

## t76\_tdlat\_2

(TML4eMmKjgFqhKMiSmHJNeQknm3QLZmF4qf)

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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  $v2\_tdlat\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v5\_tops\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_setfam\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tops\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_setfam\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_tdlat\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_tarSKI : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v2\_pre\_topc X0) \wedge (l1\_pre\_topc \\ & X0))) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 \\ & (u1\_struct\_0 X0)))) \Rightarrow ((v2\_tdlat\_2 X1 X0) \Rightarrow (v1\_tdlat\_2 X1 X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v2\_pre\_topc X0) \wedge (l1\_pre\_topc \\ & X0))) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 \\ & (u1\_struct\_0 X0)))) \Rightarrow ((v1\_tdlat\_2 X1 X0) \Rightarrow ((r1\_tarSKI (k5\_setfam\_1 \\ & (u1\_struct\_0 X0) X1) (k2\_pre\_topc X0 (k1\_tops\_1 X0 (k5\_setfam\_1 \\ & (u1\_struct\_0 X0) X1)))) \wedge (k2\_pre\_topc X0 (k5\_setfam\_1 (u1\_struct\_0 \\ & X0) X1) = k2\_pre\_topc X0 (k1\_tops\_1 X0 (k2\_pre\_topc X0 (k5\_setfam\_1 \\ & (u1\_struct\_0 X0) X1)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v2\_pre\_topc X0) \wedge (l1\_pre\_topc X0)) \Rightarrow (\forall X1. \\ & (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (v5\_tops\_1 ( \\ & k2\_pre\_topc X0 (k1\_tops\_1 X0 X1)) X0)) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 \\ & X0))) \Rightarrow (m1\_subset\_1 (k6\_setfam\_1 X0 X1) (k1\_zfmisc\_1 X0)) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 \\ & X0))) \Rightarrow (m1\_subset\_1 (k5\_setfam\_1 X0 X1) (k1\_zfmisc\_1 X0)) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((l1\_pre\_topc\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))))\Rightarrow(m1\_subset\_1\ (k2\_pre\_topc\ X0\ X1)\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \quad (6)$$

**Theorem 1**

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v2\_pre\_topc\ X0)\wedge(l1\_pre\_topc\ X0)))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))))\Rightarrow((v2\_tdlat\_2\ X1\ X0)\Rightarrow((v5\_tops\_1\ (k2\_pre\_topc\ X0\ (k5\_setfam\_1\ (u1\_struct\_0\ X0)\ X1))\ X0)\wedge(v5\_tops\_1\ (k2\_pre\_topc\ X0\ (k1\_tops\_1\ X0\ (k6\_setfam\_1\ (u1\_struct\_0\ X0)\ X1)))\ X0))))$$