

# t30\_jordan6 (TM- bYGFj5jhVxYJRZgWHeaMD3XwZQCCmSy2w)

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Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $v4\_pre\_topc : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k6\_jordan6 : \iota \Rightarrow \iota$  be given. Let  $k15\_euclid : \iota \Rightarrow \iota$  be given. Let  $np\_2 : \iota$  be given. Let  $k7\_jordan6 : \iota \Rightarrow \iota$  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  $k18\_euclid : \iota \Rightarrow \iota$  be given. Let  $k17\_euclid : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ (u1\_struct\_0 (k15\_euclid np\_2)))) \Rightarrow ((X1 = ReplSep (toset (\lambda X2 : \\ \iota.m1\_subset\_1 X2 (u1\_struct\_0 (k15\_euclid np\_2)))) (\lambda X2 : \\ \iota.k18\_euclid X2 = X0) (\lambda X2 : \iota.X2)) \Rightarrow (v4\_pre\_topc X1 (k15\_euclid \\ np\_2)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ (u1\_struct\_0 (k15\_euclid np\_2)))) \Rightarrow ((X1 = ReplSep (toset (\lambda X2 : \\ \iota.m1\_subset\_1 X2 (u1\_struct\_0 (k15\_euclid np\_2)))) (\lambda X2 : \\ \iota.k17\_euclid X2 = X0) (\lambda X2 : \iota.X2)) \Rightarrow (v4\_pre\_topc X1 (k15\_euclid \\ np\_2)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (m1\_subset\_1 (k7\_jordan6 X0) (k1\_zfmisc\_1 \\ (u1\_struct\_0 (k15\_euclid np\_2)))) \quad (3)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (m1\_subset\_1 (k6\_jordan6 X0) (k1\_zfmisc\_1 \\ (u1\_struct\_0 (k15\_euclid np\_2)))) \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1\_xreal\_0 X0) \Rightarrow (k7\_jordan6 X0 = ReplSep (toset (\lambda X1 : \\ \iota.m1\_subset\_1 X1 (u1\_struct\_0 (k15\_euclid np\_2)))) (\lambda X1 : \\ \iota.k18\_euclid X1 = X0) (\lambda X1 : \iota.X1)) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1\_xreal\_0 X0) \Rightarrow & (k6\_jordan6 X0 = ReplSep (toset (\lambda X1 : \\ & \iota.m1\_subset\_1 X1 (u1\_struct\_0 (k15\_euclid np\_2)))) (\lambda X1 : \\ & \iota.k17\_euclid X1 = X0) (\lambda X1 : \iota.X1)) \end{aligned} \quad (6)$$

**Theorem 1**

$$\begin{aligned} \forall X0.(v1\_xreal\_0 X0) \Rightarrow & ((v4\_pre\_topc (k6\_jordan6 X0) (k15\_euclid \\ & np\_2)) \wedge (v4\_pre\_topc (k7\_jordan6 X0) (k15\_euclid np\_2))) \end{aligned}$$