

$\zeta(17)$ and $\zeta(19)$ ver.2

Toshiro Takami*

[Abstract]

I calculated $\zeta(17)$ and $\zeta(19)$.

$\zeta(17)$ and $\zeta(19)$ tended to converge very quickly.

[Discussion]

$$\zeta(17) = \sum_{n=1}^{\infty} \frac{1}{n^{17}} = 1 + \sum_{n=1}^{\infty} \frac{1}{(2n)^{17}} + \sum_{n=1}^{\infty} \frac{1}{(2n+1)^{17}}$$

calculated

$$\zeta(17) = \frac{131072}{131071} \left(1 + \sum_{n=1}^{\infty} \frac{1}{(2n+1)^{17}} \right) \quad (1)$$

$$\zeta(17) = \frac{2^{17}}{2^{17}-1} \left(1 + \sum_{n=1}^{\infty} \frac{1}{(2n+1)^{17}} \right) \quad (2)$$

$n=1, \zeta(17) \doteq 131072/131071 \cdot (1+1/3^{17}) = 131072/131071 \cdot (1+1/129140163) =$
 $= 2^{17}/(2^{17}-1) \cdot (1+1/3^{17}) = 131072/131071 \cdot (1+1/129140163) =$
 1.0000076371963228089989.....

.....

$\zeta(17) = 1.00000763719763789976227.....$

and,

$$\zeta(19) = \sum_{n=1}^{\infty} \frac{1}{n^{19}} = 1 + \sum_{n=1}^{\infty} \frac{1}{(2n)^{19}} + \sum_{n=1}^{\infty} \frac{1}{(2n+1)^{19}}$$

calculated

$$\zeta(19) = \frac{524288}{524287} \left(1 + \sum_{n=1}^{\infty} \frac{1}{(2n+1)^{19}} \right) \quad (1)$$

$$\zeta(19) = \frac{2^{19}}{2^{19}-1} \left(1 + \sum_{n=1}^{\infty} \frac{1}{(2n+1)^{19}} \right) \quad (2)$$

$n=1$, $\zeta(19) \doteq 524288/524287 * (1 + 1/3^{19}) = 524288/524287 * (1 + 1/1162261467) =$
 1.00000190821266403655359801.....

.....

$\zeta(19) = 1.00000190821271655393892.....$

【References】

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

🐱~🐱~🐱~🐱~🐱~

🐱~🐱~🐱~🐱~🐱~

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



(home)

〒854-0067

47-8 kuyamadai, Isahaya City, Nagasaki Prefecture, Japan

mmm82889@yahoo.co.jp

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

Currently 56 years old

Born on November 26, 1961

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

When converted to English by Google translation, it becomes cryptic to me.

10/8/18 9:35 AM

10/8/18 9:35 AM