

t1\_jordan7  
(TMdrx5Gc2BJr5R6f95exsAo1yXjMA3mXSBE)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. 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  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $v1\_topreal2 : \iota \Rightarrow o$  be given. Let  $k18\_pscomp\_1 : \iota \Rightarrow \iota$  be given. Let  $k9\_jordan6 : \iota \Rightarrow \iota$  be given. Let  $k22\_pscomp\_1 : \iota \Rightarrow \iota$  be given. Let  $k8\_jordan6 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k7\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. r1\_tarski X0 (k2\_xboole\_0 X0 X1) \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0. (m1\_subset\_1 X0 (k1\_zfmisc\_1 (u1\_struct\_0 (k15\_euclid \\ np\_2)))) \Rightarrow ((v1\_topreal2 X0) \Rightarrow ((k9\_jordan6 X0 = k2\_xboole\_0 (k7\_subset\_1 \\ (u1\_struct\_0 (k15\_euclid np\_2)) X0 (k8\_jordan6 X0)) (k2\_tarski \\ (k18\_pscomp\_1 X0) (k22\_pscomp\_1 X0))) \wedge (k8\_jordan6 X0 = k2\_xboole\_0 \\ (k7\_subset\_1 (u1\_struct\_0 (k15\_euclid np\_2)) X0 (k9\_jordan6 \\ X0)) (k2\_tarski (k18\_pscomp\_1 X0) (k22\_pscomp\_1 X0)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0. \forall X1. (r1\_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \tag{3}$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (X2 = k2\_tarski X0 X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow ((X3 = X0) \vee (X3 = X1))) \tag{4}$$

Assume the following.

$$\forall X0. \forall X1. k2\_xboole\_0 X0 X1 = k2\_xboole\_0 X1 X0 \tag{5}$$

**Theorem 1**

$$\begin{aligned} & \forall X0. ((\neg v1\_xboole\_0 X0) \wedge ((v2\_compts\_1 X0 (k15\_euclid np\_2)) \wedge \\ & (m1\_subset\_1 X0 (k1\_zfmisc\_1 (u1\_struct\_0 (k15\_euclid np\_2)))))) \Rightarrow \\ & ((v1\_topreal2 X0) \Rightarrow ((k18\_pscomp\_1 X0 \in k9\_jordan6 X0) \wedge ((k22\_pscomp\_1 \\ & X0 \in k9\_jordan6 X0) \wedge ((k18\_pscomp\_1 X0 \in k8\_jordan6 X0) \wedge (k22\_pscomp\_1 \\ & X0 \in k8\_jordan6 X0)))))) \end{aligned}$$