

t14\_tex\_1

(TMbWHgKYsuptJR8JoX9Pq4SjJL5cn6ixp89)

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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  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $v1\_tops\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v2\_tdlat\_3 : \iota \Rightarrow o$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k2\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v2\_pre\_topc X0) \wedge (l1\_pre\_topc \\ X0))) \Rightarrow ((\forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 \\ X0))) \Rightarrow ((\neg v1\_xboole\_0 X1) \Rightarrow (k2\_pre\_topc X0 X1 = u1\_struct\_0 X0))) \Rightarrow \\ (v2\_tdlat\_3 X0)) \end{aligned} \tag{1}$$

Assume the following.

$$v1\_xboole\_0 k1\_xboole\_0 \tag{2}$$

Assume the following.

$$\begin{aligned} \forall X0. (l1\_pre\_topc X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ (u1\_struct\_0 X0))) \Rightarrow ((v1\_tops\_1 X1 X0) \Leftrightarrow (k2\_pre\_topc X0 X1 = u1\_struct\_0 \\ X0))) \end{aligned} \tag{3}$$

**Theorem 1**

$$\begin{aligned} \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v2\_pre\_topc X0) \wedge (l1\_pre\_topc \\ X0))) \Rightarrow ((\forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 \\ X0))) \Rightarrow ((X1 \neq k1\_xboole\_0) \Rightarrow (v1\_tops\_1 X1 X0))) \Rightarrow (v2\_tdlat\_3 X0)) \end{aligned}$$