

t5\_tsep\_1

(TMQaNsgyLkN4pmJv92h3Rs71n3tu17yvGvJ)

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Let  $l1\_pre\_topc : \iota \Rightarrow o$  be given. Let  $m1\_pre\_topc : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $g1\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota$  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  $v1\_pre\_topc : \iota \Rightarrow o$  be given. Let  $l1\_struct\_0 : \iota \Rightarrow o$  be given. Let  $k1\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_struct\_0 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.(l1\_pre\_topc X0) \Rightarrow (\forall X1.(m1\_pre\_topc X1 X0) \Rightarrow (m1\_subset\_1 (u1\_struct\_0 X1) (k1\_zfmisc\_1 (u1\_struct\_0 X0)))) \quad (1)$$

Assume the following.

$$\forall X0.(l1\_pre\_topc X0) \Rightarrow (\forall X1.(m1\_pre\_topc X1 X0) \Rightarrow ((v1\_pre\_topc (g1\_pre\_topc (u1\_struct\_0 X1) (u1\_pre\_topc X1))) \wedge (m1\_pre\_topc (g1\_pre\_topc (u1\_struct\_0 X1) (u1\_pre\_topc X1)) X0))) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (k1\_zfmisc\_1 X0))) \Rightarrow (\forall X2.\forall X3.(g1\_pre\_topc X0 X1 = g1\_pre\_topc X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3))) \quad (3)$$

Assume the following.

$$\forall X0.(l1\_pre\_topc X0) \Rightarrow (m1\_subset\_1 (u1\_pre\_topc X0) (k1\_zfmisc\_1 (k1\_zfmisc\_1 (u1\_struct\_0 X0)))) \quad (4)$$

Assume the following.

$$\forall X0.(l1\_pre\_topc X0) \Rightarrow (\forall X1.(m1\_pre\_topc X1 X0) \Rightarrow (l1\_pre\_topc X1)) \quad (5)$$

Assume the following.

$$\forall X0.(l1\_pre\_topc X0) \Rightarrow (l1\_struct\_0 X0) \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1\_pre\_topc\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1 \\ (u1\_struct\_0\ X0))) \Rightarrow (\forall X2.((v1\_pre\_topc\ X2) \wedge (m1\_pre\_topc \\ X2\ X0)) \Rightarrow ((X2 = k1\_pre\_topc\ X0\ X1) \Leftrightarrow (k2\_struct\_0\ X2 = X1)))) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0.(l1\_struct\_0\ X0) \Rightarrow (k2\_struct\_0\ X0 = u1\_struct\_0\ X0) \quad (8)$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0) \Rightarrow ((v1\_pre\_topc\ X0) \Rightarrow (X0 = g1\_pre\_topc \\ (u1\_struct\_0\ X0)\ (u1\_pre\_topc\ X0))) \quad (9)$$

**Theorem 1**

$$\begin{aligned} \forall X0.(l1\_pre\_topc\ X0) \Rightarrow (\forall X1.(m1\_pre\_topc\ X1\ X0) \Rightarrow \\ (\forall X2.(m1\_pre\_topc\ X2\ X0) \Rightarrow ((u1\_struct\_0\ X1 = u1\_struct\_0 \\ X2) \Rightarrow (g1\_pre\_topc\ (u1\_struct\_0\ X1)\ (u1\_pre\_topc\ X1) = g1\_pre\_topc \\ (u1\_struct\_0\ X2)\ (u1\_pre\_topc\ X2)))) \end{aligned}$$