

t5_jordan_a (TMQR-
bGzaNB4VG17wTNqDiEtDJ8biHR8Wwem)

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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 $k9_jordan6 : \iota \Rightarrow \iota$ be given. Let $k18_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $r1_jordan6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k22_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v2_compts_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8_jordan6 : \iota \Rightarrow \iota$ be given. Let $r1_jordan5c : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v1_xboole_0 X0) \wedge ((v2_compts_1 X0 (k15_euclid np_2)) \wedge \\ & (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))) \Rightarrow \\ & ((v1_topreal2 X0) \Rightarrow ((k18_pscomp_1 X0 \in k9_jordan6 X0) \wedge ((k22_pscomp_1 \\ & X0 \in k9_jordan6 X0) \wedge ((k18_pscomp_1 X0 \in k8_jordan6 X0) \wedge (k22_pscomp_1 \\ & X0 \in k8_jordan6 X0)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow (m1_subset_1 (k22_pscomp_1 X0) (u1_struct_0 (k15_euclid np_2))) \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid \\ & np_2)))) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 (k15_euclid \\ & np_2)))) \Rightarrow (\forall X2. (m1_subset_1 X2 (u1_struct_0 (k15_euclid \\ & np_2)))) \Rightarrow ((r1_jordan6 X0 X1 X2) \Leftrightarrow (\neg(\neg(X1 \in k8_jordan6 X0) \wedge ((X2 \in \\ & k9_jordan6 X0) \wedge (X2 \neq k18_pscomp_1 X0))) \wedge (\neg(X1 \in k8_jordan6 X0) \wedge \\ & ((X2 \in k8_jordan6 X0) \wedge (r1_jordan5c (k8_jordan6 X0) (k18_pscomp_1 \\ & X0) (k22_pscomp_1 X0) X1 X2)))) \wedge (\neg(X1 \in k9_jordan6 X0) \wedge ((X2 \in k9_jordan6 \\ & X0) \wedge ((X2 \neq k18_pscomp_1 X0) \wedge (r1_jordan5c (k9_jordan6 X0) (k22_pscomp_1 \\ & X0) (k18_pscomp_1 X0) X1 X2))))))))) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow ((v1_topreal2 X0) \Rightarrow ((\neg v1_xboole_0 X0) \wedge (v2_compts_1 X0 (k15_euclid np_2)))) \quad (4)$$

Theorem 1

$$\forall X0.((v1_topreal2 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow ((X1 \in k9_jordan6 X0) \Rightarrow ((X1 = k18_pscomp_1 X0) \vee (r1_jordan6 X0 (k22_pscomp_1 X0) X1))))$$