

PROOF OF TWIN PRIME CONJECTURE

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In $(5, 7), (11, 13), \dots, (6n - 1, 6n + 1)$

Composite Multiples of $6a \pm 1$ are in $(6a \pm 1)b \pm ath$ bracket

If there's no natural number a, b, Q that $Q = 6ab \pm a \pm b, 6Q \pm 1$ are twin prime.

I'll show that there's infinitely many Q such that

In other words, If there are infinitely Q that is not belonging to

$5n \pm 1$

$7n \pm 1$

$11n \pm 2$

$13n \pm 2$

\vdots

Twin primes are infinitely many.

number of natural numbers that is not belonging to

$5n, 5n + 1$

$7n, 7n + 1$

$11n, 11n + 1$

$13n, 13, +1$

\vdots

is 6 from that only $(1, 2), (2, 3), (3, 4), (8, 9)$ are pair of adjacent $2^\alpha 3^\beta$

Let's change $5n$ to $5n - 1$

Under T , it increase as number of answers of $5n = 5^\alpha$, decrease less than as number of answers of $5n - 1 = 2^\alpha 3^\beta$

Under T , number of natural numbers that is not belonging to

$5n \pm 1$

$7n, 7n + 1$

$11n, 11n + 1$

$13n, 13, +1$

\vdots

is greater than $6 + \ln_5 T - \frac{1}{5} \cdot \frac{2}{2-1} \cdot \ln_3 T$

If you repeat,

Under T , number of natural numbers that is not belonging to

$5n \pm 1$

$7n \pm 1$

$11n \pm 2$

$13n \pm 2$

⋮

is greater than $6 + \sum_t^{i=3} (\ln_{p_i} T - \frac{2}{p_i} \cdot \prod_{i=2}^{j=1} \frac{p_i}{p_i-1} \cdot \ln_{p_{i-1}} T)$

and

$\lim_{T \rightarrow \infty} (6 + \sum_t^{i=3} (\ln_{p_i} T - \frac{2}{p_i} \cdot \prod_{i=2}^{j=1} \frac{p_i}{p_i-1} \cdot \ln_{p_{i-1}} T)) = \infty$

Hence,

Twin primes are infinitely many.

when p_t is greater prime under T

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