

t5_trees_4

(TMck9nbpiBaH1oaHAL2oECU6dKR78QXrg4i)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v3_trees_2 : \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k2_trees_1 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k1_trees_4 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k2_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$k2_trees_1 \ k6_numbers = k1_tarski \ k1_xboole_0 \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 \ X0) \wedge (v1_funct_1 \ X0)) \Rightarrow (\forall X1.(\forall X2. \\ (X2 \in k9_xtuple_0 \ X0) \Rightarrow (k1_funct_1 \ X0 \ X2 = X1)) \Rightarrow (X0 = k2_funcop_1 \\ (k9_xtuple_0 \ X0) \ X1)) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. k7_funcop_1 \ X0 \ X1 = k2_funcop_1 \ X0 \ X1 \quad (3)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (4)$$

Assume the following.

$$\forall X0. k1_trees_4 \ X0 = k7_funcop_1 \ (k2_trees_1 \ k6_numbers) \ X0 \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. (X1 = k1_tarski \ X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow \\ (X2 = X0)) \quad (6)$$

Theorem 1

$$\begin{aligned} \forall X0.((v1_relat_1 \ X0) \wedge ((v1_funct_1 \ X0) \wedge (v3_trees_2 \ X0))) \Rightarrow \\ ((k9_xtuple_0 \ X0 = k2_trees_1 \ k6_numbers) \Rightarrow (X0 = k1_trees_4 \ (k1_funct_1 \\ X0 \ k1_xboole_0))) \end{aligned}$$