

t26\_yellow14 (TMdPfDTWAWRwBXRMBMoE-  
fYEQV1SrWDkhGP6)

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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  $g1\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $u1\_pre\_topc : \iota \Rightarrow \iota$  be given. Let  $v4\_yellow\_8 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $r1\_yellow\_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v3\_yellow\_8 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v2\_pre\_topc X0) \wedge (l1\_pre\_topc \\
& X0))) \Rightarrow (\forall X1.((\neg v2\_struct\_0 X1) \wedge ((v2\_pre\_topc X1) \wedge (l1\_pre\_topc \\
& X1))) \Rightarrow (\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (\forall X3. \\
& (m1\_subset\_1 X3 (u1\_struct\_0 X1)) \Rightarrow (\forall X4.(m1\_subset\_1 X4 \\
& (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (\forall X5.(m1\_subset\_1 X5 \\
& (k1\_zfmisc\_1 (u1\_struct\_0 X1)))) \Rightarrow (((X2 = X3) \wedge ((X4 = X5) \wedge ((g1\_pre\_topc \\
& (u1\_struct\_0 X0) (u1\_pre\_topc X0) = g1\_pre\_topc (u1\_struct\_0 X1) \\
& (u1\_pre\_topc X1)) \wedge (r1\_yellow\_8 X0 X4 X2)))) \Rightarrow (r1\_yellow\_8 X1 X5 \\
& X3))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v2\_pre\_topc X0) \wedge (l1\_pre\_topc \\
& X0))) \Rightarrow (\forall X1.((\neg v2\_struct\_0 X1) \wedge ((v2\_pre\_topc X1) \wedge (l1\_pre\_topc \\
& X1))) \Rightarrow (\forall X2.((v3\_yellow\_8 X2 X0) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 \\
& (u1\_struct\_0 X0)))) \Rightarrow (\forall X3.(m1\_subset\_1 X3 (k1\_zfmisc\_1 \\
& (u1\_struct\_0 X1))) \Rightarrow (((X2 = X3) \wedge (g1\_pre\_topc (u1\_struct\_0 X0) \\
& (u1\_pre\_topc X0) = g1\_pre\_topc (u1\_struct\_0 X1) (u1\_pre\_topc X1))) \Rightarrow \\
& (v3\_yellow\_8 X3 X1))))
\end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 \\
& X0))) \Rightarrow (\forall X2. \forall X3.(g1\_pre\_topc X0 X1 = g1\_pre\_topc \\
& X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3)))
\end{aligned} \tag{3}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0) \Rightarrow (m1\_subset\_1\ (u1\_pre\_topc\ X0)\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))) \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v2\_pre\_topc\ X0) \wedge (l1\_pre\_topc\ X0))) \Rightarrow & ((v4\_yellow\_8\ X0) \Leftrightarrow (\forall X1.((v3\_yellow\_8\ X1\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))) \Rightarrow (\exists X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \wedge ((r1\_yellow\_8\ X0\ X1\ X2) \wedge (\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0)) \Rightarrow ((r1\_yellow\_8\ X0\ X1\ X3) \Rightarrow (X2 = X3))))))) \end{aligned} \quad (5)$$

**Theorem 1**

$$\begin{aligned} \forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v2\_pre\_topc\ X0) \wedge (l1\_pre\_topc\ X0))) \Rightarrow & (\forall X1.((\neg v2\_struct\_0\ X1) \wedge ((v2\_pre\_topc\ X1) \wedge (l1\_pre\_topc\ X1))) \Rightarrow (((g1\_pre\_topc\ (u1\_struct\_0\ X0)\ (u1\_pre\_topc\ X0) = g1\_pre\_topc\ (u1\_struct\_0\ X1)\ (u1\_pre\_topc\ X1)) \wedge (v4\_yellow\_8\ X0)) \Rightarrow (v4\_yellow\_8\ X1))) \end{aligned}$$