A FURTHER DEFINITION OF PRIME NUMBER

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Abstract: This article redefine the prime number in angle with irreducible.

• Introduction and results
We have the definition of prime number in Number Theory such as

1. A natural number p is called prime if the only natural numbers dividing p are 1 and p itself [1].
2. A prime number is an integer p greater than 1 whose only positive divisors are 1 and p [2].

These definitions are both in angle with divisibility. In here, we through another angle with irreducible to redefine the prime number,

Definition. Let n₀ be a positive integer; for every natural number n which less than n₀, if there always exist
\[ \gcd(n, n₀) = 1 \]

We call n₀ is a prime number.

That is too saying:

A prime number is a positive integer that irreducible to every natural number which less than itself.