

Trees

Definition: Given a tree t and a node $u \in \text{dom}(t)$, the *subtree rooted at u* is the tree t/u whose domain is the set $\{v \mid uv \in \text{dom}(t)\}$ and such that $t/u(v) = t(uv)$ for all $v \in \text{dom}(t/u)$.

Given two trees t_1 and t_2 and an address u in $\text{dom}(t_1)$, the result of *replacing the subtree rooted at u in t_1 with t_2* , denoted by $t_1[u \leftarrow t_2]$ is the function whose domain is:

and whose graph is the set of pairs: