# New blueprint test

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Natural numbers

**Definition 1** (Natural numbers)**.**

Addition Here we define addition of natural numbers.

**Definition 2.** Natural number addition.

**Theorem 3.** *For any natural number $a$, $0 + a = a$.*

*Proof.* The proof follows by induction. □

**Theorem 4.** *For any natural numbers $a, b$, $(a + 1) + b = (a + b) + 1$.*

*Proof.* Proof by induction on ‘b‘. □

**Theorem 5.** *For any natural numbers $a, b$, $a + b = b + a$.*

*Proof.* The base case follows from **??**.
The inductive case follows from **??**. □

Multiplication

**Definition 6.** Natural number multiplication.

**Theorem 7.** *For any natural numbers $a, b$, $a * b = b * a$.*

*Proof.* □

Fermat’s Last Theorem

**Theorem 8** (Taylor–Wiles)**.** *Fermat’s last theorem.*

*Proof.* See [**?**, **?**]. □