l171_jordan (TMbbMtD-BxPW5Ys1QiUa2eedk8ZKvFi6vYDJ)

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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 $r1\_jordan24 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k19\_euclid : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_real\_1 : \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $r1\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_rltopsp1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_3 : \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))) \Rightarrow ((r1\_jordan24\ np\_\_2\ X0\ (k19\_euclid\ (k1\_real\_1\ np\_\_1)\ k6\_numbers)\ (k19\_euclid\ np\_\_1\ k6\_numbers)) \Rightarrow (r1\_xboole\_0\ X0\ (k1\_rltopsp1\ (k15\_euclid\ np\_\_2)\ (k19\_euclid\ (k1\_real\_1\ np\_\_1)\ np\_\_3)\ (k19\_euclid\ np\_\_1\ np\_\_3)))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(\neg(\neg r1\_xboole\_0\ X0\ X1) \wedge (\forall X2.\neg(X2 \in X0) \wedge (X2 \in X1))) \wedge (\neg(\exists X2.(X2 \in X0) \wedge (X2 \in X1)) \wedge (r1\_xboole\_0\ X0\ X1)) \tag{2}$$

Assume the following.

$$r1\_tarski\ (k1\_rltopsp1\ (k15\_euclid\ np\_\_2)\ (k19\_euclid\ np\_\_1\ np\_\_3)\ (k19\_euclid\ k6\_numbers\ np\_\_3))\ (k1\_rltopsp1\ (k15\_euclid\ np\_\_2)\ (k19\_euclid\ (k1\_real\_1\ np\_\_1)\ np\_\_3)\ (k19\_euclid\ np\_\_1\ np\_\_3)) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(r1\_tarski\ X0\ X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow (X2 \in X1)) \tag{4}$$

Theorem 1

$$\forall X0.((v1\_topreal2\ X0) \wedge (m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))) \Rightarrow ((r1\_jordan24\ np\_\_2\ X0\ (k19\_euclid\ (k1\_real\_1\ np\_\_1)\ k6\_numbers)\ (k19\_euclid\ np\_\_1\ k6\_numbers)) \Rightarrow (r1\_xboole\_0\ (k1\_rltopsp1\ (k15\_euclid\ np\_\_2)\ (k19\_euclid\ np\_\_1\ np\_\_3)\ (k19\_euclid\ k6\_numbers\ np\_\_3))\ X0))$$