

# t11\_jordan14 (TMWgN- vyr1bFWgG1KdoWuGasAPG93UTgQZK9)

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Let  $v1\_topreal2 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k15\_euclid : \iota \Rightarrow \iota$  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  $r1\_jordan1h : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_goboard9 : \iota \Rightarrow \iota$  be given. Let  $k1\_jordan13 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $r1\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v3\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_finseq\_6 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_topreal1 : \iota \Rightarrow o$  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  $k3\_goboard9 : \iota \Rightarrow \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v1\_sppol\_1 : \iota \Rightarrow o$  be given. Let  $v2\_sppol\_1 : \iota \Rightarrow o$  be given. Let  $v1\_sprect\_2 : \iota \Rightarrow o$  be given. Let  $v2\_compts\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.((v1\_topreal2 X0) \wedge (m1\_subset\_1 X0 (k1\_zfmisc\_1 (u1\_struct\_0 \\ (k15\_euclid np\_2)))))) \Rightarrow (\forall X1.(m2\_subset\_1 X1 k1\_numbers \\ k5\_numbers) \Rightarrow ((r1\_jordan1h X0 X1) \Rightarrow (r1\_subset\_1 X0 (k3\_topreal1 \\ np\_2 (k1\_jordan13 X0 X1)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \neg (X0 \in X1) \wedge (v1\_xboole\_0 X1) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 X2))) \Rightarrow (m1\_subset\_1 X0 X2) \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (\neg (\neg r1\_xboole\_0 X0 X1) \wedge (\forall X2. \neg (X2 \in \\ X0) \wedge (X2 \in X1))) \wedge (\neg (\exists X2. (X2 \in X0) \wedge (X2 \in X1)) \wedge (r1\_xboole\_0 \\ X0 X1)) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v3\_funct\_1 X0) \wedge ((\neg v1\_xboole\_0 X0) \wedge ((v1\_finseq\_6 \\ & X0 (u1\_struct\_0 (k15\_euclid np\_2))) \wedge ((v1\_topreal1 X0) \wedge ((v2\_topreal1 \\ & X0) \wedge ((v1\_goboard5 X0) \wedge ((v2\_goboard5 X0) \wedge (m2\_finseq\_1 X0 (u1\_struct\_0 \\ & (k15\_euclid np\_2)))))))))) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 \\ & (k15\_euclid np\_2))) \Rightarrow ((X1 \in k3\_goboard9 X0) \Leftrightarrow ((\neg X1 \in k3\_topreal1 \\ & np\_2 X0) \wedge (\neg X1 \in k2\_goboard9 X0)))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1\_topreal2 X0) \wedge (m1\_subset\_1 X0 (k1\_zfmisc\_1 (u1\_struct\_0 \\ & (k15\_euclid np\_2)))))) \Rightarrow (\forall X1.(m2\_subset\_1 X1 k1\_numbers \\ & k5\_numbers) \Rightarrow ((r1\_jordan1h X0 X1) \Rightarrow (r1\_xboole\_0 X0 (k3\_goboard9 \\ & (k1\_jordan13 X0 X1)))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((\neg v1\_xboole\_0 X0) \wedge (\neg v1\_xboole\_0 X1)) \Rightarrow \\ & ((r1\_subset\_1 X0 X1) \Leftrightarrow (r1\_xboole\_0 X0 X1)) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((\neg v1\_xboole\_0 X0) \wedge ((\neg v1\_xboole\_0 X1) \wedge \\ & (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)))) \Rightarrow (\forall X2.(m2\_subset\_1 \\ & X2 X0 X1) \Leftrightarrow (m1\_subset\_1 X2 X1)) \end{aligned} \quad (8)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (9)$$

Assume the following.

$$(\neg v1\_xboole\_0 k4\_ordinal1) \wedge (v3\_ordinal1 k4\_ordinal1) \quad (10)$$

Assume the following.

$$\neg v1\_xboole\_0 k1\_numbers \quad (11)$$

Assume the following.

$$m1\_subset\_1 k5\_numbers (k1\_zfmisc\_1 k1\_numbers) \quad (12)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(((\neg v1\_xboole\_0 X0) \wedge ((\neg v1\_sppol\_1 X0) \wedge \\ & ((\neg v2\_sppol\_1 X0) \wedge ((v1\_topreal2 X0) \wedge (m1\_subset\_1 X0 (k1\_zfmisc\_1 \\ & (u1\_struct\_0 (k15\_euclid np\_2)))))))))) \wedge (m1\_subset\_1 X1 k5\_numbers) \Rightarrow \\ & ((\neg v1\_xboole\_0 (k1\_jordan13 X0 X1)) \wedge ((\neg v3\_funct\_1 (k1\_jordan13 \\ & X0 X1)) \wedge ((v1\_finseq\_6 (k1\_jordan13 X0 X1) (u1\_struct\_0 (k15\_euclid \\ & np\_2))) \wedge ((v1\_topreal1 (k1\_jordan13 X0 X1)) \wedge ((v2\_topreal1 ( \\ & k1\_jordan13 X0 X1)) \wedge ((v1\_goboard5 (k1\_jordan13 X0 X1)) \wedge ((v2\_goboard5 \\ & (k1\_jordan13 X0 X1)) \wedge ((v1\_sprect\_2 (k1\_jordan13 X0 X1)) \wedge (m2\_finseq\_1 \\ & (k1\_jordan13 X0 X1) (u1\_struct\_0 (k15\_euclid np\_2)))))))))) \end{aligned} \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.(r1\_tarSKI X0 X1)\Leftrightarrow(\forall X2.(X2 \in X0)\Rightarrow (X2 \in X1)) \quad (14)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 (k1\_zfmisc\_1 (u1\_struct\_0 (k15\_euclid np\_2))))\Rightarrow((v1\_topreal2 X0)\Rightarrow((v1\_topreal2 X0)\wedge((\neg v1\_sppol\_1 X0)\wedge(\neg v2\_sppol\_1 X0)))) \quad (15)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 (k1\_zfmisc\_1 (u1\_struct\_0 (k15\_euclid np\_2))))\Rightarrow((v1\_topreal2 X0)\Rightarrow((\neg v1\_xboole\_0 X0)\wedge(v2\_compts\_1 X0 (k15\_euclid np\_2)))) \quad (16)$$

**Theorem 1**

$$\forall X0.((v1\_topreal2 X0)\wedge(m1\_subset\_1 X0 (k1\_zfmisc\_1 (u1\_struct\_0 (k15\_euclid np\_2)))))\Rightarrow(\forall X1.(m2\_subset\_1 X1 k1\_numbers k5\_numbers)\Rightarrow((r1\_jordan1h X0 X1)\Rightarrow(r1\_tarSKI X0 (k2\_goboard9 (k1\_jordan13 X0 X1)))))$$