

Original article

The collapse of the Riemann Empire

(Do they really converge to zero?)

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Abstract

I tried to prove that(Riemann hypothesis), but I realized that I can not prove how I did it.

When we calculate by the sum method of (1) we found that the nontrivial zero point will never converge to zero.

Calculating $\zeta(2)$, $\zeta(3)$, $\zeta(4)$, $\zeta(5)$ etc. by the method of the sum of (1) gives the correct calculation result.

This can be considered because convergence is extremely slow in the case of complex numbers, but there is no tendency to converge at all. Rather, it tends to diffuse.

In other words, it is inevitable to conclude that Riemann's hypothesis is a mistake.

We will fundamentally completely erroneous ones, For 150 years, We were trying to prove it.

Introduction

$$\zeta(s) = \sum_{n=1}^{\infty} \frac{1}{n^s} \quad (1)$$

$$\zeta(s) = \frac{2^s}{2^s - 1} \frac{3^s}{3^s - 1} \frac{5^s}{5^s - 1} \frac{7^s}{7^s - 1} \dots \quad (2)$$

from (2)

$2^s, s=a+bi$

if $a=2, b=0, \zeta(s)=(4/3)*(9/8)*(25/24)*(49/48).....=\infty$

if $a=1, b=0, \zeta(s)=(2/1)*(3/2)*(5/4)*(7/6).....=\infty$

if $a=0.5, b=0, \zeta(s)=???$

from (1)

$\sum_{n=1}^{960} \frac{1}{n^2} = 1.6438929425279.....$

$\sum_{n=1}^{3000} \frac{1}{n^2} = 1.644600789064275819....$

$\sum_{n=1}^{6000} \frac{1}{n^2} = 1.64476741406967705.....$

$\sum_{n=1}^{19000} \frac{1}{n^2} = 1.64488143665429632....$

$\sum_{n=1}^{\infty} \frac{1}{n^2} = 1.644934066848226.....$

$\sum_{n=1}^{960} \frac{1}{n^3} = 1.202056361189718.....$

$\sum_{n=1}^{\infty} \frac{1}{n^3} = 1.2020569031595942.....$

$\sum_{n=1}^{100} \frac{1}{n^4} = 1.082322905344473.....$

$\sum_{n=1}^{\infty} \frac{1}{n^4} = 1.08232290534.....$

$\sum_{n=1}^{\infty} \frac{1}{n^4} = \pi^4/90 = 1.0823232....$

$\sum_{n=1}^{\infty} \frac{1}{n^5} = \zeta(5) = 1.036927755....$

Discussion

$\sum_{n=1}^{3000} 1/n^{(0.5+i14.1347)} \approx 0.4174005 + 3.85034 i$

$\sum_{n=1}^{5000} 1/n^{(0.5+i14.1347)} \approx 4.3224 + 2.512729 i$

$\sum_{n=1}^{9000} 1/n^{(0.5 + i 14.1347)} \approx 0.48920272 - 6.6898815 i$

$\sum_{n=1}^{9160} 1/n^{(0.5+i14.1347)} \approx -1.185309 - 6.662485 i$

$\sum_{n=1}^{19000} 1/n^{(0.5 + i 14.1347)} \approx 8.5184 + 4.73502121617 i$

$\sum_{n=1}^{19160} 1/n^{(0.5+i14.1347)} \approx 9.05644139 + 3.710020 i$

$\sum_{n=1}^{19960} 1/n^{(0.5 + i 14.1347)} \approx 9.810559359 - 1.880355 i$

$\sum_{n=1}^{29000} 1/n^{(0.5 + i 14.1347)} \approx 8.2696693 + 8.751341 i$

$\sum_{n=1}^{39000} 1/n^{(0.5 + 14.1347 i)} \approx -13.587942799 + 3.21424 i$

$\text{sum}_{(n=1)}^{49000} 1/n^{(0.5 + 14.1347 i)} \approx 14.87108966 - 4.87901 i$
 $\text{sum}_{(n=1)}^{59000} 1/n^{(0.5 + 14.1347 i)} \approx -16.8331588 - 3.404215 i$
 $\text{sum}_{(n=1)}^{65000} 1/n^{(0.5 + 14.1347 i)} \approx 7.0429770 + 16.5931825 i$
 $\text{sum}_{(n=1)}^{70000} 1/n^{(0.5 + 14.1347 i)}$unable calculate???

$\text{sum}_{(n=1)}^{960} 1/n^{(0.5 + 21.022 i)} \approx -0.179178350 + 1.46289 i$
 $\text{sum}_{(n=1)}^{9000} 1/n^{(0.5 + 21.022 i)} \approx 0.92865011317 - 4.41509626 i$
 $\text{sum}_{(n=1)}^{10000} 1/n^{(0.5 + 21.022 i)} \approx -4.309478891 + 2.011205 i$
 $\text{sum}_{(n=1)}^{19000} 1/n^{(0.5 + 21.022 i)} \approx -1.353386 + 6.41392288 i$
 $\text{sum}_{(n=1)}^{20000} 1/n^{(0.5 + 21.022 i)} \approx 5.14179913 + 4.335154 i$
 $\text{sum}_{(n=1)}^{29000} 1/n^{(0.5 + 21.022 i)} \approx 5.482377543 - 5.960709 i$
 $\text{sum}_{(n=1)}^{30000} 1/n^{(0.5 + 21.022 i)} \approx 0.2549641341 - 8.2330654 i$
 $\text{sum}_{(n=1)}^{39000} 1/n^{(0.5 + 21.022 i)} \approx 6.7292629 - 6.551265 i$
 $\text{sum}_{(n=1)}^{40000} 1/n^{(0.5 + 21.022 i)} \approx 2.50556618693 - 9.1752959 i$
 $\text{sum}_{(n=1)}^{49000} 1/n^{(0.5 + 21.022 i)} \approx 7.96403371 + 6.884077 i$
 $\text{sum}_{(n=1)}^{50000} 1/n^{(0.5 + 21.022 i)} \approx 10.195572543 + 3.0213407 i$
 $\text{sum}_{(n=1)}^{59000} 1/n^{(0.5 + 21.022 i)} \approx -11.537037 + 0.5740716 i$
 $\text{sum}_{(n=1)}^{60000} 1/n^{(0.5 + 21.022 i)} \approx -10.71541936 + 4.568782 i$
 $\text{sum}_{(n=1)}^{69000} 1/n^{(0.5 + 21.022 i)} \approx 12.2441497 - 2.4756617 i$
 $\text{sum}_{(n=1)}^{70000} 1/n^{(0.5 + 21.022 i)} \approx 11.029895 - 6.05403973 i$
 $\text{sum}_{(n=1)}^{80000} 1/n^{(0.5 + 21.022 i)}$...unable calculate???

$\text{sum}_{(n=1)}^{960} 1/n^{(0.5 + I 25.01085)} \approx 1.047016... - 0.662357... i$
 $\text{sum}_{(n=1)}^{960} 1/n^{(0.5 - I 25.01085)} \approx 1.047016... + 0.662357... i$
 $\text{sum}_{(n=1)}^{9960} 1/n^{(0.5 + I 25.01085)} \approx -3.22926 - 2.3427 i$
 $\text{sum}_{(n=1)}^{9960} 1/n^{(0.5 - I 25.01085)} \approx -3.22926 + 2.3427 i$
 $\text{sum}_{(n=1)}^{19960} 1/n^{(0.5 + I 25.01085)} \approx 2.8093359 - 4.8994 i$
 $\text{sum}_{(n=1)}^{19960} 1/n^{(0.5 - I 25.01085)} \approx 2.8093359 + 4.8994 i$
 $\text{sum}_{(n=1)}^{29960} 1/n^{(0.5 + I 25.01085)} \approx 1.4566464 + 6.76418 i$
 $\text{sum}_{(n=1)}^{29960} 1/n^{(0.5 - I 25.01085)} \approx 1.4566464 + 6.76418 i$
 $\text{sum}_{(n=1)}^{39960} 1/n^{(0.5 + I 25.01085)} \approx 7.235095 + 3.39252 i$
 $\text{sum}_{(n=1)}^{39960} 1/n^{(0.5 - I 25.01085)} \approx 7.235095 - 3.39252 i$
 $\text{sum}_{(n=1)}^{49960} 1/n^{(0.5 + I 25.01085)} \approx 3.76619 + 8.10254 i$
 $\text{sum}_{(n=1)}^{49960} 1/n^{(0.5 - I 25.01085)} \approx 3.76619 - 8.10254 i$
 $\text{sum}_{(n=1)}^{59960} 1/n^{(0.5 + I 25.01085)} \approx -9.390834 + 2.761776 i$

$\sum_{(n=1)}^{59960} 1/n^{(0.5 - I 25.01085)} \approx -9.390834 - 2.761776 i$
 $\sum_{(n=1)}^{69960} 1/n^{(0.5 + I 25.01085)} \approx 5.6929367 - 8.90986585 i$
 $\sum_{(n=1)}^{69960} 1/n^{(0.5 - I 25.01085)} \approx 5.6929367 + 8.90986585 i$
 $\sum_{(n=1)}^{70000} 1/n^{(0.5 + I 25.01085)} \approx 5.566575 - 8.992907 i$
 $\sum_{(n=1)}^{79960} 1/n^{(0.5 + I 25.01085)} \dots \text{unable calculate??}$

$\sum_{(n=1)}^{10000} 1/n^{(0.5 + I 30.4249)} \approx -1.962335795413977 - 2.636209245219 i$
 $\sum_{(n=1)}^{20000} 1/n^{(0.5 + I 30.4249)} \approx -1.208645029398043 + 4.4877561416754844 i$
 $\sum_{(n=1)}^{30000} 1/n^{(0.5 + I 30.4249)} \approx -2.6962797622690516087 + 5.01306781262991 i$
 $\sum_{(n=1)}^{40000} 1/n^{(0.5 + I 30.4249)} \approx 6.0407105371772565 - 2.590458828297400 i$
 $\sum_{(n=1)}^{50000} 1/n^{(0.5 + I 30.4249)} \approx 4.504465030345766725 - 5.8060529043392784241 i$
 $\sum_{(n=1)}^{60000} 1/n^{(0.5 + I 30.4249)} \approx 7.927152705 - 1.40038071118346 i$
 $\sum_{(n=1)}^{70000} 1/n^{(0.5 + I 30.4249)} \approx 1.32041630855 \dots \dots + 8.5940477 \dots \dots i$

$\sum_{(n=1)}^{10000} 1/n^{(0.5 + I 32.9351)} \approx 2.977478515055 - 0.5930464706360 i$
 $\sum_{(n=1)}^{20000} 1/n^{(0.5 + I 32.9351)} \approx -2.19744505120 + 3.688608336006 i$
 $\sum_{(n=1)}^{30000} 1/n^{(0.5 + I 32.9351)} \approx 1.301481904 + 5.094850451274 i$
 $\sum_{(n=1)}^{40000} 1/n^{(0.5 + I 32.9351)} \approx -1.79457947063262 - 5.80059349982 i$
 $\sum_{(n=1)}^{50000} 1/n^{(0.5 + I 32.9351)} \approx -6.6467588230324 - 1.38040170013585 i$
 $\sum_{(n=1)}^{60000} 1/n^{(0.5 + I 32.9351)} \approx 6.585008887967 - 3.4553174404 i$
 $\sum_{(n=1)}^{70000} 1/n^{(0.5 + I 32.9351)} \approx 0.951159259 \dots \dots - 7.97576684 \dots \dots i$

$\text{sum}_{(n=1)}^{10000} 1/n^{(0.5 + I 37.5862)} \approx 1.549434098817591 + 2.16266228515191 i$
 $\text{sum}_{(n=1)}^{20000} 1/n^{(0.5 + I 37.5862)} \approx 3.760618574840540 + 0.1129828266500 i$
 $\text{sum}_{(n=1)}^{30000} 1/n^{(0.5 + I 37.5862)} \approx -4.047260330446412 - 2.202634718802768 i$
 $\text{sum}_{(n=1)}^{40000} 1/n^{(0.5 + I 37.5862)} \approx 3.3508308457280623 - 4.1329350084426 i$
 $\text{sum}_{(n=1)}^{50000} 1/n^{(0.5 + I 37.5862)} \approx -5.8834396619042441 - 0.878448960089747 i$
 $\text{sum}_{(n=1)}^{60000} 1/n^{(0.5 + I 37.5862)} \approx -5.9466036534860 + 2.664958498941 i$
 $\text{sum}_{(n=1)}^{70000} 1/n^{(0.5 + I 37.5862)} \approx -7.022286437062614932 - 0.478110758811890 i$

$\text{sum}_{(n=1)}^{10000} 1/n^{(0.5 + I 40.9187)} \approx -0.24810512800 + 2.431096382798 i$
 $\text{sum}_{(n=1)}^{20000} 1/n^{(0.5 + I 40.9187)} \approx 0.0496699427489 - 3.45561119088665 i$
 $\text{sum}_{(n=1)}^{30000} 1/n^{(0.5 + I 40.9187)} \approx 3.23081486557748 + 2.734370217785406 i$
 $\text{sum}_{(n=1)}^{40000} 1/n^{(0.5 + I 40.9187)} \approx 0.35870851711959 + 4.87419715793004 i$
 $\text{sum}_{(n=1)}^{50000} 1/n^{(0.5 + I 40.9187)} \approx 1.19605875648179 - 5.33179898910412 i$
 $\text{sum}_{(n=1)}^{60000} 1/n^{(0.5 + I 40.9187)} \approx -4.89125737991815 - 3.450480342114443 i$
 $\text{sum}_{(n=1)}^{70000} 1/n^{(0.5 + I 40.9187)} \approx -5.372554208750150 - 3.59687350587515 i$

$\text{sum}_{(n=1)}^{10000} 1/n^{(0.5 + I 43.3271)} \approx -0.2046521131 - 2.298802134192 i$
 $\text{sum}_{(n=1)}^{20000} 1/n^{(0.5 + I 43.3271)} \approx 3.14153047571 - 0.8850626999977 i$

$\text{sum}_{(n=1)}^{30000} 1/n^{(0.5 + I 43.3271)} \approx 2.13390773291 + 3.38018433507 i$
 $\text{sum}_{(n=1)}^{40000} 1/n^{(0.5 + I 43.3271)} \approx 2.05329489904 + 4.1339470640475 i$
 $\text{sum}_{(n=1)}^{50000} 1/n^{(0.5 + I 43.3271)} \approx -3.34144280263 - 3.932715572767 i$
 $\text{sum}_{(n=1)}^{60000} 1/n^{(0.5 + I 43.3271)} \approx -4.13754133646 + 3.8521638231096 i$
 $\text{sum}_{(n=1)}^{70000} 1/n^{(0.5 + I 43.3271)} \approx -2.52012471700 + 5.56180644181 i$

$\text{sum}_{(n=1)}^{10000} 1/n^{(0.5 + I 48.0052)} \approx 1.505212769157 - 1.4399495500292 i$
 $\text{sum}_{(n=1)}^{20000} 1/n^{(0.5 + I 48.0052)} \approx -2.555266401352 - 1.4656478507770 i$
 $\text{sum}_{(n=1)}^{30000} 1/n^{(0.5 + I 48.0052)} \approx -3.59199648484 + 0.33763855285 i$
 $\text{sum}_{(n=1)}^{40000} 1/n^{(0.5 + I 48.0052)} \approx -0.963587163237 + 4.053083544117 i$
 $\text{sum}_{(n=1)}^{50000} 1/n^{(0.5 + I 48.0052)} \approx -4.04878641839 - 2.302428851523 i$
 $\text{sum}_{(n=1)}^{60000} 1/n^{(0.5 + I 48.0052)} \approx 1.8985379437040 + 4.735997669619 i$
 $\text{sum}_{(n=1)}^{70000} 1/n^{(0.5 + I 48.0052)} \approx 5.49658535088 + 0.40064043307 i$

$\text{sum}_{(n=1)}^{10000} 1/n^{(0.5 + I 49.7738)} \approx -0.45085990397303 + 1.95775072207942 i$
 $\text{sum}_{(n=1)}^{20000} 1/n^{(0.5 + I 49.7738)} \approx 0.797607066225586 - 2.726967107790 i$
 $\text{sum}_{(n=1)}^{30000} 1/n^{(0.5 + I 49.7738)} \approx -3.0131771177589 - 1.74042489687751 i$
 $\text{sum}_{(n=1)}^{40000} 1/n^{(0.5 + I 49.7738)} \approx -1.347960269366 + 3.7850980501393 i$
 $\text{sum}_{(n=1)}^{50000} 1/n^{(0.5 + I 49.7738)} \approx -4.3727908534617988824 - 1.0290588352250 i$

$$\begin{aligned} \sum_{(n=1)}^{60000} 1/n^{(0.5 + I 49.7738)} &\approx 4.113186840809 + \\ &2.70148860529 i \\ \sum_{(n=1)}^{70000} 1/n^{(0.5 + I 49.7738)} &\approx 3.67153122737 - \\ &3.84353406285 i \end{aligned}$$

$$\begin{aligned} \sum_{(n=1)}^{10000} 1/n^{(0.5 + I 52.9703)} &\approx -1.524194187171187 - \\ &1.11389021040003 i \\ \sum_{(n=1)}^{20000} 1/n^{(0.5 + I 52.9703)} &\approx 0.118786196847680 - \\ &2.667145845574214 i \\ \sum_{(n=1)}^{30000} 1/n^{(0.5 + I 52.9703)} &\approx -1.732625024302507 + \\ &2.7728775900211 i \\ \sum_{(n=1)}^{40000} 1/n^{(0.5 + I 52.9703)} &\approx 3.23302320250302397 - \\ &1.9500436395092 i \\ \sum_{(n=1)}^{50000} 1/n^{(0.5 + I 52.9703)} &\approx 4.13385835165512 + \\ &0.854240645444202 i \\ \sum_{(n=1)}^{60000} 1/n^{(0.5 + I 52.9703)} &\approx -4.6221295259221517 + \\ &0.13390153624563 i \\ \sum_{(n=1)}^{70000} 1/n^{(0.5 + I 52.9703)} &\approx 1.66722003208520052 + \\ &4.7080524064524 i \end{aligned}$$

$$\begin{aligned} \sum_{(n=1)}^{10000} 1/n^{(0.5 + I 56.4462)} &\approx -1.770639638377036 - \\ &0.058892588797573 i \\ \sum_{(n=1)}^{20000} 1/n^{(0.5 + I 56.4462)} &\approx -0.4460681960609906 + \\ &2.46522370313616 i \\ \sum_{(n=1)}^{30000} 1/n^{(0.5 + I 56.4462)} &\approx -2.0148910369535471 - \\ &2.3142963441834 i \\ \sum_{(n=1)}^{40000} 1/n^{(0.5 + I 56.4462)} &\approx 3.35860945782954 + \\ &1.12812031951212 i \\ \sum_{(n=1)}^{50000} 1/n^{(0.5 + I 56.4462)} &\approx 3.7901438284494257 + \\ &1.151519810900709 i \\ \sum_{(n=1)}^{60000} 1/n^{(0.5 + I 56.4462)} &\approx -3.64981799646511146 + \\ &2.34705540899000 i \\ \sum_{(n=1)}^{70000} 1/n^{(0.5 + I 56.4462)} &\approx 4.632877919461021 + \\ &0.71013086797148518 i \end{aligned}$$

$\text{sum}_{(n=1)}^{10000} 1/n^{(0.5 + I 59.3470)} \approx -0.0331500363446892 + 1.684608871786514 i$
 $\text{sum}_{(n=1)}^{20000} 1/n^{(0.5 + I 59.3470)} \approx -0.645623688286671 - 2.2938364668290 i$
 $\text{sum}_{(n=1)}^{30000} 1/n^{(0.5 + I 59.3470)} \approx 2.084850776376229830 - 2.042249362879456 i$
 $\text{sum}_{(n=1)}^{40000} 1/n^{(0.5 + I 59.3470)} \approx 1.8159819174402442 + 2.83868062071581337 i$
 $\text{sum}_{(n=1)}^{50000} 1/n^{(0.5 + I 59.3470)} \approx 3.570052431173936 + 1.204057347532 i$
 $\text{sum}_{(n=1)}^{60000} 1/n^{(0.5 + I 59.3470)} \approx -1.98140186631679 + 3.62051602441641115 i$
 $\text{sum}_{(n=1)}^{70000} 1/n^{(0.5 + I 59.3470)} \approx 3.126285877185851 - 3.178042678371751155 i$

$\text{sum}_{(n=1)}^{10000} 1/n^{(0.5 + I 60.8318)} \approx 1.456971594555026601 + 0.761226528246291 i$
 $\text{sum}_{(n=1)}^{20000} 1/n^{(0.5 + I 60.8318)} \approx -1.5487296554061229 + 1.7337912330808 i$
 $\text{sum}_{(n=1)}^{30000} 1/n^{(0.5 + I 60.8318)} \approx -2.650788357207551988 + 1.03928146111624664 i$
 $\text{sum}_{(n=1)}^{40000} 1/n^{(0.5 + I 60.8318)} \approx -1.8423873727550387 - 2.722931267141 i$
 $\text{sum}_{(n=1)}^{50000} 1/n^{(0.5 + I 60.8318)} \approx -3.6738925462601875 + 0.11672194917626 i$
 $\text{sum}_{(n=1)}^{60000} 1/n^{(0.5 + I 60.8318)} \approx -0.5101395283469986 - 3.9940798149840 i$
 $\text{sum}_{(n=1)}^{70000} 1/n^{(0.5 + I 60.8318)} \approx 0.345107743603913574 + 4.33546073692709 i$

$\text{sum}_{(n=1)}^{10000} 1/n^{(0.5 + I 65.1125)} \approx 0.49028801224185805 - 1.45548630463979056 i$
 $\text{sum}_{(n=1)}^{20000} 1/n^{(0.5 + I 65.1125)} \approx -1.5934503102107337 - 1.4760017962060699 i$
 $\text{sum}_{(n=1)}^{30000} 1/n^{(0.5 + I 65.1125)} \approx -2.3079525001853424 + 1.3225976512210 i$

$$\text{sum}_{(n=1)}^{40000} 1/n^{(0.5 + I 65.1125)} \approx -2.8264018242090684 + 1.20249913125036 i$$

$$\text{sum}_{(n=1)}^{50000} 1/n^{(0.5 + I 65.1125)} \approx 2.449923358541 + 2.40625614174 i$$

$$\text{sum}_{(n=1)}^{60000} 1/n^{(0.5 + I 65.1125)} \approx 0.37295105285906088357 + 3.743227015623 i$$

$$\text{sum}_{(n=1)}^{70000} 1/n^{(0.5 + I 65.1125)} \approx -2.65356867279149 - 3.0772360399269903 i$$

$$\text{sum}_{(n=1)}^{10000} 1/n^{(0.5 + I 67.0798)} \approx 1.29692801307552474520 - 0.7351019723858 i$$

$$\text{sum}_{(n=1)}^{20000} 1/n^{(0.5 + I 67.0798)} \approx -2.094598259182366 - 0.239315078757196 i$$

$$\text{sum}_{(n=1)}^{30000} 1/n^{(0.5 + I 67.0798)} \approx 0.9593349201214446 + 2.39717420693024 i$$

$$\text{sum}_{(n=1)}^{40000} 1/n^{(0.5 + I 67.0798)} \approx 2.1970750484683722508 + 2.0154137429884593 i$$

$$\text{sum}_{(n=1)}^{50000} 1/n^{(0.5 + I 67.0798)} \approx -0.29556281233847964 - 3.32025824414798 i$$

$$\text{sum}_{(n=1)}^{60000} 1/n^{(0.5 + I 67.0798)} \approx 0.8949219354524314 - 3.5401758160456 i$$

$$\text{sum}_{(n=1)}^{70000} 1/n^{(0.5 + I 67.0798)} \approx 2.442836282187517094 + 3.0964952387413174 i$$

$$\text{sum}_{(n=1)}^{10000} 1/n^{(0.5 + I 69.5464)} \approx -0.4635142072870359 + 1.36112942710240 i$$

$$\text{sum}_{(n=1)}^{20000} 1/n^{(0.5 + I 69.5464)} \approx -1.38911903007086 - 1.485025064529 i$$

$$\text{sum}_{(n=1)}^{30000} 1/n^{(0.5 + I 69.5464)} \approx 1.5577729481848078 + 1.9431139606612 i$$

$$\text{sum}_{(n=1)}^{40000} 1/n^{(0.5 + I 69.5464)} \approx 2.7773030316386957 - 0.745905598436249 i$$

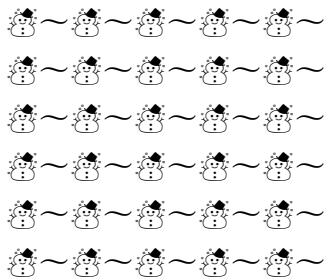
$$\text{sum}_{(n=1)}^{50000} 1/n^{(0.5 + I 69.5464)} \approx -3.206569683011677 + 0.23472718319821 i$$

$$\text{sum}_{(n=1)}^{60000} 1/n^{(0.5 + I 69.5464)} \approx -3.4610117193038356 + 0.652685099505784 i$$

$\sum_{(n=1)}^{70000} 1/n^{(0.5 + I 69.5464)} \approx 0.3367578015577242 - 3.78928108816798 i$

References

1) https://en.wikipedia.org/wiki/Riemann_hypothesis



Appendix

Original article

Riemann hypothesis

(Do they really converge to 0?)

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Abstract

$2^s/(2^{s-1}) * 3^s/(3^{s-1}) * 5^s/(5^{s-1}) * 7^s/(7^{s-1}) \dots$

Whether the above equation converges to 0 was verified.

Convergence is extremely slow, and divergence tendency was rather rather abundant when the prime number was 1000 or more.

It was thought that the above equation could possibly be an expression that can be composed only of real numbers.

Introduction

$$\zeta(s) = \sum_{n=1}^{\infty} \frac{1}{n^s} \tag{1}$$

$$\zeta(s) = \frac{2^s}{2^s - 1} \frac{3^s}{3^s - 1} \frac{5^s}{5^s - 1} \frac{7^s}{7^s - 1} \dots \tag{2}$$

List below as an example.

Example(a).

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^s-1),\{n,1000\}], \{s=0.88455622 + 14.524 i \} =$$

$$0.265871940946923 + 0.260238347039527 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^s-1),\{n,1300\}], \{s=0.88455622 + 14.524 i \} = 0.279942716350483 + 0.262382138789002 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^s-1),\{n,1000\}], \{s=0.88455622 + i14.1347\} = 0.267372169557029 + 0.036534340733185 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^s-1),\{n,1000\}], \{s=0.79 + i 14.1347 \} = 0.217899533447437 + 0.033289253858811 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^s-1),\{n,1300\}], \{s=0.88455622 + i 14.1347 \} = 0.256814279634957 + 0.037180567586996 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^s-1),\{n,1000\}], \{ s=0.1154 + 14.524 i \} = 4.11962 \times 10^{-9} + 6.61402 \times 10^{-8} i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^s-1),\{n,1200\}], \{ s=0.1154 + 14.524 i \} = 3.14031 \times 10^{13} + 1.26047 \times 10^{13} i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^s-1),\{n,1300\}], \{ s=0.1154 + 14.524 i \} = 148174. + 891998. i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^s-1),\{n,1350\}], \{ s=0.1154 + i14.524 \} = 0.353616 + 0.274539 i$$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], \{s=0.8355+i39\}=$
 $1.36911957078225 - 0.07835844114770 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], \{s=0.8355+i39\}=$
 $1.37738832193452 - 0.09265670774308 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], \{s=0.1645+i39\}=-$
 $0.00855717 - 0.0106338 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1100\}], \{$
 $s=0.1645+i39\}=19.38638414929417 - 0.29817811424546 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1200\}], \{$
 $s=0.1645+i39\}=0.3313856 - 1.104768 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], \{$
 $s=0.1645+i39\}=0.1184309737901299 - 0.0691326301941863 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], \{s=0.5+i14.1347\}=\text{cannot}$
 calculated
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], \{s=0.5+i14.1347\}=$
 $0.0925155784852525 + 0.0351207219432035 i$
 $\{\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}],$
 $\{s=0.5+i14.1347\}=\text{cannot calculated}$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], \{s=0.5+i14.1347\}=\text{cannot}$
 calculated
 $\text{product}[\text{prime}(n)^{\{0.5+i14.1347\}}/(\text{prime}(n)^{\{0.5+i14.1347\}-1}),\{n,\infty\}$
 $=\text{cannot calculated}$
 $\text{product}[\text{prime}(n)^{\{0.5+i14.1347\}}/(\text{prime}(n)^{\{-0.5+i14.1347\}}),\{n,\infty\}$
 $=\text{cannot calculated}$
 $\text{zeta}(-0.5+i14.1347)=-1.18446... - 0.314336... i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=0.5+i21.022] =\text{cannot}$
 calculated
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=0.5+i25.0108] =\text{cannot}$
 calculated
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=0.5+i2] =\text{cannot}$
 calculated
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=5+1I] =\text{cannot}$
 calculated
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=5+10I] =\text{cannot}$
 calculated

 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=-2]= 3.90155339... \times$
 10^{-20}

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=-2] = \text{cannot calculated}$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=-4] = 6.17761609... \times 10^{-40}$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=-4] = \text{cannot calculated}$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=-6] = 1.387283740... \times 10^{-59}$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=-6] = \text{cannot calculated}$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=-16] = 1.06137198... \times 10^{-157}$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=-16] = \text{cannot calculated}$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=-36] = 6.4296482725... \times 10^{-198}$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=-36] = \text{cannot calculated}$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=2] = 1.63307049049573922....$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=2] = \pi^2/6 = 1.6449340668482....$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=3] = 1.20189927...$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=3] = \text{cannot calculated}$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=4] = 1.082319965338454....$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=4] = \pi^4/90 = 1.082323233711138...$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=5] = 1.03692767494200648584...$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=5] = \text{cannot calculated}$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=6] = 1.01734305984....$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=6] = \pi^6/945 = 1.017343061984...$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=8] = 1.0040773561961920485...$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=8] = \pi^8/9450 = 1.004077356197944...$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=0.5+2] = 1.34149$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=1] = 6.3312287507233796...$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=1] = \text{cannot calculated}$

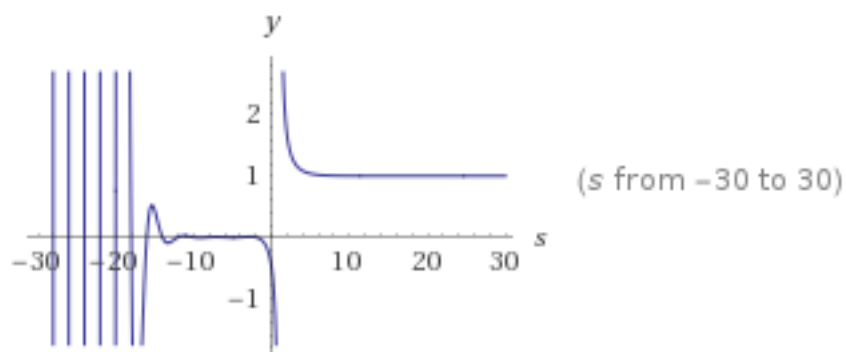
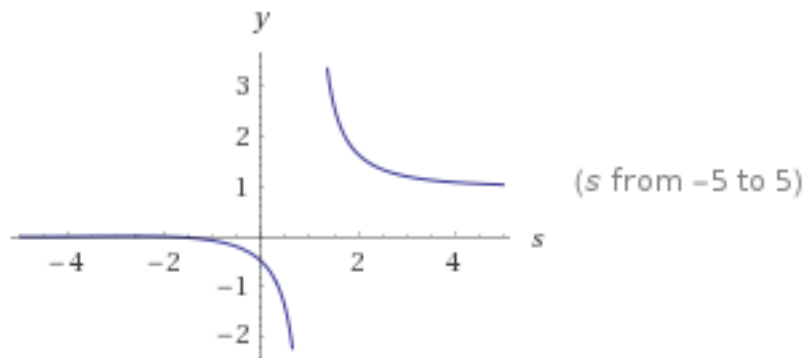
$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=10]=$$

$$1.0009945751278\dots$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=10]=\pi^{10}/93555=$$

$$1.0009945751\dots$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}]$$



Discussion

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], \{s=0.5+i14.1347\}$$

$$= 0.377652 + 0.0334658 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], \{s=0.5+i14.1347\}$$

$$= 0.213347 + 0.0240839 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i14.1347]$$

$$= 0.127566 + 0.0283298 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,20\}], [s=0.5+i14.1347]$$

$$= 0.0993201 + 0.0074479 i$$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,30\}], [s=0.5+i14.1347]$
 $= 0.0763729 + 0.0115101 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,40\}], [s=0.5+i14.1347]$
 $= 0.0784141 - 0.00403302 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,80\}], [s=0.5+i14.1347]$
 $= 0.07038 - 0.0110989 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,160\}], [s=0.5+i14.1347]$
 $= 0.0770881 - 0.0118563 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,300\}], [s=0.5+i14.1347]$
 $= 0.0619651 + 0.0335354 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i14.1347]$
 $= 0.0925155784852525 + 0.0351207219432035 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i14.1347]$
 $= 0.0205870612401611 + 0.0175173833712662 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i14.1347]$
 $= 0.0236476275066567 + 0.0329217483754596 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1400\}], [s=0.5+i14.1347]$
 $= \text{cannot calculate}$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i21.022]$
 $= 0.506267 - 0.0358867 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i21.022]$
 $= 0.259625 - 0.0721143 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i21.022]$
 $= 0.218131 - 0.0504925 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,20\}], [s=0.5+i21.022]$
 $= 0.177199 - 0.0543632 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,120\}], [s=0.5+i21.022]$
 $= 0.0759949 - 0.017568 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,320\}], [s=0.5+i21.022]$
 $= 0.0598123 - 0.0229864 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,520\}], [s=0.5+i21.022]$
 $= 0.0564780081596529 - 0.03885265369355867 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i21.022]$
 $= 0.0810434072565851 + 0.0170292248690552 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i21.022]$
 $= 0.0733483857858449 + 0.0219411283963124 i$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i21.022] \\ = 0.1101788403324873 + 0.0006482652372322 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i25.0108] \\ = 0.539436 + 0.195767 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i25.0108] \\ = 0.329809 + 0.192133 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i25.0108] \\ = 0.187922 + 0.035742 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i25.0108] \\ = 0.113093 + 0.0574211 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,200\}], [s=0.5+i25.0108] \\ = 0.113807 + 0.0487198 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,300\}], [s=0.5+i25.0108] \\ = 0.120129 + 0.0463811 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,400\}], [s=0.5+i25.0108] \\ = 0.0939364940085029 + 0.00948564888126129 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,500\}], [s=0.5+i25.0108] \\ = 0.0788647617769132 + 0.0064299591824090 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,600\}], [s=0.5+i25.0108] \\ = 0.1068217706639720 + 0.01051275715312875 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,700\}], [s=0.5+i25.0108] \\ = 0.0940882515680912 + 0.0654029681469763 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,800\}], [s=0.5+i25.0108] \\ = 0.0601324372859493 + 0.0171239622290952 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,900\}], [s=0.5+i25.0108] \\ = 0.1215484397090983 + 0.0419489116296102 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i25.0108] \\ = 0.0566503142350682 + 0.0201764891112796 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1200\}], [s=0.5+i25.0108] \\ = 0.0752348397695963 - 0.0063238237639172 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i25.0108] \\ = 0.0533173607716765 + 0.0447443983884782 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i25.0108] \\ = 0.0854559695534404 + 0.0687263613741341 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1400\}], [s=0.5+i25.0108] \\ = \text{cannot calculate}$$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i30.4248]$
 $= 0.34629 - 0.332933 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i30.4248]$
 $= 0.329357 - 0.155893 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i30.4248]$
 $= 0.151369 - 0.143805 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,20\}], [s=0.5+i30.4248]$
 $= 0.136511 - 0.0967734 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,40\}], [s=0.5+i30.4248]$
 $= 0.123619 - 0.0477287 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,80\}], [s=0.5+i30.4248]$
 $= 0.104979 - 0.0647724 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,160\}], [s=0.5+i30.4248]$
 $= 0.111697 - 0.0610105 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,320\}], [s=0.5+i30.4248]$
 $= 0.102568 - 0.0342745 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i30.4248]$
 $= 0.0548568792970041 - 0.0650018624254304 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1200\}], [s=0.5+i30.4248]$
 $= 0.0539981231806227 - 0.0718148037078559 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i30.4248]$
 $= 0.0654390365225221 - 0.0191848204203633 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i30.4248]$
 $= 0.0999719129954261 - 0.0348805486773332 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1400\}], [s=0.5+i30.4248]$
 $= \text{cannot calculate}$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i32.9350]$
 $= 0.361634 + 0.436996 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i32.9350]$
 $= 0.389821 + 0.151269 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i32.9350]$
 $= 0.23851 + 0.0994475 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i32.9350]$
 $= 0.148803 + 0.103849 i$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,20\}], [s=0.5+i32.9350]$
 $= 0.165508 + 0.119011 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i32.9350]$
 $= 0.0983761 + 0.0841706 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,200\}], [s=0.5+i32.9350]$
 $= 0.111654 + 0.0659845 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,600\}], [s=0.5+i32.9350]$
 $= 0.0587750921725233 + 0.0643533427180150 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i32.9350]$
 $= 0.0665507025489664 + 0.0753272749125431 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1200\}], [s=0.5+i32.9350]$
 $= 0.0776863736204299 + 0.0838956395913934 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i32.9350]$
 $= 0.0681181682902927 + 0.0251664185362439 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i32.9350]$
 $= 0.0488420355218018 + 0.0488876968109086 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1400\}], [s=0.5+i32.9350]$
 $= \text{cannot calculate}$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i37.5861]$
 $= 0.662167 - 0.465778 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i37.5861]$
 $= 0.466129 - 0.0663061 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i37.5861]$
 $= 0.387315 - 0.110532 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,40\}], [s=0.5+i37.5861]$
 $= 0.232772 - 0.0785726 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,400\}], [s=0.5+i37.5861]$
 $= 0.1353063569477743 - 0.0696071170557717 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i37.5861]$
 $= 0.0921358554972438 - 0.0320010390700539 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i37.5861]$
 $= 0.1086255358658522 - 0.0680554946041234 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i37.5861]$
 $= 0.0895952637914474 - 0.0260528909344787 i$

$$\begin{aligned} & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i40.9187] \\ & = 0.594355 - 0.388383 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i40.9187] \\ & = 0.378882 - 0.133335 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i40.9187] \\ & = 0.253207 - 0.0533546 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i40.9187] \\ & = 0.126478 - 0.0139816 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i40.9187] \\ & = 0.0842070345605124 - 0.0449075058788713 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i40.9187] \\ & = 0.0958678634387273 - 0.0498338879249424 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i40.9187] \\ & = 0.0680632641808921 - 0.0259102753591269 i \end{aligned}$$

$$\begin{aligned} & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i43.3271] \\ & = 0.387273 + 0.438802 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i43.3271] \\ & = 0.602852 + 0.201332 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i43.3271] \\ & = 0.356195 + 0.244084 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,8\}], [s=0.5+i43.3271] \\ & = 0.286547 + 0.137597 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i43.3271] \\ & = 0.25859 + 0.104947 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i43.3271] \\ & = 0.139457 + 0.101296 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i43.3271] \\ & = 0.0630445400724399 + 0.0795278251781460 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i43.3271] \\ & = 0.0604817697881812 + 0.0851958614850022 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i43.3271] \\ & = 0.109655464859025 + 0.091666294613241 i \end{aligned}$$

$$\begin{aligned} & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i48.0051] \\ & = 0.352778 - 0.332182 i \end{aligned}$$

$$\begin{aligned}
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i48.0051] \\
& = 0.365422 - 0.346586 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i48.0051] \\
& = 0.226617 - 0.267092 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,8\}], [s=0.5+i48.0051] \\
& = 0.186604 - 0.158739 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i48.0051] \\
& = 0.263028 - 0.129222 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i48.0051] \\
& = 0.108987 - 0.105554 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i48.0051] \\
& = 0.0420939558943280 - 0.0748907389119029 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i48.0051] \\
& = 0.0576050312909078 - 0.0563671235348613 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i48.0051] \\
& = 0.0779355627730564 - 0.088725240158172 i
\end{aligned}$$

$$\begin{aligned}
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i49.7738] \\
& = 0.414443 + 0.184089 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i49.7738] \\
& = 0.237385 + 0.197494 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i49.7738] \\
& = 0.341823 + 0.179804 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,8\}], [s=0.5+i49.7738] \\
& = 0.271919 + 0.0646094 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i49.7738] \\
& = 0.234739 + 0.154132 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i49.7738] \\
& = 0.118287 + 0.0639912 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i49.7738] \\
& = 0.0853972356838811 + 0.0624669726333817 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i49.7738] \\
& = 0.0927770370532244 + 0.0290553422776424 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i49.7738] \\
& = 0.0634320845423274 + 0.0442654597985283 i
\end{aligned}$$

$$\begin{aligned}
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i52.9703] \\
& = 0.957726 + 0.259615 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i52.9703] \\
& = 0.511406 + 0.122876 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i52.9703] \\
& = 0.440348 + 0.0405441 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i52.9703] \\
& = 0.39701 + 0.137965 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i52.9703] \\
& = 0.203966 + 0.0598304 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i52.9703] \\
& = 0.1242819647452082 + 0.0274983062885220 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i52.9703] \\
& = 0.167167745839329 + 0.061200264286554 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i52.9703] \\
& = 0.135765840524732 + 0.012849466931192 i
\end{aligned}$$

$$\begin{aligned}
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i56.4462] \\
& = 1.18789 - 0.0636653 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i56.4462] \\
& = 0.593433 - 0.0990827 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i56.4462] \\
& = 0.618563 - 0.128434 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,8\}], [s=0.5+i56.4462] \\
& = 0.398277 - 0.131197 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i56.4462] \\
& = 0.343641 - 0.290229 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i56.4462] \\
& = 0.195861 - 0.0666635 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i56.4462] \\
& = 0.1072003055265527 - 0.0585868208054271 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i56.4462] \\
& = 0.144024845324995 - 0.0778129275329508 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i56.4462] \\
& = 0.103602668697241 - 0.0498531004280057 i
\end{aligned}$$

$$\begin{aligned}
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i59.347] \\
& = 0.398034 - 0.0626195 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i59.347] \\
& = 0.220079 - 0.233103 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i59.347] \\
& = 0.168053 - 0.207246 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,8\}], [s=0.5+i59.347] \\
& = 0.256395 - 0.114389 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i59.347] \\
& = 0.251452 - 0.029267 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i59.347] \\
& = 0.106294 - 0.071101 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i59.347] \\
& = 0.0595365243904075 - 0.0250920356192947 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i59.347] \\
& = 0.0555607681639736 - 0.0364034472964299 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i59.347] \\
& = 0.0733222273325398 - 0.0196183053988868 i
\end{aligned}$$

$$\begin{aligned}
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i60.8318] \\
& = 0.341495 + 0.377987 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i60.8318] \\
& = 0.0822419 + 0.413191 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i60.8318] \\
& = 0.109173 + 0.467557 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i60.8318] \\
& = 0.0837407 + 0.22717 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i60.8318] \\
& = 0.0478625 + 0.123679 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i60.8318] \\
& = 0.0344568785771721 + 0.0772946980089417 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i60.8318] \\
& = 0.0359487592388053 + 0.0679248399553758 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i60.8318] \\
& = 0.0525158803794204 + 0.0941780735565609 i
\end{aligned}$$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i65.1125]$
 $= 0.380781 - 0.589828 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i65.1125]$
 $= 0.315121 - 0.556051 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i65.1125]$
 $= 0.47053 - 0.364258 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,8\}], [s=0.5+i65.1125]$
 $= 0.287343 - 0.297829 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i65.1125]$
 $= 0.309815 - 0.249738 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i65.1125]$
 $= 0.174057 - 0.135539 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i65.1125]$
 $= 0.1202226973433774 - 0.0789887705572783 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i65.1125]$
 $= 0.1324583600403318 - 0.0879530358433079 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i65.1125]$
 $= 0.0874813592936400 - 0.100041608986563 i$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i67.0798]$
 $= 0.491082 + 0.115201 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i67.0798]$
 $= 0.540271 + 0.0787367 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i67.0798]$
 $= 0.35284 + 0.0475876 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,8\}], [s=0.5+i67.0798]$
 $= 0.281386 - 0.0511258 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i67.0798]$
 $= 0.284469 - 0.0391593 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i67.0798]$
 $= 0.175742 - 0.0119937 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i67.0798]$
 $= 0.1021337227241550 + 0.0041100932021340 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i67.0798]$
 $= 0.1162963261377133 + 0.0177035253652661 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i67.0798]$
 $= 0.114901999894346 - 0.018682251339301 i$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i69.5464]$
 $= 0.791132 - 0.140947 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i69.5464]$
 $= 0.597654 + 0.220056 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i69.5464]$
 $= 0.386812 + 0.106589 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,8\}], [s=0.5+i69.5464]$
 $= 0.279649 + 0.0601736 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i69.5464]$
 $= 0.249018 + 0.0561291 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i69.5464]$
 $= 0.188525 + 0.0492936 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i69.5464]$
 $= 0.1571027284707269 + 0.0387311308806077 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i69.5464]$
 $= 0.1221183573498265 + 0.0275501570395058 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i69.5464]$
 $= 0.148527246151295 + 0.061260374773663 i$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i72.0672]$
 $= 1.16013 + 1.23254 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i72.0672]$
 $= 0.876634 + 0.42437 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i72.0672]$
 $= 0.562763 + 0.204358 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,8\}], [s=0.5+i72.0672]$
 $= 0.406811 + 0.263395 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i72.0672]$
 $= 0.390397 + 0.361653 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i72.0672]$
 $= 0.263308 + 0.0806071 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i72.0672]$
 $= 0.1498571865964130 + 0.0794656596227694 i$
 $\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i72.0672]$
 $= 0.196318371686328 + 0.047454767781787 i$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i72.0672] \\ = 0.149753607872424 + 0.073282414948645 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i75.7047] \\ = 0.354014 - 0.468309 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i75.7047] \\ = 0.106994 - 0.294192 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i75.7047] \\ = 0.35902 - 0.354272 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,8\}], [s=0.5+i75.7047] \\ = 0.249381 - 0.406639 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i75.7047] \\ = 0.305591 - 0.279846 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i75.7047] \\ = 0.0832787 - 0.127981 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i75.7047] \\ = 0.0777966777004996 - 0.0855869073114268 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i75.7047] \\ = 0.0502964543382511 - 0.0708363512571197 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i75.7047] \\ = 0.0631861330215501 - 0.0948914980242509 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i77.1448] \\ = 0.371784 + 0.000475416 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i77.1448] \\ = 0.339775 + 0.320968 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i77.1448] \\ = 0.22452 + 0.174944 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,8\}], [s=0.5+i77.1448] \\ = 0.252993 + 0.210681 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i77.1448] \\ = 0.208204 + 0.128378 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i77.1448] \\ = 0.107291 + 0.0409591 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i77.1448] \\ = 0.0895582534182579 + 0.0333493306127753 i$$

$$\begin{aligned} & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i77.1448] \\ & = 0.0658699303945487 + 0.0282714089031475 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i77.1448] \\ & = 0.0825108602038927 + 0.0159785422065299 i \end{aligned}$$

$$\begin{aligned} & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i79.3374] \\ & = 0.380323 + 1.06137 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i79.3374] \\ & = 0.344207 + 0.564736 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i79.3374] \\ & = 0.407335 + 0.279223 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,8\}], [s=0.5+i79.3374] \\ & = 0.438522 + 0.312443 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i79.3374] \\ & = 0.285986 + 0.257881 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i79.3374] \\ & = 0.17815 + 0.121896 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i79.3374] \\ & = 0.1355659011279398 + 0.0973849106969286 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i79.3374] \\ & = 0.1021393287384217 + 0.118037865893594 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i79.3374] \\ & = 0.097918921572898 + 0.081984599865823 i \end{aligned}$$

$$\begin{aligned} & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i82.9104] \\ & = 0.559189 - 0.558322 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i82.9104] \\ & = 0.363752 - 0.492155 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i82.9104] \\ & = 0.514062 - 0.264489 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,8\}], [s=0.5+i82.9104] \\ & = 0.506877 - 0.214425 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i82.9104] \\ & = 0.336731 - 0.226722 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i82.9104] \\ & = 0.226146 - 0.158813 i \end{aligned}$$

$$\begin{aligned} & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i82.9104] \\ & = 0.1054038747490071 - 0.1305233438653630 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i82.9104] \\ & = 0.129722727270062 - 0.1299711142820603 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i82.9104] \\ & = 0.139660279582208 - 0.089340306127117 i \end{aligned}$$

$$\begin{aligned} & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i84.7355] \\ & = 0.689194 + 0.14951 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i84.7355] \\ & = 0.544034 + 0.116818 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i84.7355] \\ & = 0.374964 + 0.0432969 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,8\}], [s=0.5+i84.7355] \\ & = 0.359862 + 0.027605 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i84.7355] \\ & = 0.285673 - 0.0578493 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i84.7355] \\ & = 0.22516 + 0.0372672 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i84.7355] \\ & = 0.1547999668802079 + 0.0398153399168179 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i84.7355] \\ & = 0.1431934420291319 + 0.0337569114547540 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i84.7355] \\ & = 0.1239050011053785 + 0.0090958824487874 i \end{aligned}$$

$$\begin{aligned} & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i87.4253] \\ & = 0.512343 - 0.0467799 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i87.4253] \\ & = 0.46394 - 0.283016 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i87.4253] \\ & = 0.343922 - 0.190301 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,8\}], [s=0.5+i87.4253] \\ & = 0.35569 - 0.214614 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i87.4253] \\ & = 0.387518 - 0.0978681 i \end{aligned}$$

$$\begin{aligned} & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i87.4253] \\ & = 0.130133 - 0.0407992 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i87.4253] \\ & = 0.1076552586913424 - 0.0122182074946771 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i87.4253] \\ & = 0.1105763127269194 - 0.0192672907153070 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i87.4253] \\ & = 0.0919861734426403 - 0.0326149627010606 i \end{aligned}$$

$$\begin{aligned} & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i88.8091] \\ & = 0.437907 + 0.425294 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i88.8091] \\ & = 0.147119 + 0.375158 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i88.8091] \\ & = 0.191402 + 0.451246 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,8\}], [s=0.5+i88.8091] \\ & = 0.189468 + 0.504962 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i88.8091] \\ & = 0.18038 + 0.38151 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i88.8091] \\ & = 0.0996069 + 0.176682 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i88.8091] \\ & = 0.0644654441784986 + 0.1097283579097019 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i88.8091] \\ & = 0.0768428577895150 + 0.1136535498069152 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i88.8091] \\ & = 0.0748945129974856 + 0.0870633087349146 i \end{aligned}$$

$$\begin{aligned} & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i92.4919] \\ & = 0.272198 - 1.04069 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i92.4919] \\ & = 0.512182 - 0.45992 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i92.4919] \\ & = 0.449275 - 0.390945 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,8\}], [s=0.5+i92.4919] \\ & = 0.374845 - 0.295732 i \end{aligned}$$

$$\begin{aligned} & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i92.4919] \\ & = 0.316701 - 0.323122 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i92.4919] \\ & = 0.185264 - 0.181854 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i92.4919] \\ & = 0.153749644766168 - 0.1162349873278976 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i92.4919] \\ & = 0.1224380884546225 - 0.111660849113900 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i92.4919] \\ & = 0.155712626906861 - 0.103916996766394 i \end{aligned}$$

$$\begin{aligned} & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i94.6513] \\ & = 0.381547 - 0.0142201 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i94.6513] \\ & = 0.21377 - 0.202223 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i94.6513] \\ & = 0.202132 - 0.225844 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,8\}], [s=0.5+i94.6513] \\ & = 0.162262 - 0.167492 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i94.6513] \\ & = 0.150025 - 0.165188 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i94.6513] \\ & = 0.0929646 - 0.0577548 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i94.6513] \\ & = 0.0858778885118157 - 0.0575361270594186 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i94.6513] \\ & = 0.0729306901538976 - 0.0434007187940284 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i94.6513] \\ & = 0.0834801682377031 - 0.0567408885966960 i \end{aligned}$$

$$\begin{aligned} & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i95.8706] \\ & = 0.399312 + 0.365186 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i95.8706] \\ & = 0.129552 + 0.291117 i \\ & \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i95.8706] \\ & = 0.154201 + 0.254503 i \end{aligned}$$

product[prime(n)^s/(prime(n)^s-1),{n,8}], [s=0.5+i95.8706]
= 0.228366 + 0.293689 i
product[prime(n)^s/(prime(n)^s-1),{n,10}], [s=0.5+i95.8706]
= 0.197365 + 0.30213 i
product[prime(n)^s/(prime(n)^s-1),{n,100}], [s=0.5+i95.8706]
= 0.0736847 + 0.101874 i
product[prime(n)^s/(prime(n)^s-1),{n,1000}], [s=0.5+i95.8706]
= 0.0638337117558314 + 0.0962527460612394 i
product[prime(n)^s/(prime(n)^s-1),{n,1300}], [s=0.5+i95.8706]
= 0.0751287495945912 + 0.0755938932874673 i
product[prime(n)^s/(prime(n)^s-1),{n,1350}], [s=0.5+i95.8706]
=0.071517555262855 + 0.095310745325878 i

References

1) https://en.wikipedia.org/wiki/Riemann_hypothesis

postscript

Did Riemann hypothesis seem to be a conspiracy because I was caught in a protracted cold, because I stayed at home and solved Riemann hypothesis for a long time?

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



**(home) mmm82889@yahoo.co.jp I would like to receive an email.
I will not answer the phone.
Currently 57 years old
Born on November 26, 1961**

(I am very poor of English. Almost all document are google-translation.) When converted to English by Google translation, it becomes cryptic to me.

But, I read letter by google translation. In my case, if you translate it into English by google translation, I do not know what is written in my paper. For me, foreign languages such as English (actually not good at Japanese) is a demon. As soon as it is translated into English, it turns into a cipher for me.

postscript

The cold when I found the first one is still continuing now and this may be my last post. I may have discovered another by surging my energy and it may not be counter example.

It may be written as a will.

I am writing this at the limit of power.

I write this with spitting blood.

2019/03/06 5:21

2019/03/06 5:21