

## t33\_tex\_2

(TMWiw23Msd1RoMjsfYCeW7jCcUbsuE6DxdW)

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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  $v4\_pre\_topc : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v2\_tex\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k9\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((v2\_pre\_topc X0) \wedge (l1\_pre\_topc X0)) \Rightarrow (\forall X1. \\ & (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (\forall X2. \\ & (m1\_subset\_1 X2 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (((v4\_pre\_topc \\ & X1 X0) \wedge (v4\_pre\_topc X2 X0)) \Rightarrow (v4\_pre\_topc (k4\_subset\_1 (u1\_struct\_0 \\ & X0) X1 X2) X0)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v2\_pre\_topc X0) \wedge (l1\_pre\_topc X0)) \Rightarrow (\forall X1. \\ & (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (\forall X2. \\ & (m1\_subset\_1 X2 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (((v4\_pre\_topc \\ & X1 X0) \wedge (v4\_pre\_topc X2 X0)) \Rightarrow (v4\_pre\_topc (k9\_subset\_1 (u1\_struct\_0 \\ & X0) X1 X2) X0)))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.(l1\_pre\_topc X0) \Rightarrow ((\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ & (u1\_struct\_0 X0))) \Rightarrow (\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 \\ & (u1\_struct\_0 X0))) \Rightarrow (((v4\_pre\_topc X1 X0) \wedge (v4\_pre\_topc X2 X0)) \Rightarrow \\ & ((v4\_pre\_topc (k9\_subset\_1 (u1\_struct\_0 X0) X1 X2) X0) \wedge (v4\_pre\_topc \\ & (k4\_subset\_1 (u1\_struct\_0 X0) X1 X2) X0)))))) \Rightarrow (\forall X1.(m1\_subset\_1 \\ & X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (\forall X2.(m1\_subset\_1 \\ & X2 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (((v4\_pre\_topc X1 X0) \wedge ((v4\_pre\_topc \\ & X2 X0) \wedge (v2\_tex\_2 X1 X0) \wedge (v2\_tex\_2 X2 X0))) \Rightarrow (v2\_tex\_2 (k4\_subset\_1 \\ & (u1\_struct\_0 X0) X1 X2) X0)))))) \end{aligned} \tag{3}$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v2\_pre\_topc X0) \wedge (l1\_pre\_topc \\ & X0))) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 \\ & X0))) \Rightarrow (\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (u1\_struct\_0 \\ & X0)))) \Rightarrow (((v4\_pre\_topc X1 X0) \wedge (v4\_pre\_topc X2 X0) \wedge ((v2\_tex\_2 \\ & X1 X0) \wedge (v2\_tex\_2 X2 X0)))) \Rightarrow (v2\_tex\_2 (k4\_subset\_1 (u1\_struct\_0 \\ & X0) X1 X2) X0))) \end{aligned}$$