t17_borsuk_4 (TMdDEKWVBhCvWN-GoJC34R8CQ8FXszCccsbs)

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Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k5\_topmetr : \iota$ be given. Let $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Let $k3\_rcomp\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_rcomp\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1\_connsp\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $r1\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_xxreal\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_xxreal\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_xxreal\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_rcomp\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k17\_borsuk\_1 : \iota$ be given. Let $l1\_pre\_topc : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1\_xxreal\_0\ X0) \Rightarrow (\forall X1.(v1\_xxreal\_0\ X1) \Rightarrow (\forall X2.\ (v1\_xxreal\_0\ X2) \Rightarrow (\forall X3.(v1\_xxreal\_0\ X3) \Rightarrow ((r1\_xxreal\_0\ X0\ X1) \Rightarrow (r1\_xboole\_0\ (k2\_xxreal\_1\ X2\ X0)\ (k1\_xxreal\_1\ X1\ X3)))))) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xxreal\_0\ X0) \Rightarrow (\forall X1.(v1\_xxreal\_0\ X1) \Rightarrow (\forall X2.\ (v1\_xxreal\_0\ X2) \Rightarrow (\forall X3.(v1\_xxreal\_0\ X3) \Rightarrow ((r1\_xxreal\_0\ X0\ X1) \Rightarrow (r1\_xboole\_0\ (k1\_xxreal\_1\ X2\ X0)\ (k3\_xxreal\_1\ X1\ X3)))))) \tag{2}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (u1\_struct\_0\ k5\_topmetr))) \Rightarrow (\forall X1.(v1\_xreal\_0\ X1) \Rightarrow (\forall X2.(v1\_xreal\_0\ X2) \Rightarrow ((X0 = k3\_rcomp\_1\ X1\ X2) \Rightarrow ((r1\_xxreal\_0\ X2\ X1) \vee (k2\_pre\_topc\ k5\_topmetr\ X0 = k1\_rcomp\_1\ X1\ X2))))) \tag{3}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (u1\_struct\_0\ k5\_topmetr))) \Rightarrow (\forall X1.(v1\_xreal\_0\ X1) \Rightarrow (\forall X2.(v1\_xreal\_0\ X2) \Rightarrow ((X0 = k4\_rcomp\_1\ X1\ X2) \Rightarrow ((r1\_xxreal\_0\ X2\ X1) \vee (k2\_pre\_topc\ k5\_topmetr\ X0 = k1\_rcomp\_1\ X1\ X2))))) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xxreal\_0\ X0)\wedge(v1\_xxreal\_0\ X1))\Rightarrow(r1\_xxreal\_0\ X0\ X0) \tag{5}$$

Assume the following.

$$k5\_topmetr = k17\_borsuk\_1 \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xxreal\_0\ X0)\wedge(v1\_xreal\_0\ X1))\Rightarrow(k4\_rcomp\_1\ X0\ X1 = k3\_xxreal\_1\ X0\ X1) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xreal\_0\ X0)\wedge(v1\_xxreal\_0\ X1))\Rightarrow(k3\_rcomp\_1\ X0\ X1 = k2\_xxreal\_1\ X0\ X1) \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xreal\_0\ X0)\wedge(v1\_xreal\_0\ X1))\Rightarrow(k1\_rcomp\_1\ X0\ X1 = k1\_xxreal\_1\ X0\ X1) \tag{9}$$

Assume the following.

$$l1\_pre\_topc\ k17\_borsuk\_1 \tag{10}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))\Rightarrow((r1\_connsp\_1\ X0\ X1\ X2)\Leftrightarrow((r1\_xboole\_0\ (k2\_pre\_topc\ X0\ X1)\ X2)\wedge(r1\_xboole\_0\ X1\ (k2\_pre\_topc\ X0\ X2)))))) \tag{11}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(v1\_xxreal\_0\ X0) \tag{12}$$

Theorem 1

$$\forall X0.(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (u1\_struct\_0\ k5\_topmetr)))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ k5\_topmetr)))\Rightarrow(\forall X2.(v1\_xreal\_0\ X2)\Rightarrow(\forall X3.(v1\_xreal\_0\ X3)\Rightarrow(\forall X4.(v1\_xreal\_0\ X4)\Rightarrow(((X0 = k3\_rcomp\_1\ X2\ X3)\wedge(X1 = k4\_rcomp\_1\ X3\ X4))\Rightarrow((r1\_xxreal\_0\ X3\ X2)\vee((r1\_xxreal\_0\ X4\ X3)\vee(r1\_connsp\_1\ k5\_topmetr\ X0\ X1)))))))))$$