

VERIFY THE CONJECTURE



cem yalcin yildirim <cyalciny@gmail.com>

CONJECTURE for PRIME NUMBERS (now theorems) by Dimitris Valianatos GREECE

1 mesaj

dim val <dim-val@hotmail.com>

23 Haziran 2012 20:59

Alici: Cem Yalçın Yıldırım <yalciny@boun.edu.tr>

Dear Cem

I greet.

I would like to give you more information about my conjectures for prime numbers.

I will give you 2 conjectures for prime numbers, which gave me the idea for the twin primes conjecture.

(These 2 conjectures I was able to prove, so now are two important theorems in the theory of prime numbers. I will send you the proof.)

C)

First see the correlation with the twin primes.

As we saw the twin primes are pairs (p_1, p_2) where p_1, p_2 are primes $p_2 - p_1 = 2$ and $e = (p_1 + p_2) / 2$ is an even number among them.

Thus we have the triples: $(3, 4, 5), (5, 6, 7), (11, 12, 13), (17, 18, 19), (29, 30, 31), (41, 42, 43), (59, 60, 61), (71, 72, 73), \dots, (p_1, e, p_2)$

$e \rightarrow \{4, 6, 12, 18, 30, 42, 60, 72, \dots\}$ (some numbers e divisible by 3 and some with 3 and 4, ie 12). and apply the rule.

if $e = 0 \pmod 4$ or $p_1 = 3 \pmod 4$ then we form the product $\prod p_2/p_1$

if $e = 2 \pmod 4$ or $p_1 = 1 \pmod 4$ then we form the product $\prod p_1/p_2$

So my conjecture says that the product:

$$(3^2 / 2^2) * (5^2 / 3^2) * (5^2 / 7^2) * (13^2 / 11^2) * (17^2 / 19^2) * (41^2 / 43^2) * (61^2 / 59^2) * (73^2 / 71^2) * (101^2 / 103^2) * \dots = \pi?$$

$$(29/31)^2$$

$$3.1887755102040816321 \text{ to } 1e 1 \quad (3^2 / 2^2 * 5^2 / 3^2 * 5^2 / 7^2)$$

$$3.2055606708805624550 \text{ to } 1e 2$$

$$3.1290622219773513145 \text{ to } 1e 3$$

$$3.1364540609918890779 \text{ to } 1e 4$$

$$3.1384537326021492746 \text{ to } 1e 5$$

$$3.1417076006640026373 \text{ to } 1e 6$$

$$3.1417823471756806475 \text{ to } 1e 7$$

$$3.1415377533170544536 \text{ to } 1e 8$$

$$3.1415215264211035597 \text{ to } 1e 9$$

$$3.1415248453830039795 \text{ to } 1e 10$$

$$3.1415126339547108140 \text{ to } 1e 11$$

$$3.1415144504088659201 \text{ to } 1e 12$$

$$3.1415142045284687040 \text{ to } 1e 13$$

$$3.1415144719058962626 \text{ to } 1e 14$$

$$3.1415384423175311229 \text{ to } 1e 15$$

A)

$$\left(\frac{3}{2}\right)^2 \left(\frac{5}{3}\right)^2 \left(\frac{5}{7}\right)^2 \left(\frac{13}{11}\right)^2 \left(\frac{17}{19}\right)^2 \dots \stackrel{?}{=} \pi$$

$$\stackrel{so}{\left(\frac{3}{2}\right)^2} \prod_{\substack{p, p+2: \text{prime} \\ p \equiv 1 \pmod{4}}} \left(\frac{p}{p+2}\right)^2 \prod_{\substack{p, p+2: \text{prime} \\ p \equiv 3 \pmod{4}}} \left(\frac{p+2}{p}\right)^2 \stackrel{?}{=} \pi$$

(Always the prime which is $1 \pmod{4}$ is in the numerator)