

Inference at \* 1  
of proof for Lemma uni\_sat\_imp\_in\_uni\_set:

1.  $T : \text{Type}$   
2.  $a : T$   
3.  $Q : T \rightarrow \mathbb{P}$   
4.  $Q(a)$   
5.  $\forall a':T. Q(a') \Rightarrow (a' = a)$   
 $\vdash a \in \{x:T \mid Q(x) \wedge (\forall y:T. Q(y) \Rightarrow (y = x))\}$   
by ((MemTypeCD)  
CollapseTHEN ((Auto\_aux (first\_nat 1:n) ((first\_nat 1:n),(first\_nat  
3:n)) (first\_tok :t) inil\_term)))

1:

6.  $y : T$   
7.  $Q(y)$   
 $\vdash y = a$   
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