

## t12\_jordan10

(TMQ8NjhY8py9dYRA9A4vaFMWEjjrzakbcWw)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $v2\_connsp\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k15\_euclid : \iota \Rightarrow \iota$  be given. Let  $np\_2 : \iota$  be given. Let  $v2\_compts\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_sppol\_1 : \iota \Rightarrow o$  be given. Let  $v2\_sppol\_1 : \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarSKI : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_jordan2c : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_jordan9 : \iota \Rightarrow \iota \Rightarrow \iota$  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  $r1\_jordan2c : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_goboard9 : \iota \Rightarrow \iota$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $v2\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $v6\_membered : \iota \Rightarrow o$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v3\_funct\_1 X0) \wedge ((\neg v1\_xboole\_0 X0) \wedge ((v1\_finseq\_6 \\ & X0 (u1\_struct\_0 (k15\_euclid np\_2)))) \wedge ((v1\_topreal1 X0) \wedge ((v2\_topreal1 \\ & X0) \wedge ((v1\_goboard5 X0) \wedge ((v2\_goboard5 X0) \wedge ((v1\_sprect\_2 X0) \wedge \\ & (m2\_finseq\_1 X0 (u1\_struct\_0 (k15\_euclid np\_2)))))))))) \Rightarrow ( \\ & r1\_jordan2c np\_2 (k3\_topreal1 np\_2 X0) (k3\_goboard9 X0)) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. (m2\_subset\_1 X0 k1\_numbers k5\_numbers) \Rightarrow (\forall X1. \\ & (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 (k15\_euclid X0)))) \Rightarrow \\ & (\forall X2. (m1\_subset\_1 X2 (k1\_zfmisc\_1 (u1\_struct\_0 (k15\_euclid \\ & X0)))) \Rightarrow ((r1\_jordan2c X0 X1 X2) \Rightarrow (r1\_tarSKI X2 (k1\_jordan2c X0 X1)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((r1\_tarSKI X0 X1) \wedge (r1\_tarSKI X1 X2)) \Rightarrow (r1\_tarSKI X0 X2) \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.((v2\_connsp\_1 \\ & X1 (k15\_euclid np\_2)) \wedge ((v2\_compts\_1 X1 (k15\_euclid np\_2)) \wedge \\ & ((\neg v1\_sppol\_1 X1) \wedge ((\neg v2\_sppol\_1 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ & (u1\_struct\_0 (k15\_euclid np\_2)))))))))) \Rightarrow (r1\_tarski X1 (k3\_goboard9 \\ & (k1\_jordan9 X1 X0))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & ((v2\_xxreal\_0 np\_2) \wedge (m2\_subset\_1 np\_2 k1\_numbers k5\_numbers)) \wedge \\ & ((m1\_subset\_1 np\_2 k5\_numbers) \wedge (m1\_subset\_1 np\_2 k1\_numbers)) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1 X1 X0) \Leftrightarrow (m1\_finseq\_1 X1 X0) \quad (6)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (7)$$

Assume the following.

$$v6\_membered k4\_ordinal1 \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v7\_ordinal1 X0) \wedge (m1\_finseq\_1 X1 (u1\_struct\_0 \\ & (k15\_euclid X0)))) \Rightarrow (m1\_subset\_1 (k3\_topreal1 X0 X1) (k1\_zfmisc\_1 \\ & (u1\_struct\_0 (k15\_euclid X0)))) \end{aligned} \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v1\_xboole\_0 X0) \wedge ((\neg v3\_funct\_1 X0) \wedge ((v1\_finseq\_6 \\ & X0 (u1\_struct\_0 (k15\_euclid np\_2))) \wedge ((v1\_topreal1 X0) \wedge ((v2\_topreal1 \\ & X0) \wedge ((v1\_goboard5 X0) \wedge ((v2\_goboard5 X0) \wedge (m1\_finseq\_1 X0 (u1\_struct\_0 \\ & (k15\_euclid np\_2)))))))))) \Rightarrow (m1\_subset\_1 (k3\_goboard9 X0) ( \\ & k1\_zfmisc\_1 (u1\_struct\_0 (k15\_euclid np\_2)))) \end{aligned} \quad (10)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(((\neg v1\_xboole\_0 X0) \wedge ((v2\_compts\_1 X0 ( \\ & k15\_euclid np\_2)) \wedge ((\neg v1\_sppol\_1 X0) \wedge ((\neg v2\_sppol\_1 X0) \wedge (m1\_subset\_1 \\ & X0 (k1\_zfmisc\_1 (u1\_struct\_0 (k15\_euclid np\_2)))))))))) \wedge (v7\_ordinal1 \\ & X1)) \Rightarrow ((\neg v1\_xboole\_0 (k1\_jordan9 X0 X1)) \wedge ((\neg v3\_funct\_1 (k1\_jordan9 \\ & X0 X1)) \wedge ((v1\_finseq\_6 (k1\_jordan9 X0 X1) (u1\_struct\_0 (k15\_euclid \\ & np\_2)))) \wedge ((v1\_topreal1 (k1\_jordan9 X0 X1)) \wedge ((v2\_topreal1 (k1\_jordan9 \\ & X0 X1)) \wedge ((v1\_goboard5 (k1\_jordan9 X0 X1)) \wedge ((v2\_goboard5 (k1\_jordan9 \\ & X0 X1)) \wedge ((v1\_sprect\_2 (k1\_jordan9 X0 X1)) \wedge (m2\_finseq\_1 (k1\_jordan9 \\ & X0 X1) (u1\_struct\_0 (k15\_euclid np\_2)))))))))) \end{aligned} \quad (11)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 (k1\_zfmisc\_1 (u1\_struct\_0 (k15\_euclid np\_2)))) \Rightarrow ((v1\_xboole\_0 X0) \Rightarrow (v2\_sppol\_1 X0)) \quad (12)$$

Assume the following.

$$\forall X0.(v6\_membered X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 X0) \Rightarrow (v7\_ordinal1 X1)) \quad (13)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (\forall X1.((v2\_connsp\_1 \\ & X1 (k15\_euclid np\_2)) \wedge ((v2\_compts\_1 X1 (k15\_euclid np\_2)) \wedge \\ & ((\neg v1\_sppol\_1 X1) \wedge ((\neg v2\_sppol\_1 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ & (u1\_struct\_0 (k15\_euclid np\_2)))))))) \Rightarrow (r1\_tarski X1 (k1\_jordan2c \\ & np\_2 (k3\_topreal1 np\_2 (k1\_jordan9 X1 X0)))) \end{aligned}$$