

Let $S = \{x, y, z\}, T = \{x, y\}$.

First, form the sequence $\langle S, T \rangle = \{ \} [0 \mapsto S] [1 \mapsto T]$.

Then $\Sigma \langle S, T \rangle = \{ [i, x] \mid i \in \{0, 1\} \text{ and } x \in S \text{ or } T \}$, which is $\{ [0, x], [0, y], [0, z], [1, x], [1, y] \}$.