



Result

Proposition 1. *Suppose $n \in \mathbf{N}$ and $n > 1$. Then there exists a factorization (π_1, \dots, π_p) of n where π_i is prime for $i = 1, \dots, p$. In other words,*

$$n = \pi_1 \pi_2 \cdots \pi_p$$

The above result is known as the *fundamental theorem of arithmetic* and the *prime factorization theorem*. Future editions will include the proof.

