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## Primes in $\mathbb{N}$

  $\text{primes}(\mathbb{N})$  is infinite.

 **(Difference between consecutive primes)** There is an integer  $K \in \mathbb{N}$  such that

$$p_{n+1} - p_n < Kp_n^{\frac{5}{8}}$$

where  $p_n$  is the  $n$ -th prime number.

Current note has 0 direct children and 0 total descendants.

- [stretchy](#)
  - $\mathbb{Z}$ 
    - [Primes in  \$\mathbb{N}\$](#)

And it has 6 siblings.

- [stretchy](#)
  - $\mathbb{Z}$ 
    - [Division in  \$\mathbb{Z}\$](#)
    - [Euler totient function](#)
    - [gcd of integers](#)
    - [Primes in  \$\mathbb{N}\$](#)
    - [Partitions of naturals](#)
    - [Prime-representing function](#)