

t32_trees_3
(TMWZhDns9hUe3NuEsxXZ2z9afk5av8FJk)

October 27, 2020

Let $v5_trees_3 : \iota \Rightarrow o$ be given. Let $k10_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $v1_trees_1 : \iota \Rightarrow o$ be given. Let $v2_trees_3 : \iota \Rightarrow o$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (v2_trees_3 (k2_tarski X0 X1)) \Leftrightarrow (((\neg v1_xboole_0 X0) \wedge ((v1_finset_1 X0) \wedge (v1_trees_1 X0))) \wedge ((\neg v1_xboole_0 X1) \wedge ((v1_finset_1 X1) \wedge (v1_trees_1 X1)))) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. k10_xtuple_0 (k10_finseq_1 X0 X1) = k2_tarski X0 X1 \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (v1_relat_1 (k10_finseq_1 X0 X1)) \wedge (v1_funct_1 (k10_finseq_1 X0 X1)) \quad (3)$$

Assume the following.

$$\forall X0. ((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow ((v5_trees_3 X0) \Leftrightarrow (v2_trees_3 (k10_xtuple_0 X0))) \quad (4)$$

Theorem 1

$$\forall X0. \forall X1. (v5_trees_3 (k10_finseq_1 X0 X1)) \Leftrightarrow (((\neg v1_xboole_0 X0) \wedge ((v1_finset_1 X0) \wedge (v1_trees_1 X0))) \wedge ((\neg v1_xboole_0 X1) \wedge ((v1_finset_1 X1) \wedge (v1_trees_1 X1))))$$