t14_jordan12 (TMYqt3uEXRPsqzp1m1dAri6RcSntJD2LGiH)

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Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v3\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_finseq\_6 : \iota \Rightarrow \iota \Rightarrow o$ 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 $v1\_topreal1 : \iota \Rightarrow o$ be given. Let $v2\_topreal1 : \iota \Rightarrow o$ be given. Let $v1\_goboard5 : \iota \Rightarrow o$ be given. Let $v2\_goboard5 : \iota \Rightarrow o$ be given. Let $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $r3\_connsp\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_goboard9 : \iota \Rightarrow \iota$ be given. Let $k2\_goboard9 : \iota \Rightarrow \iota$ be given. Let $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_tops\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_goboard5 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $k5\_goboard5 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))) \Rightarrow (\forall X1.((\neg v1\_xboole\_0\ X1) \wedge ((\neg v3\_funct\_1\ X1) \wedge ((v1\_finseq\_6\ X1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \wedge ((v1\_topreal1\ X1) \wedge ((v2\_topreal1\ X1) \wedge ((v1\_goboard5\ X1) \wedge ((v2\_goboard5\ X1) \wedge (m2\_finseq\_1\ X1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))))))) \Rightarrow (\neg (r3\_connsp\_1\ (k15\_euclid\ np\_\_2)\ (k3\_subset\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))\ (k3\_topreal1\ np\_\_2\ X1))\ X0) \wedge ((X0 \neq k3\_goboard9\ X1) \wedge (X0 \neq k2\_goboard9\ X1)))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1\ X1\ X0) \Leftrightarrow (m1\_finseq\_1\ X1\ X0) \tag{2}$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0\ X0) \wedge ((\neg v3\_funct\_1\ X0) \wedge ((v1\_finseq\_6\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))) \wedge ((v1\_topreal1\ X0) \wedge ((v2\_topreal1\ X0) \wedge ((v1\_goboard5\ X0) \wedge ((v2\_goboard5\ X0) \wedge (m1\_finseq\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))))))) \Rightarrow (m1\_subset\_1\ (k3\_goboard9\ X0)\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))) \tag{3}$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0\ X0)\wedge((\neg v3\_funct\_1\ X0)\wedge((v1\_finseq\_6\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\wedge((v1\_topreal1\ X0)\wedge((v2\_topreal1\ X0)\wedge((v1\_goboard5\ X0)\wedge((v2\_goboard5\ X0)\wedge(m1\_finseq\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))))))))\Rightarrow(m1\_subset\_1\ (k2\_goboard9\ X0)\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))) \tag{4}$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0\ X0)\wedge((\neg v3\_funct\_1\ X0)\wedge((v1\_finseq\_6\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\wedge((v1\_topreal1\ X0)\wedge((v2\_topreal1\ X0)\wedge((v1\_goboard5\ X0)\wedge((v2\_goboard5\ X0)\wedge(m2\_finseq\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))))))))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))\Rightarrow((X1 = k3\_goboard9\ X0)\Leftrightarrow((r3\_connsp\_1\ (k15\_euclid\ np\_\_2)\ (k3\_subset\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))\ (k3\_topreal1\ np\_\_2\ X0))\ X1)\wedge(r1\_tarski\ (k1\_tops\_1\ (k15\_euclid\ np\_\_2)\ (k4\_goboard5\ X0\ np\_\_1))\ X1)))) \tag{5}$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0\ X0)\wedge((\neg v3\_funct\_1\ X0)\wedge((v1\_finseq\_6\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\wedge((v1\_topreal1\ X0)\wedge((v2\_topreal1\ X0)\wedge((v1\_goboard5\ X0)\wedge((v2\_goboard5\ X0)\wedge(m2\_finseq\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))))))))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))\Rightarrow((X1 = k2\_goboard9\ X0)\Leftrightarrow((r3\_connsp\_1\ (k15\_euclid\ np\_\_2)\ (k3\_subset\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))\ (k3\_topreal1\ np\_\_2\ X0))\ X1)\wedge(r1\_tarski\ (k1\_tops\_1\ (k15\_euclid\ np\_\_2)\ (k5\_goboard5\ X0\ np\_\_1))\ X1)))) \tag{6}$$

Theorem 1

$$\forall X0.\forall X1.\forall X2.((\neg v1\_xboole\_0\ X2)\wedge((\neg v3\_funct\_1\ X2)\wedge((v1\_finseq\_6\ X2\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\wedge((v1\_topreal1\ X2)\wedge((v2\_topreal1\ X2)\wedge((v1\_goboard5\ X2)\wedge((v2\_goboard5\ X2)\wedge(m2\_finseq\_1\ X2\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))))))))\Rightarrow((\neg(\exists X3.(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))\wedge((r3\_connsp\_1\ (k15\_euclid\ np\_\_2)\ (k3\_subset\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))\ (k3\_topreal1\ np\_\_2\ X2))\ X3)\wedge((X0 \in X3)\wedge(X1 \in X3))))\wedge((\neg(X0 \in k3\_goboard9\ X2)\wedge(X1 \in k3\_goboard9\ X2))\wedge(\neg(X0 \in k2\_goboard9\ X2)\wedge(X1 \in k2\_goboard9\ X2))))\wedge(\neg(((X0 \in k3\_goboard9\ X2)\wedge(X1 \in k3\_goboard9\ X2))\vee((X0 \in k2\_goboard9\ X2)\wedge(X1 \in k2\_goboard9\ X2)))\wedge(\forall X3.(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))\Rightarrow(\neg(r3\_connsp\_1\ (k15\_euclid\ np\_\_2)\ (k3\_subset\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))\ (k3\_topreal1\ np\_\_2\ X2))\ X3)\wedge((X0 \in X3)\wedge(X1 \in X3)))))) $$