

t20_jordan14 (TM-
SWivci8KqmkYUQq1EbhLscqfW91pXpBZE)

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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 $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $r1_jordan1h : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_jordan2c : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_jordan13 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_jordan9 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_6 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_topreal1 : \iota \Rightarrow o$ be given. Let $v2_topreal1 : \iota \Rightarrow o$ be given. Let $v1_goboard5 : \iota \Rightarrow o$ be given. Let $v2_goboard5 : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_goboard9 : \iota \Rightarrow \iota$ be given. Let $k3_goboard9 : \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v2_compts_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_sppol_1 : \iota \Rightarrow o$ be given. Let $v2_sppol_1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_sprect_2 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. \neg (X0 \in X1) \wedge (v1_xboole_0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (\neg (\neg r1_xboole_0 X0 X1) \wedge (\forall X2. \neg (X2 \in X0) \wedge (X2 \in X1))) \wedge (\neg (\exists X2. (X2 \in X0) \wedge (X2 \in X1)) \wedge (r1_xboole_0 X0 X1)) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((r1_tarski\ X0\ X1)\wedge(r1_tarski\ X1\ X2))\Rightarrow(r1_tarski\ X0\ X2) \quad (5)$$

Assume the following.

$$\forall X0.(m2_subset_1\ X0\ k1_numbers\ k5_numbers)\Rightarrow(\forall X1.((v1_topreal2\ X1)\wedge(m1_subset_1\ X1\ (k1_zfmisc_1\ (u1_struct_0\ (k15_euclid\ np_2))))))\Rightarrow(r1_tarski\ (k3_topreal1\ np_2\ (k1_jordan9\ X1\ X0))\ (k2_jordan2c\ np_2\ X1))) \quad (6)$$

Assume the following.

$$\forall X0.((\neg v3_funct_1\ X0)\wedge((\neg v1_xboole_0\ X0)\wedge((v1_finseq_6\ X0\ (u1_struct_0\ (k15_euclid\ np_2))))\wedge((v1_topreal1\ X0)\wedge((v2_topreal1\ X0)\wedge((v1_goboard5\ X0)\wedge((v2_goboard5\ X0)\wedge(m2_finseq_1\ X0\ (u1_struct_0\ (k15_euclid\ np_2))))))))))\Rightarrow(\forall X1.(m1_subset_1\ X1\ (u1_struct_0\ (k15_euclid\ np_2)))\Rightarrow((X1\in k2_goboard9\ X0)\Leftrightarrow((\neg X1\in k3_topreal1\ np_2\ X0)\wedge(\neg X1\in k3_goboard9\ X0)))) \quad (7)$$

Assume the following.

$$\forall X0.((v1_topreal2\ X0)\wedge(m1_subset_1\ X0\ (k1_zfmisc_1\ (u1_struct_0\ (k15_euclid\ np_2))))))\Rightarrow(\forall X1.(m2_subset_1\ X1\ k1_numbers\ k5_numbers)\Rightarrow((r1_jordan1h\ X0\ X1)\Rightarrow(r1_tarski\ (k2_jordan2c\ np_2\ X0)\ (k2_goboard9\ (k1_jordan13\ X0\ X1)))))) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0\ X0)\wedge(\neg v1_xboole_0\ X1))\Rightarrow((r1_subset_1\ X0\ X1)\Leftrightarrow(r1_xboole_0\ X0\ X1)) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0\ X0)\wedge((\neg v1_xboole_0\ X1)\wedge(m1_subset_1\ X1\ (k1_zfmisc_1\ X0))))\Rightarrow(\forall X2.(m2_subset_1\ X2\ X0\ X1)\Leftrightarrow(m1_subset_1\ X2\ X1)) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1\ X1\ X0)\Leftrightarrow(m1_finseq_1\ X1\ X0) \quad (11)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (12)$$

Assume the following.

$$(\neg v1_xboole_0\ k4_ordinal1)\wedge(v3_ordinal1\ k4_ordinal1) \quad (13)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0) \wedge ((\neg v3_funct_1 X0) \wedge ((v1_finseq_6 \\ & X0 (u1_struct_0 (k15_euclid np_2))) \wedge ((v1_topreal1 X0) \wedge ((v2_topreal1 \\ & X0) \wedge ((v1_goboard5 X0) \wedge ((v2_goboard5 X0) \wedge (m1_finseq_1 X0 (u1_struct_0 \\ & (k15_euclid np_2)))))))))) \Rightarrow (v1_topreal2 (k3_topreal1 np_2 \\ & X0)) \end{aligned} \tag{14}$$

Assume the following.

$$\neg v1_xboole_0 k1_numbers \tag{15}$$

Assume the following.

$$m1_subset_1 k5_numbers (k1_zfmisc_1 k1_numbers) \tag{16}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0) \wedge ((\neg v3_funct_1 X0) \wedge ((v1_finseq_6 \\ & X0 (u1_struct_0 (k15_euclid np_2))) \wedge ((v1_topreal1 X0) \wedge ((v2_topreal1 \\ & X0) \wedge ((v1_goboard5 X0) \wedge ((v2_goboard5 X0) \wedge (m1_finseq_1 X0 (u1_struct_0 \\ & (k15_euclid np_2)))))))))) \Rightarrow (m1_subset_1 (k2_goboard9 X0) (\\ & k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))) \end{aligned} \tag{17}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((\neg v1_xboole_0 X0) \wedge ((v2_compts_1 X0 (\\ & k15_euclid np_2)) \wedge ((\neg v1_sppol_1 X0) \wedge ((\neg v2_sppol_1 X0) \wedge (m1_subset_1 \\ & X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))))) \wedge (v7_ordinal1 \\ & X1)) \Rightarrow ((\neg v1_xboole_0 (k1_jordan9 X0 X1)) \wedge ((\neg v3_funct_1 (k1_jordan9 \\ & X0 X1)) \wedge ((v1_finseq_6 (k1_jordan9 X0 X1) (u1_struct_0 (k15_euclid \\ & np_2))) \wedge ((v1_topreal1 (k1_jordan9 X0 X1)) \wedge ((v2_topreal1 (k1_jordan9 \\ & X0 X1)) \wedge ((v1_goboard5 (k1_jordan9 X0 X1)) \wedge ((v2_goboard5 (k1_jordan9 \\ & X0 X1)) \wedge ((v1_sprect_2 (k1_jordan9 X0 X1)) \wedge (m2_finseq_1 (k1_jordan9 \\ & X0 X1) (u1_struct_0 (k15_euclid np_2)))))))))) \end{aligned} \tag{18}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((\neg v1_xboole_0 X0) \wedge ((\neg v1_sppol_1 X0) \wedge \\ & ((\neg v2_sppol_1 X0) \wedge ((v1_topreal2 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 \\ & (u1_struct_0 (k15_euclid np_2)))))))) \wedge (m1_subset_1 X1 k5_numbers)) \Rightarrow \\ & ((\neg v1_xboole_0 (k1_jordan13 X0 X1)) \wedge ((\neg v3_funct_1 (k1_jordan13 \\ & X0 X1)) \wedge ((v1_finseq_6 (k1_jordan13 X0 X1) (u1_struct_0 (k15_euclid \\ & np_2))) \wedge ((v1_topreal1 (k1_jordan13 X0 X1)) \wedge ((v2_topreal1 (\\ & k1_jordan13 X0 X1)) \wedge ((v1_goboard5 (k1_jordan13 X0 X1)) \wedge ((v2_goboard5 \\ & (k1_jordan13 X0 X1)) \wedge ((v1_sprect_2 (k1_jordan13 X0 X1)) \wedge (m2_finseq_1 \\ & (k1_jordan13 X0 X1) (u1_struct_0 (k15_euclid np_2)))))))))) \end{aligned} \tag{19}$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarSKI X0 X1)\Leftrightarrow(\forall X2.(X2 \in X0)\Rightarrow (X2 \in X1)) \quad (20)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1)\Rightarrow(v7_ordinal1 X0) \quad (21)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2))))\Rightarrow((v1_topreal2 X0)\Rightarrow((v1_topreal2 X0)\wedge((\neg v1_sppol_1 X0)\wedge(\neg v2_sppol_1 X0)))) \quad (22)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2))))\Rightarrow((v1_topreal2 X0)\Rightarrow((\neg v1_xboole_0 X0)\wedge(v2_compts_1 X0 (k15_euclid np_2)))) \quad (23)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0))\Rightarrow(v1_xboole_0 X1)) \quad (24)$$

Theorem 1

$$\forall X0.((v1_topreal2 X0)\wedge(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid np_2)))))\Rightarrow(\forall X1.(m2_subset_1 X1 k1_numbers k5_numbers)\Rightarrow((r1_jordan1h X0 X1)\Rightarrow(r1_subset_1 (k2_jordan2c np_2 X0) (k3_topreal1 np_2 (k1_jordan13 X0 X1))))))$$