$\sqcap$-rule: Replace $A \in M$ by A', if

$a\colon C \sqcap D \in A$ **and** $\{a\colon C, a\colon D\} \not\subseteq A$ **and**

$A' = A \cup \{a\colon C, a\colon D\}$

$\sqcup$-rule: Replace $A \in M$ by A' and A'', if

$a\colon C \sqcup D \in A$ **and** $\{a\colon C, a\colon D\} \cap A = \emptyset$ **and**

$A' = A \cup \{a\colon C\}$ **and** $A'' = A \cup \{a\colon D\}$

$\forall$-rule: Replace $A \in M$ by A', if

$\{a\colon \forall r.C, (a,b)\colon r\} \subseteq A$ **and** $b\colon C \notin A$ **and**

$A' = A \cup \{b\colon C\}$

$\exists$-rule: Replace $A \in M$ by A', if

$\{a\colon \exists r.C\} \subseteq A$ **and there is no**

individual name b with $\{(a,b)\colon r, b\colon C\} \subseteq A$ **and**

$A' = A \cup \{(a,c)\colon r, c\colon C\}$ **for an individual name c new in A**

$\geq$-rule:

Replace $A \in M$ by A', if

- $a\colon(\geq n\ r) \in A$**, and**
- **there are no ind. names $b_1, \ldots, b_n$ with**

  $A \supseteq \{(a, b_1)\colon r, \ldots, (a, b_n)\colon r\} \cup \{b_i \not\doteq b_j \mid 1 \leq i < j \leq n\}$
- $A' = A \cup \{(a, c_1)\colon r, \ldots, (a, c_n)\colon r\} \cup$
  $\{c_i \not\doteq c_j \mid 1 \leq i < j \leq n\}$

$\leq$-rule:

Replace $A \in M$ by at most $\binom{n+1}{2}$ Aboxes $A_{i,j}$, if

- $a\colon(\leq n\ r) \in A$**, and**
- **there are $n+1$ ind. names $b_0, \ldots, b_n$ with**

  $\{(a, b_0)\colon r, \ldots, (a, b_n)\colon r\} \subseteq A$ **and**
- **there are $i \neq j$ with $0 \leq i, j \leq n$ and $b_i \not\doteq b_j \notin A$**
- **for $i < j$ with $b_i \not\doteq b_j \notin A$ we define $A_{i,j} = A[b_i/b_j]$, i.e., $A_{i,j}$ is obtained from A by replacing each occurrence of b_i by b_j.**