

t48_jordan21 (TMHz-
vAZw9CigC8q8M57VAaWRJaop5zDHxjb)

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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 $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k18_euclid : \iota \Rightarrow \iota$ be given. Let $k2_jordan21 : \iota \Rightarrow \iota$ be given. Let $k9_jordan6 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8_jordan6 : \iota \Rightarrow \iota$ be given. Let $v2_compts_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_jordan21 : \iota \Rightarrow o$ be given. Let $k6_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k17_euclid : \iota \Rightarrow \iota$ be given. Let $k8_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k7_pscomp_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v1_xboole_0 X0) \wedge ((v1_topreal2 X0) \wedge (m1_subset_1 \\ & X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))) \Rightarrow ((r1_tarski \\ & (k9_jordan6 X0) X0) \wedge (r1_tarski (k8_jordan6 X0) X0)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v2_compts_1 X0 (k15_euclid np_2)) \wedge ((v1_jordan21 \\ & X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))) \Rightarrow \\ & (k2_jordan21 X0 \in X0) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. (m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & (\forall X1. ((\neg v1_xboole_0 X1) \wedge ((v2_compts_1 X1 (k15_euclid \\ & np_2)) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 (k15_euclid \\ & np_2)))))) \Rightarrow ((X0 \in X1) \Rightarrow ((r1_xxreal_0 (k6_pscomp_1 X1) (k17_euclid \\ & X0)) \wedge ((r1_xxreal_0 (k17_euclid X0) (k8_pscomp_1 X1)) \wedge ((r1_xxreal_0 \\ & (k9_pscomp_1 X1) (k18_euclid X0)) \wedge (r1_xxreal_0 (k18_euclid X0) \\ & (k7_pscomp_1 X1)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v1_xboole_0 X0) \wedge ((v1_topreal2 X0) \wedge (m1_subset_1 \\ & X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))) \Rightarrow ((\neg v1_xboole_0 \\ & (k9_jordan6 X0)) \wedge (v2_compts_1 (k9_jordan6 X0) (k15_euclid np_2))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.((v1_topreal2 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))) \Rightarrow ((\neg v1_xboole_0 (k9_jordan6 X0)) \wedge (v1_jordan21 (k9_jordan6 X0))) \quad (5)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow ((\neg v1_xboole_0 (k9_jordan6 X0)) \wedge (m1_subset_1 (k9_jordan6 X0) (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))) \quad (6)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow (m1_subset_1 (k2_jordan21 X0) (u1_struct_0 (k15_euclid np_2))) \quad (7)$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (8)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow ((v1_topreal2 X0) \Rightarrow ((\neg v1_xboole_0 X0) \wedge (v2_compts_1 X0 (k15_euclid np_2)))) \quad (9)$$

Theorem 1

$$\forall X0.((v1_topreal2 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))) \Rightarrow (r1_xxreal_0 (k9_pscomp_1 X0) (k18_euclid (k2_jordan21 (k9_jordan6 X0))))$$