The Ratio Between Primes and Composites

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Prime Numbers Formula:

The formula used to separate prime numbers within an ascending numeric list from 1 to X from the rest of the numbers in the list uses the direct relationship of opposition existing between composite and prime numbers.
Following the ratio that every number greater than 1 that is not composite is prime:

{P}={N<=x}-({N<=x/2}•{N<=x/2})

Composite Numbers Formula:

x•{N<=x} = {C}

Composite numbers follow an opposite ratio to prime numbers, being inversely proportional to them. Thus, the more composite numbers exist in an ascending numeric list between 1 and X, proportionally fewer prime numbers exist within that same list.

Let:

f(x) = 2^x

Exclusive Prime Numbers (2,5):

Exclusive prime numbers are essential for non-existence of various prime numbers.

Classifying 2 as a prime inherently defines that 2 is exclusively the only even prime number, considering that every other even number is necessarily a multiple of 2.

Classifying 5 as a prime inherently defines 5 as the only prime ending in 5, considering that any other number ending in 5 is necessarily a multiple of 5.

Prime Number Validation Formula:

The most efficient formula to validate whether a number is prime is:

$$\frac{x}{\{ P <= x/2 \}} \neq N$$