







$$\overline{(\forall D)\sigma L\vee C\neg L'\vee D\text{ where }L\sigma C\sigma\neg L'\sigma D\sigma\sigma}=(L,L')$$

$$\begin{array}{l} S=\{P(x)\vee\neg P(y),\neg P(a),P(b)\}\\ \vdash a\mid y\mapsto b\mid\neg P(y)P(b)P(x)\vee\neg P(y)\neg P(a)_0\perp=\{colHiP(\perp)\vee\neg P(\perp),colHi\neg P(a),colHiP(b)\}*\textit{satisfiable}\mid x\mapsto a\mid P\\ \{\}\exists\theta C\theta\subseteq D*Cs\textit{ubsumes}DS\textit{satisfiable}colHi51\iff(S\setminus D)\textit{satisfiable}S\perp\textit{satisfiable}colLocolLo55\iff(S\setminus D) \end{array}$$

$$\{\neg P(f(a,b)), f(x,b)=x\}A=\{x=x, x\neq y\vee y=x, x\neq y\vee y\neq z\vee x=z\ast R., S., T. x_1\neq y_1\vee x_2\neq y_2\vee f(x_1,x_2)=$$

$x = \mathbf{a} \vee x \neq \mathbf{a}$ $\perp = \perp \vee \perp \neq \perp$ $\mathbf{f}(\mathbf{a}) \neq \mathbf{f}(\mathbf{b})$ $\mathbf{f}(\perp) \neq \mathbf{f}(\mathbf{a})$ $R = \{x = \mathbf{a}\}$ $\sigma = \{x \mapsto \mathbf{b}\}$ $(x = \mathbf{a})\sigma = \mathbf{a} \rightarrow \mathbf{b}$ $\mathbf{a} > \mathbf{b}$ $\mathbf{f}(a) \neq \mathbf{b}$
$\mathbf{P}(\mathbf{a}), \neg \mathbf{P}(\mathbf{f}(\mathbf{a}, \mathbf{b})), \mathbf{f}(x, \mathbf{b}) = x$ $\mathbf{P}(\mathbf{a}), \neg \mathbf{P}(\mathbf{f}(\mathbf{a}, \mathbf{b})), \mathbf{f}(\perp, \mathbf{b}) = \perp$ $\{\mathbf{f}(x, \mathbf{b}) = x\}$ $\{x \mapsto \mathbf{a}\}$ $\neg \mathbf{P}(\mathbf{a})$