

t155_member_1

(TMPJj51jzHcysKhcvqGXgyGnxSxgHwB9DuK)

October 27, 2020

Let $v2_membered : \iota \Rightarrow o$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k18_member_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_numbers : \iota$ be given. Let $k3_xxreal_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v2_membered X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\forall X2. \\ & \neg(X2 \in k18_member_1 X0 X1) \wedge (\forall X3.(m1_subset_1 X3 k7_numbers) \Rightarrow \\ & \neg(X2 = k3_xxreal_3 X1 X3) \wedge (X3 \in X0)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v2_membered X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xxreal_0 X2) \Rightarrow ((X1 \in X0) \Rightarrow (k3_xxreal_3 X2 X1 \in k18_member_1 X0 \\ & X2)))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xxreal_0 X2) \Rightarrow ((k3_xxreal_3 X0 X1 = k3_xxreal_3 X0 X2) \Rightarrow (X1 = \\ & X2)))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v2_membered X0) \Rightarrow (\forall X1.(r1_tarski X0 X1) \Leftrightarrow (\forall X2. \\ & (v1_xxreal_0 X2) \Rightarrow ((X2 \in X0) \Rightarrow (X2 \in X1)))) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(r1_tarski X0 X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow \\ & (X2 \in X1)) \end{aligned} \tag{5}$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xxreal_0 X0) \tag{6}$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k7_numbers) \Rightarrow (v1_xxreal_0 X0) \tag{7}$$

Theorem 1

$$\begin{aligned} & \forall X0.(v2_membered\ X0) \Rightarrow (\forall X1.(v2_membered\ X1) \Rightarrow (\forall X2. \\ & (v1_xreal_0\ X2) \Rightarrow ((r1_tarski\ (k18_member_1\ X0\ X2)\ (k18_member_1 \\ & X1\ X2)) \Rightarrow (r1_tarski\ X0\ X1)))) \end{aligned}$$