

## t16\_jordan14

(TMV3qtWU824Fzq6hmB9hoR9fNcBAyBmgoqs)

October 27, 2020

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  $k2\_jordan2c : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_goboard9 : \iota \Rightarrow \iota$  be given. Let  $k1\_jordan13 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v3\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  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  $v1\_sprect.2 : \iota \Rightarrow o$  be given. Let  $m2\_finseq.1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota$  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  $v2\_compts.1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v3\_funct.1 X0) \wedge ((\neg v1\_xboole.0 X0) \wedge ((v1\_finseq.6 \\ & X0 (u1\_struct.0 (k15\_euclid np\_2)))) \wedge ((v1\_topreal1 X0) \wedge ((v2\_topreal1 \\ & X0) \wedge ((v1\_goboard5 X0) \wedge ((v2\_goboard5 X0) \wedge ((v1\_sprect.2 X0) \wedge \\ & (m2\_finseq.1 X0 (u1\_struct.0 (k15\_euclid np\_2)))))))))) \Rightarrow ( \\ & k2\_jordan2c np\_2 (k3\_topreal1 np\_2 X0) = k2\_goboard9 X0) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1\_topreal2 X0) \wedge (m1\_subset.1 X0 (k1\_zfmisc.1 (u1\_struct.0 \\ & (k15\_euclid np\_2)))))) \Rightarrow (\forall X1.(m2\_subset.1 X1 k1\_numbers \\ & k5\_numbers) \Rightarrow ((r1\_jordan1h X0 X1) \Rightarrow (r1\_tarski (k2\_jordan2c np\_2 \\ & X0) (k2\_jordan2c np\_2 (k3\_topreal1 np\_2 (k1\_jordan13 X0 X1)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1\_xboole.0 X0) \wedge ((\neg v1\_xboole.0 X1) \wedge \\ & (m1\_subset.1 X1 (k1\_zfmisc.1 X0)))) \Rightarrow (\forall X2.(m2\_subset.1 \\ & X2 X0 X1) \Leftrightarrow (m1\_subset.1 X2 X1)) \end{aligned} \quad (3)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (4)$$

Assume the following.

$$(\neg v1\_xboole\_0 \ k4\_ordinal1) \wedge (v3\_ordinal1 \ k4\_ordinal1) \quad (5)$$

Assume the following.

$$\neg v1\_xboole\_0 \ k1\_numbers \quad (6)$$

Assume the following.

$$m1\_subset\_1 \ k5\_numbers \ (k1\_zfmisc\_1 \ k1\_numbers) \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((\neg v1\_xboole\_0 \ X0) \wedge (\neg v1\_sppol\_1 \ X0) \wedge \\ & ((\neg v2\_sppol\_1 \ X0) \wedge (v1\_topreal2 \ X0) \wedge (m1\_subset\_1 \ X0 \ (k1\_zfmisc\_1 \\ & (u1\_struct\_0 \ (k15\_euclid \ np\_2)))))) \wedge (m1\_subset\_1 \ X1 \ k5\_numbers)) \Rightarrow \\ & ((\neg v1\_xboole\_0 \ (k1\_jordan13 \ X0 \ X1)) \wedge ((\neg v3\_funct\_1 \ (k1\_jordan13 \\ & X0 \ X1)) \wedge (v1\_finseq\_6 \ (k1\_jordan13 \ X0 \ X1) \ (u1\_struct\_0 \ (k15\_euclid \\ & np\_2))) \wedge (v1\_topreal1 \ (k1\_jordan13 \ X0 \ X1)) \wedge (v2\_topreal1 \ ( \\ & k1\_jordan13 \ X0 \ X1)) \wedge (v1\_goboard5 \ (k1\_jordan13 \ X0 \ X1)) \wedge (v2\_goboard5 \\ & (k1\_jordan13 \ X0 \ X1)) \wedge (v1\_sprect\_2 \ (k1\_jordan13 \ X0 \ X1)) \wedge (m2\_finseq\_1 \\ & (k1\_jordan13 \ X0 \ X1) \ (u1\_struct\_0 \ (k15\_euclid \ np\_2)))))) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0. (m1\_subset\_1 \ X0 \ (k1\_zfmisc\_1 \ (u1\_struct\_0 \ (k15\_euclid \\ & np\_2)))) \Rightarrow ((v1\_topreal2 \ X0) \Rightarrow ((v1\_topreal2 \ X0) \wedge ((\neg v1\_sppol\_1 \\ & X0) \wedge (\neg v2\_sppol\_1 \ X0)))) \end{aligned} \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0. (m1\_subset\_1 \ X0 \ (k1\_zfmisc\_1 \ (u1\_struct\_0 \ (k15\_euclid \\ & np\_2)))) \Rightarrow ((v1\_topreal2 \ X0) \Rightarrow ((\neg v1\_xboole\_0 \ X0) \wedge (v2\_compts\_1 \\ & X0 \ (k15\_euclid \ np\_2)))) \end{aligned} \quad (10)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. ((v1\_topreal2 \ X0) \wedge (m1\_subset\_1 \ X0 \ (k1\_zfmisc\_1 \ (u1\_struct\_0 \\ & (k15\_euclid \ np\_2)))) \Rightarrow (\forall X1. (m2\_subset\_1 \ X1 \ k1\_numbers \\ & k5\_numbers) \Rightarrow ((r1\_jordan1h \ X0 \ X1) \Rightarrow (r1\_tarski \ (k2\_jordan2c \ np\_2 \\ & X0) \ (k2\_goboard9 \ (k1\_jordan13 \ X0 \ X1)))))) \end{aligned}$$