

t48_jordan1k
(TMM1dnpncsMLXt6wqXPQQzhDMWiBewr1nqn)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k1_numbers : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ 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 $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_topreal6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_jordan1k : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_jordan1k : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\ & X1 k1_numbers) \Rightarrow (\forall X2.((\neg v1_xboole_0 X2) \wedge (m1_subset_1 \\ & X2 (k1_zfmisc_1 (u1_struct_0 (k15_euclid X0)))))) \Rightarrow (\forall X3. \\ & ((\neg v1_xboole_0 X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (u1_struct_0 \\ & (k15_euclid X0)))))) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 (\\ & (k15_euclid X0)))) \Rightarrow (\forall X5.(m1_subset_1 X5 (u1_struct_0 (\\ & k15_euclid X0)))) \Rightarrow (((X4 \in X2) \wedge (X5 \in X3)) \Rightarrow (r1_xxreal_0 X1 (k1_topreal6 \\ & X0 X4 X5)))))) \Rightarrow (r1_xxreal_0 X1 (k1_jordan1k X0 X2 X3)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X1 X0)) \Rightarrow (k6_domain_1 X0 X1 = k1_tarski X1) \quad (2)$$

Assume the following.

$$\forall X0.\neg v1_xboole_0 (k1_tarski X0) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X1 X0)) \Rightarrow (m1_subset_1 (k6_domain_1 X0 X1) (k1_zfmisc_1 X0)) \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\ X1 (u1_struct_0 (k15_euclid X0))) \Rightarrow (\forall X2.(m1_subset_1 X2 \\ (k1_zfmisc_1 (u1_struct_0 (k15_euclid X0)))) \Rightarrow (k5_jordan1k X0 \\ X1 X2 = k1_jordan1k X0 (k6_domain_1 (u1_struct_0 (k15_euclid X0)) \\ X1) X2))) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1_tarski X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (X2 = X0)) \quad (6)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (v1_xboole_0 X1)) \quad (7)$$

Theorem 1

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\ X1 k1_numbers) \Rightarrow (\forall X2.((\neg v1_xboole_0 X2) \wedge (m1_subset_1 \\ X2 (k1_zfmisc_1 (u1_struct_0 (k15_euclid X0)))))) \Rightarrow (\forall X3. \\ (m1_subset_1 X3 (u1_struct_0 (k15_euclid X0))) \Rightarrow ((\forall X4. \\ (m1_subset_1 X4 (u1_struct_0 (k15_euclid X0))) \Rightarrow ((X4 \in X2) \Rightarrow (r1_xxreal_0 \\ X1 (k1_topreal6 X0 X3 X4))) \Rightarrow (r1_xxreal_0 X1 (k5_jordan1k X0 X3 \\ X2)))))) \end{aligned}$$