

t76\_tex\_4

(TMTzkioniEGmKNdthcZ6dDpqcxxTBSgd3aM)

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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  $v1\_borsuk\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_pre\_topc : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k5\_tex\_4 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $v4\_pre\_topc : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_tarSKI : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_tex\_4 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $l1\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v1\_pre\_topc : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X0 X1) \Rightarrow ((v1\_xboole\_0 X1) \vee (X0 \in X1)) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. ((\neg v2\_struct\_0 X0) \wedge (l1\_pre\_topc X0)) \Rightarrow (\forall X1. \\ (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (\forall X2. \\ (m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (((v4\_pre\_topc X1 X0) \wedge (X2 \in \\ X1)) \Rightarrow (r1\_tarSKI (k2\_tex\_4 X0 X2) X1)))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. (l1\_pre\_topc X0) \Rightarrow (\forall X1. (m1\_pre\_topc X1 X0) \Rightarrow (m1\_subset\_1 (u1\_struct\_0 X1) (k1\_zfmisc\_1 (u1\_struct\_0 X0)))) \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. ((v2\_pre\_topc X0) \wedge (l1\_pre\_topc X0)) \Rightarrow (\forall X1. \\ (m1\_pre\_topc X1 X0) \Rightarrow (\forall X2. (m1\_subset\_1 X2 (k1\_zfmisc\_1 \\ (u1\_struct\_0 X0))) \Rightarrow ((X2 = u1\_struct\_0 X1) \Rightarrow (((v1\_borsuk\_1 X1 X0) \wedge \\ (m1\_pre\_topc X1 X0)) \Leftrightarrow (v4\_pre\_topc X2 X0)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0. ((\neg v2\_struct\_0 X0) \wedge (l1\_pre\_topc X0)) \Rightarrow (\forall X1. \\ (m1\_pre\_topc X1 X0) \Rightarrow (\forall X2. (m1\_pre\_topc X2 X0) \Rightarrow ((r1\_tarSKI \\ (u1\_struct\_0 X1) (u1\_struct\_0 X2)) \Rightarrow (m1\_pre\_topc X1 X2)))) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0 X0) \wedge (l1\_struct\_0 X0)) \Rightarrow (\neg v1\_xboole\_0 (u1\_struct\_0 X0)) \quad (6)$$

Assume the following.

$$\forall X0.(l1\_pre\_topc X0) \Rightarrow (\forall X1.(m1\_pre\_topc X1 X0) \Rightarrow (l1\_pre\_topc X1)) \quad (7)$$

Assume the following.

$$\forall X0.(l1\_pre\_topc X0) \Rightarrow (l1\_struct\_0 X0) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((l1\_pre\_topc X0) \wedge (m1\_subset\_1 X1 (u1\_struct\_0 X0))) \Rightarrow ((v1\_pre\_topc (k5\_tex\_4 X0 X1)) \wedge (m1\_pre\_topc (k5\_tex\_4 X0 X1) X0)) \quad (9)$$

Assume the following.

$$\forall X0.(l1\_pre\_topc X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2.((v1\_pre\_topc X2) \wedge (m1\_pre\_topc X2 X0)) \Rightarrow ((X2 = k5\_tex\_4 X0 X1) \Leftrightarrow (u1\_struct\_0 X2 = k2\_tex\_4 X0 X1)))) \quad (10)$$

**Theorem 1**

$$\forall X0.((\neg v2\_struct\_0 X0) \wedge ((v2\_pre\_topc X0) \wedge (l1\_pre\_topc X0))) \Rightarrow (\forall X1.((\neg v2\_struct\_0 X1) \wedge ((v1\_borsuk\_1 X1 X0) \wedge (m1\_pre\_topc X1 X0)))) \Rightarrow (\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow ((m1\_subset\_1 X2 (u1\_struct\_0 X1)) \Rightarrow (m1\_pre\_topc (k5\_tex\_4 X0 X2) X1))))$$