t23_yellow14 (TMFTSWtvchvUZW32zVeiAtxujKrcrQ54T4s)

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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 $v3\_yellow\_8 : \iota \Rightarrow \iota \Rightarrow o$ 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 $g1\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1\_pre\_topc : \iota \Rightarrow \iota$ be given. Let $v4\_pre\_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k1\_finsub\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((v2\_pre\_topc\ X0) \wedge (l1\_pre\_topc\ X0)) \Rightarrow (\forall X1.((v2\_pre\_topc\ X1) \wedge (l1\_pre\_topc\ X1)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X1))) \Rightarrow (((X2 = X3) \wedge ((g1\_pre\_topc\ (u1\_struct\_0\ X0)\ (u1\_pre\_topc\ X0) = g1\_pre\_topc\ (u1\_struct\_0\ X1)\ (u1\_pre\_topc\ X1)) \wedge (v4\_pre\_topc\ X2\ X0))) \Rightarrow (v4\_pre\_topc\ X3\ X1))))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ X0))) \Rightarrow (\forall X2.\forall X3.(g1\_pre\_topc\ X0\ X1 = g1\_pre\_topc\ X2\ X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3))) \tag{2}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0) \Rightarrow (m1\_subset\_1\ (u1\_pre\_topc\ X0)\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))) \tag{3}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow ((v3\_yellow\_8\ X1\ X0) \Leftrightarrow ((\neg v1\_xboole\_0\ X1) \wedge ((v4\_pre\_topc\ X1\ X0) \wedge (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow (\neg(v4\_pre\_topc\ X2\ X0) \wedge ((v4\_pre\_topc\ X3\ X0) \wedge ((X1 = k1\_finsub\_1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))\ X2\ X3) \wedge ((X2 \neq X1) \wedge (X3 \neq X1)))))))))) \tag{4}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v2\_pre\_topc\ X0)\wedge(l1\_pre\_topc\ X0)))\Rightarrow(\forall X1.((\neg v2\_struct\_0\ X1)\wedge((v2\_pre\_topc\ X1)\wedge(l1\_pre\_topc\ X1)))\Rightarrow(\forall X2.((v3\_yellow\_8\ X2\ X0)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))))\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X1)))\Rightarrow(((X2 = X3)\wedge(g1\_pre\_topc\ (u1\_struct\_0\ X0)\ (u1\_pre\_topc\ X0) = g1\_pre\_topc\ (u1\_struct\_0\ X1)\ (u1\_pre\_topc\ X1)))\Rightarrow(v3\_yellow\_8\ X3\ X1)))))$$