

Original article

Riemann hypothesis (Do they really converge to 0?)

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Abstract

$2^s/(2^s-1)*3^s/(3^s-1)*5^s/(5^s-1)*7^s/(7^s-1).....$

Whether the above equation converges to 0 was verified.

Convergence is extremely slow, and divergence tendency was 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

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

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

List below as an example.

Example(a).

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^s-1),\{n,\infty\}]$, $\{s=0.5+i14.1347\}$ =cannot calculated
 $\{\text{product}[\text{prime}(n)^s/(\text{prime}(n)^s-1),\{n,\infty\}], \{s=0.5+i14.1347\}\}$ =cannot calculated

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\},\{s=0.5+i14.1347\}]$ =cannot calculated
 $\text{product}[\text{prime}(n)^{\{0.5+i14.1347\}}/(\text{prime}(n)^{\{0.5+i14.1347\}-1}),\{n,\infty\}]$ =cannot calculated

$\text{product}[\text{prime}(n)^{\{0.5+i14.1347\}}/(\text{prime}(n)^{\{-0.5+i14.1347\}}),\{n,\infty\}]$ =cannot calculated

$\zeta(-0.5+i14.1347) = -1.18446... - 0.314336... i$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=0.5+i21.022]$ =cannot calculated

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

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=0.5+i2]$ =cannot calculated

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

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=5+10i]$ =cannot calculated

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

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=-2]$ =cannot calculated

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=-4] = 6.17761609... \times 10^{-40}$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=-4]$ =cannot calculated

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=-6] = 1.387283740... \times 10^{-59}$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=-6]$ =cannot calculated

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=-16] = 1.06137198... \times 10^{-157}$

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,\infty\}], [s=-16]$ =cannot calculated

$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=-36] = 6.4296482725... \times 10^{-198}$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

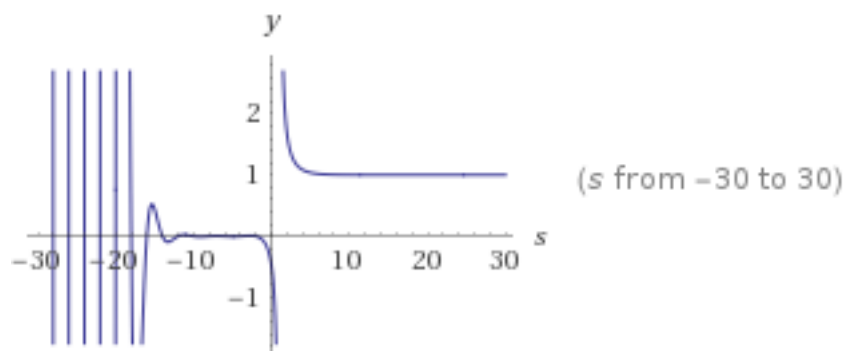
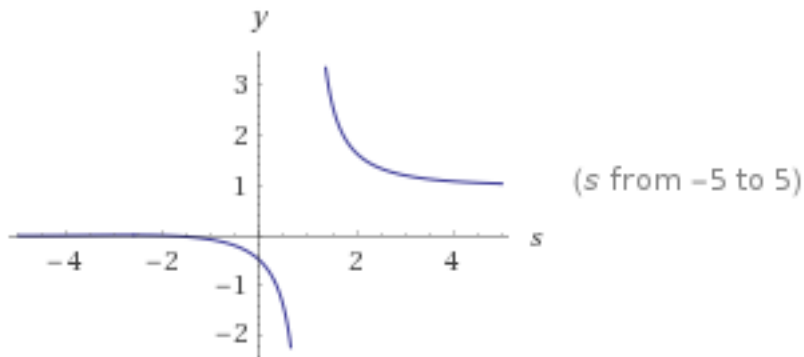
$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=1] = 6.3312287507233796...$

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

product[prime(n)^s/(prime(n)^s-1),{n,2}], [s=0.5+i21.022]
 = 0.506267 - 0.0358867 i
 product[prime(n)^s/(prime(n)^s-1),{n,4}], [s=0.5+i21.022]
 = 0.259625 - 0.0721143 i
 product[prime(n)^s/(prime(n)^s-1),{n,10}], [s=0.5+i21.022]
 = 0.218131 - 0.0504925 i
 product[prime(n)^s/(prime(n)^s-1),{n,20}], [s=0.5+i21.022]
 = 0.177199 - 0.0543632 i
 product[prime(n)^s/(prime(n)^s-1),{n,120}], [s=0.5+i21.022]
 = 0.0759949 - 0.017568 i
 product[prime(n)^s/(prime(n)^s-1),{n,320}], [s=0.5+i21.022]
 = 0.0598123 - 0.0229864 i
 product[prime(n)^s/(prime(n)^s-1),{n,520}], [s=0.5+i21.022]
 = 0.0564780081596529 - 0.03885265369355867 i
 product[prime(n)^s/(prime(n)^s-1),{n,1000}], [s=0.5+i21.022]
 = 0.0810434072565851 + 0.0170292248690552 i
 product[prime(n)^s/(prime(n)^s-1),{n,1300}], [s=0.5+i21.022]
 = 0.0733483857858449 + 0.0219411283963124 i
 product[prime(n)^s/(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
 product[prime(n)^s/(prime(n)^s-1),{n,100}], [s=0.5+i32.9350]
 = 0.0983761 + 0.0841706 i
 product[prime(n)^s/(prime(n)^s-1),{n,200}], [s=0.5+i32.9350]
 = 0.111654 + 0.0659845 i
 product[prime(n)^s/(prime(n)^s-1),{n,600}], [s=0.5+i32.9350]
 = 0.0587750921725233 + 0.0643533427180150 i
 product[prime(n)^s/(prime(n)^s-1),{n,1000}], [s=0.5+i32.9350]
 = 0.0665507025489664 + 0.0753272749125431 i
 product[prime(n)^s/(prime(n)^s-1),{n,1200}], [s=0.5+i32.9350]
 = 0.0776863736204299 + 0.0838956395913934 i
 product[prime(n)^s/(prime(n)^s-1),{n,1300}], [s=0.5+i32.9350]
 = 0.0681181682902927 + 0.0251664185362439 i
 product[prime(n)^s/(prime(n)^s-1),{n,1350}], [s=0.5+i32.9350]
 = 0.0488420355218018 + 0.0488876968109086 i
 product[prime(n)^s/(prime(n)^s-1),{n,1400}], [s=0.5+i32.9350]
 =cannot calculate

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

product[prime(n)^s/(prime(n)^s-1),{n,2}], [s=0.5+i40.9187]

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

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

$$\begin{aligned}
&\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i48.0051] \\
&= 0.352778 - 0.332182 i \\
&\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i48.0051]
\end{aligned}$$

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

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

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i52.9703]$$

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

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

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i59.347]$$

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

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

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i65.1125]$$

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

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

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

$$\begin{aligned}
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i72.0672] \\
& = 1.16013 + 1.23254 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i72.0672] \\
& = 0.876634 + 0.42437 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i72.0672] \\
& = 0.562763 + 0.204358 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,8\}], [s=0.5+i72.0672] \\
& = 0.406811 + 0.263395 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i72.0672] \\
& = 0.390397 + 0.361653 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i72.0672] \\
& = 0.263308 + 0.0806071 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i72.0672] \\
& = 0.1498571865964130 + 0.0794656596227694 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i72.0672] \\
& = 0.196318371686328 + 0.047454767781787 i \\
& \text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i72.0672]
\end{aligned}$$

$$= 0.149753607872424 + 0.073282414948645 i$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i77.1448]$$

$$= 0.0658699303945487 + 0.0282714089031475 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i77.1448]$$

$$= 0.0825108602038927 + 0.0159785422065299 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i79.3374]$$

$$= 0.380323 + 1.06137 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i79.3374]$$

$$= 0.344207 + 0.564736 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i79.3374]$$

$$= 0.407335 + 0.279223 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,8\}], [s=0.5+i79.3374]$$

$$= 0.438522 + 0.312443 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i79.3374]$$

$$= 0.285986 + 0.257881 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i79.3374]$$

$$= 0.17815 + 0.121896 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i79.3374]$$

$$= 0.1355659011279398 + 0.0973849106969286 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1300\}], [s=0.5+i79.3374]$$

$$= 0.1021393287384217 + 0.118037865893594 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1350\}], [s=0.5+i79.3374]$$

$$= 0.097918921572898 + 0.081984599865823 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i82.9104]$$

$$= 0.559189 - 0.558322 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i82.9104]$$

$$= 0.363752 - 0.492155 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i82.9104]$$

$$= 0.514062 - 0.264489 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,8\}], [s=0.5+i82.9104]$$

$$= 0.506877 - 0.214425 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i82.9104]$$

$$= 0.336731 - 0.226722 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i82.9104]$$

$$= 0.226146 - 0.158813 i$$

$$\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,1000\}], [s=0.5+i82.9104]$$

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

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

$$\begin{aligned}
&\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i87.4253] \\
&= 0.512343 - 0.0467799 i \\
&\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i87.4253] \\
&= 0.46394 - 0.283016 i \\
&\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i87.4253] \\
&= 0.343922 - 0.190301 i \\
&\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,8\}], [s=0.5+i87.4253] \\
&= 0.35569 - 0.214614 i \\
&\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i87.4253] \\
&= 0.387518 - 0.0978681 i \\
&\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,100\}], [s=0.5+i87.4253]
\end{aligned}$$

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

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

$$\begin{aligned}
&\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i92.4919] \\
&= 0.272198 - 1.04069 i \\
&\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i92.4919] \\
&= 0.512182 - 0.45992 i \\
&\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i92.4919] \\
&= 0.449275 - 0.390945 i \\
&\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,8\}], [s=0.5+i92.4919] \\
&= 0.374845 - 0.295732 i \\
&\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,10\}], [s=0.5+i92.4919]
\end{aligned}$$

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

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

$$\begin{aligned}
&\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,2\}], [s=0.5+i95.8706] \\
&= 0.399312 + 0.365186 i \\
&\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,4\}], [s=0.5+i95.8706] \\
&= 0.129552 + 0.291117 i \\
&\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,6\}], [s=0.5+i95.8706] \\
&= 0.154201 + 0.254503 i \\
&\text{product}[\text{prime}(n)^s/(\text{prime}(n)^{s-1}),\{n,8\}], [s=0.5+i95.8706]
\end{aligned}$$

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

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.



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.

1/9/19 8:50 AM

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