

t14_funct_5 (TMZrjn-
sTP76gmUTyadiWSVYVSmH4YUa6oih)

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Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0. \neg(X0 \neq k1_xboole_0) \wedge (\forall X1. \neg(X1 \in X0) \wedge (\forall X2. \\ \forall X3. \neg((X2 \in X0) \vee (X3 \in X0)) \wedge (X1 = k4_tarski\ X2\ X3))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (X1 = k10_xtuple_0\ X0) \Leftrightarrow (\forall X2. (X2 \in \\ X1) \Leftrightarrow (\exists X3. k4_tarski\ X3\ X2 \in X0)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (X1 = k9_xtuple_0\ X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow \\ (\exists X3. k4_tarski\ X2\ X3 \in X0)) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} \forall X0. (\forall X1. \forall X2. \neg k4_tarski\ X1\ X2 \in X0) \Rightarrow ((k9_xtuple_0 \\ X0 = k1_xboole_0) \wedge (k10_xtuple_0\ X0 = k1_xboole_0)) \end{aligned}$$