Why

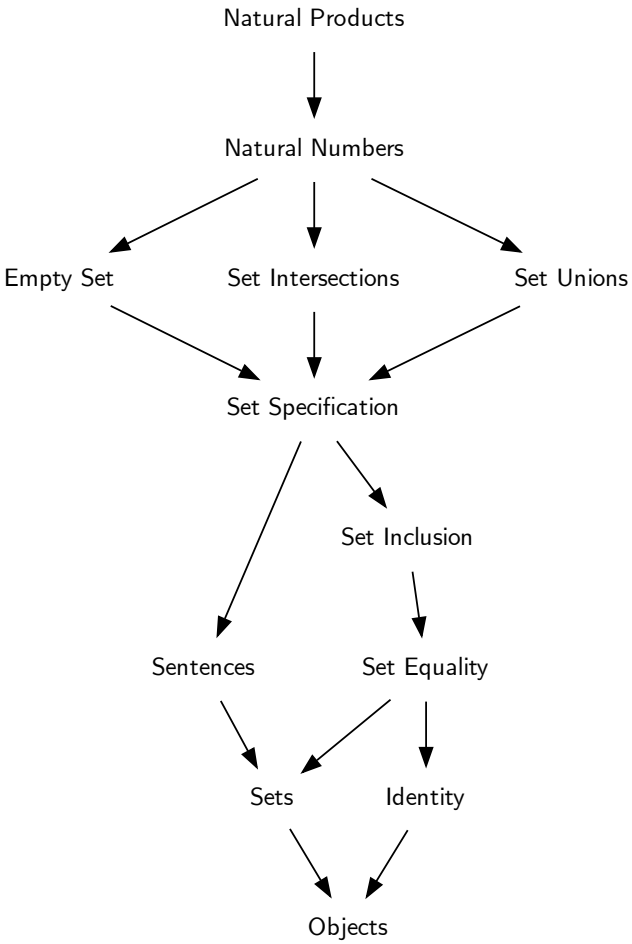
TODO

Definition

Let m and n naturals. If we add n copies of m we obtain a number. If we add m copies of n we obtain a number. Indeed, we obtain the same number in both cases. We call this number the **product** of m and n. We say we **multiply** m to n, or vice versa. We call this symmetric operation mapping (m, n) to their product **multiplication**.

Notation

We denote the operation of multiplication by $\cdot$ and so denote the product of the naturals m and n by $m \cdot n$.


Natural Products
Natural Numbers
Empty Set
Set Intersections
Set Unions
Set Specification
Set Inclusion
Sentences
Set Equality
Sets
Identity
Objects