ABC Conjecture and My Latest Definition

March 14, 2022 Yuji Masuda
y_masuda0208@yahoo.co.jp

Abstract

The objective was to prove the ABC conjecture by my definition series.

Proof

From "Reconstruction Proofs by Definition" of my No.67, I define all numbers as 5 numbers.

-2 -1 0=2 1

① $\log\left(-\frac{\pi}{2}\right)=\log e=1$

② $\log 1=0$

③ $\log 0=\log\left(\frac{1}{\pm\infty}\right)=\log\left(e^{-1}\right)=\log(-e)=\log\left(\frac{\pi}{2}\right)=-1$

④ $\log(-1)=i\pi=-2$

① $\log(-2)=\log\left(-\frac{\pi}{2}\right)=\log e=1$

②⇒③⇒④⇒①⇒②⇒③⇒④⇒①⇒⋯

$\ln(0)=\ln(\frac{1}{\pm\infty})=\ln(\frac{1}{e})=\ln(e^{-1})=-1$
$\ln(1)=\ln(-e^2)=\ln(-1)+2=i\pi+2=-2+2=0$
$\ln(2)=\ln(-e)=\ln(-1)+1=i\pi+1=-2+1=-1$
$\ln(3)=\ln(-2)=\ln(e)=1$
$\ln(4)=\ln(-1)=i\pi=-2$
$\ln(5)=\ln(0)=-1$
$\ln(6)=\ln(1)=0$
$\ln(7)=\ln(2)=-1$
$\ln(8)=\ln(3)=1$
$\ln(9)=\ln(4)=-2$
⋮

Since these five numbers are prime to each other, there are 6 additive patterns.

① $1-1=0$
② $1-2=-1$
③ $1+0=1$
④ $-1-2=-3=2=0$
⑤ $-2+0=-2$
⑥ $-1+0=-1$

Furthermore, it does not include 0, so if I exclude the additive 0,

① $1-1=0$ → ① $1\times(-1)\times 0=0$ $\therefore 0^2\geq 0$
② $1-2=-1$ → ② $1\times(-2)\times(-1)=2=0$ $\therefore 0^2\geq -1$
④ $-1-2=-3=2=0$ → ④ $(-1)\times(-2)\times 0=0$ $\therefore 0^2\geq 0$

【proof end】

General comments

The numbers are very deep. I firmly believe that there are still many undiscovered areas.