THE THEORY ABOUT INFINITY OF SIMPLE NUMBERS-TWINS.

This theory, allows on new, on other to look at a problem, and, quite probably that those conclusions which are presented to theories, it will appear quite enough what to recognise a problem about simple numbers-twins solved!

(The author of the theory, Valery Demidovich)

From all services which can be rendered a science, Introduction of new ideas the most important.

(J. J. Thomson)

THE THEORY ABOUT INFINITY OF SIMPLE NUMBERS-TWINS.

By means of construction of Matrixes-numbers, the general principle of occurrence of simple numbers-singles and simple numbers-twins is shown. The proof of infinity of simple numbers-twins is based on disappearance of theoretical simple numbers-twins from a number Matrix 2-3. This process aspires not to 0, and to plus-infinity.

THE PREFACE.

The author of the theory, considers indisputable that it has found law which stores in infinity simple numbers-twins. Law which can be checked up easily empirically, to the last, to us of known simple numbers-twins! Moreover, here is one curious fact - with increase in number of empirical checks (that is, with removal towards infinity on natural to a number sequence), grows both presence of the facts, and this law amplifies, for the reception account, Becomes less quantities of simple numbers-twins. And such fastening, occurs thanks to the proved invariable law (and any law - is invariable!) size increases Between steps. And not only. Representation here any empirical material, not is idle time Calculation, and the reason leading to quantity Calculation is specified. Whether it is Enough here in general proofs, it already to judge not to the author.

In any case, the postulate of Bertrana in any way would not appear, if for its publication P.L.Chebysheva's proof was necessary. And in a similar way the great theorem the Farm. Therefore, publication of new ideas, always is useful! If in them and there are not enough proofs but who knows, there can be they, other mind, to a finding of the only thing true, and whom not The denied, proofs is pushed!

Yours faithfully, the author of the theory Valery Demidovich

1. Returning to sieve Eratosfena.

We take sieve Eratosfena, and it is extended it from 1000 numbers, indefinitely, thus we will remove all even numbers. Such simplification, will not affect a consideration course.

We pierce all numbers which share on 3:

3,9,15,21,27,33...∞

What do we see?! Between piercing points (that we will name further piercing step) steams of not punctured numbers are found out:

5-7,11-13,17-19,23-25...∞

It is those steams to which either it is fated, or it is not fated, to become simple numbers-twins. Now, truth, already steams:

5-7,11-13

By right concern simple numbers-twins as settle down to $5^2 = 25$, that is, to the subsequent number of the piercing squared.

These mathematical patterns, after piercing of numbers sharing on 3, we will define as the Matrix of some 2-3.

a number Matrix – an order and quantity of an arrangement of not punctured and punctured numbers on natural to a number sequence (sieve Eratosfena), after piercing of numbers of numbers sharing on certain quantity.

By means of number Matrixes, we build a number Mega-matrix.

a number Mega-matrix – an order and quantity of an arrangement simple and compound (including semisimple) numbers on natural to a number sequence after infinite piercing by all numbers of piercing.

We see that on the Matrix of some 2-3, the infinite set of repetitions of pairs, and all these repetitions have the same length.

Let's define them, thus repetitions we name internal steps of the Matrix of a number.

the Internal step of the Matrix of a number (V) – each Matrix of a number consists of the internal steps which number is infinite. A mosaic of an arrangement of punctures, number of the punctured and not punctured numbers, the relative positioning of the punctured and not punctured numbers identical on all internal steps of the Matrix of a number.

the Length of an internal step of the Matrix of a number – is result of multiplication of numbers Which participated in the piercing, increased on 2. (For example, for the Matrix of some 2-3-5-7-11 (abbr. 2-11) $2 \times 3 \times 5 \times 7 \times 11 = 2310$).Even numbers on sieve Eratosfena are used only for definition of steps of Matrixes of a number.

2. We define a problem.

Those steams which were formed after piercing of numbers sharing on 3, we will designate as initial infinite set of pairs. We should learn, now, how many there will be steam, after infinite piercing, infinite set of numbers of piercing. Final there will be a set or infinite?! The remained set, will be set any more steam, and set of simple numbers-twins!

3. The problem decision.

By means of following for 3, simple number 5, we pierce on решете Eratosfena of pair, one of which numbers shares on 5. We in steam can pierce only one number as the size of a step of piercing is equal to more distance between steams. The distance size between steams is equal 2.

Size of a step of piercing (R) - the size of a step of piercing, is equal:

$$\mathrm{N} \times 2 = R$$

N - piercing number.

$\times 2-$Communication is defined with that that we work only with odd numbers on sieve Eratosfena.

Now we have built the Matrix of some 2-3-5, with length of an internal step:

$$\mathrm{V} = 2 \times 3 \times 5 = 30$$

On the Matrix of some 2-3-5 the infinite set of internal steps was formed:

$$0\text{-}30, 30\text{-}60, 60\text{-}90 \ldots \infty$$

For simplicity of a statement, we will simply count now (we will establish quantity a recounting method) steams on internal steps (S) Matrixes of some 2-3-5. Them will be 3. Thus it is necessary to bring updating of internal steps for correct calculation of pairs on them. If to consider strictly, for example, to 30 at us 29 will be not pair, and on a following internal step 31 as there will be not a pair. But, as a whole same pair and consequently at calculation, for accuracy of calculations of pairs, we consider steams on intervals:

0-31,32-61,62-91...∞

Further, we look how many R on V:

$$\frac{30}{5\times 2} = 3 = \mathrm{R}_{s}$$

And now and to receive size Between steps (X):

$$\mathrm{X} = \frac{S}{R_S} = \frac{3}{3} = 1$$

Size Between steps (X) - after the next piercing решета Eratosfena, we have made the infinite set of steps of piercing (W_{s_n}), and as a result remains infinite set of not punctured pairs (Q_{r_n}).

$$\mathrm{X} = \frac{Q_{r_n}}{W_{s_n}}$$

The size Between steps is defined on one internal step of the Matrix of a number, and we carry such definition for all Matrix of a number as it consists of infinite set and that the most important thing, identical internal steps. The size Between steps, it if to take the remained set of pairs, and in regular intervals to spread out between infinite set of steps of piercing.

There has come turn to pierce on sieve Eratosfena (improved to sieve with odd numbers) numbers sharing on 7. We do it, and we receive the Matrix of some 2-3-5-7.

Now the length of an internal step of a new Matrix of a number, consists of 7 internal steps of the previous Matrix of some 2-3-5, and is equal 210. Quantity of steps of piercing:

$$\frac{210}{7\times 2} = 15$$

At us still this quantity and quantity of points of piercing on an internal step of the Matrix of some 2-3-5-7:

7-21-35-49-63-77-91-105-119-133-147-161-175-189-203

And also quantity of odd numbers on an internal step of the previous Matrix of some 2-3-5:

1-3-5-7-9-11-13-15-17-19-21-23-25-27-29

And as the internal step of the Matrix of some 2-3-5-7 consists of internal steps of the Matrix of some 2-3-5, that, the quantity of odd numbers on an internal step of the Matrix of some 2-3-5-7 will be equal:

$$15 \times 7 = 105$$

And so, at piercing of numbers sharing on 7, we can on each internal step of the Matrix of some 2-3-5-7, from 105 numbers, pierce only 15. And it $\frac{1}{7}$ a part, that is from each 7 numbers we will pierce 1. The pair at us includes 2 numbers and consequently what to clean pair, it is enough to pierce one of pair numbers. And we do it twice, from it piercing of pairs occurs in the ratio $\frac{2}{7}$. And in general it $\frac{2}{n}$ where n, it is simple numbers in the order of an arrangement in natural to a number sequence.

Such process of piercing, it is possible to name as correct reading of the Alphabet, and thus we will present that we have an alphabet with infinite set of letters.

4. Correct reading of the Alphabet.

For an example we take the Matrix step rjada3-5, and to each number we will give the alphabet letter. Further, as we know, for formation of a step of the Matrix of some 3-5-7, undertake 7 steps of the Matrix of some 3-5. Now on each such step, all numbers we will designate alphabet letters, one after another, since the first of each internal step of the Matrix of some 2-3-5. And for this purpose what to distinguish a site of letters, we will number letters, depending on a serial number of an internal step of the Matrix of some 2-3-5.

Now we will look at reading of the alphabet by means of piercing of numbers sharing on 7:

1	A_1						
3	B_1	A_2					
5	C_1	B_2	A_3				
7	D_1	C_2	B_3	A_4			
9	E_1	D_2	C_3	B_4	A_5		
11	F_1	E_2	D_3	C_4	B_5	A_6	
13	G_1	F_2	E_3	D_4	C_5	B_6	A_7

15	H_1	G_2	F_3	E_4	D_5	C_6	B_7
17	I_1	H_2	G_3	F_4	E_5	D_6	C_7
19	J_1	I_2	H_3	G_4	F_5	E_6	D_7
21	K_1	J_2	I_3	H_4	G_5	F_6	E_7
23	L_1	K_2	J_3	I_4	H_5	G_6	F_7
25	M_1	L_2	K_3	J_4	I_5	H_6	G_7
27	N_1	M_2	L_3	K_4	J_5	I_6	H_7
29	O_1	N_2	M_3	L_4	K_5	J_6	I_7
		O_2	N_3	M_4	L_5	K_6	J_7
			O_3	N_4	M_5	L_6	K_7
				O_4	N_5	M_6	L_7
					O_5	N_6	M_7
						O_6	N_7
							O_7

At piercing of numbers sharing on 7, having passed an internal step the Matrix rjada3-7 which consists of seven Matrixes rjada3-5, "have read"all alphabet:

$$\mathrm{A}\ _4 - B_3 - C_2 - D_1 - E_7 - F_6 - G_5 - H_4 - I_3 - J_2 - K_1 - L_7 - M_6 - N_5 - O_4$$

As we see, piercing at "reading ", any letter has not passed, and the same letter, reads one time. And as, the simple number-single occupies one letter from 7 variants, it and "is read"once. But, simple numbers-twins, occupy two letters, and piercing, already "reads"two letters. And as a result, two pairs from 7, are pierced.

So work piercing, and from their work, we receive formulas for calculation of pairs and singles on number Matrixes.

5. The formula with which help the quantity of pairs on an internal step of the Matrix of a number is defined.

Quantity of singles and pairs, from number Piercings, on an internal step of a concrete Matrix of a number, gives in to calculation. And this quantity is presented on all internal steps of a concrete Matrix of a number.

a – quantity of pairs on the previous Matrix of a number.
b - quantity of singles on the previous Matrix of a number.
n – number of the new piercing, a new Matrix ряда3...-N.
c – quantity of pairs on the Matrix ряда3 . . . -N.
d – quantity of singles on the Matrix ряда3 . . . -N.

$c = a\times(n-2)$
$d = (b\times n) - b + 2a$

Here it is necessary to bring the essential remark. These formulas:
$c = a\times(n-2)$
$d = (b\times n) - b + 2a$
Show to us, how many remains on the Matrix of some singles and pairs which remained not touched by piercing action. But, as a result of piercing actions, there is also such action:
Piercing number $(n)\ \times 1$
Which changes nothing. But, the formula of it "does not know ", and subtracts. And if to be true, that, it writes off one unit, either pair or the single, on eternal storage Mega Matrixes. And similar writing off, any more does not find reflection in the subsequent Matrixes of a number! And this formula, considers quantity on number Matrixes. The same quantity which is on the first internal steps of Matrixes of a number from 0 to piercing number (the beginning of the first internal step of Matrixes of a number), cannot be considered any more.

6. About Between steps. The proof of infinity of set of preservation.

Let's note quantity of an average Between steps (X) on one step. Then we receive a number Between steps:

$$X_0, X_1, X_2 .... X_\infty.$$

For example. We have X_{53}.
And if the following number of piercing and if it "has not killed"any pair, that enters a course, Between steps would become Z_{54}, but as during pair piercing are pierced:

$$X_{54} = Z_{54} - Y_{54}$$

Now we will look at limits of sequences X and Y.
How we receive X? We will consider one more time. In the beginning we learn length of an internal step of the Matrix of a number. It is equal:
For example, for the Matrix of some 3-11.

On the Matrix of some 3-11, numbers 3,5,7,11 participating in piercing are involved and we therefore multiply these numbers:

$3 \times 5 \times 7 \times 11 = 1155$

And then we double result:

$1155 \times 2 = 2310$

Last number of piercing on the Matrix of some 3-11, is 11. And the length of its full step is equal $11 \times 2 = 22$.

From it, on the Matrix of some 3-11, we have:

2310: 22 = 105 full steps of piercing, on one internal step of the Matrix of some 3-11. Quantity of steps of piercing on an internal step of the Matrix of some 3-11 (R_s).

Under the formula specified in item 5, we calculate quantity of pairs on one internal step of the Matrix of some 3-11. It will be 135. Quantity of pairs on an internal step of the Matrix of some 3-11 (S)

Now we look at a parity $\frac{S}{R_s}$:

$\frac{135}{105} = 1,2857$

Here so we have calculated an average Between steps on the Matrix of some 3-11!

What to pass to a new member of sequence X, we already reduce a way of a finding.

As are formed X, we can write down and so:

$X_1 = X_0 \times \frac{N_2}{N_1} - Y_1$
$X_2 = X_1 \times \frac{N_3}{N_2} - Y_2$
$X_3 = X_2 \times \frac{N_4}{N_3} - Y_3$
And so it is infinite further!

$Y_1 = \frac{2}{N_2} \times (X_0 \times \frac{N_2}{N_1})$
$Y_2 = \frac{2}{N_3} \times (X_1 \times \frac{N_3}{N_2})$
$Y_3 = \frac{2}{N_4} \times (X_2 \times \frac{N_4}{N_3})$
And so it is infinite further!

N - simple numbers in the order of an arrangement in natural to a number sequence.

Let's consider our sequences, since $N_1 = 7$

And then accordingly $X_0 = 1$

Here is how there was an increase Between steps to the Matrix of some 3-53:

$1 \rightarrow 1,28 \rightarrow 1,28 \rightarrow 1,48 \rightarrow ightarrow...$

There where we see equality in Between steps, it there where is simple numbers-twins. At us the set of simply simple numbers, and a difference between them constantly increases. Whether but here so it actually with Between steps? What limit X and Y?

It is necessary for us to consider sequences X and Y. We will show them, and thus sequence Y, we will a little simplify:

$\mathbf{X}_i = X_{i-1} \times \frac{N_{i+1}}{N_i} - Y_i$
$\mathbf{Y}_i = \frac{2}{N_i} \times X_{i-1}, i \in N$
And so that at us is:
$\mathbf{X}_i = X_{i-1} \times \frac{N_{i+1}}{N_i} - Y_i = X_{i-1} \times \frac{N_{i+1}}{N_i} - \frac{2}{N_i} \times X_{i-1} = \frac{N_{i+1}-2}{N_i} \times X_{i-1}$
From this we see:
$\mathbf{X}_i = \frac{N_{i+1}-2}{N_i} \times X_{i-1} \Leftrightarrow \frac{N_i}{N_{i+1}-2} \times X_i = X_{i-1}$
Thus:
$\mathbf{Y}_i = \frac{2}{N_i} \times X_{i-1} = \frac{2}{N_i} \times \frac{N_i}{N_{i+1}-2} \times X_i = \frac{2}{N_{i+1}-2} \times X_i$
Initial sequences, it is possible to write down differently:
$\mathbf{X}_i = \frac{N_{i+1}-2}{N_i} \times X_{i-1}$
$\mathbf{Y}_i = \frac{2}{N_{i+1}-2} \times X_i$
i$\in N$
N $_i-$ it is sequence of simple numbers, since the first number .

Painting expression for X $_i$, we will receive:
$\mathbf{X}_i = \frac{N_{i+1}-2}{N_i} \times X_{i-1} = \frac{N_{i+1}-2}{N_i} \times \frac{N_i-2}{N_{i-1}} \times X_{i-2} = \frac{N_{i+1}-2}{N_i} \times \frac{N_i-2}{N_{i-1}} \times \frac{N_{i-1}-2}{N_{i-2}} \times X_{i-3} = ... = \frac{X_0(N_{i+1}-2)}{N_1} \prod_{j=2}^{i} \frac{N_j-2}{N_j}$
We follow further:
$\mathbf{Y}_i = \frac{2}{N_{i+1}-2} \times X_i = ... = \frac{2}{N_{i+1}-2} \times \frac{X_0 \times (N_{i+1}-2)}{N_1} \prod_{j=2}^{i} \frac{N_j-2}{N_j} = \frac{2X_0}{N_1} \prod_{j=2}^{i} \frac{N_j-2}{N_j}$

Now we will estimate Y $_i$ from below, with the account $N_j \leq N_{j+1} - 2$:
$\mathbf{Y}_i = \frac{2X_0}{N_1} \prod_{j=2}^{i} \frac{N_j-2}{N_j} > \frac{2X_0}{N_1} \prod_{j=2}^{i} \frac{N_j-2}{N_{j+1}-2} = \frac{2X_0}{N_1} \times \frac{N_2-2}{N_3-2} \times \frac{N_3-2}{N_4-2} \cdots \frac{N_{i-1}-2}{N_i-2} \times \frac{N_i-2}{N_{i+1}-2} = \frac{2X_0}{N_1} \times \frac{N_2-2}{N_{i+1}-2}$
Now we can see:
$\mathbf{Y}_i > \frac{2X_0}{N_1} \times \frac{N_2-2}{N_{i+1}-2}$

Now we will estimate Y $_i$ from above, with the account of that that $ln(1-x) < -x, x \in (0,1)$:
$\mathbf{Y}_i = \frac{2X_0}{N_1} \prod_{j=2}^{i} \frac{N_j-2}{N_j} = \frac{2X_0}{n_1} e^{ln \prod_{j=2}^{i} \frac{N_j-2}{N_j}} = \frac{2X_0}{N_1} e^{\sum_{j=2}^{i} ln(1-\frac{2}{N_j})} < \frac{2X_0}{N_1} e^{-2\sum_{j=2}^{i} \frac{1}{N_j}}$

Thus:

$\frac{2X_0}{N_1} \times \frac{N_2-2}{N_{i+1}-2} < \mathbf{Y}_i < \frac{2X_0}{N_1} e^{-2\sum_{j=2}^{i} \frac{1}{N_j}}$
Now we will pass here to a limit then with the account of that a number $\sum_{j=2}^{i} \frac{1}{N_j}$ disperses we will receive:

$\lim_{i\to\infty} \frac{2X_0}{N_1} \times \frac{N_2-2}{N_{i+1}-2} < \lim_{i\to\infty} Y_i < \lim_{i\to\infty} \frac{2X_0}{N_1} e^{-2\sum_{j=2}^{i} \frac{1}{N_j}} \Leftrightarrow 0 \leq \lim_{i\to\infty} Y_i \leq 0 \Leftrightarrow \lim_{i\to\infty} Y_i = 0$

Here we also have approached to the proof of that that $\lim_{i \to \infty} Y_i = 0.$

Let's continue further. Here at us is Y $_i = \frac{2}{N_{i+1}-2} \times X_i$. From it we see:

X$_i = \frac{N_{i+1}-2}{2} \times Y_i = X_0 \times \frac{N_{i+1}-2}{N_1} \prod_{j=2}^{i} \frac{N_j-2}{N_j} = X_0 \times \frac{N_{i+1}-2}{N_1} e^{ln \prod_{j=2}^{i} \frac{N_j-2}{N_j}} =$

$X_0 \times \frac{N_{i+1}-2}{N_1} e^{\sum_{j=2}^{i} ln(1-\frac{2}{N_j})} > X_0 \times \frac{N_{i+1}-2}{N_1} e^{-4 \sum_{j=2}^{i} \frac{1}{N_j}}$

Let's pass here to a limit:

$$\lim_{i \to \infty} X_i > \lim_{i \to \infty} X_0 \times \frac{N_{i+1}-2}{N_1} e^{-4 \sum_{j=2}^{i} \frac{1}{N_j}}$$

Now we will define a limit on the right:

$$\lim_{i \to \infty} X_0 \frac{N_{i+1}-2}{N_1} e^{-4 \sum_{j=2}^{i} \frac{1}{N_j}} = \frac{X_0}{N_1} \lim_{i \to \infty} \frac{N_{i+1}-2}{e^a}$$

a$= 4 \sum_{j=2}^{i} \frac{1}{N_j}$

At $\sum_{k=1}^{n} \frac{1}{p_k} \sim lnlnn$ and with account N $_1 = p_4$:

$\frac{X_0}{N_1 e^{-4(\frac{1}{2}+\frac{1}{3}+\frac{1}{5})}} \lim_{i \to \infty} \frac{N_{i+1}-2}{ln^4 i}$

At $\lim_{i \to \infty} \frac{(i+1)-2}{ln^4 i} = \infty$ That and a limit $\lim_{i \to \infty} \frac{N_{i+1}-2}{ln^4 i} = \infty$ As $N_{i+1} > i+1$

And as soon as X $_0$ can affect a sign on this limit, we have:

$\lim_{i \to \infty} X_0 \times \frac{N_{i+1}-2}{N_1} e^{-4 \sum_{j=2}^{i} \frac{1}{N_j}} = sign(X_0) \times \infty$

Here we see that limit Y $_i$ is always equal 0, and the limit X_i is equal $sign(X_0) \times \infty$ considering that $sign(0) \times \infty = 0$.

We see, the size Between steps (preservations) (X) aspires to infinite size, and size Becomes less (Y) size Between steps to 0.

Similar result, basically, a consequence of "murder"and preservation of pairs.

We saw that "murder"has such sequence:

$\frac{2}{5} \to \frac{2}{7} \to \frac{2}{11} \to \frac{2}{13} \to \frac{2}{17} \to ... \frac{2}{n} \to 0 \qquad n \to \infty$

Preservation has the sequence:

$\frac{3}{5} \rightarrow \frac{5}{7} \rightarrow \frac{9}{11} \rightarrow \frac{11}{13} \rightarrow \frac{15}{17} \rightarrow ... \frac{n-2}{n} \rightarrow +\infty \qquad n \rightarrow \infty$

Here a limit plus-infinity, but not 1. And, only that we deal with infinity. Therefore, this sequence can be written down so:

$\frac{\frac{3}{5}}{A_1} \rightarrow \frac{\frac{5}{7}}{A_2} \rightarrow \frac{\frac{9}{11}}{A_3} \rightarrow \frac{\frac{11}{13}}{A_4} \rightarrow \frac{\frac{15}{17}}{A_5} \rightarrow ... \frac{\frac{n-2}{n}}{A_u} \rightarrow +\infty \qquad n \rightarrow \infty \qquad u \rightarrow \infty$

And in appropriate way, Before sequence.

A $_0$–The initial infinite set of pairs.
$A_1, A_2, A_3 ... \ A_u \quad u \rightarrow \infty$
A $_u$–The infinite sets of pairs, after the next serial piercing.

Sequence limit $\frac{\frac{n-2}{n}}{A}$ is A. If and $= 8$ also the limit of the given sequence will be 8. At us And it first of all infinite set.

And if will admit, for example, that on the Matrix of some 3-N last real simple numbers-twins are postponed, and already further all remained infinite set of Matrixes of a number 0 simple numbers-twins will give out, then at us the set will be final. And we will face paradox. We should accept either our assumption, or the mathematical proof which withdraws us to infinity. Unless the size leaving in infinity, can have a final limit?! And at us, it should be then is equal 0!

And a similar assumption, have one nature with an assumption if we, on the Matrix of some 3-5 when have pierced $\frac{2}{5}$ steam, that, we have pierced infinite set of pairs, and if this infinite set to arrange from 0 in infinity, that, we, it would seem we will block all number. Well, and where then we will put what have not blocked?! Similar attempts are equal to attempts, on one infinite number, to lay out two infinite series of apples. Infinite set green, and then behind it infinite set of the red. There is only one variant, it to spread alternately. Infinitely mixing.

And here, we have a strict mathematical proof that the set of the kept aspires to plus-infinity, and set pierced to 0. From it also there will be as a result kept an infinite set. If would be final also the mathematical proof would speak to us about the return. The set of the kept would aspire to 0, and set pierced to plus-infinity!

Let's return once again to our assumption. About possibility gradual Deleting a number from pairs. Then we receive what not important system Deleting steam. Here we look:

We took in the beginning 5 steams and have cleaned 2 of them. Further, we to these have added 3 remained 4 what to receive 7. Then from 7 we clean 2. We receive 5.

Further, we to these 5 have added 6 what to receive 11. Then from 11 we clean 2. We receive 9.

Further, we to these 9 have added 4 what to receive 13. Then from 13 we clean 2. We receive 11.

Further, we to these 11 have added 6 what to receive 17. Then from 17 we clean 2. We receive 15.

Further, we to these 15 have added 4 what to receive 19. Then from 19 we clean 2. We receive 17.

Further, we to these 17 have added 6 what to receive 23. Then from 23 we clean 2. We receive 21.

And so on.

As we see, the set received constantly increases:

$$3 \rightarrow 5 \rightarrow 9 \rightarrow 11 \rightarrow 15 \rightarrow 21 \ldots \infty$$

And then we as though push out this set forward if at an assumption we pierce the first steams from last simple numbers-twins. But, this set is, and it has not disappeared anywhere!

There is one more interesting thing which directly is connected with our sequences presented in this chapter.

As we have already found out, delivery of new real pairs, occurs in places $P_n^2 \longleftrightarrow P_{n+1}^2$ n - simple number n+1 - following simple number for n.

Here these sites:

25-49-121-169-289-361-529-841-961-.....∞

And so, thanks to that ours Between steps (the set of pairs on one step) aspires to infinity, also the set of pairs given out in $P_n^2 \longleftrightarrow P_{n+1}^2$ has For all the increase tendency. Also to aspire to plus-infinity.

It would seem, the density of simple numbers-twins decreases, but here the chance of occurrence of new simple numbers-twins increases. And the further, the there are more than chances of reception of new pairs. As though they seldom did not settle down on natural to a number sequence.

Each new Matrix of a number, as a whole aspires to give out It is more set of simple numbers-twins, than previous. And this For all can be checked up the tendency easily to last simple numbers-twins known to us!

7. The theory conclusion.

Let's return to $X = Z - Y$

1. Proceeding from size definition Between steps, at size > 0, set of pairs infinitely.

2. Proceeding from size definition Between steps, at size $= 0$, set of pairs certainly as we cannot any final size spread out to identical infinite set of sizes. At such outcome, limit X should be equal 0!

3. At increase in length of a step of piercing, we automatically increase size Between steps. If, the size Between steps increased only for the account increase in length of a step of piercing:

$$\mathrm{Z}\ _i = \mathrm{a} \times \frac{N_{i+1}}{N_1} \qquad \lim_{i\to\infty} Z_i = \infty$$

3. But at us, size Y constantly corrects Z, and from it:

$$X \neq Z \qquad X = Z - Y$$

4. But, if $X = Z - Y$ to write down through sizes of limits:

$$+\infty = +\infty - 0$$

We see that X and Z aspire to one limit, and their limit is opposite to a limit 0.

5. Proceeding from the conclusions from point 1 and point 4, we can draw a conclusion that the final set of simple numbers-twins is excluded. From it it can be only infinite!

8. The used literature.

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