t4_abcmiz_0 (TMS49CSPE6dsiFpcriPBxCJhqqShHmLNeYH)

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Let $l1\_abcmiz\_0 : \iota \Rightarrow o$ be given. Let $u1\_abcmiz\_0 : \iota \Rightarrow \iota$ be given. Let $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u2\_abcmiz\_0 : \iota \Rightarrow \iota$ be given. Let $v4\_abcmiz\_0 : \iota \Rightarrow o$ be given. Let $v5\_abcmiz\_0 : \iota \Rightarrow o$ be given. Let $v6\_abcmiz\_0 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k1\_abcmiz\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X0\ X1) \Rightarrow ((v1\_xboole\_0\ X1) \vee (X0 \in X1)) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1\_subset\_1\ X0\ X1) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\neg v1\_xboole\_0\ (k2\_tarski\ X0\ X1) \tag{3}$$

Assume the following.

$$\forall X0.(l1\_abcmiz\_0\ X0) \Rightarrow ((v6\_abcmiz\_0\ X0) \Leftrightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_abcmiz\_0\ X0)) \Rightarrow (k1\_abcmiz\_0\ X0\ X1 \neq X1))) \tag{4}$$

Assume the following.

$$\forall X0.(l1\_abcmiz\_0\ X0) \Rightarrow ((v5\_abcmiz\_0\ X0) \Leftrightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_abcmiz\_0\ X0)) \Rightarrow (k1\_abcmiz\_0\ X0\ (k1\_abcmiz\_0\ X0\ X1) = X1))) \tag{5}$$

Assume the following.

$$\forall X0.(l1\_abcmiz\_0\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_abcmiz\_0\ X0)) \Rightarrow (k1\_abcmiz\_0\ X0\ X1 = k1\_funct\_1\ (u2\_abcmiz\_0\ X0)\ X1)) \tag{6}$$

Assume the following.

$$\forall X0.(l1\_abcmiz\_0\ X0) \Rightarrow ((v4\_abcmiz\_0\ X0) \Leftrightarrow (v1\_xboole\_0\ (u1\_abcmiz\_0\ X0))) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k2\_tarski\ X0\ X1)\Leftrightarrow(\forall X3.\ (X3 \in X2)\Leftrightarrow((X3 = X0)\vee(X3 = X1))) \tag{8}$$

Theorem 1

$$\forall X0.\forall X1.(X0\neq X1)\Rightarrow(\forall X2.(l1\_abcmiz\_0\ X2)\Rightarrow (((u1\_abcmiz\_0\ X2 = k2\_tarski\ X0\ X1)\wedge((k1\_funct\_1\ (u2\_abcmiz\_0\ X2)\ X0 = X1)\wedge(k1\_funct\_1\ (u2\_abcmiz\_0\ X2)\ X1 = X0)))\Rightarrow((\neg v4\_abcmiz\_0\ X2)\wedge((v5\_abcmiz\_0\ X2)\wedge(v6\_abcmiz\_0\ X2)))))$$