Inference at $*$ 1
of proof for Lemma order_functionality_wrt_iff:

1. T : Type
2. R : $T \to T \to \mathbb{P}$
3. R' : $T \to T \to \mathbb{P}$
4. $\forall x, y{:}T.\ R(x,y) \iff R'(x,y)$

$\vdash$(Refl(T;x,y.$R(x,y)$) & Trans(T;x,y.$R(x,y)$) & AntiSym(T;x,y.$R(x,y)$))
$\iff$ (Refl(T;x,y.$R'(x,y)$) & Trans(T;x,y.$R'(x,y)$) & AntiSym(T;x,y.$R'(x,y)$))
by InteriorProof ((RWH (HypC 4) 0)
CollapseTHENA ((Auto_aux (first_nat 1:n
) ((first_nat 1:n),(first_nat 3:n)) (first_tok :t) inil_term)))·

1:

$\vdash$ (Refl(T;x,y.$R'(x,y)$) & Trans(T;x,y.$R'(x,y)$) & AntiSym(T;x,y.$R'(x,y)$))
$\iff$ (Refl(T;x,y.$R'(x,y)$) & Trans(T;x,y.$R'(x,y)$) & AntiSym(T;x,y.$R'(x,y)$))
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