

t16_jordan11 (TMTLXGSuTXML-
shaKrvd6725kUK9Dow9gRBN)

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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 $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_jordan2c : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_jordan2c : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $v2_connsp_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow (r1_xboole_0 (k1_jordan2c np_2 X0) X0) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((r1_tarski X0 X1) \wedge (r1_xboole_0 X1 X2)) \Rightarrow (r1_xboole_0 X0 X2) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.((v2_connsp_1 \\ & X1 (k15_euclid X0)) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ & (k15_euclid X0)))))) \Rightarrow (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 \\ & (u1_struct_0 (k15_euclid X0)))) \Rightarrow (\neg(r1_xboole_0 X1 X2) \wedge (\neg r1_tarski \\ & X1 (k2_jordan2c X0 X2)) \wedge (\neg r1_tarski X1 (k1_jordan2c X0 X2)))))) \quad (3) \end{aligned}$$

Assume the following.

$$\begin{aligned} & \forall X0.(((v1_topreal2 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 \\ & (k15_euclid np_2)))))) \Rightarrow (\forall X1.(((v1_topreal2 X1) \wedge (m1_subset_1 \\ & X1 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))) \Rightarrow (\neg(r1_tarski \\ & X0 (k1_jordan2c np_2 X1)) \wedge (r1_tarski X1 (k1_jordan2c np_2 X0)))))) \quad (4) \end{aligned}$$

Assume the following.

$$\forall X0.\forall X1.(r1_xboole_0 X0 X1) \Rightarrow (r1_xboole_0 X1 X0) \quad (5)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 \text{ } np_2) \wedge (m2_subset_1 \text{ } np_2 \text{ } k1_numbers \text{ } k5_numbers)) \wedge \\ & ((m1_subset_1 \text{ } np_2 \text{ } k5_numbers) \wedge (m1_subset_1 \text{ } np_2 \text{ } k1_numbers)) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0. (m1_subset_1 \text{ } X0 \text{ } (k1_zfmisc_1 \text{ } (u1_struct_0 \text{ } (k15_euclid \text{ } np_2)))) \Rightarrow ((v1_topreal2 \text{ } X0) \Rightarrow (v2_connsp_1 \text{ } X0 \text{ } (k15_euclid \text{ } np_2))) \quad (7)$$

Theorem 1

$$\begin{aligned} & \forall X0. ((v1_topreal2 \text{ } X0) \wedge (m1_subset_1 \text{ } X0 \text{ } (k1_zfmisc_1 \text{ } (u1_struct_0 \text{ } \\ & \quad (k15_euclid \text{ } np_2)))))) \Rightarrow (\forall X1. ((v1_topreal2 \text{ } X1) \wedge (m1_subset_1 \text{ } \\ & \quad X1 \text{ } (k1_zfmisc_1 \text{ } (u1_struct_0 \text{ } (k15_euclid \text{ } np_2)))))) \Rightarrow ((r1_tarski \text{ } \\ & \quad X0 \text{ } (k1_jordan2c \text{ } np_2 \text{ } X1)) \Rightarrow (r1_tarski \text{ } X1 \text{ } (k2_jordan2c \text{ } np_2 \text{ } X0)))) \end{aligned}$$