Goldbach's conjecture

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Abstract

I proved the Goldbach's conjecture. Even numbers are prime numbers and prime numbers added, but it has not been proven yet whether it can be true even for a huge number (forever huge number).

All prime numbers are included in (6n -1) or (6n+1) except 2 and 3 (n is a positive integer).

All numbers are executed in hexadecimal notation. This does not change even in a huge number (forever huge number).

The larger the even value, the more the number of prime number plus prime number that become even.

That is because the number of rotations of the hexagon increases.

The number is infinite. the number circlate this hexagon infinite.

key words

Hexadecimal rotation, Prime number, Goldbach's conjecture, Probabilistically

Introduction

(6n -2), (6n), (6n+2) in are even numbers.
(6n -1), (6n+1), (6n+3) are odd numbers.

prime numbers are (6n -1) or (6n+1). Except 2 and 3. (n is positive integer).
(Even numbers greater than 2 are all sums of two prime numbers, below)
(n is a positive integer)
4=2+2
6=3+3
8= 3+(6n-1), 3+5, n=0,1
10=(6n -1)+(6n-1), 5+5, n=1,1
12=(6n -1)+(6n+1), 5+7, n=1,1
14=(6n+1)+(6n+1), 7+7, n=1,1

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16=(6n -1)+(6n -1), 5+11, n=1,2
18=(6n+1)+(6n -1), 7+11, n=1,2
20=(6n+1)+(6n+1), 7+13, n=1,2
22=(6n -1)+(6n-1), 11+11, n=2,2
24=(6n -1)+(6n+1), 11+13, n=2,2
26=(6n+1)+(6n+1), 13+13, n=2,2
28=(6n -1)+(6n -1), 11+17, n=2,3
30=(6n -1)+(6n+1), 11+19, n=2,3
32=(6n+1)+(6n+1), 13+19, n=2,3
34=(6n -1)+(6n -1), 17+17, n=3,3
36=(6n -1)+(6n+1), 17+19, n=3,3
38=(6n+1)+(6n+1), 19+19, n=3,3
40=(6n -1)+(6n -1), 17+23, n=3,4
42=(6n+1)+(6n -1), 19+23, n=3,4
44=(6n+1)+(6n+1), 13+31, n=2,5
46=(6n -1)+(6n -1), 23+23, n=4,4
48=(6n+1)+(6n -1), 19+29, n=3,5
50=(6n+1)+(6n+1), 19+31, n=3,5
52=(6n -1)+(6n -1), 23+29, n=4,5
54=(6n -1)+(6n+1), 23+31, n=4,5
56=(6n+1)+(6n+1), 13+43, n=2,7
58=(6n -1)+(6n -1), 29+29, n=5,5
60=(6n -1)+(6n+1), 29+31, n=5,5
62=(6n+1)+(6n+1), 31+31, n=5,5
64=(6n -1)+(6n -1), 23+41, n=4,7
66=(6n -1)+(6n+1), 23+43, n=4,7.......
68=(6n+1)+(6n+1), 31+37, n=5,6
70=(6n -1)+(6n -1), 29+41, n=5,7
72=(6n+1)+(6n -1), 31+41, n=5,7
74=(6n+1)+(6n+1), 37+37, n=6,6
76=(6n -1)+(6n -1), 29+47, n=5,8.......
78=(6n+1)+(6n -1), 37+41, n=6,7
80=(6n -1)+(6n -1), 29+59, n=5,10
82=(6n -1)+(6n -1), 41+41, n=7,7
84=(6n -1)+(6n+1), 41+43, n=7,7
86=(6n+1)+(6n+1), 43+43, n=7,7
88=(6n -1)+(6n -1), 41+47, n=7,8
90=(6n -1)+(6n+1), 29+61, n=5,10
92=(6n+1)+(6n+1), 31+61, n=5,10
94=(6n -1)+(6n -1), 47+47, n=8,8
96=(6n -1)+(6n+1), 47+49, n=8,8
98=(6n+1)+(6n+1), 37+61, n=6,10
100=(6n -1)+(6n -1), 41+59, n=7,10
102=(6n -1)+(6n+1), 41+61, n=7,10
104=(6n+1)+(6n+1), 43+61, n=7,10
106=(6n -1)+(6n-1), 53+53, n=9,9
108=(6n -1)+(6n+1), 47+61, n=8,10

110=(6n+1)+(6n+1), 43+67, n=7,11
112=(6n -1)+(6n -1), 53+59, n=9,10
114=(6n -1)+(6n+1), 53+61, n=9,10
116=(6n+1)+(6n+1), 43+73, n=7,12........
118=(6n -1)+(6n -1), 59+59, n=10,10
120=(6n -1)+(6n+1), 59+61, n=10,10
122=(6n+1)+(6n+1), 61+61, n=10,10
124=(6n -1)+(6n -1), 53+71, n=9,12
126=(6n -1)+(6n+1), 53+73, n=9,12.....
128=(6n+1)+(6n+1), 61+67, n=10,11
130=(6n -1)+(6n -1), 59+71, n=10,12
132=(6n -1)+(6n+1), 59+73, n=10,12
134=(6n+1)+(6n+1), 67+67, n=11,11
136=(6n -1)+(6n -1), 53+83, n=9,14
138=(6n -1)+(6n+1), 59+79, n=10,13
140=(6n+1)+(6n+1), 67+73, n=11,12
142=(6n -1)+(6n -1), 71+71, n=12,12
144=(6n -1)+(6n+1), 71+73, n=12,12
146=(6n+1)+(6n+1), 73+73, n=12,12
148=(6n -1)+(6n -1), 59+89, n=10,15
150=(6n -1)+(6n+1), 71+79, n=12,13
152=(6n+1)+(6n+1), 73+79, n=12,13
154=(6n -1)+(6n -1), 71+83, n=12,14
156=(6n+1)+(6n -1), 73+83, n=12,14
158=(6n+1)+(6n+1), 79+79, n=13,13
154=(6n -1)+(6n -1), 71+83, n=12,14
156=(6n+1)+(6n -1), 73+83, n=12,14
158=(6n+1)+(6n+1), 79+79, n=13,13
160=(6n -1)+(6n -1), 71+89, n=12,15
162=(6n -1)+(6n+1), 59+103, n=10,17
164=(6n+1)+(6n+1), 73+91, n=12,15
166=(6n -1)+(6n -1), 83+83, n=14,14
168=(6n -1)+(6n+1), 83+85, n=14,14
170=(6n+1)+(6n+1), 85+85, n=14,14
172=(6n -1)+(6n -1), 71+101,n=12,17
174=(6n -1)+(6n+1), 71+103,n=12,17
176=(6n+1)+(6n+1), 73+103,n=12,17
178=(6n -1)+(6n -1), 89+89, n=15,15
180=(6n -1)+(6n+1), 83+97, n=14,16
182=(6n+1)+(6n+1), 79+103, n=13,17
184=(6n -1)+(6n -1), 83+101, n=14,17
186=(6n -1)+(6n+1), 89+97, n=15,16
188=(6n+1)+(6n+1), 61+127, n=10,21
190=(6n -1)+(6n -1), 89+101, n=15,17
192=(6n -1)+(6n+1), 83+109, n=14,18
194=(6n+1)+(6n+1), 97+97, n=16,16
196=(6n -1)+(6n -1), 83+113, n=14,19

198=(6n -1)+(6n+1), 89+109, n=15,18
200=(6n+1)+(6n+1), 97+103, n=16,17
202=(6n -1)+(6n -1), 101+101, n=17,17
204=(6n -1)+(6n+1), 101+103, n=17,17
206=(6n+1)+(6n+1), 103+103, n=17,17
208=(6n -1)+(6n -1), 101+107, n=17,18
210=(6n -1)+(6n+1), 101+109, n=17,18
212=(6n+1)+(6n+1), 103+109, n=17,18
214=(6n -1)+(6n -1), 107+107, n=18,18
216=(6n -1)+(6n+1), 107+109, n=18,18
218=(6n+1)+(6n+1), 109+109, n=18,18
220=(6n -1)+(6n -1), 107+113, n=18,19
222=(6n -1)+(6n+1), 89+133, n=15,22
224=(6n+1)+(6n+1), 97+127, n=16,21
....
....
These are just examples, and there are several combinations of prime numbers in these small even numbers.

For example, 224 includes not only 97+127 but also 151+73, 157+67, 163+61, 181+43, 193+31, 211+13.

For example, 65 is 5th angle, but the next rotation, 71 to which 6 is added, is a prime number.
Also, 335 is 5th angle, but the next rotation, 347 to which 6 + 6 is added, is a prime number.

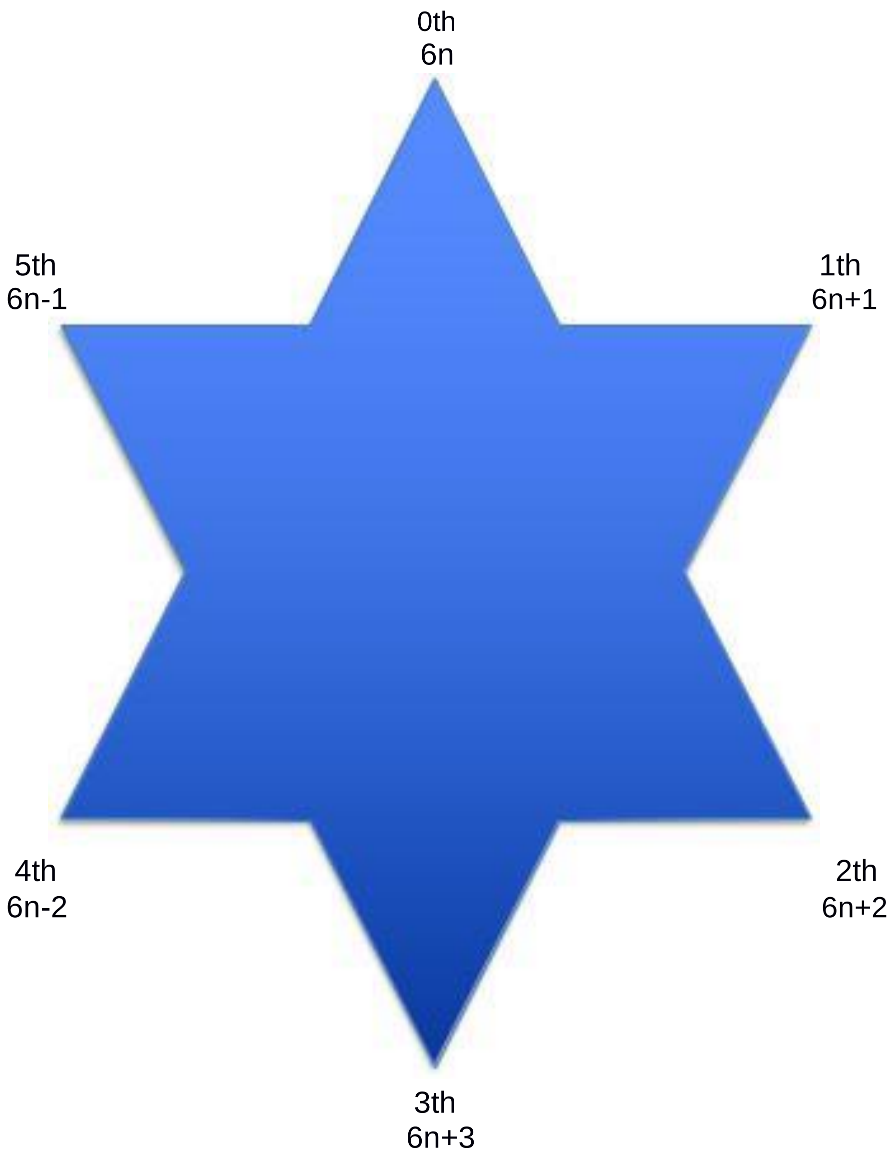
As the size of the even number increases, the combination of (odd number not prime) plus (odd number not prime), (odd number not prime) plus (prime number), and (prime number) plus (prime number) also increases.

The fact that the set of (prime) plus (prime) increases to an even number means that the even number of (prime) plus (prime) always exists.

This is because as the even size increases, the number of rotations within the hexagon also increases proportionally.

All even numbers are included in 0th angle, 2th angle, 4th angle.
And, all prime numbers are present in 1th angle, 5th angle. except 2 and 3.

(5th angle + 5th angle) are 4th angle(even number).
(5th angle + 1th angle) are 0th angle(even number).
(1th angle + 1th angle) are 2th angle(even number).


0th
6n
5th
6n-1
1th
6n+1
4th
6n-2
2th
6n+2
3th
6n+3

Discussion

As a result of my calculation up to 1×10^{11} in Twin prime Conjecture[5], the probability of the appearance of prime numbers was around 0.00224376 in the total up to 5 to 1×10^{11}.

However, this value is even smaller when it gets huge.
And, this is an aggregation up to 5 to 1×10^{11}, and if it is limited to the vicinity of 1×10^{11}, the probability that a prime number appears will be even smaller.

If this is rounded to 0.002, simply calculate,
the probability of (prime number)+(prime number) is $0.002 \times 0.002 = 4 \times 10^{-6}$.

The larger the number, the smaller the probability of (prime number)+(prime number).

However, the larger the number, the larger the combination of (prime number)+(prime number).

Therefore, the opinion that Goldbach's Conjecture does not hold because the probability that a prime number appears becomes small when the number becomes large.

Simply calculating, in 1×10^{11}, the number of times the hexagon is rotated is $1 \times 10^{11}/6$.
When this is multiplied by 4×10^{-6}.

$[1 \times 10^{11}/6] \times [4 \times 10^{-6}]=[2 \times 10^{5}]/3=66666.66......$

Every time it rotate the hexagon, 4×10^{-6} is doubled.

This is well over 100%.

Thus, Goldbach's Conjecture is correct stochastically.

Proof end.

References

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