

t24\_jordan1h (TM-  
Rfq4CVwkS1K29HhwZAGB9ncipfwzqYZxX)

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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  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v3\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_finseq\_6 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_topreal1 : \iota \Rightarrow o$  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  $r3\_connsp\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  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  $k1\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v3\_connsp\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v2\_xxreal\_0 : \iota \Rightarrow o$  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  $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $v6\_membered : \iota \Rightarrow o$  be given. Let  $l1\_rltopsp1 : \iota \Rightarrow o$  be given. Let  $l1\_rlvect1 : \iota \Rightarrow o$  be given. Let  $l1\_pre\_topc : \iota \Rightarrow o$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v5\_rltopsp1 : \iota \Rightarrow o$  be given. Assume the following.

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

Assume the following.

$$\begin{aligned} & ((v2\_xxreal\_0 np\_2) \wedge (m2\_subset\_1 np\_2 k1\_numbers k5\_numbers)) \wedge \\ & ((m1\_subset\_1 np\_2 k5\_numbers) \wedge (m1\_subset\_1 np\_2 k1\_numbers)) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0. \forall X1. (m2\_finseq\_1 X1 X0) \Leftrightarrow (m1\_finseq\_1 X1 X0) \tag{3}$$

Assume the following.

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

Assume the following.

$$v6\_membered\ k4\_ordinal1 \quad (5)$$

Assume the following.

$$\forall X0.(l1\_rltopsp1\ X0) \Rightarrow ((l1\_rlvect\_1\ X0) \wedge (l1\_pre\_topc\ X0)) \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((v7\_ordinal1\ X0) \wedge (m1\_finseq\_1\ X1\ (u1\_struct\_0 \\ (k15\_euclid\ X0)))) \Rightarrow (m1\_subset\_1\ (k3\_topreal1\ X0\ X1)\ (k1\_zfmisc\_1 \\ (u1\_struct\_0\ (k15\_euclid\ X0)))) \quad (7) \end{aligned}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0)) \Rightarrow (m1\_subset\_1\ (k3\_subset\_1\ X0\ X1)\ (k1\_zfmisc\_1\ X0)) \quad (8)$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow ((v5\_rltopsp1\ (k15\_euclid\ X0)) \wedge (l1\_rltopsp1\ (k15\_euclid\ X0))) \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1\_pre\_topc\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1 \\ (u1\_struct\_0\ X0))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1 \\ (u1\_struct\_0\ X0))) \Rightarrow ((r3\_connsp\_1\ X0\ X1\ X2) \Leftrightarrow (\exists X3.(m1\_subset\_1 \\ X3\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k1\_pre\_topc\ X0\ X1)))) \wedge ((X3 = X2) \wedge \\ (v3\_connsp\_1\ X3\ (k1\_pre\_topc\ X0\ X1)))))) \quad (10) \end{aligned}$$

Assume the following.

$$\forall X0.(v6\_membered\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ X0) \Rightarrow (v7\_ordinal1\ X1)) \quad (11)$$

**Theorem 1**

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