Twin primes

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Abstract:

Basing on my study, "Distribution of primes"**viXra:1407.0167** **[pdf]** *submitted on 2014-07-21* I've shown that we can determine the distribution of prime numbers while remaining within the set of natural numbers; However, I present in this paper the numbers which are susceptible to be twins

I-Introduction:

Before speaking of twin primes; I would like to take back the distribution of primes that can be clear and meaningful only when we spread natural numbers over a period of 19 or 11 in order to get the numbers that constitutes the distribution of prime numbers which are in the form:

P=2x3x5 n +2k+3 / n an k € N and k= {2, 4, 5, 7,8, 10, 13,14}
Thus , the numbers 2k+3 which are 7,11,13,17,19,23,29,31
So the eight numbers are:

30 n +7 in position 4 → P_4

30 n +11 in position 5 → P_5

30 n +11 in position 6 → P_6

30 n +17 in position 7 → P_7

30 n +19 in position 8 → P_8

30 n +23 in position 9 → P_9

30 n +29 in position 10 → P_{10}

30 n +31 in position 11 → P_{11}

Eight (08) numbers are associated to n ; only these numbers are susceptibles to be primes or to be the product of this same kind of numbers.

These same results were obtained by Harry k.Kahn: arXiv: 0801.4049 v1 on studying the Riemann function; but have failed to understand the primes; or through the distribution that I illustrated; I am able to find the primality of a number or form a prime number as large as possible in few minutes

In addition; for centuries we spoke only about density of primes by studying the limit of the Euler function; but in my study I mentioned the rank of primes bringing a verifiable formula:

$R_n = 8\,n + P_k - np$

* R_n is the rank
* P_k is the position of the prime number with {4,5, 6, 7, 8, 9, 10,11}
* np is the number of the non-prime numbers belong to the distribution before this prime number.

II- Twin primes:

So; through the distribution of primes which starts since 7; and where 2;3;5 do not belong to it but take part in the formula; the numbers which are susceptible to be twin after the primality testing are the following:

(30 n 11 and 30 n +13)

(30 n +17 and 30 n +19)

(30 n +29 and 30 n +31)

Example:

n=0 the three couples are twin (11,13);(17,19);(29,31)

n=1 Two Couples are twin (41,43);(59,61) but (47,49) are not twin because 49 even it belongs to the distribution but it is not prime.

The distribution of primes is depending of the table in FIG1; this same table is the table of primality testing; and also it would be the mean to clarify when twin primes emerge

FIG 1 :

n	P_k	n	P_k	n	P_k	n	P_k	n	P_k	n	P_k	n	P_k	n	P_k
1	8	2	7	2	11	3	10	4	6	5	5	6	9	7	4
2	7	3	11	4	9	6	4	6	10	8	6	10	8	11	5
2	11	4	9	5	8	7	5	8	4	9	10	12	7	13	6
3	10	6	4	7	5	9	8	10	9	12	11	16	6	17	7
4	6	6	10	8	4	10	9	11	11	14	7	18	5	19	8
5	5	8	6	9	10	12	11	14	7	17	8	22	4	23	9
6	9	10	8	12	7	16	6	18	5	22	4	27	11	29	10
7	4	11	5	13	6	17	7	19	8	23	9	29	10	31	11

Conclusion:

Before looking if the number of twin primes is finite or infinite; should review the distribution of primes that will lead us to make basic observations that allow us to make clear that alternative which I will reveal in my next article

References

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