

typst-theorems

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<https://github.com/sahasatvik/typst-theorems>

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1. Introduction

This document only includes the examples given in the manual; each one of these has been explained in full detail there.

2. Feature demonstration

Theorem 2.1 (Euclid): There are infinitely many primes.

Lemma 2.2: If n divides both x and y , it also divides $x - y$.

Corollary 2.2.1: If n divides two consecutive natural numbers, then $n = 1$.

2.1. Suppressing numbering

Example: The numbers 2, 3, and 17 are prime.

Lemma: The square of any even number is divisible by 4.

Lemma 2.1.1: The square of any odd number is one more than a multiple of 4.

2.2. Limiting depth

Definition 2.1 (Prime numbers): A natural number is called a *prime number* if it is greater than 1 and cannot be written as the product of two smaller natural numbers.

Definition 2.2 (Composite numbers): A natural number is called a *composite number* if it is greater than 1 and not prime.

Example 2.2.0.0.1: The numbers 4, 6, and 42 are composite.

2.3. Custom formatting

Lemma 2.3.1: All even natural numbers greater than 2 are composite.

PROOF: Every even natural number n can be written as the product of the natural numbers 2 and $n / 2$. When $n > 2$, both of these are smaller than 2 itself. \square

Notation (I): The variable p is reserved for prime numbers.

2.4. Labels and references

Recall that there are infinitely many prime numbers via Theorem 2.1.

You can reference future environments too, like COROLLARY (2.3.1.1).

This reference to Definition 2.1 is not linked!

2.5. Overriding base

Remark 2.5.1: There are infinitely many composite numbers.

Corollary 2.3.1.1: All primes greater than 2 are odd.

Remark 2.3.1.1.1: Two is a *lone prime*.