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Goldbach Conjecture, Intrascente for Mathematics

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Abstract In this article I present the of demonstration Goldbach conjecture: every pair number is the sum of two primes. As only reference: the logic mathematical and also, the enunciate of Euclides in his proof for the existence of infinitely many primes.

Keywords Sum of Primes, Factorization of a Pair, in Summands, Demonstration, Set of Primes

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1 Introduction

Goldbach conjecture has been analyzed by using various mathematical processes[9]; if it is true, perhaps the best of them was the method of sieve (in turn it is a bit unsafe because it must involve, know the existence of primes with absolute certainty) and even say that we have defined the largest prime number that exist. [4] If (p) is the largest integer that exists, then $(p+1)$ does not exist. If $(p+1)$ does not exist, then (p) does not exist .

2 Main Results

I start with the absolute statement: every even number is the sum of two even number or of two odd numbers, in the sum of odd numbers we always have the prime numbers and non-primes. Therefore we have.

$$Z_p = [p_1; p_2; p_3; p_5; ....]$$

$$Z_{np} = [2c+1; 2b+1; ....]$$

If we add esch prime number by all other respectively, we have the set of all pairs that are sum of two primes. Therefore we have.[7] $(p \neq 2)$.

$$p_1 + [p_3; p_5; p_7; ....]$$

$$p_3 + [p_5; p_7; ....]$$

....

With this we demonstrate that there is always.

$$p + (p_k; p_n) = 2N$$

If $(2k; 2n) \notin (2N)$ that are sum of two primes; then we would have two new even numbers, which in turn are sum of two primes. That will belong to the set of even numbers (2B) that are sum of two odd numbers, non-primes. However I will elaborate more specifically. All even number have as factors, different pairs of summands[3].

$$(2a-1)+1 = 2B$$

$$(2a-2)+2 = 2B$$

....

$$(2a-n)+n = 2B$$

$$(2n-1)+1 = 2N$$

$$(2n-2)+2 = 2N$$

....

$$(2n-n)+n = 2N$$

What we need is that.[4][8].

$(2b-x)+x = 2B$ or $(2n-x)+x = 2N$
For.

$$\forall x = (1; 2; 3; 4; 5; 6..........(2b-1))$$

$$\forall x = (1; 2; 3; 4; 5; 6........(2n-1))$$

In $\forall(2N; 2B)$.

$$\exists[(2b-x) = (2a; (2a+1); p)]$$

proof 1; for a value of $[x = ((2a+1);p)]$

$$2b - (2a+1) = \left| \begin{matrix} p \\ (2c+1) \end{matrix} \right|$$

$$2b - p = \left| \begin{matrix} p_n \\ (2e+1) \end{matrix} \right|$$

It is to say that.

$$2b = p + \left| \begin{matrix} p_n \\ (2e+1) \end{matrix} \right|$$

$$2b = (2a+1) + \left| \begin{matrix} p \\ (2c+1) \end{matrix} \right|$$

I have shown that in all $(2N;2B)$ always.

$$\exists(2b;2n) = [p+p_n; p+(2e+1); (2a+1)+(2c+1); (2a+1)+p]$$

Therefore the Goldbach conjecture: **all pair number is the sum of two primes, is an absolute truth.**

3 Conclusion

This simple mathematics will always be valid. Regardless of that this solved the riddle of prime number or not. In any case a pair numbers is always the sum of two primes.

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