

A Rebuttal Proof of the Riemann Hypothesis

Yoshimi Shinichi
ORCID: 0009-0008-8121-8947

May 22, 2025

Abstract

Is mathematics not, at its core, something that should be proven using numbers and calculation?

I must say this: **If something cannot be proven purely through equations, then it is not mathematics.**

To say “*Explain why* $1 + 1 = 2$ ” just because one does not know the answer is misguided. But to insist that “ $1 + 1 = 2$ ” is true without truly understanding *why* it is so— **is that not the illusion we must now abandon?**

That kind of reasoning belongs to architecture, physics, or other sciences—**not mathematics.**

Mathematics is **simple**. Its answers must be **singular, universal, and evident** to anyone who sees them. This is the essence of mathematics—and the essence of nature.

Mathematics is not about “proof” in the conventional sense. It is about whether or not we **realize** something—just as one realizes that $1 + 1 = 2$.

This rebuttal is grounded in the principles outlined in the *Theorems of Cosmic Deformation – BOX3* (DOI: 10.5281/zenodo.15477698).

At its core lies Theorem 1, which represents infinity not as a symbolic picture (∞), but as a tangible phenomenon. Even if we treat Theorem 1 as a hypothetical definition of infinity, it logically follows that Theorem 3 emerges from it—a generative principle capable of producing infinite structures: points, circles, surfaces, solids, and beyond.

Thus, Theorem 3 provides the structural essence that replaces π in this paper. This is not a symbol, but a law of emergence.

It is not enough for mathematicians to observe infinity as a distant abstraction. Our task is to give it form, logic, and structure. That is the true mission of mathematics. And that is the foundation upon which this work stands.

1 What is the Riemann Hypothesis?

”All nontrivial zeros of the Riemann zeta function lie on the line $\text{Re}(s) = \frac{1}{2}$ in the complex plane.”

2 The Illusory Nature of the Number One

The act of infinite addition of 1s in the Riemann Hypothesis lacks proof that each 1 used in the sum is truly the same. Moreover, introducing π into results derived from infinite summation introduces further inconsistencies. This is tragic.

3 π Is a Fiction

π arises when comparing a square of 1 cm with a circle—but this makes π a fiction, not a number. What defines 1 cm? What defines a 1 cm circle? All of these are born from ambiguity.

Can mathematics truly define ”1 cm”?

4 Conclusion: The Riemann Hypothesis Is Based on a Faulty Definition

From the above, it follows that the Riemann Hypothesis is based on flawed foundations.

Appendix 1: π Cannot Be Used to Prove the Sum of All Numbers

Leibniz Series:

$$\pi = 4 \left(1 - \frac{1}{3} + \frac{1}{5} - \frac{1}{7} + \frac{1}{9} - \dots \right)$$

Machin’s Formula:

$$\pi = 16 \cdot \arctan\left(\frac{1}{5}\right) - 4 \cdot \arctan\left(\frac{1}{239}\right)$$

Ramanujan’s Formula:

$$\frac{1}{\pi} = \frac{2\sqrt{2}}{9801} \sum_{k=0}^{\infty} \frac{(4k)! (1103 + 26390k)}{(k!)^4 396^{4k}}$$

Chudnovsky Formula:

$$\frac{1}{\pi} = \frac{12}{640320^{3/2}} \sum_{k=0}^{\infty} \frac{(-1)^k (6k)! (13591409 + 545140134k)}{(3k)! (k!)^3 (640320)^{3k}}$$

Wallis Product:

$$\frac{\pi}{2} = \prod_{n=1}^{\infty} \frac{4n^2}{4n^2 - 1}$$

These are formulas for approximating the value of π .

Appendix 2: Formula of the True Shape of a Circle

Standard equation for a circle:

$$r^2 = X^2 + Y^2$$

This holds only when $N = 2$.

General form:

$$Y = \left(\sum_{i=1}^n X_i^N \right)^{\frac{1}{N}}$$

Appendix 3: π Is a Picture, Not a Number

$$\pi \neq X^2 + Y^2$$

Appendix 4: About $X^2 + Y^2$

The reason why many mathematicians, from Pythagoras to Fermat, have utilized this formula is because they intuitively sensed discomfort with conventional addition.

Even in my other paper, where I addressed the ABC conjecture, the expression $X^2 + Y^2$ appears.

This expression connects us to a new door in mathematics.

Should we name it the **Non-Riemann Addition Method**?

Should we call it the **Shinichi Addition Method**?

Or another name altogether?

Whatever the case, this expression is significant.

I believe that $X^2 + Y^2$ is the very gateway to a new world, and the only path by which the true authority of mathematics can be restored.

As such, I hereby record it as part of a new mathematical philosophy—namely, what I call **Shinichi Mathematics**. Let this serve as the conclusion of this paper.

Appendix 5: Dedicated to Grigori Perelman

To Grigori Perelman: I understand you.

Proof is no longer “mathematics”; it is the future.

Proof is merely sending a time machine into the past, as it formalizes something that already exists.

But I want to send my time machine toward the future.

What we are doing is not “prediction” but “emergence,” not “proof” but “creation.”

However, unlike you, I have one crucial difference:

I want 100 million yen.

Because I am poor, and I want money for my wife and child.

That is why I have rebutted the Riemann Hypothesis.

5 About the Bank Account (Structured Record)

This paper records my rebuttal proof of the Riemann Hypothesis.

There can be only one correct answer.

It is not a matter of “maybe wrong.” It is “correct.”

Because adding 1 an infinite number of times is a matter of *doing* or *not doing*, not of truth.

Mathematicians, please realize: Do real mathematics, not just word games and pictures.

I, too, want to do real mathematics. If you would like to support me, please consider a donation to the account below.

Bank Name: PayPay Bank

Branch Number: 008

Account Type: Savings

Account Number: 3996693

Account Holder: Yoshimi Shinichi

6 License

This work is distributed under the Shinichi Mathematics License v1.0.

© Shinichi Mathematics Project

License URL: <https://doi.org/10.5281/zenodo.15386802>