

Formale Baumsprachen

Task 19 (relabelings)

- (a) Show that any relabeling preserves the image under pos .

Let Σ and Δ be ranked alphabets.

- (b) Under which conditions is there a relabeling between trees over Σ and trees over Δ ?
- (c) Let τ be a relabeling between trees over Σ and trees over Δ . Now consider $\sigma \in \Sigma$, $\xi \in \mathbb{T}_\Sigma$, and $L \subseteq \mathbb{T}_\Sigma$. Quantify τ in the following expressions:

(i) $\tau(\sigma)$,

(ii) $\tau(\xi)$, and

(iii) $\tau(L)$.