

## Theorems

**Thm.** If  $d$  is a factor of  $n$ ,  $n \neq 0$  and  $d \neq 0$ , then  $n/d$  is a factor of  $n$ .

**Thm.** If  $n$  is a composite, then  $n$  has a prime factor  $p$  such that  $p^2 \leq n$

**Thm.** If  $n \in \mathbb{J}$  and  $n > 1$  such that  $n$  is not divisible by any prime  $p$ , where  $p^2 \leq n$ , then  $n$  is prime.

Is 109 prime?

Is 397 prime?