

t28\_yellow14

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Let  $l1\_pre\_topc : \iota \Rightarrow o$  be given. Let  $g1\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $u1\_pre\_topc : \iota \Rightarrow \iota$  be given. Let  $v1\_compts\_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_tops\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_setfam\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0.(l1\_pre\_topc X0) \Rightarrow (\forall X1.(l1\_pre\_topc X1) \Rightarrow (\forall X2. \\ & (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k1\_zfmisc\_1 (u1\_struct\_0 X0)))) \Rightarrow \\ & (\forall X3.(m1\_subset\_1 X3 (k1\_zfmisc\_1 (k1\_zfmisc\_1 (u1\_struct\_0 \\ & X1)))) \Rightarrow (((g1\_pre\_topc (u1\_struct\_0 X0) (u1\_pre\_topc X0) = g1\_pre\_topc \\ & (u1\_struct\_0 X1) (u1\_pre\_topc X1)) \wedge ((X2 = X3) \wedge (v1\_tops\_2 X2 X0))) \Rightarrow \\ & (v1\_tops\_2 X3 X1)))))) \end{aligned} \quad (1)$$

Assume the following.

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

Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0.(l1\_pre\_topc X0) \Rightarrow ((v1\_compts\_1 X0) \Leftrightarrow (\forall X1.( \\ & m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 (u1\_struct\_0 X0)))) \Rightarrow \\ & (\neg(m1\_setfam\_1 X1 (u1\_struct\_0 X0)) \wedge ((v1\_tops\_2 X1 X0) \wedge (\forall X2. \\ & (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k1\_zfmisc\_1 (u1\_struct\_0 X0)))) \Rightarrow \\ & (\neg(r1\_tarski X2 X1) \wedge ((m1\_setfam\_1 X2 (u1\_struct\_0 X0)) \wedge (v1\_finset\_1 \\ & X2)))))))))) \end{aligned} \quad (4)$$

**Theorem 1**

$$\forall X0.(l1\_pre\_topc\ X0) \Rightarrow (\forall X1.(l1\_pre\_topc\ X1) \Rightarrow ((g1\_pre\_topc\ (u1\_struct\_0\ X0)\ (u1\_pre\_topc\ X0) = g1\_pre\_topc\ (u1\_struct\_0\ X1)\ (u1\_pre\_topc\ X1)) \wedge (v1\_compts\_1\ X0) \Rightarrow (v1\_compts\_1\ X1)))$$