A New Method to Find Two Large Prime Numbers of Any Composite Numbers Without Doing Factorization

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Abstract -

This research is all about the biggest question... is it possible that without using factorization method can we find two prime numbers factors of any given product (composite number)?

Answer is yes....

We have found the formula method that proves how additive property of prime numbers has direct relation with its multiplicative property and how it can help to find any two multiplied prime factors of given composite number.

Introduction -

It is believed throughout the history that there is no pattern in prime numbers and its distribution in natural numbers are random. Our alfa omega series of prime number theory proves that prime number do have pattern and they are not randomly distributed in natural numbers.

This theory also states that fundamental property of prime numbers are combination of additive and subtractive operations and its sum must be a composite number divisible by associated prime factor.(for details check below theory).

Alfa & Omega Prime Number Theory.

Below shown is the method for divisible by prime number 5 only.

Method Example 1.1

Step 1 -

This step is to find '**Specific Natural Numbers**' to operate alfa & omega series.

There is a secret formula to find those specific natural numbers which we haven't disclosed it here. The unknown fact is that there are infinitely many specific natural numbers governing each and every prime numbers like 2 ,3, 5, 7.... and are direct responsible for each and every prime numbers behavior and properties. Those natural numbers can be used to find any required composite numbers and its prime factors.

We know that specific natural numbers for prime factor number 5 is 25, 21, 11, 12. therefore we use this numbers for below arithmetic operation of alfa additive & omega series.

Step 2 - Creating Alfa Additive Series.

25 + 21 = 46

46 + 21 = 67

67 + 21 = 88

88 + 21 = 109

109 + 21 = 130

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Note.

This series can go towards infinity as we go on adding constant number 21 to each sum in sequence. **25** and **21** is the **specific natural numbers** taken in case of this series.

Step 3 - Adding specific natural numbers 11, 12 series to find omega series.

11 + 12 = 23

12 + 12 = 24

23 + 12 = 35

24 + 12 = 36

35 + 12 = 47

36 + 12 = 48

47 + 12 = 59

48 + 12 = 60

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Note.

Starting from 11 go on adding constant number 12 in sequence as shown above to get as many series of numbers infinitely. **11** and **12** is the **specific natural numbers** in case of this series. . Notice above, the terms vertically on the left side i.e. 11,12, 23, 24, 35, 36.. Those are the omega series. Take only those series.

Step 4 - Combine both the above series we get...

Alfa & Omega Series.

25 + 21 = 46 - 11 = 35 (5×7).

46 + 21 = 67 - 12 = 55 (5×11).

67 + 21 = 88 - 23 = 65 (5×13).

88 + 21 = 109 - 24 = 85 (5×17).

109 + 21 = 130 - 35 = 95 (5×19).

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Note -

Omega series numbers 11,12, 23, 24, 35... (highlighted in red color) When subtracted from sums of alfa series we get composite numbers which are divisible by prime number 5. This series can go towards infinity as we go on combining Alfa & Omega Series. No matter how further we calculate, the result will be same. Further there would be some numbers in the series which would appear as composites of composites numbers like... 125, 175, 275 etc. They also must be a divisible of prime number 5 or associated prime numbers.

Repetitive pattern of prime numbers -

Notice above when we combine the alfa and omega series we get a pattern of composite numbers 35, 55, 65.... those numbers are divisible by only prime number 5. This is not a coincidence, it is because we use a specific natural numbers 21, 11, 12 (Constants) to generate alfa & omega series. Therefore we get repetitive pattern of composite numbers divisible only by repetitive prime factor number 5. This shows the proof that prime number 5 and associated composite numbers is governed by specific natural numbers like 25, 21, 11, 12. This also proves that all prime numbers and composite numbers (divisible by prime numbers) are governed by their own associated specific natural numbers.

Primality Test -

Since using the above method we can get any composite numbers and its prime factors instantly, therefore it is also possible to use this method for primality testing with 100 % correct result.

E.g. Assuming that we don't know 35 is composite number. To find number 35 is prime or not?

Using alfa & omega series as explained above...

We get 25 + 21 = 46 - 11 = 35 (5×7).

35 is divisible by 5 therefore it is composite. Just by knowing specific natural numbers i.e. 25, 21, 11 we found result.

Knowing Large Prime Factors -

Just by knowing few **specific natural number** like 25, 21, 11, 12 we created series which gave the result of composite numbers such as 35 55, 65, 85... and we found their prime factors such as 5×7, 5×11, 5×13 etc. So it is also possible to know any two large prime factors of given composite numbers instantly, only if we know what are those specific numbers to use in the series to get result.

Method for prime number divisible by number 5, using another set of specific natural numbers.

Example 1.2

424 and 339 is the specific natural numbers used in case of this series.

Step 1 - Create Alfa Additive Series.

424 + 339 = 763

763 + 339 = 1102

1102 + 339 = 1441

1441 + 339 = 1780

1780 + 339 = 2119

2119 + 339 = 2458

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Note.

This series can go towards infinity.

Step 2 -

168 and 167 is the specific natural numbers in case of this series. To find omega series adding specific natural number 168, 167

168 + 168 = 336

168 + 167 = 335

168 + 336 = 504

168 + 335 = 503

168 + 504 = 672

168 + 503 = 671

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Note.

Starting from 168 go on adding constant number 168 in sequence as shown above to get as many series of numbers infinitely.

Notice above, the terms vertically on the right side i.e. 168, 167, 336, 335, 504, 503......

Those are the omega series.

Step 3 - Combine both the above series we get...

Alfa & Omega Series.

424 + 339 = 763 - 168 = 595 (5 × 119).

763 + 339 = 1102 - 167 = 935 (5 × 187).

1102 + 339 = 1441 - 336 = 1105 (5 × 221).

1441 + 339 = 1780 - 335 = 1445 (5 × 289).

1780 + 339 = 2119 - 504 = 1615 (5 × 323).

2119 + 339 = 2458 - 503 = 1955 (5 × 391).

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Series goes towards infinity.

This way just by knowing specific natural numbers anyone can find any composite numbers and their prime factors.

Links Between Prime Factors in Series -

Check the prime factor of Alfa & Omega Series method **example 1.1**

35 (5 ×7)

55(5 × 11)

65(5 × 13)

85(5 × 17)

95(5 × 19)..

Next, check composite numbers & its prime factors of Alfa & Omega Series method **example 1.2**

119 (17 ×7)

187 (17 × 11)

221 (17 × 13)

323 (17 × 17)..

They are all interrelated with each other having same prime factors multiplied like...7, 11,13, 17 etc.

E.g. 35 is divisible by 7 at example 1.1 and 119 is also divisible by 7 at example 1.2

This is not a coincidence. This happens due the link between all the alfa and omega series. This is the second proof that all prime numbers and composite are linked with each other in counting natural numbers and behave in orderly form in number line.

RSA & ECC Technology -

Credit card uses encryption, decryption technology to send secret information over internet. Cryptography is essentially the study of coding and sending secret messages. One of the most widely used cryptographic systems is called RSA. It's easier to multiply two large primes to get larger composite number, but it's is hard to factorize that composite back into the original two primes. This is the technology RSA is based on.

BUT....

We know that by using secret formula (haven't disclosed here) and explained above theory method. We can find any two largest prime factors of given composite number in an instant.

So the question is.... is really RSA technology safe?

Even elliptic-curve cryptography (Ecc) holds many loopholes that can be proven by this theory.

So even is this technology safe?

Conclusion -

There are many secrets this theory reveals about prime numbers. If this theory is taken into consideration, it may reveal many more secrets of prime numbers. The Cryptography, RSA, ECC use prime numbers for encryption and decryption of information and it is believed that this technology is the safest method, but this theory reveals that RSA trapdoor function is not the safest technology. Even there are many loopholes in ECC technology.

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