t7_tex_1 (TM-Mdko7QPnqYf9WYMXsXcRMpbLbdQukZiNw)

October 27, 2020

Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. 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 $k6\_tmap\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2\_tops\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3\_tops\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_pre\_topc : \iota \Rightarrow \iota$ be given. Let $k5\_tmap\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v4\_pre\_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_pre\_topc : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v2\_pre\_topc\ X0) \wedge (l1\_pre\_topc\ X0))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow ((u1\_struct\_0\ (k6\_tmap\_1\ X0\ X1) = u1\_struct\_0\ X0) \wedge (u1\_pre\_topc\ (k6\_tmap\_1\ X0\ X1) = k5\_tmap\_1\ X0\ X1))) \tag{1}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v2\_pre\_topc\ X0) \wedge (l1\_pre\_topc\ X0))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k6\_tmap\_1\ X0\ (k3\_subset\_1\ (u1\_struct\_0\ X0)\ X1))))) \Rightarrow (((X2 = X1) \wedge (v2\_tops\_1\ X1\ X0)) \Rightarrow ((v2\_tops\_1\ X2\ (k6\_tmap\_1\ X0\ (k3\_subset\_1\ (u1\_struct\_0\ X0)\ X1))) \wedge (v4\_pre\_topc\ X2\ (k6\_tmap\_1\ X0\ (k3\_subset\_1\ (u1\_struct\_0\ X0)\ X1)))))) \tag{2}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v2\_pre\_topc\ X0) \wedge (l1\_pre\_topc\ X0))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow (((v3\_tops\_1\ X1\ X0) \wedge (r1\_tarski\ X2\ X1)) \Rightarrow (v3\_tops\_1\ X2\ X0)))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v2\_struct\_0\ X0)\wedge((v2\_pre\_topc\ X0)\wedge (l1\_pre\_topc\ X0)))\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))))\Rightarrow((\neg v2\_struct\_0\ (k6\_tmap\_1\ X0\ X1))\wedge((v1\_pre\_topc\ (k6\_tmap\_1\ X0\ X1))\wedge(v2\_pre\_topc\ (k6\_tmap\_1\ X0\ X1)))) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v2\_struct\_0\ X0)\wedge((v2\_pre\_topc\ X0)\wedge (l1\_pre\_topc\ X0)))\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))))\Rightarrow((v1\_pre\_topc\ (k6\_tmap\_1\ X0\ X1))\wedge((v2\_pre\_topc\ (k6\_tmap\_1\ X0\ X1))\wedge(l1\_pre\_topc\ (k6\_tmap\_1\ X0\ X1)))) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))\Rightarrow(m1\_subset\_1\ (k3\_subset\_1\ X0\ X1)\ (k1\_zfmisc\_1\ X0)) \tag{6}$$

Assume the following.

$$\forall X0.((v2\_pre\_topc\ X0)\wedge(l1\_pre\_topc\ X0))\Rightarrow(\forall X1.\ (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))\Rightarrow(((v4\_pre\_topc\ X1\ X0)\wedge(v2\_tops\_1\ X1\ X0))\Rightarrow(v3\_tops\_1\ X1\ X0))) \tag{7}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v2\_pre\_topc\ X0)\wedge(l1\_pre\_topc\ X0)))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k6\_tmap\_1\ X0\ (k3\_subset\_1\ (u1\_struct\_0\ X0)\ X1)))))\Rightarrow(((r1\_tarski\ X2\ X1)\wedge(v2\_tops\_1\ X1\ X0))\Rightarrow(v3\_tops\_1\ X2\ (k6\_tmap\_1\ X0\ (k3\_subset\_1\ (u1\_struct\_0\ X0)\ X1))))))$$