

t2_moebius1

(TMJiyuMW4eFGJwkvSBnuYZrTKozymJf1tTm)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k24_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ 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 $k4_ordinal1 : \iota$ be given. Let $k1_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Let $v3_membered : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v1_membered : \iota \Rightarrow o$ be given. Assume the following.

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

Assume the following.

$$\forall X0. (v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. (v1_xreal_0 X0) \Rightarrow (\forall X1. (v1_xreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xreal_0 X2) \Rightarrow (\neg(\neg r1_xxreal_0 X0 k6_numbers) \wedge ((\neg r1_xxreal_0 \\ & X2 X1) \wedge (r1_xxreal_0 (k3_xcmplx_0 X2 X0) (k3_xcmplx_0 X1 X0)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. (v1_xreal_0 X0) \Rightarrow (\forall X1. (v1_xreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xreal_0 X2) \Rightarrow (\forall X3. (v1_xreal_0 X3) \Rightarrow (((r1_xxreal_0 \\ & k6_numbers X0) \wedge ((r1_xxreal_0 X0 X1) \wedge ((r1_xxreal_0 k6_numbers \\ & X2) \wedge (r1_xxreal_0 X2 X3)))) \Rightarrow (r1_xxreal_0 (k3_xcmplx_0 X0 X2) (\\ & k3_xcmplx_0 X1 X3)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.(v7_ordinal1\ X1) \Rightarrow (\forall X2. \\ (v7_ordinal1\ X2) \Rightarrow ((r1_xxreal_0\ X0\ X1) \Rightarrow (r1_xxreal_0\ (k3_xcmplx_0 \\ X0\ X2)\ (k3_xcmplx_0\ X1\ X2)))))) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0\ X0) \Rightarrow (k3_xcmplx_0\ np_1\ X0 = X0) \quad (6)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0\ X0) \Rightarrow (k3_xcmplx_0\ X0\ k6_numbers = k6_numbers) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1_subset_1\ X0\ X1) \quad (8)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.(v7_ordinal1\ X1) \Rightarrow ((\\ X0 \in k2_finseq_1\ X1) \Leftrightarrow ((r1_xxreal_0\ np_1\ X0) \wedge (r1_xxreal_0\ X0\ X1)))) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0\ X0) \Rightarrow (k2_xcmplx_0\ X0\ k6_numbers = X0) \quad (10)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.(v7_ordinal1\ X1) \Rightarrow ((\\ \neg r1_xxreal_0\ (k1_nat_1\ X1\ np_1)\ X0) \Leftrightarrow (r1_xxreal_0\ X0\ X1))) \end{aligned} \quad (11)$$

Assume the following.

$$\begin{aligned} ((v2_xxreal_0\ np_1) \wedge (m2_subset_1\ np_1\ k1_numbers\ k5_numbers)) \wedge \\ ((m1_subset_1\ np_1\ k5_numbers) \wedge (m1_subset_1\ np_1\ k1_numbers)) \end{aligned} \quad (12)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (13)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (14)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0) \Rightarrow (k2_finseq_1\ X0 = k1_finseq_1\ X0) \quad (15)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((v7_ordinal1\ X0) \wedge (v7_ordinal1\ X1)) \Rightarrow (\\ k24_binop_2\ X0\ X1 = k3_xcmplx_0\ X0\ X1) \end{aligned} \quad (16)$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1\ X0)\wedge(m1_subset_1\ X1\ k5_numbers))\Rightarrow (k1_nat_1\ X0\ X1 = k2_xcmplx_0\ X0\ X1) \quad (17)$$

Assume the following.

$$\exists X0.(v1_xboole_0\ X0)\wedge(v1_xxreal_0\ X0) \quad (18)$$

Assume the following.

$$v6_membered\ k4_ordinal1 \quad (19)$$

Assume the following.

$$v3_membered\ k1_numbers \quad (20)$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1\ X0)\wedge(v7_ordinal1\ X1))\Rightarrow(v7_ordinal1\ (k3_xcmplx_0\ X0\ X1)) \quad (21)$$

Assume the following.

$$\forall X0.((v7_ordinal1\ X0)\wedge(v1_xboole_0\ X0))\Rightarrow(v1_xboole_0\ (k1_finseq_1\ X0)) \quad (22)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(m1_subset_1\ (k2_finseq_1\ X0)\ (k1_zfmisc_1\ k5_numbers)) \quad (23)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0\ X0)\wedge(v1_xxreal_0\ X1))\Rightarrow((r1_xxreal_0\ X0\ X1)\vee(r1_xxreal_0\ X1\ X0)) \quad (24)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0\ X0)\wedge(v1_xcmplx_0\ X1))\Rightarrow(k3_xcmplx_0\ X0\ X1 = k3_xcmplx_0\ X1\ X0) \quad (25)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0\ X0)\wedge(v1_xcmplx_0\ X1))\Rightarrow(k2_xcmplx_0\ X0\ X1 = k2_xcmplx_0\ X1\ X0) \quad (26)$$

Assume the following.

$$\forall X0.(v1_xboole_0\ X0)\Rightarrow(v7_ordinal1\ X0) \quad (27)$$

Assume the following.

$$\forall X0.(v3_membered\ X0)\Rightarrow(v1_membered\ X0) \quad (28)$$

Assume the following.

$$\forall X0.(v1_xreal_0\ X0)\Rightarrow(v1_xcmplx_0\ X0) \quad (29)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(v1_xxreal_0\ X0) \quad (30)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(v1_xreal_0\ X0) \quad (31)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(v1_xcmplx_0\ X0) \quad (32)$$

Assume the following.

$$\forall X0.(v6_membered\ X0)\Rightarrow(\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1\ X0))\Rightarrow(v6_membered\ X1)) \quad (33)$$

Assume the following.

$$\forall X0.(v6_membered\ X0)\Rightarrow(\forall X1.(m1_subset_1\ X1\ X0)\Rightarrow(v7_ordinal1\ X1)) \quad (34)$$

Assume the following.

$$\forall X0.(v3_membered\ X0)\Rightarrow(\forall X1.(m1_subset_1\ X1\ X0)\Rightarrow(v1_xreal_0\ X1)) \quad (35)$$

Assume the following.

$$\forall X0.(v1_membered\ X0)\Rightarrow(\forall X1.(m1_subset_1\ X1\ X0)\Rightarrow(v1_xcmplx_0\ X1)) \quad (36)$$

Theorem 1

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(\forall X1.(v7_ordinal1\ X1)\Rightarrow(\forall X2.(v7_ordinal1\ X2)\Rightarrow((r1_xxreal_0\ np_1\ X0)\Rightarrow((X2 \in k2_finseq_1\ X1)\Leftrightarrow(k24_binop_2\ X0\ X2 \in k2_finseq_1\ (k24_binop_2\ X0\ X1))))))$$