

# t12\_jordan1e (TMYTorvz- naH7w7FvmKxgCuR7Cw1AjaUEHhn)

October 27, 2020

Let  $v2\_compts\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k15\_euclid : \iota \Rightarrow \iota$  be given. Let  $np\_2 : \iota$  be given. Let  $v1\_sppol\_1 : \iota \Rightarrow o$  be given. Let  $v2\_sppol\_1 : \iota \Rightarrow o$  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  $k5\_numbers : \iota$  be given. Let  $k3\_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_jordan9 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_graph\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_jordan1e : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_jordan1e : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_finseq\_6 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_finseq\_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k18\_pscomp\_1 : \iota \Rightarrow \iota$  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  $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $v6\_membered : \iota \Rightarrow o$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v3\_funct\_1 : \iota \Rightarrow o$  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. Assume the following.

$$\begin{aligned}
& \forall X0.(m1\_subset\_1 X0 (u1\_struct\_0 (k15\_euclid np\_2))) \Rightarrow \\
& (\forall X1.((v1\_finseq\_6 X1 (u1\_struct\_0 (k15\_euclid np\_2)))) \wedge \\
& (m2\_finseq\_1 X1 (u1\_struct\_0 (k15\_euclid np\_2)))) \Rightarrow (k3\_topreal1 \\
& np\_2 (k1\_finseq\_6 (u1\_struct\_0 (k15\_euclid np\_2)) X1 X0) = k3\_topreal1 \\
& \quad \quad \quad np\_2 X1))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v2\_compts\_1 X0 (k15\_euclid np\_2)) \wedge ((\neg v1\_sppol\_1 \\
& X0) \wedge ((\neg v2\_sppol\_1 X0) \wedge (m1\_subset\_1 X0 (k1\_zfmisc\_1 (u1\_struct\_0 \\
& (k15\_euclid np\_2))))))) \Rightarrow (\forall X1.(m1\_subset\_1 X1 k5\_numbers) \Rightarrow \\
& (k1\_finseq\_6 (u1\_struct\_0 (k15\_euclid np\_2)) (k1\_jordan9 X0 \\
& X1) (k18\_pscomp\_1 (k3\_topreal1 np\_2 (k1\_jordan9 X0 X1))) = k4\_graph\_2 \\
& (u1\_struct\_0 (k15\_euclid np\_2)) (k1\_jordan1e X0 X1) (k2\_jordan1e \\
& \quad \quad \quad X0 X1))
\end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & ((v2\_xreal\_0 \ np\_2) \wedge (m2\_subset\_1 \ np\_2 \ k1\_numbers \ k5\_numbers)) \wedge \\ & ((m1\_subset\_1 \ np\_2 \ k5\_numbers) \wedge (m1\_subset\_1 \ np\_2 \ k1\_numbers)) \end{aligned} \quad (3)$$

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.

$$v6\_membered \ k4\_ordinal1 \quad (6)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((\neg v1\_xboole\_0 \ X0) \wedge ((v2\_compts\_1 \ X0 \ ( \\ & k15\_euclid \ np\_2)) \wedge ((\neg v1\_sppol\_1 \ X0) \wedge ((\neg v2\_sppol\_1 \ X0) \wedge (m1\_subset\_1 \\ & X0 \ (k1\_zfmisc\_1 \ (u1\_struct\_0 \ (k15\_euclid \ np\_2)))))))) \wedge (v7\_ordinal1 \\ & X1)) \Rightarrow ((\neg v1\_xboole\_0 \ (k1\_jordan9 \ X0 \ X1)) \wedge ((\neg v3\_funct\_1 \ (k1\_jordan9 \\ & X0 \ X1)) \wedge ((v1\_finseq\_6 \ (k1\_jordan9 \ X0 \ X1) \ (u1\_struct\_0 \ (k15\_euclid \\ & np\_2)))) \wedge ((v1\_topreal1 \ (k1\_jordan9 \ X0 \ X1)) \wedge ((v2\_topreal1 \ (k1\_jordan9 \\ & X0 \ X1)) \wedge ((v1\_goboard5 \ (k1\_jordan9 \ X0 \ X1)) \wedge ((v2\_goboard5 \ (k1\_jordan9 \\ & X0 \ X1)) \wedge ((v1\_sprect\_2 \ (k1\_jordan9 \ X0 \ X1)) \wedge (m2\_finseq\_1 \ (k1\_jordan9 \\ & X0 \ X1) \ (u1\_struct\_0 \ (k15\_euclid \ np\_2)))))))))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0. (m1\_subset\_1 \ X0 \ (k1\_zfmisc\_1 \ (u1\_struct\_0 \ (k15\_euclid \ np\_2)))) \Rightarrow (m1\_subset\_1 \ (k18\_pscomp\_1 \ X0) \ (u1\_struct\_0 \ (k15\_euclid \ np\_2))) \quad (9)$$

Assume the following.

$$\forall X0. (m1\_subset\_1 \ X0 \ (k1\_zfmisc\_1 \ (u1\_struct\_0 \ (k15\_euclid \ np\_2)))) \Rightarrow ((v1\_xboole\_0 \ X0) \Rightarrow (v2\_sppol\_1 \ X0)) \quad (10)$$

Assume the following.

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

**Theorem 1**

$$\begin{aligned} & \forall X0.((v2\_compts\_1\ X0\ (k15\_euclid\ np\_2)) \wedge ((\neg v1\_sppol\_1 \\ & X0) \wedge ((\neg v2\_sppol\_1\ X0) \wedge (m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (u1\_struct\_0 \\ & (k15\_euclid\ np\_2)))))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ k5\_numbers) \Rightarrow \\ & (k3\_topreal1\ np\_2\ (k1\_jordan9\ X0\ X1) = k3\_topreal1\ np\_2\ (k4\_graph\_2 \\ & (u1\_struct\_0\ (k15\_euclid\ np\_2))\ (k1\_jordan1e\ X0\ X1)\ (k2\_jordan1e \\ & X0\ X1)))) \end{aligned}$$