

## t1\_borsuk\_6

(TMWsvVCHj2aXmsyVGNPd3xD2Hm4U4dCNrb4)

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Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k2\_borsuk\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_topmetr : \iota$  be given. Let  $k8\_mcart\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_numbers : \iota$  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  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $k17\_borsuk\_1 : \iota$  be given. Let  $v2\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  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  $l1\_pre\_topc : \iota \Rightarrow o$  be given. Let  $u1\_pre\_topc : \iota \Rightarrow \iota$  be given. Let  $k5\_setfam\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(v1\_xboole\_0 X0) \Rightarrow (X0 = k1\_xboole\_0) \quad (1)$$

Assume the following.

$$u1\_struct\_0 k17\_borsuk\_1 = k1\_rcomp\_1 k6\_numbers np\_1 \quad (2)$$

Assume the following.

$$\begin{aligned} & ((v2\_xxreal\_0 np\_1) \wedge (m2\_subset\_1 np\_1 k1\_numbers k5\_numbers)) \wedge \\ & ((m1\_subset\_1 np\_1 k5\_numbers) \wedge (m1\_subset\_1 np\_1 k1\_numbers)) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((m1\_subset\_1 X2 \\ & (k1\_zfmisc\_1 X0)) \wedge (m1\_subset\_1 X3 (k1\_zfmisc\_1 X1))) \Rightarrow (k8\_mcart\_1 \\ & X0 X1 X2 X3 = k2\_zfmisc\_1 X2 X3) \end{aligned} \quad (4)$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \quad (5)$$

Assume the following.

$$k5\_topmetr = k17\_borsuk\_1 \quad (6)$$

Assume the following.

$$\exists X0.(v1\_xboole\_0 X0) \wedge ((v1\_xcmplx\_0 X0) \wedge ((v1\_xxreal\_0 X0) \wedge (v1\_xreal\_0 X0))) \quad (7)$$

Assume the following.

$$(\neg v2\_struct\_0 k17\_borsuk\_1) \wedge ((v1\_pre\_topc k17\_borsuk\_1) \wedge (v2\_pre\_topc k17\_borsuk\_1)) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.(((v2\_pre\_topc X0) \wedge (l1\_pre\_topc X0)) \wedge ((v2\_pre\_topc X1) \wedge (l1\_pre\_topc X1))) \Rightarrow ((v1\_pre\_topc (k2\_borsuk\_1 X0 X1)) \wedge ((v2\_pre\_topc (k2\_borsuk\_1 X0 X1)) \wedge (l1\_pre\_topc (k2\_borsuk\_1 X0 X1)))) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xreal\_0 X0) \wedge (v1\_xreal\_0 X1)) \Rightarrow (m1\_subset\_1 (k1\_rcomp\_1 X0 X1) (k1\_zfmisc\_1 k1\_numbers)) \quad (10)$$

Assume the following.

$$l1\_pre\_topc k17\_borsuk\_1 \quad (11)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v2\_pre\_topc X0) \wedge (l1\_pre\_topc X0)) \Rightarrow (\forall X1. \\ & ((v2\_pre\_topc X1) \wedge (l1\_pre\_topc X1)) \Rightarrow (\forall X2.((v1\_pre\_topc X2) \wedge ((v2\_pre\_topc X2) \wedge (l1\_pre\_topc X2))) \Rightarrow ((X2 = k2\_borsuk\_1 X0 X1) \Leftrightarrow ((u1\_struct\_0 X2 = k2\_zfmisc\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X1)) \wedge (u1\_pre\_topc X2 = ReplSep (toset (\lambda X3 : \iota.m1\_subset\_1 X3 (k1\_zfmisc\_1 (k1\_zfmisc\_1 (u1\_struct\_0 X2)))) (\lambda X3 : \iota.r1\_tarski X3 (ReplSep2 (toset (\lambda X4 : \iota.m1\_subset\_1 X4 (k1\_zfmisc\_1 (u1\_struct\_0 X0)))) (\lambda X4 : \iota.toset (\lambda X5 : \iota.m1\_subset\_1 X5 (k1\_zfmisc\_1 (u1\_struct\_0 X1)))) (\lambda X4 : \iota.\lambda X5 : \iota.(X4 \in u1\_pre\_topc X0) \wedge (X5 \in u1\_pre\_topc X1)) (\lambda X4 : \iota.\lambda X5 : \iota.k8\_mcart\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X1) X4 X5))) (\lambda X3 : \iota.k5\_setfam\_1 (u1\_struct\_0 X2) X3)))))) \quad (12) \end{aligned}$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k1\_numbers) \Rightarrow (v1\_xreal\_0 X0) \quad (13)$$

**Theorem 1**

$$u1\_struct\_0 (k2\_borsuk\_1 k5\_topmetr k5\_topmetr) = k8\_mcart\_1 k1\_numbers k1\_numbers (k1\_rcomp\_1 k6\_numbers np\_1) (k1\_rcomp\_1 k6\_numbers np\_1)$$