

t97_jordan (TMFFtx- cVqxYUwp6xxwSStpUewGAn7vitcMG)

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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 $k1_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_connsp_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_tops_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_jordan2c : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.((v1_topreal2 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 \\ (k15_euclid np_2)))))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ (u1_struct_0 (k15_euclid np_2)))))) \Rightarrow (\forall X2.(m1_subset_1 \\ X2 (k1_zfmisc_1 (u1_struct_0 (k1_pre_topc (k15_euclid np_2) \\ (k3_subset_1 (u1_struct_0 (k15_euclid np_2)) X0)))))) \Rightarrow (((X2 = \\ X1) \wedge (v3_connsp_1 X2 (k1_pre_topc (k15_euclid np_2) (k3_subset_1 \\ (u1_struct_0 (k15_euclid np_2)) X0)))))) \Rightarrow ((v1_xboole_0 (k1_jordan2c \\ np_2 X0)) \vee (X0 = k2_tops_1 (k15_euclid np_2) X1)))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.((v1_topreal2 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 \\ (k15_euclid np_2)))))) \Rightarrow (\neg v1_xboole_0 (k1_jordan2c np_2 X0)) \quad (2)$$

Theorem 1

$$\begin{aligned} \forall X0.(((v1_topreal2 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 \\ (k15_euclid np_2)))))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ (u1_struct_0 (k15_euclid np_2)))))) \Rightarrow (\forall X2.(m1_subset_1 \\ X2 (k1_zfmisc_1 (u1_struct_0 (k1_pre_topc (k15_euclid np_2) \\ (k3_subset_1 (u1_struct_0 (k15_euclid np_2)) X0)))))) \Rightarrow (((X2 = \\ X1) \wedge (v3_connsp_1 X2 (k1_pre_topc (k15_euclid np_2) (k3_subset_1 \\ (u1_struct_0 (k15_euclid np_2)) X0)))))) \Rightarrow (X0 = k2_tops_1 (k15_euclid \\ np_2) X1)))) \end{aligned}$$