

t5_jordan17 (TMbVrSYM- CXVYYamgz6vBDM6rf2KU2EaRkKe)

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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 $r1_jordan6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k18_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k9_jordan6 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v2_compts_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k22_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k8_jordan6 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v1_xboole_0 X0) \wedge ((v2_compts_1 X0 (k15_euclid np_2)) \wedge \\ & (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))) \Rightarrow \\ & (\forall X1. (m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow \\ & (((v1_topreal2 X0) \wedge (r1_jordan6 X0 X1 (k18_pscomp_1 X0))) \Rightarrow (X1 = \\ & k18_pscomp_1 X0))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v1_xboole_0 X0) \wedge ((v2_compts_1 X0 (k15_euclid np_2)) \wedge \\ & (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))) \Rightarrow \\ & ((v1_topreal2 X0) \Rightarrow ((k18_pscomp_1 X0 \in k9_jordan6 X0) \wedge ((k22_pscomp_1 \\ & X0 \in k9_jordan6 X0) \wedge ((k18_pscomp_1 X0 \in k8_jordan6 X0) \wedge (k22_pscomp_1 \\ & X0 \in k8_jordan6 X0)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow ((v1_topreal2 X0) \Rightarrow ((\neg v1_xboole_0 X0) \wedge (v2_compts_1 X0 (k15_euclid np_2)))) \tag{3}$$

Theorem 1

$$\begin{aligned} & \forall X0. ((v1_topreal2 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 \\ & (k15_euclid np_2)))))) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 \\ & (k15_euclid np_2)))) \Rightarrow ((r1_jordan6 X0 X1 (k18_pscomp_1 X0)) \Rightarrow (\\ & X1 \in k9_jordan6 X0)) \end{aligned}$$