

t168_member_1
(TMT9xZw5QmB4dbdjGNj5Ehgv3sjz1Cp7dSh)

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Let $v2_membered : \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $k3_xxreal_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k20_member_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_member_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v2_membered X0) \Rightarrow (\forall X1.(v2_membered X1) \Rightarrow (\forall X2. \\ & (v1_xxreal_0 X2) \Rightarrow (\forall X3.(v1_xxreal_0 X3) \Rightarrow (((X2 \in X0) \wedge (X3 \in \\ & X1)) \Rightarrow (k3_xxreal_3 X2 X3 \in k10_member_1 X0 X1)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (v2_membered (k1_tarski X0)) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1_tarski X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (X2 = X0)) \quad (3)$$

Assume the following.

$$\forall X0.(v2_membered X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (k20_member_1 X0 X1 = k10_member_1 X0 (k1_tarski X1))) \quad (4)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v2_membered X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xxreal_0 X2) \Rightarrow ((X1 \in X0) \Rightarrow (k3_xxreal_3 X1 X2 \in k20_member_1 X0 \\ & X2)))) \end{aligned}$$