t23_isomichi (TMJ9f7u9tF6bD4HD572MWKhdqg5f8hwvieW)

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Let $v2\_pre\_topc : \iota \Rightarrow o$ be given. Let $l1\_pre\_topc : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $v2\_isomichi : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5\_tops\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k1\_isomichi : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $k4\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v6\_tops\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_tops\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0) \Rightarrow (X0 = k1\_xboole\_0) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(k4\_xboole\_0\ X0\ X1 = k1\_xboole\_0) \Leftrightarrow (r1\_tarski\ X0\ X1) \tag{2}$$

Assume the following.

$$\forall X0.((v2\_pre\_topc\ X0) \wedge (l1\_pre\_topc\ X0)) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow ((v6\_tops\_1\ (k1\_isomichi\ X0\ X1)\ X0) \wedge ((k1\_isomichi\ X0\ X1 = k7\_subset\_1\ (u1\_struct\_0\ X0)\ (k1\_tops\_1\ X0\ (k2\_pre\_topc\ X0\ X1))\ (k2\_pre\_topc\ X0\ (k1\_tops\_1\ X0\ X1))) \wedge (k1\_isomichi\ X0\ X1 = k9\_subset\_1\ (u1\_struct\_0\ X0)\ (k1\_tops\_1\ X0\ (k2\_pre\_topc\ X0\ X1))\ (k1\_tops\_1\ X0\ (k2\_pre\_topc\ X0\ (k3\_subset\_1\ (u1\_struct\_0\ X0)\ X1))))))) \tag{3}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow ((r1\_tarski\ X1\ X2) \Rightarrow (r1\_tarski\ (k2\_pre\_topc\ X0\ X1)\ (k2\_pre\_topc\ X0\ X2))))) \tag{4}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))\Rightarrow(r1\_tarski\ (k1\_tops\_1\ X0\ X1)\ X1)) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))\Rightarrow(k7\_subset\_1\ X0\ X1\ X2 = k4\_xboole\_0\ X1\ X2) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((l1\_pre\_topc\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))))\Rightarrow(k2\_pre\_topc\ X0\ (k2\_pre\_topc\ X0\ X1) = k2\_pre\_topc\ X0\ X1) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.(((v2\_pre\_topc\ X0)\wedge(l1\_pre\_topc\ X0))\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))))\Rightarrow(v5\_tops\_1\ (k2\_pre\_topc\ X0\ (k1\_tops\_1\ X0\ X1))\ X0) \tag{8}$$

Assume the following.

$$v1\_xboole\_0\ k1\_xboole\_0 \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.((l1\_pre\_topc\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))))\Rightarrow(m1\_subset\_1\ (k2\_pre\_topc\ X0\ X1)\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \tag{10}$$

Assume the following.

$$\forall X0.\forall X1.((l1\_pre\_topc\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))))\Rightarrow(m1\_subset\_1\ (k1\_tops\_1\ X0\ X1)\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \tag{11}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))\Rightarrow((v5\_tops\_1\ X1\ X0)\Leftrightarrow(X1 = k2\_pre\_topc\ X0\ (k1\_tops\_1\ X0\ X1)))) \tag{12}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))\Rightarrow((v2\_isomichi\ X1\ X0)\Leftrightarrow(k2\_pre\_topc\ X0\ (k1\_tops\_1\ X0\ X1) = k2\_pre\_topc\ X0\ X1))) \tag{13}$$

Assume the following.

$$\forall X0.\forall X1.(X0 = X1)\Leftrightarrow((r1\_tarski\ X0\ X1)\wedge(r1\_tarski\ X1\ X0)) \tag{14}$$

Theorem 1

$$\forall X0.((v2\_pre\_topc\ X0)\wedge(l1\_pre\_topc\ X0))\Rightarrow(\forall X1.\ (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))\Rightarrow((v2\_isomichi\ X1\ X0)\Leftrightarrow((v5\_tops\_1\ (k2\_pre\_topc\ X0\ X1)\ X0)\wedge(v1\_xboole\_0\ (k1\_isomichi\ X0\ X1)))))$$