

## A New Look at Prime Numbers

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### Abstract

We have found patterns in the numbers that remain after multiples of primes are removed from the natural numbers according to the sieve of Eratosthenes. These patterns have several uses.

It is not necessary to remove the multiples of primes from the natural numbers in steps. That is, the removal of the multiples of several primes can be accomplished in one step.

Given the first  $n$  primes, the next several primes can be calculated directly.

The gaps between primes can be calculated more precisely.

A new look at the twin primes is presented.