t52_jordan6 (TMVipNx48BCXeWrroAEdk2r321sCzVEEtZ9)

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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 $k15\_euclid : \iota \Rightarrow \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $k1\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_topreal2 : \iota \Rightarrow o$ be given. Let $k9\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8\_jordan6 : \iota \Rightarrow \iota$ be given. Let $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k18\_pscomp\_1 : \iota \Rightarrow \iota$ be given. Let $k22\_pscomp\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_jordan6 : \iota \Rightarrow \iota$ be given. Let $k3\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.k2\_xboole\_0\ (k3\_xboole\_0\ X0\ X1)\ (k4\_xboole\_0\ X0\ X1) = X0 \tag{1}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))) \Rightarrow ((v1\_topreal2\ X0) \Rightarrow ((k9\_jordan6\ X0 = k2\_xboole\_0\ (k7\_subset\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))\ X0\ (k8\_jordan6\ X0))\ (k2\_tarski\ (k18\_pscomp\_1\ X0)\ (k22\_pscomp\_1\ X0))) \wedge (k8\_jordan6\ X0 = k2\_xboole\_0\ (k7\_subset\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))\ X0\ (k9\_jordan6\ X0))\ (k2\_tarski\ (k18\_pscomp\_1\ X0)\ (k22\_pscomp\_1\ X0)))))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.k4\_xboole\_0\ (k2\_xboole\_0\ X0\ X1)\ X1 = k4\_xboole\_0\ X0\ X1 \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ X0)) \Rightarrow (k9\_subset\_1\ X0\ X1\ X2 = k3\_xboole\_0\ X1\ X2) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0)) \Rightarrow (k7\_subset\_1\ X0\ X1\ X2 = k4\_xboole\_0\ X1\ X2) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.k3\_xboole\_0\ X0\ X1 = k3\_xboole\_0\ X1\ X0 \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.k2\_xboole\_0\ X0\ X1 = k2\_xboole\_0\ X1\ X0 \tag{7}$$

Theorem 1

$$\forall X0.(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k1\_pre\_topc\ (k15\_euclid\ np\_\_2)\ X0)))) \Rightarrow (((v1\_topreal2\ X0) \wedge (k9\_subset\_1\ (u1\_struct\_0\ (k1\_pre\_topc\ (k15\_euclid\ np\_\_2)\ X0))\ (k8\_jordan6\ X0)\ X1 = k2\_tarski\ (k18\_pscomp\_1\ X0)\ (k22\_pscomp\_1\ X0)) \wedge (k2\_xboole\_0\ (k8\_jordan6\ X0)\ X1 = X0))) \Rightarrow (X1 = k9\_jordan6\ X0)))$$