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|  | Equivalence | Unambiguity | Sequentiality | Fin Seq |
| ---: | :---: | :---: | :---: | :---: |
| fin-amb | yes | yes | yes | unamb |
| poly-amb | no | $?$ | $?$ | $?$ |
| general | no | $?$ | $?$ | $?$ |

$$
\sigma=(\operatorname{Rel}, \mathrm{ar})
$$

$$
\text { signature }=\text { (relation symbols, arity) }
$$

$\mathcal{A}=(A, \mathcal{I}) \quad \sigma$-structure $=($ finite universe, interpretation $)$

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\beta::=R\left(x_{1}, \ldots, x_{n}\right)|x \in X| \neg \beta|\beta \vee \beta| \exists x . \beta \mid \exists X . \beta
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$(S, \oplus, \otimes, \mathbb{0}, \mathbb{1})$
semiring
$\psi::=\beta|s| \psi \oplus \psi \mid \psi \otimes \psi$
$\varphi::=\beta|s| \varphi \oplus \varphi|\varphi \otimes \varphi| \bigoplus x . \varphi|\otimes x . \psi| \bigoplus X . \varphi$

$$
\begin{aligned}
& \sigma=(\text { Rel }, \text { ar }) \quad \text { signature }=(\text { relation symbols, arity }) \\
& \hline \mathcal{A}=(A, \mathcal{I}) \quad \sigma \text {-structure }=(\text { finite universe, interpretation }) \\
& \beta::=R\left(x_{1}, \ldots, x_{n}\right)|x \in X| \neg \beta|\beta \vee \beta| \exists x . \beta \mid \exists X . \beta \\
& P::=x_{i}\left|y_{i}\right| P \vee P \mid P \wedge P \\
& (S, \oplus, \otimes, \mathbb{0}, \mathbb{1}) \\
& \psi::=\beta|s| \psi \oplus \psi \mid \psi \otimes \psi \\
& \varphi::=\beta|s| \varphi \oplus \varphi|\varphi \otimes \varphi| \oplus x . \varphi|\otimes x . \psi| \oplus X . \varphi \\
& E::=x_{i}\left|y_{i}\right| E \oplus E \mid E \otimes E
\end{aligned}
$$

