# t136 member_1 <br> (TMYsyk8EGWUNVLwkeay8trMuYZNZm3XxdXE) 

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Let $v 2 \_$membered : $\iota \Rightarrow 0$ be given. Let $v 1 \_x$ real_0 : $\iota \Rightarrow o$ be given. Let k16_member_1 : $\iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r 1 \_$tars $s i: ~ \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.
$\forall X 0 .\left(v 2 \_m e m b e r e d ~ X 0\right) \Rightarrow\left(\forall X 1\right.$. $\left(v 2 \_\right.$membered $\left.X 1\right) \Rightarrow(\forall X 2$.

$$
\left(v 1 \_x r e a l \_0 X 2\right) \Rightarrow\left(\left(r 1 \_ t a r s k i \quad ( k 1 6 \_ m e m b e r \_ 1 X 0 X 2 ) \quad \left(k 16 \_m e m b e r \_1\right.\right.\right.
$$

$$
X 1 X 2)) \Rightarrow(\text { r1_tarski } X 0 X 1))))
$$

Assume the following.

$$
\begin{equation*}
\forall X 0 . \forall X 1 .(X 0=X 1) \Leftrightarrow\left((\text { r1_tarski } X 0 X 1) \wedge\left(r 1 \_ \text {tarski } X 1 X 0\right)\right) \tag{2}
\end{equation*}
$$

## Theorem 1

$\forall X 0 .\left(v 2 \_m e m b e r e d ~ X 0\right) \Rightarrow\left(\forall X 1 .\left(v 2 \_m e m b e r e d ~ X 1\right) \Rightarrow(\forall X 2\right.$.
$\left(v 1 \_x r e a l \_0 X 2\right) \Rightarrow\left(\left(k 16 \_m e m b e r \_1 X 0 X 2=k 16 \_m e m b e r \_1 X 1 X 2\right) \Rightarrow(X 0=\right.$ X1))))

