

***[original article ]***

## Simulation of nontribial point of Riemann zeta function

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***[Abstract]***

Tried to simulate the nontribial point of the Riemann zeta function.

At the beginning, we tried to be exactly the same value as the nontribial point of the Riemann Zeta function only with the degree of increase of the circle going up like wrapping  $x = 0.5$ , but the degree of increase varies from moment to moment extremely difficult It was judged impossible.

Then I created an expression that can take approximate values, but always take lower values than the nontribial zeros of the Riemann zeta function except for the initial values. However, by increasing the degree of increase of the circle going up like winding  $x = 0.5$ , it became possible to take a value which can be said to be an approximate value.

The degree of increase in circle was based on the formula of the nuclear energy value of uranium.

Since the degree of increase of the zero point changes from moment to moment, satisfactory approximate values can not be obtained yet.

***[Introduction]***

$$2\pi \ln(x!) = Dn \quad (1)$$

$$+1.7(1 - (\frac{\sin\pi 1.3 \bmod (An - 0.9, 3.51)}{\pi 1.3 \bmod (An - 0.9, 3.51)})^2) = En \quad (2)$$

$$14.1347 + 1.7(1 - (\frac{\sin\pi 1.3 \bmod (A1 - 0.9, 3.51)}{\pi 1.3 \bmod (A1 - 0.9, 3.51)})^2) = E1 \quad (3)$$

$$D2 + 1.7(1 - (\frac{\sin\pi 1.3 \bmod (A2 - 0.9, 3.51)}{\pi 1.3 \bmod (A2 - 0.9, 3.51)})^2) = E2 \quad (4)$$

$$D3 + 1.7(1 - (\frac{\sin\pi 1.3 \bmod (A3 - 0.9, 3.51)}{\pi 1.3 \bmod (A3 - 0.9, 3.51)})^2) = E3 \quad (5)$$

$$Dn + 1.7(1 - (\frac{\sin\pi 1.3 \bmod (An - 0.9, 3.51)}{\pi 1.3 \bmod (An - 0.9, 3.51)})^2) = En \quad (6)$$

In equation (1) I can give a value that approximates the nontrivial zero of the Riemann zeta function. However, except for the initial value, the value is a little lower than the nontrivial zero point of the Riemann zeta function. It is also necessary to add the degree of increase of the circle ascending around  $x = 0.5$

At the beginning, efforts were made to have exactly the same value as the nontrivial point of the Riemann zeta function only with the degree of increase of the circle going up like winding  $x = 0.5$ , but since the degree of increase varies from moment to moment I tried, but judged impossible.

The degree of increase in circle was based on the formula of the nuclear energy value of uranium.

Expression of the circle's degree of increase was the result of various sought-after, and it became the expression from(2) to(6).

3.51 in the above equation is a value under the assumption that it will make a round at 3.51 times.

Also,  $A_n$  in the above equations (2) to (6)

$A_1, A_2, A_3, A_4, A_5 \dots A_n \dots = 1, 2, 3, 4, 5, 6 \dots n \dots$

I simulated the nontrivial zeros of Riemann's hypothesis. Looking at every other degree of increase, there is a maximum point of increase in every fourth, third or fifth place. For that reason, I did not only change one another but I looked at differences from two, three, four, five, six, seven and so on, but the degree of increase has changed variously Was observed. This is reminiscent of the dragon which rises  $x = 0.5$  while changing the degree of freedom freely while drawing a circle.

Initially I tried to simulate a nontrivial point with only the degree of increase of the circle, but I thought that it was impossible without increasing regularity and I adopted  $\ln(x!)$ . And averaged the increase.

$D_n$  is an approximation obtained by simulating the nontrivial point of the Riemann zeta function.

The first  $D_n (=D_1)$  are larger than the nontrivial zero of the Riemann zeta function, but all others are slightly small.

The average increase is  $2\pi \ln(x!) = D_n$  ( $n$  is an integer starting from 1).

$B_n$  are nontrivial zeros of Riemann's hypothesis.  $n = 1, 2, 3, 4, 5, 6, \dots$

when $\ln(x!) = 1$	$x=2.31244088$	$D_1=14.52949456$	$B_1=14.1347$
when $\ln(x!) = 2$	$x=3.16283047$	$D_2=19.87264994$	$B_2=21.0220$
when $\ln(x!) = 3$	$x=3.88072502$	$D_3=24.38331443$	$B_3=25.0108$
when $\ln(x!) = 4$	$x=4.52614251$	$D_4=28.43859212$	$B_4=30.4248$
when $\ln(x!) = 5$	$x=5.12374886$	$D_5=32.19346355$	$B_5=32.9350$
when $\ln(x!) = 6$	$x=5.68660830$	$D_6=35.73001370$	$B_6=37.5862$
when $\ln(x!) = 7$	$x=6.22265528$	$D_7=39.09809623$	$B_7=40.9187$
when $\ln(x!) = 8$	$x=6.73714810$	$D_8=42.33074995$	$B_8=43.3270$
when $\ln(x!) = 9$	$x=7.233790221$	$D_9=45.45124443$	$B_9=48.0051$
when $\ln(x!) = 10$	$x=7.715310138$	$D_{10}=48.47672333$	$B_{10}=49.7738$
when $\ln(x!) = 11$	$x=8.183789082$	$D_{11}=51.42026332$	$B_{11}=52.9703$
when $\ln(x!) = 12$	$x=8.640858975$	$D_{12}=54.29211816$	$B_{12}=52.9703$
when $\ln(x!) = 13$	$x=9.087828540$	$D_{13}=57.10051076$	$B_{13}=56.4462$
when $\ln(x!) = 14$	$x=9.525767092$	$D_{14}=59.85215983$	$B_{14}=60.8318$
when $\ln(x!) = 15$	$x=9.955562217$	$D_{15}=62.55264225$	$B_{15}=65.1125$
when $\ln(x!) = 16$	$x=10.37796067$	$D_{16}=65.20664998$	$B_{16}=67.0798$

when $\ln(x!) = 17$	$x=10.79359806$	$D17=67.81817674$	$B17=69.5464$
when $\ln(x!) = 18$	$x=11.20302101$	$D18=70.39065701$	$B18=72.0671$
when $\ln(x!) = 19$	$x=11.60670377$	$D19=72.92707062$	$B19=75.7047$
when $\ln(x!) = 20$	$x=12.00506117$	$D20=75.43002393$	$B20=77.1448$
when $\ln(x!) = 21$	$x=12.39845860$	$D21=77.90181290$	$B21=79.3373$
when $\ln(x!) = 22$	$x=12.78722004$	$D22=80.34447305$	$B22=82.9104$
when $\ln(x!) = 23$	$x=13.17163436$	$D23=82.75981949$	$B23=84.7354$
when $\ln(x!) = 24$	$x=13.55196054$	$D24=85.14947938$	$B24=87.4253$
when $\ln(x!) = 25$	$x=13.92843186$	$D25=87.51491840$	$B25=88.8091$
when $\ln(x!) = 26$	$x=14.30125934$	$D26=89.85746259$	$B26=92.4919$
when $\ln(x!) = 27$	$x=14.67063473$	$D27=92.17831657$	$B27=94.6513$
when $\ln(x!) = 28$	$x=15.03673282$	$D28=94.47857870$	$B28=95.8706$
when $\ln(x!) = 29$	$x=15.39971356$	$D29=96.75925398$	$B29=98.8312$
when $\ln(x!) = 30$	$x=15.75972378$	$D30=99.02126488$	$B30=101.3178$
when $\ln(x!) = 31$	$x=16.11689864$	$D31=101.2654607$	$B31=103.7255$
when $\ln(x!) = 32$	$x=16.47136294$	$D32=103.4926256$	$B32=105.4466$
when $\ln(x!) = 33$	$x=16.82323220$	$D33=105.7034854$	$B33=107.1686$
when $\ln(x!) = 34$	$x=17.17261360$	$D34=107.8987134$	$B34=111.0295$
when $\ln(x!) = 35$	$x=17.51960683$	$D35=110.0789362$	$B35=111.8747$
when $\ln(x!) = 36$	$x=17.86430481$	$D36=112.2447375$	$B36=114.3202$
when $\ln(x!) = 37$	$x=18.20679432$	$D37=114.3966625$	$B37=116.2267$
when $\ln(x!) = 38$	$x=18.54715655$	$D38=116.5352215$	$B38=118.7908$
when $\ln(x!) = 39$	$x=18.88546764$	$D39=118.6608928$	$B39=121.3701$
when $\ln(x!) = 40$	$x=19.22179906$	$D40=120.7741254$	$B40=122.9468$
when $\ln(x!) = 41$	$x=19.55621806$	$D41=122.8753420$	$B41=124.2568$
when $\ln(x!) = 42$	$x=19.88878797$	$D42=124.9649403$	$B42=127.5166$
when $\ln(x!) = 43$	$x=20.21956855$	$D43=127.0432961$	$B43=129.5787$
when $\ln(x!) = 44$	$x=20.52588245$	$D44=129.1107638$	$B44=131.0877$
when $\ln(x!) = 45$	$x=20.87598453$	$D45=131.1676793$	$B45=133.4977$
when $\ln(x!) = 46$	$x=21.20172393$	$D46=133.2143603$	$B46=134.7567$
when $\ln(x!) = 47$	$x=21.52588245$	$D47=135.2511084$	$B47=138.1160$
when $\ln(x!) = 48$	$x=21.84850565$	$D48=137.2782097$	$B48=139.7362$
when $\ln(x!) = 49$	$x=22.16963685$	$D49=139.2959365$	$B49=141.1237$
when $\ln(x!) = 50$	$x=22.48931724$	$D50=141.3045476$	$B50=143.1118$
when $\ln(x!) = 51$	$x=22.80758604$	$D51=143.3042898$	$B51=146.0010$
when $\ln(x!) = 52$	$x=23.12448081$	$D52=145.2953981$	$B52=147.4228$
when $\ln(x!) = 53$	$x=23.44003716$	$D53=147.2780971$	$B53=150.0535$

when $\ln(x!) = 54$	$x=23.75428923$	$D54=149.2526011$	$B54=150.9252$
when $\ln(x!) = 55$	$x=24.06726967$	$D55=151.2191152$	$B55=153.0247$
when $\ln(x!) = 56$	$x=24.37900969$	$D56=153.1778355$	$B56=156.1129$
when $\ln(x!) = 57$	$x=24.68953919$	$D57=155.1289499$	$B57=157.5976$
when $\ln(x!) = 58$	$x=24.99888684$	$D58=157.0726385$	$B58=158.8500$
when $\ln(x!) = 59$	$x=25.30708011$	$D59=159.0090739$	$B59=161.1890$
when $\ln(x!) = 60$	$x=25.61414539$	$D60=160.9384220$	$B60=163.0307$
when $\ln(x!) = 61$	$x=25.92010803$	$D61=162.8608419$	$B61=165.5371$
when $\ln(x!) = 62$	$x=26.22499237$	$D62=164.7764868$	$B62=167.1844$
when $\ln(x!) = 63$	$x=26.52882186$	$D63=166.6855037$	$B63=169.0945$
when $\ln(x!) = 64$	$x=26.83161903$	$D64=168.5880345$	$B64=173.4115$
when $\ln(x!) = 65$	$x=27.13340561$	$D65=170.4842155$	$B65=173.4115$
when $\ln(x!) = 66$	$x=27.43420251$	$D66=172.3741781$	$B66=174.7542$
when $\ln(x!) = 67$	$x=27.73402991$	$D67=174.2580492$	$B67=176.4414$
when $\ln(x!) = 68$	$x=28.03290727$	$D68=176.1359511$	$B68=178.3774$
when $\ln(x!) = 69$	$x=28.33085337$	$D69=178.0080016$	$B69=179.9165$
when $\ln(x!) = 70$	$x=28.62788636$	$D70=179.8743149$	$B70=182.2071$
when $\ln(x!) = 71$	$x=28.92402376$	$D71=181.7350011$	$B71=184.8745$
when $\ln(x!) = 72$	$x=29.21928252$	$D72=183.5901666$	$B72=185.5988$
when $\ln(x!) = 73$	$x=29.51367903$	$D73=185.4399144$	$B73=187.2289$
when $\ln(x!) = 74$	$x=29.80722913$	$D74=187.2843441$	$B74=189.4162$
when $\ln(x!) = 75$	$x=30.09994819$	$D75=189.1235522$	$B75=192.0266$
when $\ln(x!) = 76$	$x=30.39185107$	$D76=190.9576321$	$B76=193.0797$
when $\ln(x!) = 77$	$x=30.68295218$	$D77=192.7866743$	$B77=195.2654$
when $\ln(x!) = 78$	$x=30.97326548$	$D78=194.6107665$	$B78=196.8765$
when $\ln(x!) = 79$	$x=31.26280450$	$D79=196.4299939$	$B79=198.0153$
when $\ln(x!) = 80$	$x=31.55158239$	$D80=198.2444389$	$B80=201.2648$
when $\ln(x!) = 81$	$x=31.83961189$	$D81=200.0541816$	$B81=202.4936$
when $\ln(x!) = 82$	$x=32.12690538$	$D82=201.8592999$	$B82=204.1896$
when $\ln(x!) = 83$	$x=32.41347489$	$D83=203.6598692$	$B83=205.3947$
when $\ln(x!) = 84$	$x=32.69933207$	$D84=205.4559628$	$B84=207.9063$
when $\ln(x!) = 85$	$x=32.9844883$	$D85=207.2476523$	$B85=209.5765$
when $\ln(x!) = 86$	$x=33.2689546$	$D86=209.0353367$	$B86=211.6908$
when $\ln(x!) = 87$	$x=33.55274171$	$D87=210.8180937$	$B87=213.3479$
when $\ln(x!) = 88$	$x=33.83586006$	$D88=212.5969788$	$B88=214.5470$
when $\ln(x!) = 89$	$x=34.11831982$	$D89=214.3717258$	$B89=216.1695$
when $\ln(x!) = 90$	$x=34.40013088$	$D90=216.1423969$	$B90=219.0676$
when $\ln(x!) = 91$	$x=34.68130288$	$D91=217.9090527$	$B91=220.7149$

when $\ln(x!) = 92$	$x=34.96184519$	$D92=219.671752$	$B92=221.4307$
when $\ln(x!) = 93$	$x=35.24176696$	$D93=221.4305524$	$B93=224.0070$
when $\ln(x!) = 94$	$x=35.5210771$	$D94=223.1855097$	$B94=224.9833$
when $\ln(x!) = 95$	$x=35.7997843$	$D95=224.9366787$	$B95=227.4214$
when $\ln(x!) = 96$	$x=36.07789704$	$D96=226.6841126$	$B96=229.3374$
when $\ln(x!) = 97$	$x=36.35542357$	$D97=228.4278632$	$B97=231.2502$
when $\ln(x!) = 98$	$x=36.63237195$	$D98=230.1679812$	$B98=231.9872$
when $\ln(x!) = 99$	$x=36.90875007$	$D99=231.9045161$	$B99=233.6934$
when $\ln(x!) = 100$	$x=37.1845656$	$D100=233.6375162$	$B100=236.5242$
when $\ln(x!) = 101$	$x=37.45982604$	$D101=235.3670286$	$B101=237.7698$
when $\ln(x!) = 102$	$x=37.73453872$	$D102=237.0930993$	$B102=239.5555$
when $\ln(x!) = 103$	$x=38.0087108$	$D103=238.8157732$	$B103=241.0492$
when $\ln(x!) = 104$	$x=38.28234927$	$D104=240.5350945$	$B104=242.8233$
when $\ln(x!) = 105$	$x=38.55546097$	$D105=242.2511059$	$B105=244.0709$
when $\ln(x!) = 106$	$x=38.82805257$	$D106=243.9638494$	$B106=247.1370$
when $\ln(x!) = 107$	$x=39.10013062$	$D107=245.6733662$	$B107=248.1020$
when $\ln(x!) = 108$	$x=39.3717015$	$D108=247.3796964$	$B108=249.5737$
when $\ln(x!) = 109$	$x=39.64277147$	$D109=249.0828792$	$B109=251.0149$
when $\ln(x!) = 110$	$x=39.91334663$	$D110=250.7829531$	$B110=253.0670$
when $\ln(x!) = 111$	$x=40.18343299$	$D111=252.4799557$	$B111=255.3063$
when $\ln(x!) = 112$	$x=40.45303638$	$D112=254.1739238$	$B112=256.3807$
when $\ln(x!) = 113$	$x=40.72216256$	$D113=255.8648937$	$B113=258.6104$
when $\ln(x!) = 114$	$x=40.99081713$	$D114=257.5528999$	$B114=259.8744$
when $\ln(x!) = 115$	$x=41.25900559$	$D115=259.2379777$	$B115=260.8051$
when $\ln(x!) = 116$	$x=41.52673334$	$D116=260.9201608$	$B116=263.5739$
when $\ln(x!) = 117$	$x=41.79400565$	$D117=262.5994822$	$B117=265.5578$
when $\ln(x!) = 118$	$x=42.0608277$	$D118=264.2759746$	$B118=266.6150$
when $\ln(x!) = 119$	$x=42.32720454$	$D119=265.9496697$	$B119=267.9219$
when $\ln(x!) = 120$	$x=42.59314116$	$D120=267.6205987$	$B120=269.9704$
when $\ln(x!) = 121$	$x=42.85864243$	$D121=269.2887924$	$B121=271.4941$
when $\ln(x!) = 122$	$x=43.12371312$	$D122=270.9542806$	$B122=273.4596$
when $\ln(x!) = 123$	$x=43.38835791$	$D123=272.6170929$	$B123=275.5875$
when $\ln(x!) = 124$	$x=43.65258141$	$D124=274.2772581$	$B124=276.4521$
when $\ln(x!) = 125$	$x=43.91638812$	$D125=275.9348046$	$B125=248.2507$
when $\ln(x!) = 126$	$x=44.17978247$	$D126=277.5897601$	$B126=279.2292$
when $\ln(x!) = 127$	$x=44.44276879$	$D127=279.2421519$	$B127=282.4651$
when $\ln(x!) = 128$	$x=44.70535135$	$D128=280.8920068$	$B128=283.2112$

when $\ln(x!) = 129$	$x=44.96753433$	$D129=282.539351$	$B129=284.8360$
when $\ln(x!) = 130$	$x=45.22932185$	$D130=284.1842105$	$B130=286.6674$
when $\ln(x!) = 131$	$x=45.49071792$	$D131=285.7266105$	$B131=287.9119$
when $\ln(x!) = 132$	$x=45.75172652$	$D132=287.4665758$	$B132=289.5798$
when $\ln(x!) = 133$	$x=46.01235152$	$D133=289.104131$	$B133=291.8463$
when $\ln(x!) = 134$	$x=46.27259676$	$D134=290.7393001$	$B134=293.5584$
when $\ln(x!) = 135$	$x=46.53246599$	$D135=292.3721066$	$B135=294.9657$
when $\ln(x!) = 136$	$x=46.79196289$	$D136=294.0025738$	$B136=295.5732$
when $\ln(x!) = 137$	$x=47.05109111$	$D137=295.6307243$	$B137=297.9793$
when $\ln(x!) = 138$	$x=47.30985418$	$D138=297.2565807$	$B138=299.8403$
when $\ln(x!) = 139$	$x=47.56825562$	$D139=298.8801648$	$B139=301.6493$
when $\ln(x!) = 140$	$x=47.82629888$	$D140=300.5014984$	$B140=302.6967$
when $\ln(x!) = 141$	$x=48.08398733$	$D141=302.1206027$	$B141=304.8644$
when $\ln(x!) = 142$	$x=48.34132431$	$D142=303.7374987$	$B142=305.7289$
when $\ln(x!) = 143$	$x=48.59831309$	$D143=305.3522068$	$B143=307.2195$
when $\ln(x!) = 144$	$x=48.85495691$	$D144=306.9647474$	$B144=310.1095$
when $\ln(x!) = 145$	$x=49.11125891$	$D145=308.5751404$	$B145=311.1651$
when $\ln(x!) = 146$	$x=49.36722222$	$D146=310.1834053$	$B146=312.4278$
when $\ln(x!) = 147$	$x=49.62284991$	$D147=311.7895614$	$B147=313.9853$
when $\ln(x!) = 148$	$x=49.87814499$	$D148=313.3936278$	$B148=315.4756$
when $\ln(x!) = 149$	$x=50.13311044$	$D149=314.9956229$	$B149=317.7348$
when $\ln(x!) = 150$	$x=50.38774918$	$D150=316.5955653$	$B150=318.8531$
when $\ln(x!) = 151$	$x=50.64206409$	$D151=318.193473$	$B151=321.1601$
when $\ln(x!) = 152$	$x=50.89605799$	$D152=319.7893638$	$B152=322.1446$
when $\ln(x!) = 153$	$x=51.14973369$	$D153=321.3832552$	$B153=323.4667$
when $\ln(x!) = 154$	$x=51.40309393$	$D154=322.9751645$	$B154=324.8629$
when $\ln(x!) = 155$	$x=51.65614141$	$D155=324.5651087$	$B155=327.4439$
when $\ln(x!) = 156$	$x=51.9088788$	$D156=326.1531046$	$B156=329.0331$
when $\ln(x!) = 157$	$x=52.16130872$	$D157=327.7391686$	$B157=329.9532$
when $\ln(x!) = 158$	$x=52.41343375$	$D158=329.3233168$	$B158=331.4745$
when $\ln(x!) = 159$	$x=52.66525645$	$D159=330.9055655$	$B159=333.6454$
when $\ln(x!) = 160$	$x=52.91677933$	$D160=332.4859304$	$B160=334.2113$
when $\ln(x!) = 161$	$x=53.16800485$	$D161=334.0644269$	$B161=336.8418$
when $\ln(x!) = 162$	$x=53.41343375$	$D162=335.6410704$	$B162=338.3340$
when $\ln(x!) = 163$	$x=53.66924756$	$D163=337.2158759$	$B163=339.8582$
when $\ln(x!) = 164$	$x=53.91992148$	$D164=338.7888584$	$B164=341.0423$
when $\ln(x!) = 165$	$x=54.16998160$	$D165=340.3600325$	$B165=342.0549$
when $\ln(x!) = 166$	$x=54.41975621$	$D166=341.9294126$	$B166=344.6617$

when $\ln(x!) = 167$	$x=54.66924756$	$D167=343.4970130$	$B167=346.3479$
when $\ln(x!) = 168$	$x=54.91845791$	$D168=345.0628478$	$B168=347.2727$
when $\ln(x!) = 169$	$x=55.16738944$	$D169=346.6269308$	$B169=349.3163$
when $\ln(x!) = 170$	$x=55.41604435$	$D170=348.1892756$	$B170=350.4084$
when $\ln(x!) = 171$	$x=55.66442476$	$D171=349.7498958$	$B171=351.1939$
when $\ln(x!) = 172$	$x=55.91845791$	$D172=351.3088046$	$B172=353.4889$
when $\ln(x!) = 173$	$x=56.16037055$	$D173=352.8660151$	$B173=356.0176$
when $\ln(x!) = 174$	$x=56.40794007$	$D174=354.4215402$	$B174=357.1513$
when $\ln(x!) = 175$	$x=56.65524339$	$D175=355.9753928$	$B175=357.9527$
when $\ln(x!) = 176$	$x=56.90228251$	$D176=357.5275854$	$B176=359.7437$
when $\ln(x!) = 177$	$x=57.14905941$	$D177=359.0781304$	$B177=361.2894$
when $\ln(x!) = 178$	$x=57.39557604$	$D178=360.6270401$	$B178=363.3313$
when $\ln(x!) = 179$	$x=57.64183433$	$D179=362.1743265$	$B179=364.7360$
when $\ln(x!) = 180$	$x=57.88783616$	$D180=363.7200017$	$B180=366.2127$
when $\ln(x!) = 181$	$x=58.13358343$	$D181=365.2640773$	$B181=367.9936$
when $\ln(x!) = 182$	$x=58.37907798$	$D182=366.806565$	$B182=368.9684$
when $\ln(x!) = 183$	$x=58.62432163$	$D183=368.3474763$	$B183=370.0509$
when $\ln(x!) = 184$	$x=58.86931619$	$D184=369.8868225$	$B184=373.0619$
when $\ln(x!) = 185$	$x=59.11406345$	$D185=371.4246149$	$B185=373.8649$
when $\ln(x!) = 186$	$x=59.35856515$	$D186=372.9608644$	$B186=375.8259$
when $\ln(x!) = 187$	$x=59.60282303$	$D187=374.4955819$	$B187=376.3241$
when $\ln(x!) = 188$	$x=59.84683882$	$D188=376.0287783$	$B188=378.4367$
when $\ln(x!) = 189$	$x=60.09061419$	$D189=377.5604642$	$B189=379.8730$
when $\ln(x!) = 190$	$x=60.33415083$	$D190=379.0905600$	$B190=381.4845$
when $\ln(x!) = 191$	$x=60.57745039$	$D191=380.6193462$	$B191=383.4453$
when $\ln(x!) = 192$	$x=60.82051449$	$D192=382.1465630$	$B192=384.9561$
when $\ln(x!) = 193$	$x=61.06334476$	$D193=383.6723106$	$B193=385.8613$
when $\ln(x!) = 194$	$x=61.30594277$	$D194=385.1965988$	$B194=387.2229$
when $\ln(x!) = 195$	$x=61.54831010$	$D195=386.7194377$	$B195=388.8461$
when $\ln(x!) = 196$	$x=61.79044832$	$D196=388.2408370$	$B196=391.4561$
when $\ln(x!) = 197$	$x=62.03235894$	$D197=389.7608063$	$B197=392.2451$
when $\ln(x!) = 198$	$x=62.27404349$	$D198=391.2793551$	$B198=393.4277$
when $\ln(x!) = 199$	$x=62.51550348$	$D199=392.7964929$	$B199=395.5828$
when $\ln(x!) = 200$	$x=62.75674037$	$D200=394.3122290$	$B200=396.3819$
when $\ln(x!) = 201$	$x=62.99775564$	$D201=395.8265726$	$B201=397.9187$
when $\ln(x!) = 202$	$x=63.23855074$	$D202=397.3395328$	$B202=399.9851$
when $\ln(x!) = 203$	$x=63.47912708$	$D203=398.8511186$	$B203=401.8392$
when $\ln(x!) = 204$	$x=63.71948610$	$D204=400.3613388$	$B204=402.8619$



when $\ln(x!) = 205$	$x=63.95962917$	$D205=401.8702023$	$B205=404.2364$
when $\ln(x!) = 206$	$x=64.19955770$	$D206=403.3777177$	$B206=405.1344$
when $\ln(x!) = 207$	$x=64.43927304$	$D207=404.8838936$	$B207=407.5815$
when $\ln(x!) = 208$	$x=64.67877655$	$D208=406.3887385$	$B208=408.9472$
when $\ln(x!) = 209$	$x=64.91806956$	$D209=407.8922608$	$B209=410.5139$
when $\ln(x!) = 210$	$x=65.15715339$	$D210=409.3944688$	$B210=411.9723$
when $\ln(x!) = 211$	$x=65.39602935$	$D211=410.8953707$	$B211=413.2627$
when $\ln(x!) = 212$	$x=65.63469873$	$D212=412.3949747$	$B212=415.0188$
when $\ln(x!) = 213$	$x=65.87316280$	$D213=413.8932887$	$B213=415.4552$
when $\ln(x!) = 214$	$x=66.11142284$	$D214=415.3903206$	$B214=418.3877$
when $\ln(x!) = 215$	$x=66.34948009$	$D215=416.8860784$	$B215=419.8614$
when $\ln(x!) = 216$	$x=66.58733579$	$D216=418.3805699$	$B216=420.6438$
when $\ln(x!) = 217$	$x=66.82499006$	$D217=419.8737957$	$B217=422.0767$
when $\ln(x!) = 218$	$x=67.06244740$	$D218=421.3657842$	$B218=423.7166$

.....

.....

And so on.

E1=16. 2294969  
 E2=22. 1213224  
 E3=25. 8248827  
 E4=29. 3103324  
 E5=34. 39978221  
 E6=37. 60106032  
 E7=40. 2163513  
 E8=44. 61075331  
 E9=47. 1088519  
 E10=49. 9335178

.....

.....

.....

E97=230. 126959  
 E98=231. 44602  
 E99=234. 203986  
 E100=235. 928929  
 E101=237. 035398

.....

.....

E137=295. 7531594

E138=298. 3289741

E139=299. 5367919

E140=302. 4005669

.....

.....

And so on.

Even if you change the formula so that E1 becomes 14.1347, which is the first of the nontrivial zero of the Riemann zeta function, the simulation has become extremely difficult.

### ***【Discussion】***

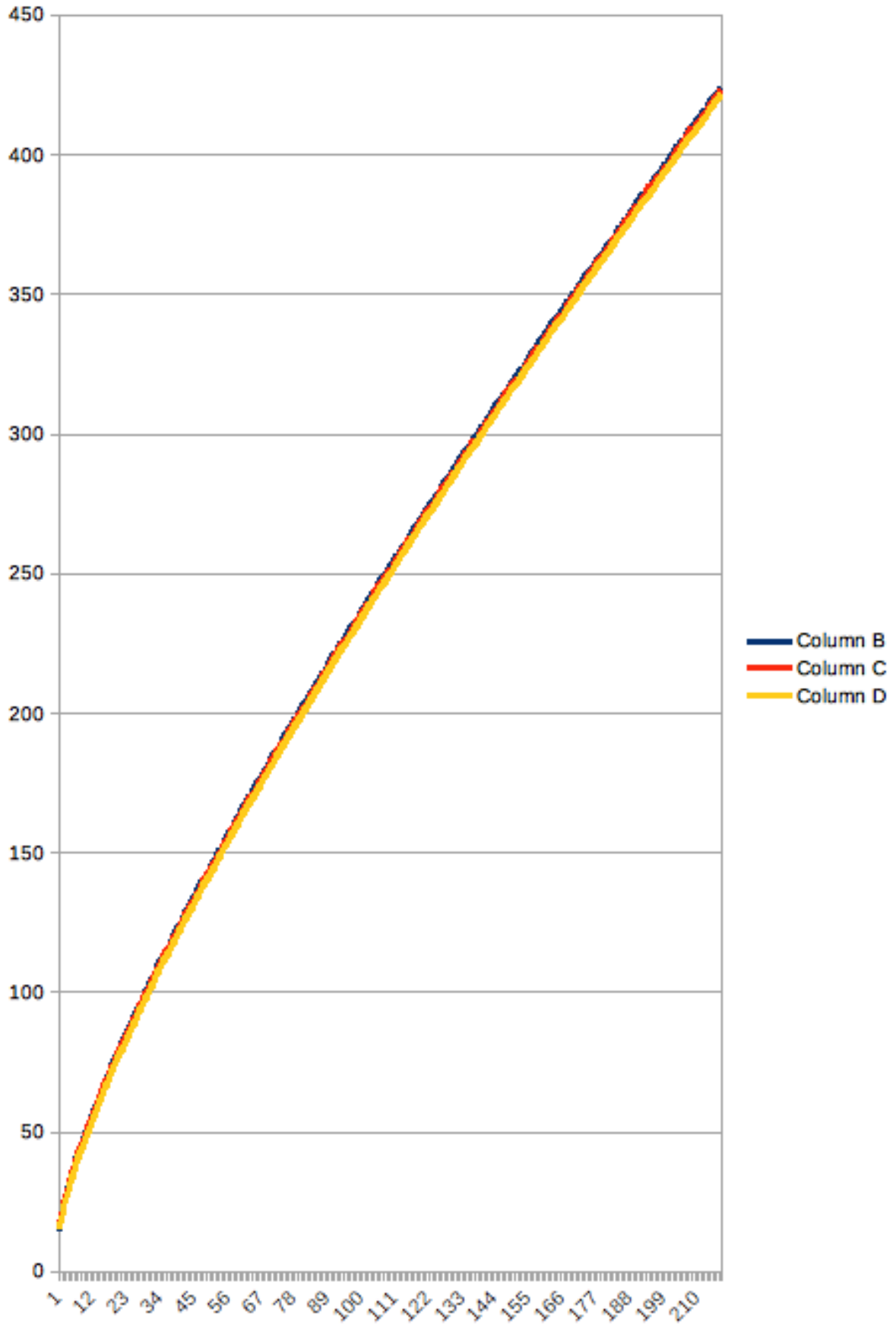
It is considered that the reason why the degree of increase at the beginning of the nontrivial point of the Riemann Zeta function is large is because the radius of the circle (dragon) surrounding  $x = 0.5$  is large. When  $n = 200$  or more, the degree of increase is small, which is thought to be because the radius of the circle (dragon) surrounding  $x = 0.5$  is small.

As shown in the figure below, the nontrivial zero point of the Riemann zeta function and its simulated numerical value are up to  $n = 217$ , they are almost on the same line (Figure 1 and Figure 2).

However, it is inferred from the graph that the approximate value obtained by equation (1) has a somewhat lower value (Figure 1).

Next graph (Figure 1).

The approximate value obtained by equation (1) is Column D.

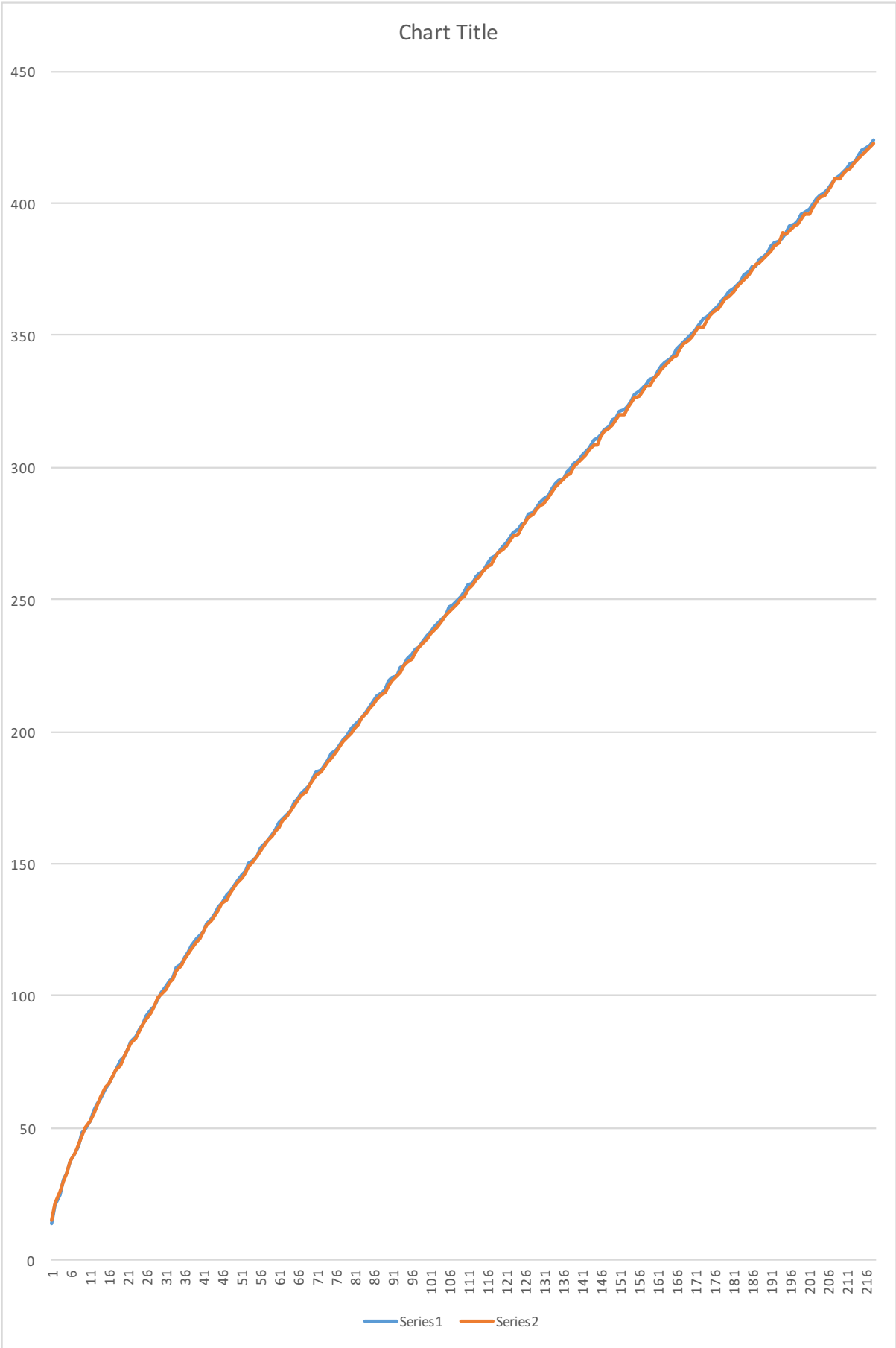


Next graph(Figure 2).

The nontrivial zero point of the Riemann zeta function is series 1.

The approximate value obtained by equation (3) to (6) is series 2.

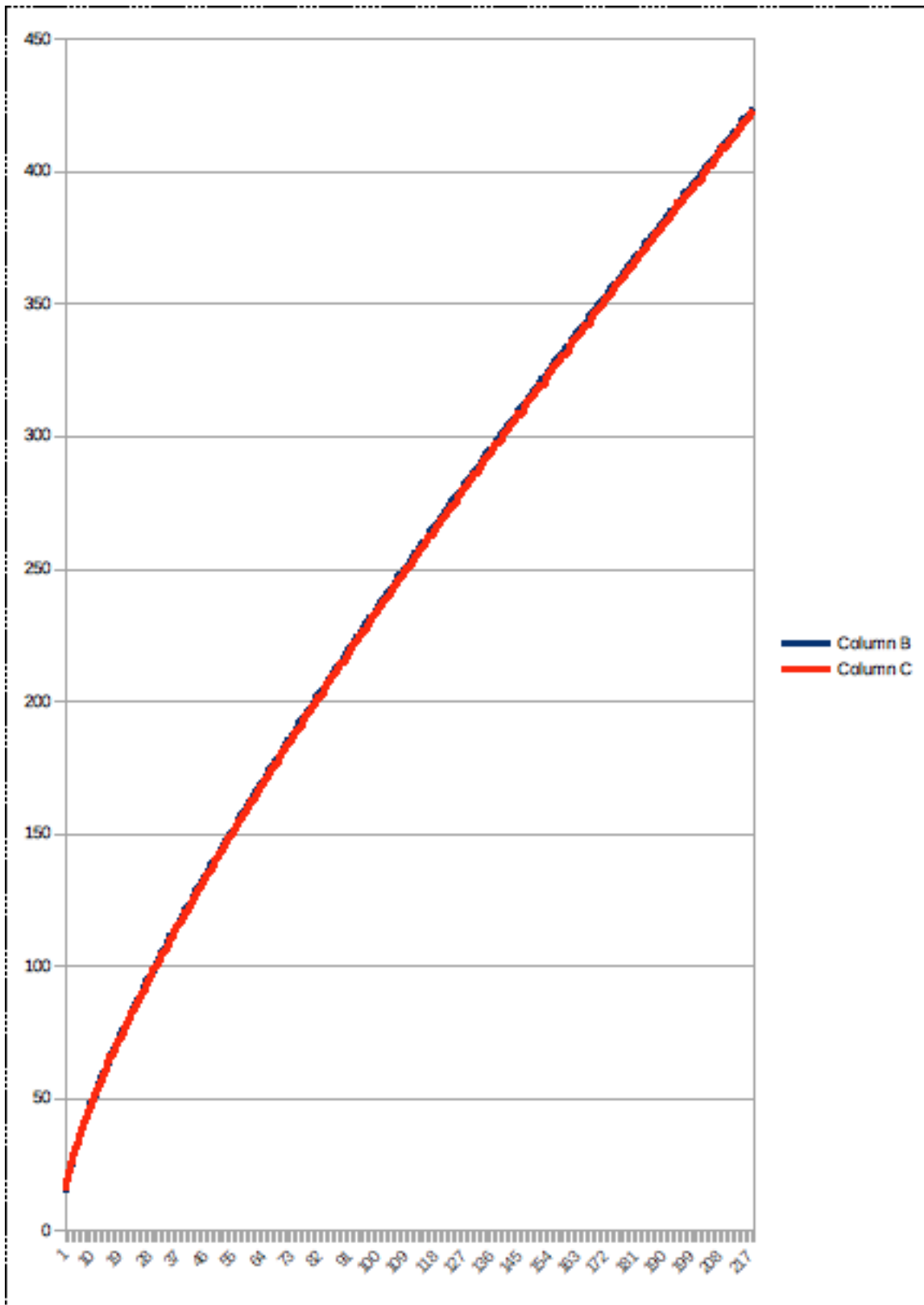
It seems that it can be said that it is on almost the same line.



Next graph(Figure 3).

The nontrivial zero point of the Riemann zeta function is Column B.

The approximate value obtained by equation (1) is Column C.



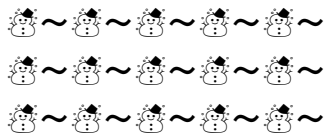
## 【Postscript】

I got tired of finding a pattern where the degree of increase was changeable freely, I gave up finding that pattern and decided to make it public here.

This is reminiscent of the dragon which rises  $x = 0.5$  while changing the degree of freedom freely while drawing a circle.

## 【References】

- 1) [https://en.wikipedia.org/wiki/Riemann\\_hypothesis](https://en.wikipedia.org/wiki/Riemann_hypothesis)



## 【Re-Postscript】

<http://fish008.ninpou.jp/14.17-0033.xlsx>

There is an excel file in the above.



I am a psychiatrist now and also a doctor of brain surgery before.





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I would like to receive an email. I will not answer the phone.

Currently 56 years old

Born on November 26, 1961

(I am very poor of English. Almost all document are google-translation.)



