

t48\_borsuk\_6  
(TMNSLZc4A34qEhsF74889zfFtGG5Ga5VtrD)

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Let  $k1\_funct.1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_borsuk.6 : \iota$  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  $v1\_xreal.0 : \iota \Rightarrow o$  be given. Let  $r1\_xxreal.0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct.0 : \iota \Rightarrow \iota$  be given. Let  $k17\_borsuk.1 : \iota$  be given. Let  $m1\_subset.1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v2\_xxreal.0 : \iota \Rightarrow o$  be given. Let  $np\_2 : \iota$  be given. Let  $m2\_subset.1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $np\_0 : \iota$  be given. Let  $k3\_xcmplx.0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_xcmplx.0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k7\_xcmplx.0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k9\_real.1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k8\_real.1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_topmetr : \iota$  be given. Let  $v1\_funct.1 : \iota \Rightarrow o$  be given. Let  $v1\_funct.2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc.1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc.1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_funct.2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k10\_real.1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. \neg (X0 \in X1) \wedge (v1\_xboole.0 X1) \quad (1)$$

Assume the following.

$$\forall X0. (v1\_xboole.0 X0) \Rightarrow (X0 = k1\_xboole.0) \quad (2)$$

Assume the following.

$$\forall X0. (v1\_xreal.0 X0) \Rightarrow (((r1\_xxreal.0 k6\_numbers X0) \wedge (r1\_xxreal.0 X0 np\_1)) \Leftrightarrow (X0 \in u1\_struct.0 k17\_borsuk.1)) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1\_subset.1 X0 X1) \quad (4)$$

Assume the following.

$$((v2\_xxreal.0 np\_2) \wedge (m2\_subset.1 np\_2 k1\_numbers k5\_numbers)) \wedge ((m1\_subset.1 np\_2 k5\_numbers) \wedge (m1\_subset.1 np\_2 k1\_numbers)) \quad (5)$$

Assume the following.

$$((v2\_xxreal.0 np\_1) \wedge (m2\_subset.1 np\_1 k1\_numbers k5\_numbers)) \wedge ((m1\_subset.1 np\_1 k5\_numbers) \wedge (m1\_subset.1 np\_1 k1\_numbers)) \quad (6)$$

Assume the following.

$$(m2\_subset\_1\ np\_0\ k1\_numbers\ k5\_numbers) \wedge ((m1\_subset\_1\ np\_0\ k5\_numbers) \wedge (m1\_subset\_1\ np\_0\ k1\_numbers)) \quad (7)$$

Assume the following.

$$v1\_xboole\_0\ np\_0 \quad (8)$$

Assume the following.

$$k3\_xcmplx\_0\ np\_2\ np\_1 = np\_2 \quad (9)$$

Assume the following.

$$k6\_xcmplx\_0\ np\_2\ np\_1 = np\_1 \quad (10)$$

Assume the following.

$$\neg r1\_xxreal\_0\ np\_1\ (k7\_xcmplx\_0\ np\_1\ np\_2) \quad (11)$$

Assume the following.

$$r1\_xxreal\_0\ np\_1\ np\_1 \quad (12)$$

Assume the following.

$$r1\_xxreal\_0\ np\_0\ (k7\_xcmplx\_0\ np\_1\ np\_2) \quad (13)$$

Assume the following.

$$r1\_xxreal\_0\ np\_0\ np\_1 \quad (14)$$

Assume the following.

$$r1\_xxreal\_0\ np\_0\ np\_0 \quad (15)$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k1\_numbers) \wedge (v1\_xreal\_0\ X1)) \Rightarrow (k9\_real\_1\ X0\ X1 = k6\_xcmplx\_0\ X0\ X1) \quad (16)$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k1\_numbers) \wedge (v1\_xreal\_0\ X1)) \Rightarrow (k8\_real\_1\ X0\ X1 = k3\_xcmplx\_0\ X0\ X1) \quad (17)$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \quad (18)$$

Assume the following.

$$k5\_topmetr = k17\_borsuk\_1 \quad (19)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((\neg v1\_boole\_0 X0)\wedge \\ & (((v1\_funct\_1 X2)\wedge((v1\_funct\_2 X2 X0 X1)\wedge(m1\_subset\_1 X2 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 X0 X1))))))\wedge(m1\_subset\_1 X3 X0)))\Rightarrow(k3\_funct\_2 X0 \\ & X1 X2 X3 = k1\_funct\_1 X2 X3) \end{aligned} \quad (20)$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1 X0 k1\_numbers)\wedge(v1\_xreal\_0 X1))\Rightarrow(k10\_real\_1 X0 X1 = k7\_xcmplx\_0 X0 X1) \quad (21)$$

Assume the following.

$$\begin{aligned} & (v1\_funct\_1 k4\_borsuk\_6)\wedge((v1\_funct\_2 k4\_borsuk\_6 (u1\_struct\_0 \\ & k5\_topmetr) (u1\_struct\_0 k5\_topmetr))\wedge(m1\_subset\_1 k4\_borsuk\_6 \\ & (k1\_zfmisc\_1 (k2\_zfmisc\_1 (u1\_struct\_0 k5\_topmetr) (u1\_struct\_0 \\ & k5\_topmetr)))))) \end{aligned} \quad (22)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1\_funct\_1 X0)\wedge((v1\_funct\_2 X0 (u1\_struct\_0 k5\_topmetr) \\ & (u1\_struct\_0 k5\_topmetr))\wedge(m1\_subset\_1 X0 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & (u1\_struct\_0 k5\_topmetr) (u1\_struct\_0 k5\_topmetr))))))\Rightarrow((X0 = \\ & k4\_borsuk\_6)\Leftrightarrow(\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 k5\_topmetr))\Rightarrow \\ & (((r1\_xxreal\_0 X1 (k10\_real\_1 np\_1 np\_2))\Rightarrow(k3\_funct\_2 (u1\_struct\_0 \\ & k5\_topmetr) (u1\_struct\_0 k5\_topmetr) X0 X1 = k6\_numbers))\wedge((\neg \\ & r1\_xxreal\_0 X1 (k10\_real\_1 np\_1 np\_2))\Rightarrow(k3\_funct\_2 (u1\_struct\_0 \\ & k5\_topmetr) (u1\_struct\_0 k5\_topmetr) X0 X1 = k9\_real\_1 (k8\_real\_1 \\ & np\_2 X1) np\_1)))))) \end{aligned} \quad (23)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k1\_numbers)\Rightarrow(v1\_xreal\_0 X0) \quad (24)$$

**Theorem 1**

$$(k1\_funct\_1 k4\_borsuk\_6 k6\_numbers = k6\_numbers)\wedge(k1\_funct\_1 k4\_borsuk\_6 np\_1 = np\_1)$$