t44_borsuk_5 (TMQKAArY3q5bs9MG29FgfCc6S251DYue46P)

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Let $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Let $k4\_rcomp\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_xxreal\_0 : \iota$ be given. Let $k4\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_numbers : \iota$ be given. Let $k1\_seq\_4 : \iota \Rightarrow \iota$ be given. Let $k2\_rcomp\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_xxreal\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_xxreal\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $v1\_xxreal\_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (k3\_xxreal\_1\ k2\_xxreal\_0\ X0 = k2\_xboole\_0\ (k4\_xxreal\_1\ k2\_xxreal\_0\ X0)\ (k1\_tarski\ X0)) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X0\ X1) \Rightarrow ((v1\_xboole\_0\ X1) \vee (X0 \in X1)) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1\_subset\_1\ X0\ X1) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0)) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ X0))) \Rightarrow (k4\_subset\_1\ X0\ X1\ X2 = k2\_xboole\_0\ X1\ X2) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xxreal\_0\ X0) \wedge (v1\_xreal\_0\ X1)) \Rightarrow (k4\_rcomp\_1\ X0\ X1 = k3\_xxreal\_1\ X0\ X1) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xxreal\_0\ X0) \wedge (v1\_xxreal\_0\ X1)) \Rightarrow (k2\_rcomp\_1\ X0\ X1 = k4\_xxreal\_1\ X0\ X1) \tag{6}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (k1\_seq\_4\ X0 = k1\_tarski\ X0) \tag{7}$$

Assume the following.

$$v1\_xxreal\_0\ k2\_xxreal\_0 \tag{8}$$

Assume the following.

$$\forall X0.\neg v1\_xboole\_0\ (k1\_zfmisc\_1\ X0) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xxreal\_0\ X0) \wedge (v1\_xxreal\_0\ X1)) \Rightarrow (m1\_subset\_1\ (k2\_rcomp\_1\ X0\ X1)\ (k1\_zfmisc\_1\ k1\_numbers)) \tag{10}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (m1\_subset\_1\ (k1\_seq\_4\ X0)\ (k1\_zfmisc\_1\ k1\_numbers)) \tag{11}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0)) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ X0))) \Rightarrow (k4\_subset\_1\ X0\ X1\ X2 = k4\_subset\_1\ X0\ X2\ X1) \tag{12}$$

Assume the following.

$$\forall X0.\forall X1.k2\_xboole\_0\ X0\ X1 = k2\_xboole\_0\ X1\ X0 \tag{13}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (v1\_xxreal\_0\ X0) \tag{14}$$

Theorem 1

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (k4\_rcomp\_1\ k2\_xxreal\_0\ X0 = k4\_subset\_1\ k1\_numbers\ (k1\_seq\_4\ X0)\ (k2\_rcomp\_1\ k2\_xxreal\_0\ X0))$$