

t6_funct_1
(TMUCt1KRcbf687NeSF5cB87UE3EvQs7gzFs)

October 27, 2020

Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (r1_tarski X0 X1) \Rightarrow (r1_tarski (k10_xtuple_0 X0) (k10_xtuple_0 X1)) \quad (1)$$

Assume the following.

$$\forall X0. (X0 \neq k1_xboole_0) \Rightarrow (\forall X1. \exists X2. ((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \wedge ((k9_xtuple_0 X2 = X0) \wedge (k10_xtuple_0 X2 = k1_tarski X1))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. r1_tarski X0 X0 \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski (k1_tarski X0) X1) \Leftrightarrow (X0 \in X1) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. (X1 = k1_tarski X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (X2 = X0)) \quad (5)$$

Theorem 1

$$\forall X0. (\forall X1. ((v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow (\forall X2. ((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \Rightarrow (((k9_xtuple_0 X1 = X0) \wedge (k9_xtuple_0 X2 = X0)) \Rightarrow (X1 = X2)))) \Rightarrow (X0 = k1_xboole_0)$$