

Goldbach's conjecture

Toshiro Takami*
mmm82889@yahoo.co.jp

Abstract

I proved the Goldbach's conjecture.
All even numbers are expressed in $6n$, $6n+2$, $6n+4=6n-2$.
And, all primes are expressed $6n-1$ or $6n+1$.

In hexagonal circulation,
 $6n-1 + 6n+1=6n$ (even number).
 $6n+1 + 6n+1=6n+2$ (even number).
 $6n-1 + 6n-1=6n-2=6n+4$ (even number).

key words

Hexagonal circulation, Even number, Goldbach's conjecture

Introduction

Even numbers can be expressed into the following three.
 $(6n)$, $(6n+2)$, $(6n+4)=(6n-2)$.

Primes can be expressed into the following two. Except 2 and 3. (n is positive integer).
 $(6n-1)$, $(6n+1)$.

Even numbers greater than 2 are all sums of two primes, below. (n is a positive integer).

$$4=6n-2=2+2$$

$$6=6n=3+3$$

$$8=6n+2=3+5$$

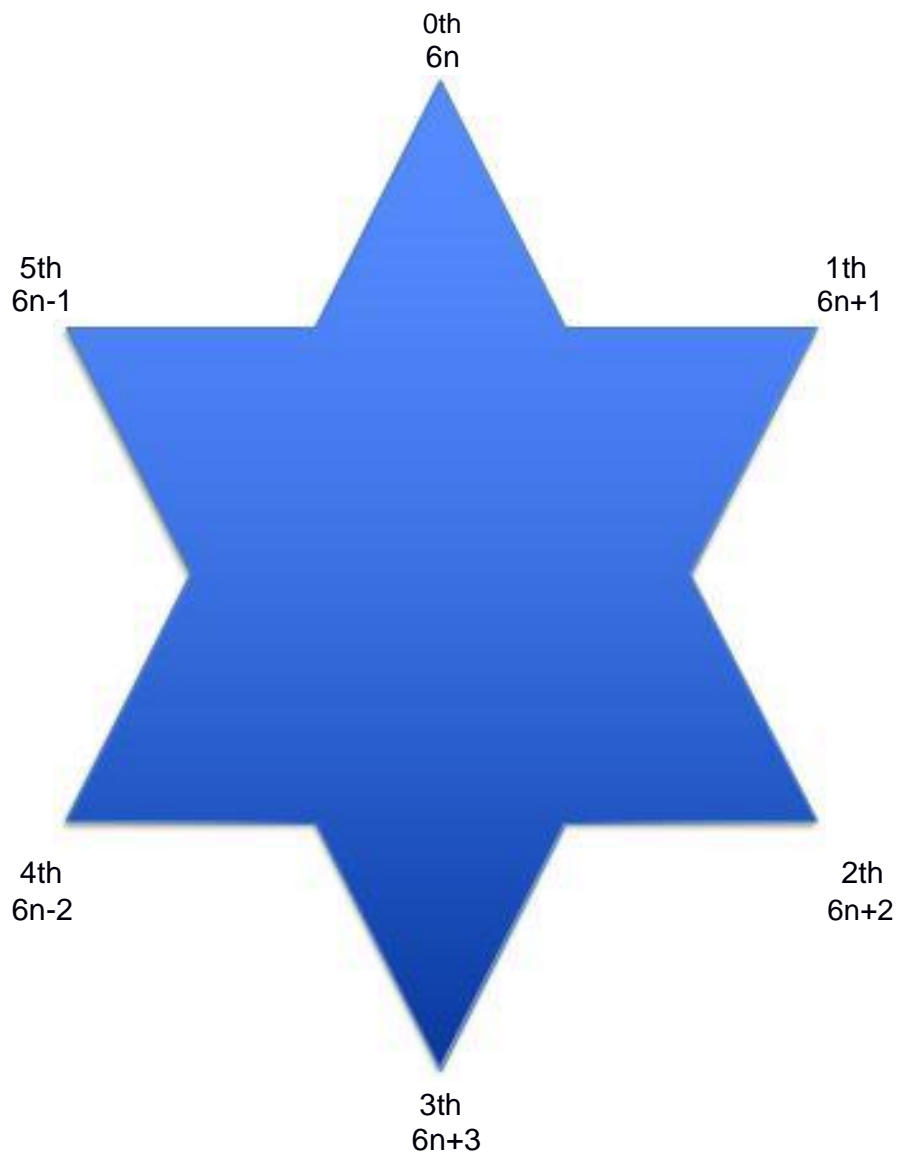
$$10=6n-2=(6n-1)+(6n-1)=5+5$$

$$12=6n=(6n-1)+(6n+1)=5+7$$

$$14=6n+2=(6n+1)+(6n+1)=7+7$$

*47-8 kuyamadai, Isahaya-shi, Nagasaki-prefecture, 854-0067 Japan

$16=6n+4=6n-2=(6n-1)+(6n-1)=5+11$
 $18=6n=(6n-1)+(6n+1)=7+11$
 $20=6n+2=(6n+1)+(6n+1)=7+13$
 $22=6n+4=6n-2=(6n-1)+(6n-1)=11+11$
 $24=6n=(6n-1)+(6n+1)=5+19=17+7=11+13$
 $26=6n+2=(6n+1)+(6n+1)=7+19=13+13$
 $28=6n+4=6n-2=(6n-1)+(6n-1)=5+23=11+17$
 $30=6n=(6n-1)+(6n+1)=11+19=17+13=23+7$
 $32=6n+2=(6n+1)+(6n+1)=13+19$
 $34=6n+4=6n-2=(6n-1)+(6n-1)=5+29=11+23=17+17$
 $36=6n=(6n-1)+(6n+1)=5+31=17+19=23+13=29+7$
 $38=6n+2=(6n+1)+(6n+1)=7+31=19+19$
 $40=6n+4=6n-2=(6n-1)+(6n-1)=11+29=17+23$
 $42=6n=(6n-1)+(6n+1)=5+37=11+31=23+19=29+13$
 $44=6n+2=(6n+1)+(6n+1)=7+37=13+31$
 $46=6n+4=6n-2=(6n-1)+(6n-1)=5+41=17+29=23+23$
 $48=6n=(6n-1)+(6n+1)=5+43=11+37=17+31=29+19=41+7$
 $50=6n+2=(6n+1)+(6n+1)=7+43=13+37=19+31$
 $52=6n+4=6n-2=(6n-1)+(6n-1)=5+47=11+41=23+29$
 $54=6n=(6n-1)+(6n+1)=5+49=11+43=17+37=23+31=41+13=47+7$
 $56=6n+2=(6n+1)+(6n+1)=13+43=19+37$
 $58=6n+4=6n-2=(6n-1)+(6n-1)=5+53=11+47=17+41=29+29$
 $60=6n=(6n-1)+(6n+1)=17+43=23+37=29+31$
 $62=6n+2=(6n+1)+(6n+1)=19+43=31+31$
 $64=6n+4=6n-2=(6n-1)+(6n-1)=5+59=11+53=17+47=23+41$
 $66=6n=(6n-1)+(6n+1)=5+61=23+43=29+37=47+19=53+13=59+7$
 $68=6n+2=(6n+1)+(6n+1)=7+61=31+37$
 $70=6n+4=6n-2=(6n-1)+(6n-1)=11+59=17+53=23+47=29+41$
 $72=6n=(6n-1)+(6n+1)=5+67=11+61=29+43=41+31=53+19=59+13$
 $74=6n+2=(6n+1)+(6n+1)=7+67=13+61=31+43=61+13$
 $76=6n+4=6n-2=(6n-1)+(6n-1)=5+71=17+59=23+53=29+47$
 $78=6n=(6n-1)+(6n+1)=19+59=31+47=41+37=71+7$
 $80=6n+2=(6n+1)+(6n+1)=7+73=13+67=19+61=37+43$
 $82=6n+4=6n-2=(6n-1)+(6n-1)=11+71=23+59=29+53=41+41$
 $84=6n=(6n-$
 $1)+(6n+1)=5+79=11+73=17+67=23+61=41+43=47+37=53+31=71+13=77+7$
 $86=6n+2=(6n+1)+(6n+1)=7+79=13+73=19+67=43+43$
 $88=6n+4=6n-2=(6n-1)+(6n-1)=5+83=17+71=29+59=41+47$
 $90=6n=(6n-$
 $1)+(6n+1)=11+79=17+73=23+67=29+61=47+43=53+37=59+31=71+19=83+7$
 $92=6n+2=(6n+1)+(6n+1)=13+79=19+73=31+61$
 $94=6n+4=6n-2=(6n-1)+(6n-1)=5+89=11+83=23+71=41+53=47+47$
 $96=6n=(6n-1)+(6n+1)=17+79=23+73=29+67=53+43=59+37=83+13=89+7$
 (The above omits the addition with 3. In addition, it seems that many miscalculations are included.)



Discussion

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

As the size of the even number increases, the combination of (primes) + (primes) increases.

Proof end.

References

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