t6_topreala (TMbNxUno1eLU7tru5RNY7GjSibJ5EXbrGY4)

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Let $v2\_pre\_topc : \iota \Rightarrow o$ be given. Let $l1\_pre\_topc : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v5\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $k8\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $l1\_struct\_0 : \iota \Rightarrow o$ be given. Let $k1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $v4\_pre\_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))) \Rightarrow (k8\_relset\_1\ X0\ X1\ X2\ X3 = k8\_relat\_1\ X2\ X3) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xboole\_0\ X0) \wedge (v1\_relat\_1\ X0)) \Rightarrow (v1\_xboole\_0\ (k8\_relat\_1\ X0\ X1)) \tag{3}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0) \Rightarrow (l1\_struct\_0\ X0) \tag{4}$$

Assume the following.

$$\forall X0.(l1\_struct\_0\ X0) \Rightarrow (m1\_subset\_1\ (k1\_struct\_0\ X0)\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \tag{5}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0)\Rightarrow(\forall X1.(l1\_pre\_topc\ X1)\Rightarrow(\forall X2.((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X1))\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X1))))))\Rightarrow((v5\_pre\_topc\ X2\ X0\ X1)\Leftrightarrow(\forall X3.(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X1)))\Rightarrow((v4\_pre\_topc\ X3\ X1)\Rightarrow(v4\_pre\_topc\ (k8\_relset\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X1)\ X2\ X3)\ X0)))))) \tag{6}$$

Assume the following.

$$\forall X0.(l1\_struct\_0\ X0)\Rightarrow(k1\_struct\_0\ X0 = k1\_xboole\_0) \tag{7}$$

Assume the following.

$$\forall X0.((v2\_pre\_topc\ X0)\wedge(l1\_pre\_topc\ X0))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))\Rightarrow((v1\_xboole\_0\ X1)\Rightarrow(v4\_pre\_topc\ X1\ X0))) \tag{8}$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0)\Rightarrow(v1\_relat\_1\ X0) \tag{9}$$

Theorem 1

$$\forall X0.((v2\_pre\_topc\ X0)\wedge(l1\_pre\_topc\ X0))\Rightarrow(\forall X1.(l1\_pre\_topc\ X1)\Rightarrow(\forall X2.((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X1))\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X1))))))\Rightarrow((v1\_xboole\_0\ X2)\Rightarrow(v5\_pre\_topc\ X2\ X0\ X1))))$$