

t24\_yellow14

(TMGHaUJ5nRWKXVo9wwutd6ghim8TpS1yWJh)

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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  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $g1\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $u1\_pre\_topc : \iota \Rightarrow \iota$  be given. Let  $r1\_yellow\_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k6\_domain\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((v2\_pre\_topc X0) \wedge (l1\_pre\_topc X0)) \Rightarrow (\forall X1. \\ & ((v2\_pre\_topc X1) \wedge (l1\_pre\_topc X1)) \Rightarrow (\forall X2.(m1\_subset\_1 \\ & X2 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (\forall X3.(m1\_subset\_1 \\ & X3 (k1\_zfmisc\_1 (u1\_struct\_0 X1))) \Rightarrow (((X2 = X3) \wedge (g1\_pre\_topc ( \\ & u1\_struct\_0 X0) (u1\_pre\_topc X0) = g1\_pre\_topc (u1\_struct\_0 X1) \\ & (u1\_pre\_topc X1))) \Rightarrow (k2\_pre\_topc X0 X2 = k2\_pre\_topc X1 X3)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \neg (X0 \in X1) \wedge ((m1\_subset\_1 X1 (k1\_zfmisc\_1 X2)) \wedge (v1\_xboole\_0 X2)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 X2))) \Rightarrow (m1\_subset\_1 X0 X2) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 X0))) \Rightarrow (\forall X2. \forall X3. (g1\_pre\_topc X0 X1 = g1\_pre\_topc X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3))) \quad (4)$$

Assume the following.

$$\forall X0. (l1\_pre\_topc X0) \Rightarrow (m1\_subset\_1 (u1\_pre\_topc X0) (k1\_zfmisc\_1 (k1\_zfmisc\_1 (u1\_struct\_0 X0)))) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0 X0)\wedge(m1\_subset\_1 X1 X0))\Rightarrow (m1\_subset\_1 (k6\_domain\_1 X0 X1) (k1\_zfmisc\_1 X0)) \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0)\wedge((v2\_pre\_topc X0)\wedge(l1\_pre\_topc \\ & X0)))\Rightarrow(\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 \\ & X0)))\Rightarrow(\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 X0))\Rightarrow((r1\_yellow\_8 \\ & X0 X1 X2)\Leftrightarrow((X2 \in X1)\wedge(r1\_tarski X1 (k2\_pre\_topc X0 (k6\_domain\_1 \\ & (u1\_struct\_0 X0) X2)))))) \quad (7) \end{aligned}$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0)\wedge((v2\_pre\_topc X0)\wedge(l1\_pre\_topc \\ & X0)))\Rightarrow(\forall X1.((\neg v2\_struct\_0 X1)\wedge((v2\_pre\_topc X1)\wedge(l1\_pre\_topc \\ & X1)))\Rightarrow(\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 X0))\Rightarrow(\forall X3. \\ & (m1\_subset\_1 X3 (u1\_struct\_0 X1))\Rightarrow(\forall X4.(m1\_subset\_1 X4 \\ & (k1\_zfmisc\_1 (u1\_struct\_0 X0))\Rightarrow(\forall X5.(m1\_subset\_1 X5 \\ & (k1\_zfmisc\_1 (u1\_struct\_0 X1))\Rightarrow(((X2 = X3)\wedge((X4 = X5)\wedge((g1\_pre\_topc \\ & (u1\_struct\_0 X0) (u1\_pre\_topc X0) = g1\_pre\_topc (u1\_struct\_0 X1) \\ & (u1\_pre\_topc X1))\wedge(r1\_yellow\_8 X0 X4 X2))))\Rightarrow(r1\_yellow\_8 X1 X5 \\ & X3)))))) \end{aligned}$$