

More short repeating digits

This is another method to find prime numbers that have short repeating digits. Starting with 10 raised to the N power and then adding 1likw 11, 101 which are both prime while 1001 is not. Following are 256 for the most of it new solutions.

$1/21993833369=0.\{000000000454672899999999995453271\}$ 34 repeating digits $r=1$
 One/646877452
 $1/59779577156334533866654838281=0.\{0000000000000000000000000016728121\}$ 36 repeating digits $r=1$ One/1660543809898181496295967730
 $1/99999000001=0.\{0000000000100000999999999998999999\}$ 36 repeating digits $r=1$
 One/27777750000
 $1/753201806271328462547977919407=0.\{00000000000000000000000000132766543\}$ 38 repeating digits $r=1$ One/19821100165034959540736261037
 $1/909090909090909091=0.\{000000000000000001099999999999999989\}$ 38 repeating digits $r=1$
 One/23923444976076555
 $1/5964848081=0.\{000000001676488632099999999983235113679\}$ 40 repeating digits $r=1$
 One/149121202
 $1/549797184491917=0.\{0000000000000001818852529999999999999818114747\}$ 46 repeating digits $r=1$ One/11952112706346
 $1/999999900000001=0.\{00000000000000010000009999999999999989999999\}$ 48 repeating digits $r=1$ One/208333331250000
 $1/78875943472201=0.\{0000000000000126781367800999999999999873218632199\}$ 50 repeating digits $r=1$ One/1577518869444
 $1/19003819767732243781=0.\{000000000000000000000526209999999999999999947379\}$ 52 repeating digits $r=1$ One/36545807245717927765
 $1/14175966169=0.\{00000000070541929070541928999999999929458070929458071\}$ 54 repeating digits $r=1$ One/262517892
 $1/127522001020150503761=0.\{0000000000000000000784178409999999999999999921582159\}$ 56 repeating digits $r=1$ One/2277178589645544710
 $1/154083204930662557781201849=0.\{00000000000000000000000000648999999999999999999999999351\}$ 58 repeating digits $r=1$ One/2656606981563147547951756
 $1/18381907262281244633158190677786966663091011=0.\{0000000000000000000000000000000000005440131895627338091\}$ 62 repeating digits $r=1$
 One/296482375198084590857390172222370430049855
 $1/90909090909090909090909090909091=0.\{0000000000000000000000000001099999999999999999999999989\}$ 62 repeating digits $r=1$ One/14662756598240469208211143695
 $1/834427406578561=0.\{0000000000000119842660022439040999999999999880157339977560959\}$ 64 repeating digits $r=1$ One/13037928227790
 $1/183411838171=0.\{000000000054522107731545221077309999999999994547789226845477892269\}$ 66 repeating digits $r=1$ One/2778967245
 $1/2324557465671829=0.\{0000000000000043018940799167822689999999999999995698105920083217731\}$ 68 repeating digits $r=1$ One/34184668612821
 $1/265212793249617641=0.\{0000000000000000037705571731556796099999999999999999622944282684432039\}$ 70 repeating digits $r=1$ One/3788754189280252
 $1/3199044596370769=0.\{00000000000000312593329000312593328999999999999999687406670999687406671\}$ 72 repeating digits $r=1$ One/44431174949594
 $1/296557347313446299=0.\{00000000000000000337202908327558636989999999999999999966279709167244136301\}$ 74 repeating digits $r=1$ One/4007531720451977

1/33950736420661075851541=0.{00000000000000000000000002945444209544272323062882549823
99603175043684261960333323062882549823996031720982400524160609999999999999999999
99970545557904557276769371174501760039682495631573803966667693711745017600396827
901759947583939} 228 repeating digits r=1 One/148906738687109981805
1/52875286008709=0.{0000000000001891242725070634456849270650097281779398843780877
4305166375545965009728177937993135362672417206906188999999999999810875727492936
55431507293499027182206011562191225694833624454034990271822062006864637327582793
093811} 228 repeating digits r=1 One/231909149161
1/739653893349540289=0.{000000000000000013519836899275634993506795013530905254772
516240667168426544067950135309052546373178716744120766089999999999999999998648016
31007243650064932049864690947452274837593328315734559320498646909474536268212832
5587923391} 228 repeating digits r=1 One/3244096023462896
1/17468739848498438039329935679794457=0.{000000000000000000000000000000000005724511
37673767054964370001883792984524170711569419096336930740152206291097599159299999
99
9036630692598477937089024008407} 232 repeating digits r=1
One/75296292450424301893663515861183
1/21591416633=0.{0000000004631470074416584947198540773024043012083171078328197993
9736546141613236128599510592381240536640799302202969999999999995368529925583415052
80145922697595698791682892167180200602634538583867638714004894076187594633592006
9779703} 232 repeating digits r=1 One/93066451
1/320326994163169943384295066992439316655840979654890345228609=0.{0000000000000000
000312180995739189700088089894541239289
2850021834849734828899
87819004260810299991191010545876071071499781651502651711} 232 repeating digits r=1
One/1380719802427456652518513219794997054551038705409010108744
1/36096800156828895568286578224818258719817914995401933354161=0.{0000000000000000
000277032865975744154410000000000000000
2770328659757441544099
29671340242558455899
One/462779489190114045747263823395105881023306602505152991720
1/103746647830421551242486430622636901002236971549990724717454338463=0.{000000000
000
0430752025047115055033301052699
999
999
999
999
242607211015427899623031} 238 repeating digits r=1 One/23837480977606369156
1/281259985248437790051014401=0.{0000000000000000000000000000000000035554293267728681539038
79026657806620683710968656133296815390387902665780662068335542572345600999999999
999
999
2097334219337931664457427654399} 240 repeating digits r=1 One/1171916605201824125212560
1/31388506438433752927908678241=0.{000000000000000000000000000000000003185879525556357579
877838059780730427345849755907916635757987783805978073042734553116795536099999999
999
999
122161940219269572654468832044639} 240 repeating digits r=1
One/130785443493473970532952826
1/102502981431359171598893=0.{0000000000000000000000000000000000097558137923007355686572660057
703465785503942904840529824774991563178293804220660052514978733966756999999999999

51056911900196451922956343064653179899271} 306 repeating digits r=1
One/514357768815617647362724093963364978484053181828
1/2405782797823=0.{00000000000415665121932413420881911707598841336567323363400496
07226507727518921210513555702238793445432336340049565659995534277579122322384942
35465978869999999999995843348780675865791180882924011586634326766365995039277349
22724810787894864442977612065545676636599504343400044657224208776776150576453402
113} 306 repeating digits r=1 One/7862035287
1/276402747619=0.{0000000000036179090425628595603414532350817788633785860441128511
60246048972182232639747238098167163357586044112847542337006409322672298294003016
388299978999999999999638209095743714043965854676491822113662141395588714883975395
10278177673602527619018328366424139558871524576629935906773277017059969836117000
21} 306 repeating digits r=1 One/903276953
1/39511854229=0.{0000000002530886032845411366381359809101051135587292106073030835
48739420512605475374892459846344509553692603546378607996458449376002834311327201
773575868999999999997469113967154588633618640190898948864412707893926969164512605
79487394524625107540153655490446307396453621392003541550623997165688672798226424
131} 308 repeating digits r=1 One/128285241
1/3925963357681=0.{00000000000254714552555244185308854045375306949177777557033356
05117831580646298093703749002715856710720313933892752379812656419897293753078180
5904037527209999999999974528544744475581469114595462469305082222244296664394882
16841935370190629625099728414328927968606610724762018734358010270624692181940959
6247279} 310 repeating digits r=1 One/12664397928
1/5167617497664851=0.{00000000000000193512774591362685429841892036090106194234340
17501491262179251815635854955988954496849399380732683507345221498977756507349162
1874838624826509999999999999980648722540863731457015810796390989380576565982498
50873782074818436414504401104550315060061926731649265477850102224349265083781251
6137517349} 310 repeating digits r=1 One/16669733863435
1/1358074433371719716641=0.{0000000000000000000736336665669553285291053631263345
42443628724139219505465177230675090817294408301594454244362872413921949810181057
3979557964383871988960999999999999999992636633343304467147089463687366545755
63712758607804945348227693249091827055916984055457556371275860780501898189426020
442035616128011039} 312 repeating digits r=1 One/4352802671063204220
1/291593563046646669491593=0.{00000000000000000000034294309845242656002000572080
67190078661232077867340891171280288805032898988665376719007866123207786734054822
818183637847287898294456999999999999999999999657056901547573439979994279193280
99213387679221326591088287197111949671010113346232809921338767922132659451771818
16362152712101705543} 312 repeating digits r=1 One/934594753354636761191
1/7323941687838105624847742701467683590147273=0.{000000000000000000000000000000000
0000000013653849834175588740340966088490794864907525231038791186738320417558874
03409660884907948649075252310387898213533369999999999999999999999999999999999
99999863461501658244112596590339115092051350924747689612088132616795824411259659
033911509205135092474768961210178646663} 312 repeating digits r=1
One/23474172076404184695024816350857960224831
1/507998564486483655774880939989709=0.{00000000000000000000000000000000019685094996
49594092519686246864008193147486006631173122224346790521654229719064647504531213
6793414632696620381151445935260518899999999999999999999999999999998031490500350
4059074803137531359918068525139933688268777565320947834577028093535249546878632
065853673033796188485540647394811} 316 repeating digits r=1
One/1607590393944568530933167531613
1/646301962916453492325383567253991760083617720844121=0.{00000000000000000000000000
000000000000000000001547264370801962943488486299116065990485357391780665380
047210172884374679109450833374328640716857407513622809999999999999999999999999999

519054176125220738087595488949875307880734036926493097483} 354 repeating digits r=1
One/7559768025546638
1/60247408327=0.{0000000001659822435136762459727374091664635132944878085494148827
83693089829397467618640590956286895484270214191515757148827836914300069623308561
80863582195230849137269313430262999999999983401775648632375402726259083353648670
55121914505851172163069101706025323813594090437131045157297858084842428511721630
8569993037669143819136417804769150862730686569737} 354 repeating digits r=1
One/170190419
1/968385024074451409=0.{0000000000000000010326471136372282099541486144609830420694
13536276275464603383497169973244514310022470574780557783643035362762754646033731
70698836872232210480984430170727362948899999999999999999896735288636277179004585
13855390169579305864637237245353966165028300267554856899775294252194422163569646
3723724535396626829301163127767789519015569829272637051} 354 repeating digits r=1
One/2735550915464552
1/1467439874822650361=0.{000000000000000000681458925273416394242774937416524689646
35995484542014074402303042520340116394604562452550978075822609489090007466866802
473086764035007734008377552769304283733832409999999999999999999999318541074726583605
75722506258347531035364004515457985925597696957479659883605395437547449021924177
39051090999253313319752691323596499226599162244723069571626616759} 362 repeating
digits r=1 One/4053701311664780
1/654721485601=0.{000000000015273670132912354709300054235597091188180800567287537
32445513082253970384926903381915030736266530992951628696339591106438038679959828
648885935035444198144342302918698744009999999999998472632986708764529069994576440
29088118191994327124626755448691774602961507309661808496926373346900704837130366
040889356196132004017135111406496455580185565769708130125599} 364 repeating digits r=1
One/1798685400
1/40498340376691=0.{00000000000002469236987734821966855485397259254335387925163065
62398359159995192140276640412595974213728510290950042149671756239835915997049977
03992921929274193597559177475961628980410999999999999975307630122651780331445146
02740745664612074836934376016408400048078597233595874040257862714897090499578503
2824376016408400295002296007078070725806402440822524038371019589} 366 repeating digits
r=1 One/110651203215

Here are another batch some may be the same as above.

1/1344628210313298373=9,{000000000000000000743699999992563} 33 repeating digits r=1
One/40746309403433284
1/2212394296770203368013=9,{00000000000000000004519989955948923} 37 repeating digits
r=1 One/59794440453248739676
1/316362908763458525001406154038726382279=9,{00000000000000000000000000000000
0316092681} 47 repeating digits r=1 One/6731125718371457978753322426355880474
1/4340876285657460212144534289928559826755746751=9,{0000000000000000000000000000
0000000000000023036823309249} 59 repeating digits r=1
One/73574174333177291731263293049636607233148250
1/5538396997364024056286510640780600481=9,{0000000000000000000000000000000000180
55765963977404423403602079} 65 repeating digits r=1
One/85206107651754216250561702165855392
1/129694419029057750551385771184564274499075700947656757821537291527196801=9,{0000
0007710432010000
000000077104320099
99999992289567989999999999228956799} 80 repeating digits r=1
One/1621180237863221881892322139807053431238446261845709472769216144089960

One/11600560663469003605022389311690189785115169093322817733659785738202166911204
4058411004329852340485577459373847289912832619290363332587807081781493391542658
1/53763491189967221358575546107279034709697=9,{000000000000000000000000000000
00000185999825879352401140033000000001859998258793524011400329999999999999999
9999999999999999999981400017412064759885996699999999814000174120647598859967}
192 repeating digits r=1 One/280018183281079277909247635975411639113
1/2010734797237741296291807480478464451813538790168907747=9,{00000000000000000000
000000000000000000000000000000049733062827268710750263717053423386473776258506
62088357008111575046058679725466842362345068945467765266219290386047881406160964
267738468917} 193 repeating digits r=1
One/10418315011594514488558587981753701822868076632999522
1/26409540111952717487908689681403=9,{000000000000000000000000000000003786510464630
95774058012821756313967163602392628572578815482204463230087676405150691290542580
723889249235599203313099560133472110333199584624325499560851007817933} 193
repeating digits r=1 One/136836995398718743460666785914
1/447798287131284928051408304965265782892174953181087929=9,{00000000000000000000
0000000000000000000000000000002233148336511660843653348911235302232580627658696
27954306894322686731086677839940957577392924518336973114624710311645519774014157
72652339831} 193 repeating digits r=1
One/2320198378918574756743048212255263123793652607155896
1/27422699366054621683295623079471066588881=9,{00000000000000000000000000000000
00000364661402092989038546160273343934181757001054859776553520999999999999999999
999999999999999999999635338597907010961453839726656065818242998945140223446479}
194 repeating digits r=1 One/141354120443580524140699088038510652520
1/323338434891034089173475790125293=9,{0000000000000000000000000000000030927347079
4464213447433884760210074729879502315595923160386531569999999999999999999999999
9999996907265292053578655256611523978992527012049768440407683961346843} 194
repeating digits r=1 One/1666692963355845820481833969718
1/44933275139025237741442164195375614371497219389368548160257661491391=9,{00000000
00222552217016445498784
66758104603163785788205094676936496153171099777447782983554501215332418953968362
142117949053230635038468289} 195 repeating digits r=1
One/230427051995001219186882893309618535238447278919838708514141853802
1/3599474961483053310878605135585111374469138078226023233589649293=9,{000000000000
0027781829591835267452885267320
74456511673732213987305282261882592991249695820440446771068985839690168167595848
2346898346366700068422843} 197 repeating digits r=1
One/18271446504990118329333020992817824235883949635665092556292636
1/7509141053025584367520009302392225318005070922160322154263365866092913563675219
96611125219417012181327241=9,{000
000133171023548303148859564297
620886566234330116262082390866092303449101957106846673212631373639} 197 repeating
digits r=1
One/38117467274241545012791925392853935624391222955128538854128760741588393724239
69525944798068106660818920
1/141122524877886182282233539317796144938305111168717=9,{000000000000000000000000
0000000000000000000000007086041019074053000000000000000007086041019074052999999
99
3958980925947} 198 repeating digits r=1
One/2138220073907366398215659686633274923307653199526