

## t5\_jordan20

(TMZJP6Y9c7ibJY5v9bDuNngo8dVWgLT3yaAi)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  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  $k1\_numbers : \iota$  be given. Let  $k1\_rltopsp1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k17\_euclid : \iota \Rightarrow \iota$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (\forall X2. \\ & (v1\_xxreal\_0 X2) \Rightarrow (((r1\_xxreal\_0 X0 X1) \wedge (r1\_xxreal\_0 X1 X2)) \Rightarrow \\ & (r1\_xxreal\_0 X0 X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 (u1\_struct\_0 (k15\_euclid np\_2))) \Rightarrow \\ & (\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 (k15\_euclid np\_2))) \Rightarrow \\ & (\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 (k15\_euclid np\_2))) \Rightarrow \\ & (\neg(X1 \in k1\_rltopsp1 (k15\_euclid np\_2) X0 X2) \wedge ((r1\_xxreal\_0 (k17\_euclid \\ & X1) (k17\_euclid X0)) \wedge ((r1\_xxreal\_0 (k17\_euclid X1) (k17\_euclid \\ & X2)) \wedge ((X0 \neq X1) \wedge ((X1 \neq X2) \wedge (\neg(k17\_euclid X0 = k17\_euclid X1) \wedge (k17\_euclid \\ & X2 = k17\_euclid X1)))))))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 (u1\_struct\_0 (k15\_euclid np\_2))) \Rightarrow (m1\_subset\_1 (k17\_euclid X0) k1\_numbers) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xxreal\_0 X0) \wedge (v1\_xxreal\_0 X1)) \Rightarrow ((r1\_xxreal\_0 X0 X1) \vee (r1\_xxreal\_0 X1 X0)) \quad (4)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (v1\_xxreal\_0 X0) \quad (5)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k1\_numbers) \Rightarrow (v1\_xreal\_0 X0) \quad (6)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 (u1\_struct\_0 (k15\_euclid np\_2)))\Rightarrow \\ & (\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 (k15\_euclid np\_2)))\Rightarrow \\ & (\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 (k15\_euclid np\_2)))\Rightarrow \\ & (\forall X3.(m1\_subset\_1 X3 k1\_numbers)\Rightarrow(\neg(X2 \in k1\_rltopsp1 ( \\ & k15\_euclid np\_2) X0 X1)\wedge((\neg r1\_xxreal\_0 (k17\_euclid X0) X3)\wedge( \\ & (\neg r1\_xxreal\_0 (k17\_euclid X1) X3)\wedge(r1\_xxreal\_0 (k17\_euclid X2) \\ & X3))))))) \end{aligned}$$