

t14\_tdlat\_3 (TM-  
NaEy7PiDmf6zX4CbzUQRhZQ85R4uZDjAh)

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Let  $v2\_pre\_topc : \iota \Rightarrow o$  be given. Let  $l1\_pre\_topc : \iota \Rightarrow o$  be given. Let  $k9\_setfam\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $v1\_tdlat\_3 : \iota \Rightarrow o$  be given. Let  $v2\_tdlat\_3 : \iota \Rightarrow o$  be given. Let  $u1\_pre\_topc : \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_setfam\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k9\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.((v2\_pre\_topc X0) \wedge (l1\_pre\_topc X0)) \Rightarrow (k1\_xboole\_0 \in u1\_pre\_topc X0) \quad (1)$$

Assume the following.

$$\forall X0.(l1\_pre\_topc X0) \Rightarrow (((k1\_xboole\_0 \in u1\_pre\_topc X0) \wedge ((u1\_struct\_0 X0 \in u1\_pre\_topc X0) \wedge (k9\_setfam\_1 (u1\_struct\_0 X0) = k2\_tarski k1\_xboole\_0 (u1\_struct\_0 X0)))) \Rightarrow ((v1\_tdlat\_3 X0) \wedge (v2\_tdlat\_3 X0))) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1\_pre\_topc X0) \Rightarrow ((v2\_pre\_topc X0) \Leftrightarrow ((u1\_struct\_0 X0 \in u1\_pre\_topc X0) \wedge ((\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 (u1\_struct\_0 X0)))) \Rightarrow ((r1\_tarski X1 (u1\_pre\_topc X0)) \Rightarrow (k5\_setfam\_1 (u1\_struct\_0 X0) X1 \in u1\_pre\_topc X0))) \wedge (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (((X1 \in u1\_pre\_topc X0) \wedge (X2 \in u1\_pre\_topc X0)) \Rightarrow (k9\_subset\_1 (u1\_struct\_0 X0) X1 X2 \in u1\_pre\_topc X0)))))))))) \end{aligned} \quad (3)$$

**Theorem 1**

$$\forall X0.((v2\_pre\_topc X0) \wedge (l1\_pre\_topc X0)) \Rightarrow ((k9\_setfam\_1 (u1\_struct\_0 X0) = k2\_tarski k1\_xboole\_0 (u1\_struct\_0 X0)) \Rightarrow ((v1\_tdlat\_3 X0) \wedge (v2\_tdlat\_3 X0)))$$