

# t17\_xxreal\_1 (TMNcqhfubGQmhWcstKLTDDdN2BLmKTfvz41)

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Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $k1\_xxreal\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v2\_membered : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (\forall X2. \\ (v1\_xxreal\_0 X2) \Rightarrow ((X0 \in k1\_xxreal\_1 X1 X2) \Leftrightarrow ((r1\_xxreal\_0 X1 X0) \wedge \\ (r1\_xxreal\_0 X0 X2)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (( \\ (r1\_xxreal\_0 X0 X1) \wedge (r1\_xxreal\_0 X1 X0)) \Rightarrow (X0 = X1))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((v1\_xxreal\_0 X0) \wedge (v1\_xxreal\_0 X1)) \Rightarrow ( \\ v2\_membered (k1\_xxreal\_1 X0 X1)) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.(v2\_membered X0) \Leftrightarrow (\forall X1.(X1 \in X0) \Rightarrow (v1\_xxreal\_0 X1)) \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(X1 = k1\_tarski X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow \\ (X2 = X0)) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((v1\_xxreal\_0 X0) \wedge (v1\_xxreal\_0 X1)) \Rightarrow ( \\ (r1\_xxreal\_0 X0 X1) \vee (r1\_xxreal\_0 X1 X0)) \end{aligned} \quad (6)$$

**Theorem 1**  $\forall X0.(v1\_xxreal\_0 X0) \Rightarrow (k1\_xxreal\_1 X0 X0 = k1\_tarski X0)$ .