

Title: Construction of the sequence of prime numbers

Author: Gabriel Martin Zeolla

Comments: 3 pages and 2 tables.

Subj-class: Theory number

gabrielzvigo@hotmail.com

Abstract: This paper develops the construction of the **Golden Pattern** for different prime divisors, the discovery of patterns towards infinity. The discovery of infinite harmony represented in fractal numbers and patterns. These patterns form the sequence of prime numbers

Keywords: Golden Pattern, prime number, simple prime number.

1) Sequence of consecutive prime numbers

Table1

Golden Pattern	Simple Prime Number	
3-Golden Pattern	$3 > 5^2$	$5^2=25$
5-Golden Pattern	$5 > 7^2$	$7^2=49$
7-Golden Pattern	$7 > 11^2$	$11^2 = 121$
11-Golden Pattern	$11 > 13$	$13=169$
13-Golden Pattern	$13 > 17^2$	$17^2=289$
17-Golden Pattern	$17 > 19^2$	$19^2=361$
Continue infinitely with other Golden Pattern		

In red the consecutive prime numbers of each sequence

Sequence: 3-Golden Pattern <http://vixra.org/abs/1803.0098>

1, **5, 7, 11, 13, 17, 19, 23**, 25, 29, 31, 35, 37, 41, 43, 47, 49, 53, 55, 59, 61, 65, 67, 71, 73, 77, 79, 83, 85, 89, 91, 95, 97, 101, 103, 107, 109, 113, 115, 119, 121, 125, 127, 131, 133, 137, 139, 143, 145, 149, ..

Sequence: 5-Golden Pattern <http://vixra.org/abs/1802.0201>

1, **7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47**, 49, 53, 59, 61, 67, 71, 73, 77, 79, 83, 89, 91, 97, 101, 103, 107, 109, 113, 119, 121, 127, 131, 133, 137, 139, 143, 149, 151, 157, 161, 163, 167, 169, 173, 179, 181, 187, 191, 193, 197, 199, 203, 209, ..

Sequence: 7-Golden Pattern <http://vixra.org/abs/1801.0064>

1, **11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, 97, 101, 103, 107, 109, 113**, 121, 127, 131, 137, 139, 143, 149, 151, 157, 163, 167, 169, 173, 179, 181, 187, 191, 193, 197, 199, 209, 211, 221, 223, 227, 229, 233, 239, 241, 247, ..

Sequence: 11-Golden Pattern <http://vixra.org/abs/1802.0236>

1, **13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, 97, 101, 103, 107, 109, 113, 127, 131, 137, 139, 149, 151, 157, 163, 167**, 169, 173, 179, 181, 191, 193, 197, 199, 211, 221, 223, 227, 229, 233, 239, 241, 247, 251, 257, 263, 269, ..

Sequence: 13-Golden Pattern <http://vixra.org/abs/1802.0363>

1, **17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, 97, 101, 103, 107, 109, 113, 127, 131, 137, 139, 149, 151, 157, 163, 167, 173, 179, 181, 191, 193, 197, 199, 211, 223, 227, 229, 233, 239, 241, 251, 257, 263, 269, 271, 277, 281, 283**, 289, ..

Sequence: 17-Golden Pattern <http://vixra.org/abs/1805.0544>

1, **19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, 97, 101, 103, 107, 109, 113, 127, 131, 137, 139, 149, 151, 157, 163, 167, 173, 179, 181, 191, 193, 197, 199, 211, 223, 227, 229, 233, 239, 241, 251, 257, 263, 269, 271, 277, 281, 283, 293, 307, 311, 313, 317, 331, 337, 347, 349, 353, 359**, 361, ..

2) Construction of the sequence of consecutive prime numbers using the Golden Pattern.

Table 2

Golden Pattern	Simple Prime Number	
3-Golden Pattern	$3 > 5^2$	$5^2=25$
5-Golden Pattern	$5^2 > 7^2$	$7^2=49$
7-Golden Pattern	$7^2 > 11^2$	$11^2 = 121$
11-Golden Pattern	$11^2 > 13$	$13=169$
13-Golden Pattern	$13^2 > 17^2$	$17^2=289$
17-Golden Pattern	$17^2 > 19^2$	$19^2=361$
Continue infinitely with other Golden Pattern		

In red the consecutive prime numbers of each sequence, linking all the patterns

Sequence: 3-Golden Pattern <http://vixra.org/abs/1803.0098>

1, **5, 7, 11, 13, 17, 19, 23**, 25, 29, 31, 35, 37, 41, 43, 47, 49, 53, 55, 59, 61, 65, 67, 71, 73, 77, 79, 83, 85, 89, 91, 95, 97, 101, 103, 107, 109, 113, 115, 119, 121, 125, 127, 131, 133, 137, 139, 143, 145, 149, ..

Sequence: 5-Golden Pattern <http://vixra.org/abs/1802.0201>

1, 7, 11, 13, 17, 19, 23, **29, 31, 37, 41, 43, 47**, 49, 53, 59, 61, 67, 71, 73, 77, 79, 83, 89, 91, 97, 101, 103, 107, 109, 113, 119, 121, 127, 131, 133, 137, 139, 143, 149, 151, 157, 161, 163, 167, 169, 173, 179, 181, 187, 191, 193, 197, 199, 203, 209, ..

Sequence: 7-Golden Pattern <http://vixra.org/abs/1801.0064>

1, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, **53, 59, 61, 67, 71, 73, 79, 83, 89, 97, 101, 103, 107, 109, 113**, 121, 127, 131, 137, 139, 143, 149, 151, 157, 163, 167, 169, 173, 179, 181, 187, 191, 193, 197, 199, 209, 211, 221, 223, 227, 229, 233, 239, 241, 247, ..

Sequence: 11-Golden Pattern <http://vixra.org/abs/1802.0236>

1, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, 97, 101, 103, 107, 109, 113, **127, 131, 137, 139, 149, 151, 157, 163, 167**, 169, 173, 179, 181, 191, 193, 197, 199, 211, 221, 223, 227, 229, 233, 239, 241, 247, 251, 257, 263, 269, ..

Sequence: 13-Golden Pattern <http://vixra.org/abs/1802.0363>

1, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, 97, 101, 103, 107, 109, 113, 127, 131, 137, 139, 149, 151, 157, 163, 167, **173, 179, 181, 191, 193, 197, 199, 211, 223, 227, 229, 233, 239, 241, 251, 257, 263, 269, 271, 277, 281, 283**, 289, ..

Sequence: 17-Golden Pattern <http://vixra.org/abs/1805.0544>

1, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, 97, 101, 103, 107, 109, 113, 127, 131, 137, 139, 149, 151, 157, 163, 167, 173, 179, 181, 191, 193, 197, 199, 211, 223, 227, 229, 233, 239, 241, 251, 257, 263, 269, 271, 277, 281, 283, **293, 307, 311, 313, 317, 331, 337, 347, 349, 353, 359**, 361, ..

3) Prime Number

Linking all the sequences of the golden patterns all the prime numbers are connected.

Sequence: Prime number < 3

5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, 97, 101, 103, 107, 109, 113, 127, 131, 137, 139, 149, 151, 157, 163, 167, 173, 179, 181, 191, 193, 197, 199, 211, 223, 227, 229, 233, 239, 241, 251, 257, 263, 269, 271,

References

Enzo R. Gentile, Elementary arithmetic (1985) OEA.

Burton W. Jones, Theory of numbers

Iván Vinogradov, Fundamentals of Number Theory

Niven y Zuckermann, Introduction to the theory of numbers

Dickson L. E., History of the Theory of Numbers, Vol. 1

Zeolla Gabriel Martin, Golden Pattern. <http://vixra.org/abs/1801.0064>

Zeolla Gabriel Martin, Expression to get Prime Numbers and Twin Prime Numbers, <http://vixra.org/abs/1801.0093>

Zeolla Gabriel Martin, 3-Golden Pattern <http://vixra.org/abs/1803.0098>

Zeolla Gabriel Martin, 5-Golden Pattern. <http://vixra.org/abs/1802.0201>

Zeolla Gabriel Martin, 7-Golden Pattern, Formula to Get the Sequence. <http://vixra.org/abs/1801.0381>

Zeolla Gabriel Martin, 11-Golden Pattern. <http://vixra.org/abs/1802.0236>

Zeolla Gabriel Martin, 13-Golden Pattern. <http://vixra.org/abs/1802.0363>

Zeolla Gabriel Martin, 17-Golden Pattern <http://vixra.org/abs/1805.0544>

Professor Zeolla Gabriel Martin
Buenos Aires, Argentina
10/2018
gabrielvirgo@hotmail.com