

t21_xtuple_0
(TMT4Jmp33wuMRELXZgEynWQbJL1BbJDjD55)

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Let $k6_xtuple_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k14_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k3_xtuple_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k11_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. (k3_xtuple_0 X0 X1 X2 \in X3) \Rightarrow (X0 \in k11_xtuple_0 X3) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. k6_xtuple_0 X0 X1 X2 X3 = k4_tarski (k3_xtuple_0 X0 X1 X2) X3 \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. k3_xtuple_0 X0 X1 X2 = k4_tarski (k4_tarski X0 X1) X2 \quad (3)$$

Assume the following.

$$\forall X0. k14_xtuple_0 X0 = k10_xtuple_0 (k11_xtuple_0 X0) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. (X1 = k10_xtuple_0 X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (\exists X3. k4_tarski X3 X2 \in X0)) \quad (5)$$

Theorem 1

$$\forall X0. \forall X1. \forall X2. \forall X3. \forall X4. (k6_xtuple_0 X0 X1 X2 X3 \in X4) \Rightarrow (X1 \in k14_xtuple_0 X4)$$