

t40\_borsuk\_1 (TMJUyfDFjBSzTKW-  
pNn8r33mQfV9BMi7g59R)

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Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k17\_borsuk\_1 : \iota$  be given. Let  $k1\_rcomp\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $l1\_pre\_topc : \iota \Rightarrow o$  be given. Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v1\_pre\_topc : \iota \Rightarrow o$  be given. Let  $v2\_pre\_topc : \iota \Rightarrow o$  be given. Let  $l1\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v1\_metric\_1 : \iota \Rightarrow o$  be given. Let  $k8\_metric\_1 : \iota$  be given. Let  $l1\_metric\_1 : \iota \Rightarrow o$  be given. Let  $k3\_pcomps\_1 : \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_pre\_topc : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_struct\_0 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\exists X0.(l1\_pre\_topc X0) \wedge ((v2\_struct\_0 X0) \wedge ((v1\_pre\_topc X0) \wedge (v2\_pre\_topc X0))) \quad (1)$$

Assume the following.

$$(\neg v2\_struct\_0 k17\_borsuk\_1) \wedge ((v1\_pre\_topc k17\_borsuk\_1) \wedge (v2\_pre\_topc k17\_borsuk\_1)) \quad (2)$$

Assume the following.

$$\forall X0.(l1\_pre\_topc X0) \Rightarrow (l1\_struct\_0 X0) \quad (3)$$

Assume the following.

$$(v1\_metric\_1 k8\_metric\_1) \wedge (l1\_metric\_1 k8\_metric\_1) \quad (4)$$

Assume the following.

$$\forall X0.(l1\_metric\_1 X0) \Rightarrow (l1\_pre\_topc (k3\_pcomps\_1 X0)) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((l1\_pre\_topc X0) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0)))) \Rightarrow ((v1\_pre\_topc (k1\_pre\_topc X0 X1)) \wedge (m1\_pre\_topc (k1\_pre\_topc X0 X1) X0)) \quad (6)$$

Assume the following.

$$l1\_pre\_topc\ k17\_borsuk\_1 \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1\_pre\_topc\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1 \\ (u1\_struct\_0\ X0))) \Rightarrow (\forall X2.((v1\_pre\_topc\ X2) \wedge (m1\_pre\_topc \\ X2\ X0)) \Rightarrow ((X2 = k1\_pre\_topc\ X0\ X1) \Leftrightarrow (k2\_struct\_0\ X2 = X1)))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0.(l1\_struct\_0\ X0) \Rightarrow (k2\_struct\_0\ X0 = u1\_struct\_0\ X0) \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1\_pre\_topc\ X0) \Rightarrow ((X0 = k17\_borsuk\_1) \Leftrightarrow (\forall X1. \\ (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k3\_pcomps\_1\ k8\_metric\_1)))) \Rightarrow \\ ((X1 = k1\_rcomp\_1\ k6\_numbers\ np\_1) \Rightarrow (X0 = k1\_pre\_topc\ (k3\_pcomps\_1 \\ k8\_metric\_1\ X1)))) \end{aligned} \quad (10)$$

**Theorem 1**  $u1\_struct\_0\ k17\_borsuk\_1 = k1\_rcomp\_1\ k6\_numbers\ np\_1$ .