

t26_funct_6 (TMLd-
nCyrkFo9kueAKdX3ZHDuhQkT52HfArZ)

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Let $k3_card.3 : \iota \Rightarrow \iota$ be given. Let $k7_funcop.1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole.0 : \iota$ be given. Let $k4_funct.6 : \iota \Rightarrow \iota$ be given. Let $v1_xboole.0 : \iota \Rightarrow o$ be given. Let $v1_relat.1 : \iota \Rightarrow o$ be given. Let $k9_xtuple.0 : \iota \Rightarrow \iota$ be given. Let $k10_xtuple.0 : \iota \Rightarrow \iota$ be given. Let $k3_tarski : \iota \Rightarrow \iota$ be given. Let $k2_funcop.1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $v1_funct.1 : \iota \Rightarrow o$ be given. Let $k1_setfam.1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_xboole.0 X0) \Rightarrow (X0 = k1_xboole.0) \quad (1)$$

Assume the following.

$$\forall X0.(v1_relat.1 X0) \Rightarrow ((k9_xtuple.0 X0 = k1_xboole.0) \Leftrightarrow (k10_xtuple.0 X0 = k1_xboole.0)) \quad (2)$$

Assume the following.

$$k3_tarski k1_xboole.0 = k1_xboole.0 \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(k9_xtuple.0 (k2_funcop.1 X0 X1) = X0) \wedge (r1_tarski (k10_xtuple.0 (k2_funcop.1 X0 X1)) (k1_tarski X1)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.k7_funcop.1 X0 X1 = k2_funcop.1 X0 X1 \quad (5)$$

Assume the following.

$$\forall X0.v1_xboole.0 (k2_funcop.1 k1_xboole.0 X0) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(v1_relat.1 (k2_funcop.1 X0 X1)) \wedge (v1_funct.1 (k2_funcop.1 X0 X1)) \quad (7)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (k4_funct_6 X0 = k1_setfam_1 (k10_xtuple_0 X0)) \quad (8)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (k3_card_3 X0 = k3_tarski (k10_xtuple_0 X0)) \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((X0 \neq k1_xboole_0) \Rightarrow ((X1 = k1_setfam_1 X0) \Leftrightarrow \\ (\forall X2. (X2 \in X1) \Leftrightarrow (\forall X3. (X3 \in X0) \Rightarrow (X2 \in X3)))))) \wedge ((X0 = \\ k1_xboole_0) \Rightarrow ((X1 = k1_setfam_1 X0) \Leftrightarrow (X1 = k1_xboole_0))) \end{aligned} \quad (10)$$

Theorem 1

$$\begin{aligned} \forall X0. (k3_card_3 (k7_funcop_1 k1_xboole_0 X0) = k1_xboole_0) \wedge \\ (k4_funct_6 (k7_funcop_1 k1_xboole_0 X0) = k1_xboole_0) \end{aligned}$$