.1205739181320733.585802472031540853.P116	
C105	775 (5,25,31,155) 102301.3524701.207753186701.12702695072081241539401.P81	
C105	777 (3,7,21,37,111,259) 3109.	
C105	779 (19,41) 17137.7643549.9586373.235997096056853.297787274080554953.P101	
C105	781 (11,71) 54293557.	
C105	783 (3,9,27,29,87,261)	
C105	785 (5,157) 120189781.P123	
C105	787 47221.3571442321831904937.	
C105	789 (3,263)	
C105	791 (7,113) 216416017.	
C105	793 (13,61) 30133.485538041.3772191484024417.458500259538957193.	
C105	795 (3,5,15,83,159,265) 3181.12721.9927961.3163171441.2170208701449020077201.P42	
C105	797 1784390549.151817708621.3276679706652741.	
C105	799 (17,47) 3318023281.	
C105	801 (3,9,89,267) 23063993.P104	
C105	803 (1,173)	
C105	805 (5,7,23,35,115,161) 3221.164967041.	
C105	807 (3,269) 1613.3229.114593.	
C105	809 48541.8706457.31840675992661.	
C105	811 48661.	
C105	813 (3,271) 11429153.21117130049.5688689453.P87	

897 (3,13,23,39,69,299)	308569.		
899 (29,31)			
901 (17,53)	212309715915957817.		
903 (3,7,21,43,129,301)	469561.2494887570160189.P85		
905 (5,181)	9567661.1596164984379521.P129		
907 2069773.153448073.85218882568302661649153.P152			
909 (3,9,101,303)	92717.9059093.		
911 107578169.			
913 (11,83)	191590395963717030369913.P149		
915 (3,5,15,61,183,305)	61*.16594230150241.		
917 (7,131)	55021.32901961.123643882069.P140		
919 23893.36761.231589.			
921 (3,307) 7369.			
923 (13,71)	50512097.		
925 (5,25,37,185)	3701.33301.19531306748486501.		
927 (3,9,103,309)	3709.63879037028000297.		
929 11149.			
931 (7,19,49,133)	12326441.64474965673.7288331127303673.417739114281337726513.P104		
933 (3,311)	6923104559934229.417557731140104453.		
935 (5,11,17,55,85,187)	54323672041.1870522178801.P111		
937 1873.449180933.7643696895096956649.15970565008944994529.P146			
939 (3,313)	54059112661.		
941 2981089.			
943 (23,41)			
945 (3,5,7,9,15,21,27,35,45,63,105,135,189,315)	139861.145150780364101. .5362483966272446452741.P50		
947 93251696081.			
949 (13,73)	5693.10543705069.75350070457.		
951 (3,317)	6284209.2954909161.		
953 148320002521.			
955 (5,191)	2177401.952879788356681.		
957 (3,11,29,33,87,319)	932117.P111		
959 (7,137)	9662360812131272153.		
961 (31)			
963 (3,9,107,321)			
965 (5,193)	640960721.36836894821.3446650156490167901.		
967 1933.27930829.193208122057.10999042492449833.			
969 (3,17,19,51,57,323)	40697.335273.796517.2854472449.9858481581. 4035936389347157.P70		
971 52433.104869.38482544680537.17970660075828673. .61980260725951458330235693729.			
973 (7,139)	15569.15963037.P162		
897 (3,13,23,39,69,299)	308569.	C105	
899 (29,31)		C176	
901 (17,53)	212309715915957817.	C157	
903 (3,7,21,43,129,301)	469561.2494887570160189.P85		
905 (5,181)	9567661.1596164984379521.P129		
907 2069773.153448073.85218882568302661649153.P152			
909 (3,9,101,303)	92717.9059093.	C114	
911 107578169.		C183	
913 (11,83)	191590395963717030369913.P149		
915 (3,5,15,61,183,305)	61*.16594230150241.		
917 (7,131)	55021.32901961.123643882069.P140		
919 23893.36761.231589.		C86	
921 (3,307) 7369.			
923 (13,71)	50512097.	C178	
925 (5,25,37,185)	3701.33301.19531306748486501.	C125	
927 (3,9,103,309)	3709.63879037028000297.	C168	
929 11149.		C127	
931 (7,19,49,133)	12326441.64474965673.7288331127303673.417739114281337726513.P104	C108	
933 (3,311)	6923104559934229.417557731140104453.	C190	
935 (5,11,17,55,85,187)	54323672041.1870522178801.P111	C97	
937 1873.449180933.7643696895096956649.15970565008944994529.P146			
939 (3,313)	54059112661.	C120	
941 2981089.		C190	
943 (23,41)		C185	
945 (3,5,7,9,15,21,27,35,45,63,105,135,189,315)	139861.145150780364101. .5362483966272446452741.P50		
947 93251696081.		C187	
949 (13,73)	5693.10543705069.75350070457.	C157	
951 (3,317)	6284209.2954909161.	C116	
953 148320002521.		C188	
955 (5,191)	2177401.952879788356681.	C138	
957 (3,11,29,33,87,319)	932117.P111		
959 (7,137)	9662360812131272153.	C152	
961 (31)		C195	
963 (3,9,107,321)		C133	
965 (5,193)	640960721.36836894821.3446650156490167901.	C123	
967 1933.27930829.193208122057.10999042492449833.		C164	
969 (3,17,19,51,57,323)	40697.335273.796517.2854472449.9858481581. 4035936389347157.P70		
971 52433.104869.38482544680537.17970660075828673. .61980260725951458330235693729.			
973 (7,139)	15569.15963037.P162	C134	
975 (3,5,13,15,25,39,65,75,195,325)			
977 42989.2082966602729.34260977417268029.			
979 (11,89)	89*.751290473.3619658657.		
981 (3,9,109,327)	616069.24788343516808013.196392108054438935117.		
983 5897.2140973.P195			
985 (5,197)			
987 (3,7,21,47,141,329)			
989 (23,43)	25770975208014221.		
991			
993 (3,331)	7564673.		
995 (5,199)	83629033601.		
997 1993.5976017.98102710780517.			
999 (3,9,27,37,111,333)	1997.16061684237.		
1401			
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TABLE 3 LUCAS FACTORIZATIONS  $2 \leq n \leq 500$ 

$n$	Prime Factors
2	3
3	2, 2
4	7
5	11
6	(2) $2^* 3^*$
7	29
8	47
9	(3) 19
10	(2) 41
11	199
12	(4) $2^* 23$
13	521
14	(2) 281
15	(3, 5) 31
16	2207
17	3571
18	(2, 6) $3^* 107$
19	9349
20	(4) 2161
21	(3, 7) 211
22	(2) 43, 307
23	139, 461
24	(8) $2^* 1103$
25	(5) A, B
	A 101
	B 151
26	(2) 90481
27	(3, 9) 5779
28	(4) $7^* 14503$
29	59, 19489
30	(2, 6, 10) 2521
31	3010349
32	1087, 4481
33	(3, 11) 9901
34	(2) 67, 63443
35	(7) A, B
	A (5) 71
	B 911
36	(4, 12) 103681
37	54018521
38	(2) 29134601
39	(3, 13) 79, 859
40	(8) 1601, 3041
41	370248451
42	(2, 6, 14) 83, 1427
43	6709, 144481
44	(4) 263, 881, 967
45	(3, 9) A, B
	A (15) 181
	B (5) 541
46	(2) 4969, 275449
47	6643838879
48	(16) $2^* 769, 3167$
49	(7) 599786069
50	(2, 10) 401, 570601
51	(3, 17) 919, 3469
52	(4) 103, 102193207
53	119218851371
54	(2, 6, 18) $3^* 11128427$
55	(11) A, B
	A 39161
	B (5) $11^* 331$
56	(8) 10745088481
57	(3, 19) 229, 95419
58	(2) 347, 1270083883
59	709, 8969, 336419
60	(4, 12, 20) 241, 20641
61	5600748293801
62	(2) 3020733700601
63	(3, 7, 9, 21) 1009, 31249
64	127, 186812208641
65	(13) A, B
	A (5) 24571
	B 131, 2081
66	(2, 6, 22) 261399601
67	4021, 24994118449
68	(4) 23230657239121
69	(3, 23) 691, 1485571
70	(2, 10, 14) 12317523121
71	688846502588399
72	(8, 24) 10749957121



- 73 151549.11899937029
- 74 (2) 11987.81143477963
- 75 (3,5,15) A, B
- A (25B) 12301
- B (25A) 18451
- 76 (4) 1091346396980401
- 77 (7,11) 229769.9321929
- 78 (2,6,26) 12280217041
- 79 32361122672259149
- 80 (16) 23725145626561
- 81 (3,9,27) 3079.62650261
- 82 (2) 163.800483.350207569
- 83 35761381.6202401259
- 84 (4,12,28) 167.65740583
- 85 (17) A, B
- A (5) 1158551
- B 12760031
- 86 (2) 313195711516578281
- 87 (3,29) 349.947104099
- 88 (8) 93058241.562418561
- 89 179.22235502640988369
- 90 (2,6,10,18,30) 10783342081
- 91 (7,13) 689667151970161
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