

t24\_tdlat\_1  
(TMcbp7FtTm3yQSYt4TXZdzT1Jiqx95wu5ve)

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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  $v4\_tops\_1 : \iota \Rightarrow \iota \Rightarrow o$  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  $k1\_tops\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v4\_pre\_topc : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.(l1\_pre\_topc X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ (u1\_struct\_0 X0))) \Rightarrow ((v4\_tops\_1 X1 X0) \Rightarrow ((v4\_tops\_1 (k1\_tops\_1 \\ X0 X1) X0) \wedge (v4\_tops\_1 (k2\_pre\_topc X0 X1) X0)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.((v2\_pre\_topc X0) \wedge (l1\_pre\_topc X0)) \Rightarrow (\forall X1. \\ (l1\_pre\_topc X1) \Rightarrow (\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (u1\_struct\_0 \\ X0))) \Rightarrow (\forall X3.(m1\_subset\_1 X3 (k1\_zfmisc\_1 (u1\_struct\_0 \\ X1))) \Rightarrow (((v4\_pre\_topc X3 X1) \wedge (v4\_tops\_1 X3 X1)) \Rightarrow (v5\_tops\_1 X3 \\ X1)) \wedge ((v5\_tops\_1 X2 X0) \Rightarrow ((v4\_pre\_topc X2 X0) \wedge (v4\_tops\_1 X2 X0)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(((v2\_pre\_topc X0) \wedge (l1\_pre\_topc X0)) \wedge \\ (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0)))) \Rightarrow (v4\_pre\_topc \\ (k2\_pre\_topc X0 X1) X0) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((l1\_pre\_topc X0) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ (u1\_struct\_0 X0)))) \Rightarrow (m1\_subset\_1 (k2\_pre\_topc X0 X1) (k1\_zfmisc\_1 \\ (u1\_struct\_0 X0))) \end{aligned} \quad (4)$$

**Theorem 1**

$$\begin{aligned} \forall X0.((v2\_pre\_topc X0) \wedge (l1\_pre\_topc X0)) \Rightarrow (\forall X1. \\ (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow ((v4\_tops\_1 \\ X1 X0) \Rightarrow (v5\_tops\_1 (k2\_pre\_topc X0 X1) X0))) \end{aligned}$$