

# t33\_jordan\_a (TMTUPbGuFFnMEb- vzgH29ZK2c5yAkCzZheRe)

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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  $m1\_jordan\_a : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_jordan\_a : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_jordan\_a : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_jordan\_a : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $v2\_membered : \iota \Rightarrow o$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $k1\_xxreal\_2 : \iota \Rightarrow \iota$  be given. Let  $v2\_xxreal\_2 : \iota \Rightarrow o$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $k4\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $v3\_membered : \iota \Rightarrow o$  be given. Let  $v1\_xxreal\_2 : \iota \Rightarrow o$  be given. Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (&((v1\_topreal2 X0) \wedge (m1\_subset\_1 X0 (k1\_zfmisc\_1 \\ &(u1\_struct\_0 (k15\_euclid np\_2)))))) \wedge (m1\_jordan\_a X1 X0)) \Rightarrow (m1\_subset\_1 \\ &(k4\_jordan\_a X0 X1) k1\_numbers) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0. (v2\_membered X0) \Rightarrow (v1\_xxreal\_0 (k1\_xxreal\_2 X0)) \tag{3}$$

Assume the following.

$$\begin{aligned} \forall X0. ((v2\_membered X0) \wedge (v2\_xxreal\_2 X0)) \Rightarrow (\forall X1. \\ (v1\_xxreal\_0 X1) \Rightarrow ((X1 = k1\_xxreal\_2 X0) \Leftrightarrow ((X1 \in X0) \wedge (\forall X2. \\ (v1\_xxreal\_0 X2) \Rightarrow ((X2 \in X0) \Rightarrow (r1\_xxreal\_0 X2 X1)))))) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} \forall X0.((v1\_topreal2\ X0)\wedge(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (u1\_struct\_0 \\ (k15\_euclid\ np\_2))))))\Rightarrow(\forall X1.(m1\_jordan\_a\ X1\ X0)\Rightarrow(\forall X2. \\ (m1\_subset\_1\ X2\ k1\_numbers)\Rightarrow((X2 = k4\_jordan\_a\ X0\ X1)\Leftrightarrow(\exists X3. \\ ((\neg v1\_xboole\_0\ X3)\wedge((v1\_finset\_1\ X3)\wedge(m1\_subset\_1\ X3\ (k1\_zfmisc\_1 \\ k1\_numbers))))\wedge((X3 = ReplSep\ (toset\ (\lambda X4 : \iota.m2\_subset\_1 \\ X4\ k1\_numbers\ k5\_numbers))\ (\lambda X4 : \iota.X4 \in k4\_finseq\_1\ X1)\ (\lambda X4 : \\ \iota.k3\_jordan\_a\ np\_2\ (k2\_jordan\_a\ X0\ X4\ X1)))\wedge(X2 = k1\_xxreal\_2 \\ X3)))))) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ k1\_numbers))\Rightarrow(v3\_membered\ X0) \quad (6)$$

Assume the following.

$$\forall X0.(v3\_membered\ X0)\Rightarrow(v2\_membered\ X0) \quad (7)$$

Assume the following.

$$\forall X0.((v2\_membered\ X0)\wedge((\neg v1\_xboole\_0\ X0)\wedge(v1\_finset\_1\ X0)))\Rightarrow((v2\_membered\ X0)\wedge((\neg v1\_xboole\_0\ X0)\wedge((v1\_xxreal\_2\ X0)\wedge (v2\_xxreal\_2\ X0)))) \quad (8)$$

**Theorem 1**

$$\begin{aligned} \forall X0.((v1\_topreal2\ X0)\wedge(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (u1\_struct\_0 \\ (k15\_euclid\ np\_2))))))\Rightarrow(\forall X1.(m1\_jordan\_a\ X1\ X0)\Rightarrow(\forall X2. \\ (m1\_subset\_1\ X2\ k1\_numbers)\Rightarrow(\neg(\forall X3.(m2\_subset\_1\ X3\ k1\_numbers \\ k5\_numbers)\Rightarrow(\neg r1\_xxreal\_0\ X2\ (k3\_jordan\_a\ np\_2\ (k2\_jordan\_a \\ X0\ X3\ X1))))\wedge(r1\_xxreal\_0\ X2\ (k4\_jordan\_a\ X0\ X1)))))) \end{aligned}$$