

Original article

Proof of Riemann hypothesis

Toshiro Takami

mmm82889@yahoo.co.jp

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Abstract

Let a be real number of $0 < a < 1$.

$$(1) = \cos[x \ln 1]/1^a - \cos[x \ln 2]/2^a + \cos[x \ln 3]/3^a - \cos[x \ln 4]/4^a + \cos[x \ln 5]/5^a \dots$$

$$(2) = \sin[x \ln 1]/1^a - \sin[x \ln 2]/2^a + \sin[x \ln 3]/3^a - \sin[x \ln 4]/4^a + \sin[x \ln 5]/5^a \dots$$

Then, at this time,

The imaginary solution of the equation $(1)^2 + (2)^2 = 0$ exists only when $a = 0.5$.

x is an infinite non-trivial zero. At the same time satisfying (1) and (2) is x , that is, an infinitely present non-trivial zero.

Introduction

$$(1) = [1 - \cos(x \ln 2)/\sqrt{2} + \cos(x \ln 3)/\sqrt{3} - \cos(x \ln 4)/\sqrt{4} + \cos(x \ln 5)/\sqrt{5} - \dots] = 0$$

$$(2) = [\sin(x \ln 2)/\sqrt{2} - \sin(x \ln 3)/\sqrt{3} + \sin(x \ln 4)/\sqrt{4} - \sin(x \ln 5)/\sqrt{5} + \dots] = 0$$

The condition satisfying (1) and (2) at the same time is x of $\zeta(s) = 0.5 + x i$.

The real solution of the equation $(1)^2+(2)^2=0$ exists only when $a=0.5$.

There are infinite number of common solutions.

That is, x has infinite number.

Here $i14.1347$ is an imaginary number, but only 14.1347 excluding i is called a real number.

x in the equation below is a real number with the same number removed from ix , $i14.1347$.

Discussion

“Let a be real number of $0 < a < 1$.

A real solution that satisfies the equation for x will exist only when $a=0.5$.”

$$(1)^2+(2)^2=0$$

Equal “Let a be a real number of $0 < a < 1$.

If $a \neq 0.5$, the equation $(1)^2+(2)^2=0$ will have no real solution.

And

If $a \neq 0.5$, it will always be $(1)^2+(2)^2 > 0$ for any real number x .”

The following equation is derived.

$$\begin{aligned}
& 1 - [1/2^c - 1/3^c + 1/4^c - \dots] \\
& + [(\ln 2)^{2/2^c} - (\ln 3)^{2/3^c} + (\ln 4)^{2/4^c} - (\ln 5)^{2/5^c} \dots] * x^{2/2!} \\
& - [(\ln 2)^{4/2^c} - (\ln 3)^{4/3^c} + (\ln 4)^{4/4^c} - (\ln 5)^{4/5^c} \dots] * x^{4/4!} \\
& + [(\ln 2)^{6/2^c} - (\ln 3)^{6/3^c} + (\ln 4)^{6/4^c} - (\ln 5)^{6/5^c} \dots] * x^{6/6!} \\
& - [(\ln 2)^{8/2^c} - (\ln 3)^{8/3^c} + (\ln 4)^{8/4^c} - (\ln 5)^{8/5^c} \dots] * x^{8/8!} \\
& \dots = 0 \dots (1)
\end{aligned}$$

$$\begin{aligned}
& [(\ln 2)^{1/2^c} - (\ln 3)^{1/3^c} + (\ln 4)^{1/4^c} - (\ln 5)^{1/5^c} + \dots] * x^{1/1!} \\
& - [(\ln 2)^{3/2^c} - (\ln 3)^{3/3^c} + (\ln 4)^{3/4^c} - (\ln 5)^{3/5^c} + \dots] * x^{3/3!} \\
& + [(\ln 2)^{5/2^c} - (\ln 3)^{5/3^c} + (\ln 4)^{5/4^c} - (\ln 5)^{5/5^c} + \dots] * x^{5/5!} \\
& - [(\ln 2)^{7/2^c} - (\ln 3)^{7/3^c} + (\ln 4)^{7/4^c} - (\ln 5)^{7/5^c} + \dots] * x^{7/7!} \dots = 0 \dots (2)
\end{aligned}$$

This is transformed as follows.

$$(1) = \text{abs}[\cos[x*\ln 1]/1^a - \cos[x*\ln 2]/2^a + \cos[x*\ln 3]/3^a - \cos[x*\ln 4]/4^a + \dots]=0$$

$$(2) = \text{abs}[\sin[x*\ln 1]/1^a - \sin[x*\ln 2]/2^a + \sin[x*\ln 3]/3^a - \sin[x*\ln 4]/4^a + \dots]=0$$

equal

$$(1) = \text{abs}[1 - 2^{(-a)}*\cos[x*\ln 2] + 3^{(-a)}*\cos[x*\ln 3] - 4^{(-a)}*\cos[x*\ln 4] + \dots]=0$$

$$(2) = \text{abs}[-2^{(-a)}*\sin[x*\ln 2] + 3^{(-a)}*\sin[x*\ln 3] - 4^{(-a)}*\sin[x*\ln 4] + \dots]=0$$

Functions of $y=(1)^2+(2)^2$ may have contacts on the x axis only when $a=0.5$.

“Let a be a real number of $0 < a < 1$.

Many real solution that satisfies the equation[$y=(1)^2+(2)^2=0$] for x will exist only when a is 0.5.”

Equal

“Let a be a real number of $0 < a < 1$. If a is not 0.5, the equation[$y=(1)^2+(2)^2=0$] for x will not have imaginary solutions.”

Here i 14.1347 is an imaginary number, but only 14.1347 excluding i is called a real number.

Given the graphs (x-y coordinates) of $y=(1)$ and $y=(2)$,

The intersection of these function curves exists on the x axis only when $a=0.5$, It is the same as saying.

Both curves are curves that cross infinitely with the x axis.

For example

$$\sum_{n=1}^{\infty} [\cos(x*\ln(2n-1))/(2n-1)^{0.5} - \cos(x*\ln(2n))/(2n)^{0.5}] = 0$$

no result

$$\sum_{n=1}^{\infty} [\sin(x*\ln(2n-1))/(2n-1)^{0.5} - \sin(x*\ln(2n))/(2n)^{0.5}] = 0$$

no result

$$\sum_{n=1}^8 [\cos(x*\ln(2n-1) / (2n-1)^{0.5}) - \cos(x*\ln(2n) / (2n)^{0.5})] = 0$$

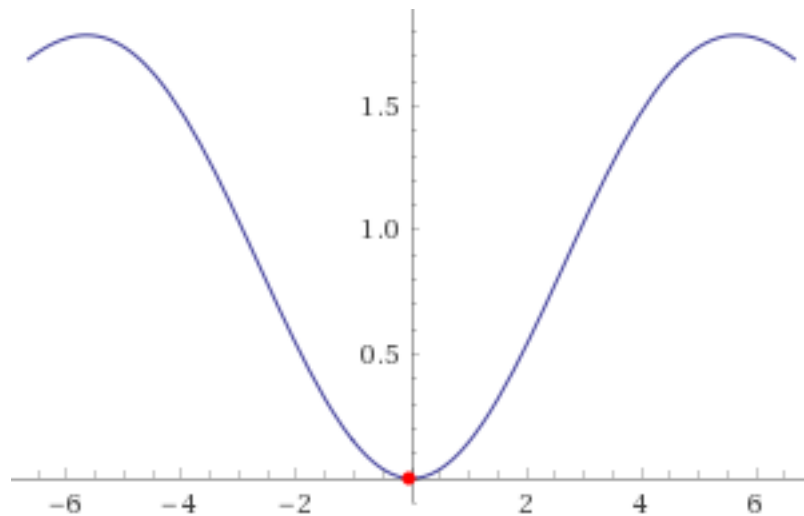
$$x \approx \pm 38.2185101049319\dots$$

$$x \approx \pm 34.7774103370118\dots$$

$$x \approx \pm 27.9883414031635\dots$$

$$x \approx \pm 24.2276551073765\dots$$

$$x = 0$$



$$\sum_{n=1}^8 [\{\sin(x \cdot \ln(2n-1))/(2n-1)^{0.5}\} - \{\sin(x \cdot \ln(2n))/(2n)^{0.5}\}] = 0$$

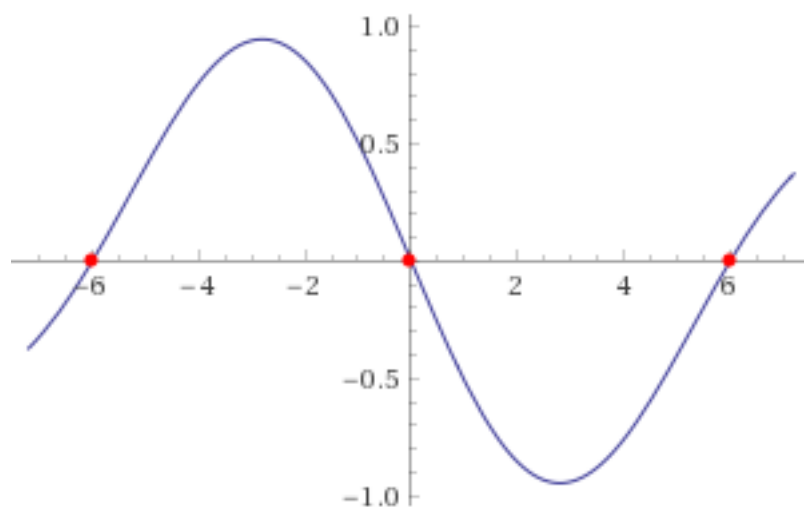
$$x \approx \pm 20.5353367023333\dots$$

$$x \approx \pm 14.3717865317719\dots$$

$$x \approx \pm 5.99227245836624\dots$$

$$x = 0$$

$$x \approx 26.0573299130524\dots$$



It can only calculate up to 8, but if you calculate this up to infinity you will get the correct value. And it proves whether Riemann hypothesis is correct or wrong.

Postscript

About half a year ago, I had succeeded to some extent the formula to find non-trivial zeros. I think that it is placed on viXra.

On the net, I learned that there are expressions and papers for completely and accurately obtaining non-trivial zeros, and since then I have stopped developing expressions for non-trivial zeros.

It was impossible with \ln alone and it was impossible without using \sin or \cos .

Also, I thought that this research result was useless for proof of Riemann hypothesis.

However, in my dreams, I was taught that this research result is greatly useful for Riemann hypothesis proof.

Therefore now I use it to write a proof of Riemann hypothesis.

References

1. Riemann, Bernhard (1859). "Ueber die Anzahl der Primzahlen unter einer gegebenen Grösse".
2. John Derbyshire, Prime Obsession: Bernhard Riemann and The Greatest Unsolved Problem in Mathematics, Joseph Henry Press, 2003, ISBN 9780309085496.
- 3) https://en.wikipedia.org/wiki/Riemann_hypothesis

postscript

Although I could find only this, I found that this is an intermediate course, \ln , \sin , and \cos can represent non-trivial zeros, but I have found that there

is a large error, a completely error free paper (Site?) And found it abandoned.

But it may have been an event in a dream.



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



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. I will
 post it in a hurry, as long as I have not done it before I die.

(Postscript)

Until now, I have failed many times and it seems useless this time, but this
 time I have absolute confidence. Perhaps I will die today or tomorrow. I will
 write it as my will.

Also, for children's tuition, write as a will.

Although I could do mathematics, but I could not do anything afterwards,
 continued to be deceived by people, who did not understand the heart of
 men, only failed in life, as a will of repentance of a man who sent a life of
 anguish leave.

The prize money of 100 million yen is given to my two children.

(postscript)

The following items were attached to the title, but it disappeared now.

ζ Star man, appearing in my dream and say it. " $\sin[x*\ln 1] / 1^a -$
 $\sin[x*\ln 2].....$ "

Infinite next is 0 Therefore,

There are many ways to prove Riemann hypothesis

(postscript)

I will put out before my life goes down. I did the last inspection. Please give
 all the prize money to my child.

(postscript)

Please compile properly. I am very poor of English. Thanking you in
 advance. postscript I do not understand English translated into English by
 google translation, I translate again into Japanese by google translation
 again, and I can not understand the translation.

