Goldbach's conjecture

Toshiro Takami*
mmm82889@yahoo.co.jp

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

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).
The following is a prime number.
There are no prime numbers that are not (6n -1) or (6n+1).
2 ———
3 ———(Twin prime)
5 ——— 6n -1 (Twin prime)
7 ——— 6n+1
11 ——— 6n -1 (Twin prime)
13 ——— 6n+1

*854-0067 Nagasaki-prefecture, Japan

17 ——— 6n -1 (Twin prime)
19 ——— 6n+1
23 ——— 6n -1
29 ——— 6n -1 (Twin prime)
31 ——— 6n+1
37 ——— 6n+1
41 ——— 6n -1 (Twin prime)
43 ——— 6n+1
47 ——— 6n -1
53 ——— 6n -1
59 ——— 6n -1
61 ——— 6n+1
67 ——— 6n+1
71 ——— 6n -1 (Twin prime)
73 ——— 6n+1
79 ——— 6n+1
83 ——— 6n -1
89 ——— 6n -1
97 ——— 6n+1
101 ——— 6n -1 (Twin prime)
103 ——— 6n+1
107 ——— 6n -1 (Twin prime)
109 ——— 6n+1
113 ——— 6n -1
127 ——— 6n+1
131 ——— 6n -1
137 ———6n -1 (Twin prime)
139 ———6n+1
149 ———6n -1 (Twin prime)
151 ———6n+1
157 ———6n+1
163 ———6n+1
167 ———6n -1
173 ———6n -1
179 ———6n -1 (Twin prime)
181 ———6n+1
191 ———6n -1(Twin prime)
193 ———6n+1
197 ———6n -1 (Twin prime)
199 ———6n+1
211 ———6n+1
223 ———6n+1
227 ———6n -1 (Twin prime)
229 ———6n+1
233 ———6n -1
239 ———6n -1 (Twin prime)
241 ———6n+1

251 ———6n -1
257 ———6n -1
263 ———6n -1
269 ———6n -1 (Twin prime)
271 ———6n+1
277 ——— 6n+1
281 ——— 6n -1 (Twin prime)
283 ——— 6n+1
293 ——— 6n+1
307 ——— 6n+1
311 ——— 6n -1 (Twin prime)
313 ——— 6n+1
317 ——— 6n -1
331 ——— 6n+1
337 ——— 6n+1
347 ——— 6n -1 (Twin prime)
349 ——— 6n+1
353 ——— 6n -1
359 ——— 6n -1
367 ——— 6n+1
373 ——— 6n -1
379 ——— 6n+1
383 ——— 6n -1
389 ——— 6n -1
397 ——— 6n+1
401 ——— 6n -1
409 ——— 6n+1
419 ——— 6n -1 (Twin prime)
421 ——— 6n+1
431 ——— 6n -1 (Twin prime)
433 ——— 6n+1
439 ——— 6n+1
443 ——— 6n -1
449 ——— 6n -1
457 ——— 6n+1
461 ——— 6n -1 (Twin prime)
463 ——— 6n+1
467 ——— 6n -1
479 ——— 6n -1
487 ——— 6n+1
491 ——— 6n -1
499 ——— 6n+1
503 ——— 6n -1
509 ——— 6n -1
521 ——— 6n -1 (Twin prime)
523 ——— 6n+1
541 ——— 6n+1

547 ——— 6n+1
557 ——— 6n -1
563 ——— 6n -1
569 ——— 6n -1 (Twin prime)
571 ——— 6n+1
577 ——— 6n+1
587 ——— 6n -1
593 ——— 6n -1
599 ——— 6n -1 (Twin prime)
601 ——— 6n+1
607 ——— 6n+1
613 ——— 6n+1
617 ——— 6n -1 (Twin prime)
619 ——— 6n+1
631——— 6n+1
641——— 6n -1 (Twin prime)
643——— 6n+1
647——— 6n -1
653——— 6n -1
659——— 6n -1 (Twin prime)
661——— 6n+1
673——— 6n+1
677——— 6n -1
683——— 6n+1
691——— 6n+1
701——— 6n -1
709——— 6n+1
719——— 6n -1
727——— 6n+1
733——— 6n+1
739——— 6n+1
743——— 6n -1
751——— 6n+1
757——— 6n+1
761——— 6n -1
769——— 6n+1
773——— 6n -1
787——— 6n+1
797——— 6n -1
809——— 6n -1 (Twin prime)
811——— 6n+1
821——— 6n -1 (Twin prime)
823——— 6n+1
827——— 6n -1 (Twin prime)
829——— 6n+1
839——— 6n -1
853——— 6n+1

857——— 6n -1 (Twin prime)
859——— 6n+1
863——— 6n -1
877——— 6n+1
881——— 6n -1 (Twin prime)
883——— 6n+1
887——— 6n -1
907——— 6n+1
911——— 6n -1
919——— 6n+1
929——— 6n -1
937——— 6n+1
941——— 6n -1
947——— 6n -1
953——— 6n -1
967——— 6n -1
971——— 6n -1
977——— 6n -1
983——— 6n -1
991——— 6n+1
997——— 6n+1
1009——— 6n -1
1013——— 6n+1
1019——— 6n -1 (Twin prime)
1021——— 6n+1
1031——— 6n -1 (Twin prime)
1033——— 6n+1
1039——— 6n+1
1049——— 6n -1 (Twin prime)
1051——— 6n+1
1061——— 6n -1 (Twin prime)
1063——— 6n+1
1069——— 6n+1
1087——— 6n+1
1091——— 6n -1 (Twin prime)
1093——— 6n+1
1097——— 6n -1
1103——— 6n -1
1109——— 6n -1
1117——— 6n+1
1123——— 6n+1
1129——— 6n+1
1151——— 6n -1 (Twin prime)
1153——— 6n+1
. . . . . .
. . . . . .
(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
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 151 + 73, 157 + 67, 163 + 61, 181 + 43, 193 + 31, 211 + 13.

Discussion

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

(6n+2) are not prime number,except 2.
(6n+3) are not prime number,except 3.

And, at (6n -1), include multiples of 5 are not prime numbers.
For example,
5, 35, 65, 95, 125, 155, 185, 215, 245, 275, 305, 335.....

And, at (6n+1), include multiples of 7 are not prime numbers.
For example,
49, 63, 77, 91, 119, 133, 147, 161, 189, 203, 217, 231.....

In a hexagonal diagram, (6n -1) and (6n +1), many are prime numbers.

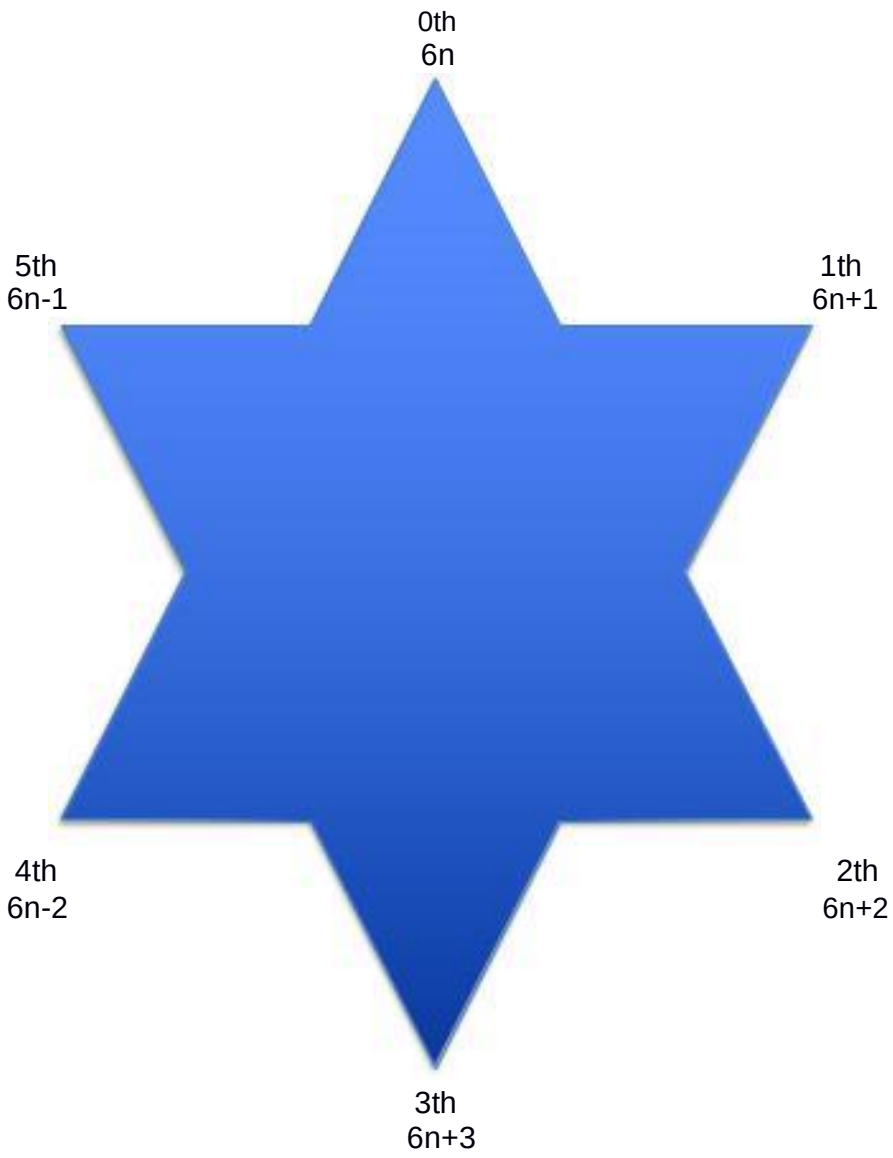
(6n -1)+(6n -1)=6(2n) -2, 4th angle is Even numbers.
(6n -1)+(6n +1)=6(2n), 0th angle is Even numbers.
(6n +1)+(6n +1)=6(2n) +2, 2th angle is Even numbers.

Simply calculate,
The probability of (6n -1) + (6n -1) is $\frac{1}{6} \times \frac{1}{6} = \frac{1}{36}$,
The probability of (6n -1) + (6n +1) is also $\frac{1}{6} \times \frac{1}{6} = \frac{1}{36}$.
The probability of (6n +1) + (6n -1) is also $\frac{1}{6} \times \ frac16 = \frac{1}{36}$.
The probability of (6n +1) + (6n +1) is also $\frac{1}{6} \times \ frac16 = \frac{1}{36}$.
These totals are $\frac{1}{36} + \frac{1}{36} + \frac{1}{36} + \frac{1}{36} = \frac{1}{9}$.

These totals are $\frac{1}{36} + \frac{1}{18} + \frac{1}{36} = \frac{1}{9}$.
Every time it rotate the hexagon, $\frac{1}{9}$ is doubled.
That is, when the hexagon is rotated nine times, it becomes 1 or 100%.
If the hexagon is rotated 90 times, it becomes 10 or 1000%.
When the hexagon is rotated 900 times, it becomes 100, that is, 10000%.
When the hexagon is rotated 90,000, it becomes 10,000, that is, 1000000%.
When the hexagon is rotated 900,000,000, it becomes 100,000,000, that is, 10000000000%.
When the hexagon is rotated 900,000,000,000, it becomes 100,000,000,000, that is, 10000000000000%.

Of course, (6n -1) + (6n -1), (6n -1) + (6n +1), (6n +1) + (6n -1), (6n +1) + (6n +1)
Some of them are not combinations of prime numbers.

But probabilistically, every even number can be confirmed as a combination of primes and primes.


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

Conclusion

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).

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.

In this way, the number is running in hexadecimal notation, and the decimal method which is most used now is wrong in a strict sense.

Thus, all numbers are executed in hexadecimal notation. It does not change in a huge number (forever huge number).

It is clear that all the even numbers are a prime number plus a prime number if it comes to the idea of a hexadecimal system.

In this way, the Goldbach conjecture can be confirmed as probabilistically correct.

Proof end.

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