

Mills

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# Chapter 1

## Mills' constant

**Definition 1.1.** *A positive real number  $x$  is Mills if  $1 < x$  and for all positive integers  $n$ , the number  $\lfloor x^{3^n} \rfloor$  is prime.*

**Proposition 1.2.** *There exists a Mills number.*

*Proof.* proof □

**Theorem 1.3.** *The Mills' constant is irrational.*

*Proof.* proof □