

# t22\_tdlat\_3 (TMScQY- ERqqS Tm2UksSW4QGM yHcbysjviHxL)

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Let  $v2\_pre\_topc : \iota \Rightarrow o$  be given. Let  $l1\_pre\_topc : \iota \Rightarrow o$  be given. Let  $v3\_tdlat\_3 : \iota \Rightarrow o$  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  $v4\_pre\_topc : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v3\_pre\_topc : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0.(l1\_pre\_topc X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ (u1\_struct\_0 X0))) \Rightarrow ((v3\_pre\_topc X1 X0) \Leftrightarrow (v4\_pre\_topc (k3\_subset\_1 \\ (u1\_struct\_0 X0) X1) X0))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0.(l1\_pre\_topc X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ (u1\_struct\_0 X0))) \Rightarrow ((v4\_pre\_topc X1 X0) \Leftrightarrow (v3\_pre\_topc (k3\_subset\_1 \\ (u1\_struct\_0 X0) X1) X0))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} \forall X0.((v2\_pre\_topc X0) \wedge (l1\_pre\_topc X0)) \Rightarrow ((v3\_tdlat\_3 \\ X0) \Leftrightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow \\ ((v3\_pre\_topc X1 X0) \Rightarrow (v4\_pre\_topc X1 X0)))) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)) \Rightarrow (m1\_subset\_1 \\ (k3\_subset\_1 X0 X1) (k1\_zfmisc\_1 X0)) \tag{4}$$

## Theorem 1

$$\begin{aligned} \forall X0.((v2\_pre\_topc X0) \wedge (l1\_pre\_topc X0)) \Rightarrow ((v3\_tdlat\_3 \\ X0) \Leftrightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow \\ ((v4\_pre\_topc X1 X0) \Rightarrow (v3\_pre\_topc X1 X0)))) \end{aligned}$$