

【Review article】

$\zeta(3), \zeta(5), \zeta(7), \zeta(9), \zeta(11), \zeta(13)$

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【Abstract】

$\zeta(3), \zeta(5), \zeta(7), \zeta(9), \zeta(11), \zeta(13)$ was obtained by another method.

$$\zeta(3) = \frac{-17.74063 + \pi^3 \log(4)}{21}$$

and

$$\zeta(3) = \frac{11.5610 + \pi^2 \log(4)}{21}$$

and

$$\zeta(3) = \frac{[-1.034353 - [\log(2)]^3] * 12 - 4 * \log^3(2) + \pi^3 * \log(4)}{21} = 1.202056903160 \dots$$

$$= \zeta(3)$$

$$\zeta(3) = \frac{11.5610 + \pi^2 * \log(4)}{21} = 1.202056903160 \dots$$

$\begin{equation}$

$$\zeta(5) = 1.19693 - \log^5(2) = 1.03693 \dots$$

$\end{equation}$

[introduction]

$$\zeta(5) = \frac{11969}{10000} - \log^5(2) \quad (1)$$

$$\zeta(7) = \frac{10852}{10000} - \log^7(2) \quad (2)$$

$$\zeta(9) = \frac{10389}{10000} - \log^9(2) \quad (3)$$

$$\zeta(11) = \frac{10182}{10000} - \log^{11}(2) \quad (4)$$

$$\zeta(13) = \frac{100865}{100000} - \log^{13}(2) \quad (5)$$

[discussion]

$$\frac{1}{21} (-17.7406 + \pi^3 \log(4)) = \frac{1}{21} (-17.7406 + \log_e(4) \pi^3)$$

$$\frac{1}{21} (-17.7406 + \pi^3 \log(4)) = \frac{1}{21} (-17.7406 + \log(a) \log_a(4) \pi^3)$$

$$\sum_{k=1}^{\infty} \frac{1}{k^2 \times 2^{k-1}} + \log^2(2)$$

$$\sum_{k=1}^{\infty} \frac{1}{k^2 \times 2^{k-1}} + (\log 2)^2 = \pi^2/6 = \zeta(2)$$

$$\sum_{k=1}^{\infty} \frac{1}{k^3 \times 2^{k-1}} + \log^3(2)$$

$$\sum_{k=1}^{\infty} \frac{1}{k^3 \times 2^{k-1}} + (\log 2)^3 \approx 1.40745$$

$$\frac{1}{12} (21 \zeta(3) + 4 \log^3(2) - \pi^2 \log(4)) + \log^3(2) \approx 1.40745$$

$$(1/12) * \{ (21 \zeta(3) + 4 * \log^3(2) - \pi^3 * [\log(4)]) \} + [\log(2)]^3 =$$

$$(1/12) * [21 * \zeta(3) + 4 * \log^3(2) - \pi^3 * \log(4)] + [\log(2)]^3 =$$

$$1.03435309358737087738620420123849589842463750128472095... \\ [21 * \zeta(3) + 4 * \log^3(2) - \pi^3 \log(4)] = -1.367378 * 12$$

$$\zeta(3) = [-1.367378 * 12 - 4 * \log^3(2) + \pi^3 \log(4)] / 21 = 1.202057...$$

$$\zeta(3) = [-17.74063 + \pi^3 \log(4)] / 21 = 1.202057...$$

$$21 * \zeta(3) = -17.74063 + \pi^3 \log(4)$$

$$\zeta(3) = \frac{-17.74063 + \pi^3 \log(4)}{21}$$

$$\zeta(5) = 21 * \zeta(3) - \log(4) \pi^5 + x$$

$$x + 21 \zeta(3) = \zeta(7) + \pi^7 \log(4)$$

$$21 \zeta(3) + x - \pi^5 \log(4) = \zeta(5)$$

$$\log(4) * \pi^5 = \zeta(7) - \zeta(5) + \pi^7 * \log(4)$$

$$\zeta(7) - \zeta(5) = -\pi^7 * \log(4) + \pi^5 * \log(4)$$

$$\zeta(7) - \zeta(5) = \log(4) (-\pi^7 + \pi^5)$$

$$x = -21 \zeta(3) + \zeta(7) + \pi^7 \log(4)$$

$$\zeta(5) - \zeta(7) - \pi^5$$

$$\sum_{k=1}^{\infty} \frac{1}{k^5 \times 2^{k-1}} + (\log 2)^5 \approx 1.1768$$

$$\sum_{k=1}^{\infty} \frac{1}{k^5 \times 2^{k-1}} + \log^5(2)$$

$$\zeta(5) + \log^5(2) \approx 1.19693$$

$$\log(2) = 0.6931471805599453094172321214$$

$$x = 1.00835 + \log^7(2)$$

$$\zeta(5) = \{\sqrt{3}/\log(10) * (\sqrt{3}-1)\} * \log(2) [\zeta(3)-1]$$

$$= \sqrt{3} * \log(2) [\zeta(3)-1] / \log(10) * (\sqrt{3}-1)$$

$$\zeta(3) \times \frac{\zeta(5) \log(5) + (\zeta(5) - \zeta(3)) \log(2)}{\zeta(3) \log(10)} + \frac{\log(2)}{\log(2) + \log(5)} =$$

$$0.976102566461359790334359$$

$$\zeta(5) [1 - \zeta(3) \log(5) - \log(2) - \zeta(3)] = \zeta(3) \left[\frac{\zeta(5) - \zeta(3)}{\zeta(3)} \right]$$

$$\log(10) + \log(2) / [\log(2) + \log(5)]$$

$$\zeta(5) [1 - \zeta(3) \log(5) - \log(2) - \zeta(3)] = \zeta(5) (-(\zeta(3) + \zeta(3) \log(5) - 1 + \log(2)))$$

$$\zeta(5) [1 - \zeta(3) \log(5) - \log(2) - \zeta(3)] = \zeta(3) \log(5) - 1 + \log(2)$$

$$\zeta(5) = [\zeta(3) * \log(5) - 1 + \log(2) + \zeta(3)] / [1 - \zeta(3) * \log(5) - \log(2) - \zeta(3)]$$

$$\zeta(5) = 11969/10000 - \log^5(2) = 1.03693$$

$$\zeta(7) = 10852/10000 - \log^7(2) = 1.00835$$

$$\zeta(9) = 10389/10000 - \log^9(2) = 1.00201$$

$$\zeta(11) = 10182/10000 - \log^{11}(2) = 1.00049$$

$$\zeta(13) = 100865/100000 - \log^{13}(2) = 1.00012$$

$$\zeta(3) = 1.202056903159594285399738$$

zeta(5)=1.0369277551433699263314...
zeta(7)= 1.0083492773819228268398....
zeta(9)= 1.0020083928260822144...
zeta(11)=1.0004941886041194645....
zeta(13)= 1.000122713347578489...

$$\zeta(5) = \frac{11969}{10000} - \log^5(2) \quad (1)$$

$$\zeta(7) = \frac{10852}{10000} - \log^7(2) \quad (2)$$

$$\zeta(9) = \frac{10389}{10000} - \log^9(2) \quad (3)$$

$$\zeta(11) = \frac{10182}{10000} - \log^{11}(2) \quad (4)$$

$$\zeta(13) = \frac{100865}{100000} - \log^{13}(2) \quad (5)$$

References

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

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





(home)

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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.

