

1. definition

A signature (Σ, Δ) is a pair with $\Sigma = \cup_{n \in N} \Sigma_n$ and $\Delta = \cup_{n \in N} \Delta_n$, where all Σ_n and Δ_n are pairwise disjoint. Every $f \in \Sigma_n$ is a function symbol of arity n , every $p \in \Delta_n$ is a predicate symbol of arity n . We always require $\Sigma_0 \neq \emptyset$.

Example.2.1.2

Example program uses the following signature (Σ, Δ) : $\Sigma = \Sigma_0 \cup \Sigma_3$, $\Delta = \Delta_1 \cup \Delta_2$ (see slide 9)

Terms are the "objects" of predicate logic.

Definition.2.1.3

Let (Σ, Δ) be a signature, let

