

t39\_jordan1j  
(TMdTs8UrKh4SMKJeadJ3N8d4KwfltmujJd8)

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Let  $v3\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_matrix\_1 : \iota \Rightarrow o$  be given. Let  $v2\_goboard1 : \iota \Rightarrow o$  be given. Let  $v3\_goboard1 : \iota \Rightarrow o$  be given. Let  $v4\_goboard1 : \iota \Rightarrow o$  be given. Let  $v5\_goboard1 : \iota \Rightarrow o$  be given. Let  $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_finseq\_2 : \iota \Rightarrow \iota$  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  $v4\_topreal1 : \iota \Rightarrow o$  be given. Let  $r1\_goboard1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k10\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k2\_jordan3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_finseq\_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_finseq\_4 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_finseq\_1 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.((v4\_topreal1 X0) \wedge (m2\_finseq\_1 X0 (u1\_struct\_0 (k15\_euclid \\ np\_2)))) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 (k15\_euclid \\ np\_2))) \Rightarrow ((X1 \in k10\_xtuple\_0 X0) \Rightarrow (k2\_jordan3 X0 X1 = k3\_finseq\_6 \\ (u1\_struct\_0 (k15\_euclid np\_2)) X0 (k4\_finseq\_4 X0 X1) (k3\_finseq\_1 \\ X0)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0.(m2\_subset\_1 X0 k1\_numbers k5\_numbers) \Rightarrow (\forall X1. \\ (m2\_subset\_1 X1 k1\_numbers k5\_numbers) \Rightarrow (\forall X2.(m2\_finseq\_1 \\ X2 (u1\_struct\_0 (k15\_euclid np\_2))) \Rightarrow (\forall X3.((\neg v3\_relat\_1 \\ X3) \wedge ((v1\_matrix\_1 X3) \wedge ((v2\_goboard1 X3) \wedge ((v3\_goboard1 X3) \wedge \\ ((v4\_goboard1 X3) \wedge ((v5\_goboard1 X3) \wedge (m2\_finseq\_1 X3 (k3\_finseq\_2 \\ (u1\_struct\_0 (k15\_euclid np\_2)))))))))) \Rightarrow ((r1\_goboard1 (u1\_struct\_0 \\ (k15\_euclid np\_2)) X2 X3) \Rightarrow (r1\_goboard1 (u1\_struct\_0 (k15\_euclid \\ np\_2)) (k3\_finseq\_6 (u1\_struct\_0 (k15\_euclid np\_2)) X2 X0 X1) \\ X3)))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0 X0)\wedge((\neg v1\_xboole\_0 X1)\wedge(m1\_subset\_1 X1 (k1\_zfmisc\_1 X0))))\Rightarrow(\forall X2.(m2\_subset\_1 X2 X0 X1)\Leftrightarrow(m1\_subset\_1 X2 X1)) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1 X1 X0)\Leftrightarrow(m1\_finseq\_1 X1 X0) \quad (4)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (5)$$

Assume the following.

$$\neg v1\_finset\_1 k4\_ordinal1 \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_1 X1 X0)\Rightarrow((v1\_relat\_1 X1)\wedge(v1\_funct\_1 X1)\wedge(v1\_finseq\_1 X1)) \quad (7)$$

Assume the following.

$$m1\_subset\_1 k5\_numbers (k1\_zfmisc\_1 k1\_numbers) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1 X0)\wedge((v1\_funct\_1 X0)\wedge(v1\_finseq\_1 X0)))\Rightarrow(m1\_subset\_1 (k4\_finseq\_4 X0 X1) k5\_numbers) \quad (9)$$

Assume the following.

$$\forall X0.((v1\_relat\_1 X0)\wedge((v1\_funct\_1 X0)\wedge(v1\_finseq\_1 X0)))\Rightarrow(m2\_subset\_1 (k3\_finseq\_1 X0) k1\_numbers k5\_numbers) \quad (10)$$

Assume the following.

$$\forall X0.(v1\_finset\_1 X0)\Rightarrow(\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 X0))\Rightarrow(v1\_finset\_1 X1)) \quad (11)$$

Assume the following.

$$\forall X0.(v1\_xboole\_0 X0)\Rightarrow(v1\_finset\_1 X0) \quad (12)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((\neg v3\_relat\_1 X0)\wedge((v1\_matrix\_1 X0)\wedge((v2\_goboard1 X0)\wedge((v3\_goboard1 X0)\wedge((v4\_goboard1 X0)\wedge((v5\_goboard1 X0)\wedge(m2\_finseq\_1 X0 (k3\_finseq\_2 (u1\_struct\_0 (k15\_euclid np\_2))))))))))\Rightarrow \\ & (\forall X1.((v4\_topreal1 X1)\wedge(m2\_finseq\_1 X1 (u1\_struct\_0 (k15\_euclid np\_2))))\Rightarrow((r1\_goboard1 (u1\_struct\_0 (k15\_euclid np\_2)) X1 X0)\Rightarrow(\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 (k15\_euclid np\_2)))\Rightarrow((X2 \in k10\_xtuple\_0 X1)\Rightarrow(r1\_goboard1 (u1\_struct\_0 (k15\_euclid np\_2)) (k2\_jordan3 X1 X2) X0)))))) \end{aligned}$$