

Riemann hypothesis means that satisfying $\zeta(s)=0$ (means Riemann Zeta function) unselfevidenceable root's part of true numbers are $1/2$.

Dennis Hejhal, and John Dubisher explained this hypothesis to :

"Chooosed Any natural numbers(exclude 1 and constructed with two or higher powered prime numbers) then the probability of numbers that choosed number's forming prime factor become an even number is $1/2$."

I'll prove this explain to prove Riemann hypothesis indirectly.

In binomial coefficient, $C(n,0)+C(n,1)+\dots+C(n,n)=2^n$. And $C(n,1)+C(n,3)+C(n,5)+\dots+C(n,n)$ and $C(n,0)+C(n,2)+C(n,4)+\dots+C(n,n)$ is 2^{n-1} .

If you pick up 8 prime numbers, then you can make numbers that exclude 1 and constructed with two or higher powered prime numbers, and the total amount of numbers that you made is 2^8 .

Same principle, if you pick the numbers in k times(k is a variable), the total amount of numbers you made is $C(8,k)$.

If k is an even number, the total amount of numbers you can make is $C(8,0)+C(8,2)+\dots+C(8,8)-1$ (because we must exclude 1,same for $C(8,0)$), and as what i said, it equals to $2^{(8-1)}-1$.

So, the probability of the numbers that forming prime factor's numbers is an even number is $2^{(8-1)}-1/2^8$

If there are amount of prime numbers exist, and we say that amount to n(n is a variable, as the k so), and sequence of upper works sameas we did, so the probability is $2^{(n-1)}/2^n$.

If you limits n to inf, then probability convergents to $1/2$.

This answer coincident with the explain above, so explain is established, same as the Riemann hypothesis is.