

# The axiomatic pattern of prime numbers

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## Abstract

In this paper, we analyze the behavior of prime numbers.

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## 1 Introduction and results

In 1859, Riemann [Rie59] computed the distribution of primes. Our motivation is to axiomatize the structure of primes. We have the following postulate.

**Postulate 1.** Let  $p$  be a prime number. Then:

1.  $p \neq 0, 1$ .
2.  $p^0 = 1$ .
3.  $1 \mid p$ .
4.  $0p \in \mathbf{N}$ .

## References

- [Rie59] B. Riemann. Ueber die Anzahl der Primzahlen unter einer gegebenen Grösse. *Monatsber. Akad. Berlin*, pages 671–680, 1859.