

t38_trees_2
(TMEtBkXSDnqguzm34c1pfEsoo4cXXZ882LS)

October 27, 2020

Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_trees_1 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k2_trees_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_tarski : \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.((\neg v1_xboole_0 X0) \wedge (v1_trees_1 X0)) \Rightarrow (X0 = k3_tarski \\ (ReplSep (toset (\lambda X1 : \iota. m2_subset_1 X1 k1_numbers k5_numbers)) \\ (\lambda X1 : \iota. True) (\lambda X1 : \iota. k2_trees_2 X0 X1))) \end{aligned} \quad (1)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (X1 = k3_tarski X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow \\ (\exists X3. (X2 \in X3) \wedge (X3 \in X0))) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} \forall X0. ((\neg v1_xboole_0 X0) \wedge (v1_trees_1 X0)) \Rightarrow (\forall X1. \\ ((\neg v1_xboole_0 X1) \wedge (v1_trees_1 X1)) \Rightarrow ((\forall X2. (m2_subset_1 \\ X2 k1_numbers k5_numbers) \Rightarrow (k2_trees_2 X0 X2 = k2_trees_2 X1 X2)) \Rightarrow \\ (X0 = X1))) \end{aligned}$$