

t25_isomichi
(TMYZv9biS7akgFeeFGpJSkduCDBvcLSYbca)

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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 $k3_topmetr : \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k4_rcomp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xxreal_0 : \iota$ be given. Let $k1_tops_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_rcomp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xxreal_0 : \iota$ be given. Let $k2_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_rcomp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_pre_topc : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $k3_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 k3_topmetr))) \Rightarrow \\ (\forall X1.(v1_xreal_0 X1) \Rightarrow ((X0 = k2_rcomp_1 X1 k1_xxreal_0) \Rightarrow \\ (k2_pre_topc k3_topmetr X0 = k3_rcomp_1 X1 k1_xxreal_0))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow (\forall X1. \\ (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (k1_tops_1 X0 \\ X1 = k3_subset_1 (u1_struct_0 X0) (k2_pre_topc X0) (k3_subset_1 \\ (u1_struct_0 X0) X1)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (k6_subset_1 \\ (k4_xxreal_1 X0 k1_xxreal_0) (k2_xxreal_1 X1 k1_xxreal_0) = k4_xxreal_1 \\ X0 X1)) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (k6_subset_1 \\ (k4_xxreal_1 k2_xxreal_0 X0) (k3_xxreal_1 k2_xxreal_0 X1) = k4_xxreal_1 \\ X1 X0)) \end{aligned} \quad (4)$$

Assume the following.

$$k1_numbers = k4_xxreal_1 k2_xxreal_0 k1_xxreal_0 \quad (5)$$

Assume the following.

$$u1_struct_0 k3_topmetr = k1_numbers \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.k6_subset_1 X0 X1 = k4_xboole_0 X0 X1 \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0 X0)\wedge(v1_xxreal_0 X1))\Rightarrow(k4_rcomp_1 X0 X1 = k3_xxreal_1 X0 X1) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0 X0)\wedge(v1_xxreal_0 X1))\Rightarrow(k3_rcomp_1 X0 X1 = k2_xxreal_1 X0 X1) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0 X0)\wedge(v1_xxreal_0 X1))\Rightarrow(k2_rcomp_1 X0 X1 = k4_xxreal_1 X0 X1) \quad (10)$$

Assume the following.

$$v1_xxreal_0 k2_xxreal_0 \quad (11)$$

Assume the following.

$$v1_xxreal_0 k1_xxreal_0 \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.m1_subset_1 (k6_subset_1 X0 X1) (k1_zfmisc_1 X0) \quad (13)$$

Assume the following.

$$(v2_pre_topc k3_topmetr)\wedge(l1_pre_topc k3_topmetr) \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0 X0)\wedge(v1_xxreal_0 X1))\Rightarrow(m1_subset_1 (k3_rcomp_1 X0 X1) (k1_zfmisc_1 k1_numbers)) \quad (15)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0))\Rightarrow(k3_subset_1 X0 X1 = k4_xboole_0 X0 X1) \quad (16)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0)\Rightarrow(v1_xxreal_0 X0) \quad (17)$$

Theorem 1

$$\begin{aligned} &\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 k3_topmetr)))\Rightarrow \\ &(\forall X1.(v1_xxreal_0 X1)\Rightarrow((X0 = k4_rcomp_1 k2_xxreal_0 X1)\Rightarrow \\ &(k1_tops_1 k3_topmetr X0 = k2_rcomp_1 k2_xxreal_0 X1))) \end{aligned}$$