

t30_mfold_2 (TMGYwyBHSirnZodpUJd- htm6ix1RUVVPQrPU)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k15_euclid : \iota \Rightarrow \iota$ be given. Let $k23_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Let $v3_mfold_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_mfold_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_mfold_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_pre_topc : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ 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 $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v2_rlvect_1 : \iota \Rightarrow o$ be given. Let $v3_rlvect_1 : \iota \Rightarrow o$ be given. Let $v4_rlvect_1 : \iota \Rightarrow o$ be given. Let $v5_rlvect_1 : \iota \Rightarrow o$ be given. Let $v6_rlvect_1 : \iota \Rightarrow o$ be given. Let $v7_rlvect_1 : \iota \Rightarrow o$ be given. Let $v8_rlvect_1 : \iota \Rightarrow o$ be given. Let $v5_rltopsp1 : \iota \Rightarrow o$ be given. Let $v5_waybel23 : \iota \Rightarrow o$ be given. Let $v2_mfold_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v8_pre_topc : \iota \Rightarrow o$ be given. Let $m1_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_rltopsp1 : \iota \Rightarrow o$ be given. Let $l1_rlvect_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ (k15_euclid (k23_binop_2 X0 np_1)))) \Rightarrow (\forall X2.(m1_subset_1 \\ X2 (u1_struct_0 (k15_euclid (k23_binop_2 X0 np_1)))) \Rightarrow ((X1 \neq k4_struct_0 \\ (k15_euclid (k23_binop_2 X0 np_1))) \Rightarrow (r1_mfold_2 (k15_euclid \\ X0) (k3_mfold_2 (k23_binop_2 X0 np_1) X1 X2)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.((\neg v2_struct_0 X1) \wedge \\ ((v2_pre_topc X1) \wedge (l1_pre_topc X1))) \Rightarrow (\forall X2.((\neg v2_struct_0 \\ X2) \wedge ((v2_pre_topc X2) \wedge (l1_pre_topc X2))) \Rightarrow (((v3_mfold_1 X1 X0) \wedge \\ (r1_mfold_2 X1 X2)) \Rightarrow (v3_mfold_1 X2 X0)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} ((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge \\ ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \end{aligned} \quad (3)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1 X0)\wedge(v7_ordinal1 X1))\Rightarrow(\quad (5)$$

$$k23_binop_2 X0 X1 = k2_xcmplx_0 X0 X1)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow(((v2_pre_topc (k15_euclid X0))\wedge \quad (6)$$

$$((v13_algstr_0 (k15_euclid X0))\wedge((v2_rlvect_1 (k15_euclid X0))\wedge$$

$$((v3_rlvect_1 (k15_euclid X0))\wedge((v4_rlvect_1 (k15_euclid X0))\wedge$$

$$((v5_rlvect_1 (k15_euclid X0))\wedge((v6_rlvect_1 (k15_euclid X0))\wedge$$

$$((v7_rlvect_1 (k15_euclid X0))\wedge((v8_rlvect_1 (k15_euclid X0))\wedge$$

$$(v5_rltopsp1 (k15_euclid X0))))))))))$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow((v5_rltopsp1 (k15_euclid X0))\wedge \quad (7)$$

$$(v5_waybel23 (k15_euclid X0)))$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow((\neg v2_struct_0 (k15_euclid X0))\wedge \quad (8)$$

$$(v5_rltopsp1 (k15_euclid X0)))$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow((v5_rltopsp1 (k15_euclid X0))\wedge \quad (9)$$

$$(v2_mfold_1 (k15_euclid X0) X0))$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow((v8_pre_topc (k15_euclid X0))\wedge \quad (10)$$

$$(v5_rltopsp1 (k15_euclid X0)))$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1 X0)\wedge(v7_ordinal1 X1))\Rightarrow(\quad (11)$$

$$v7_ordinal1 (k2_xcmplx_0 X0 X1))$$

Assume the following.

$$\forall X0.(l1_pre_topc X0)\Rightarrow(\forall X1.(m1_pre_topc X1 X0)\Rightarrow \quad (12)$$

$$(l1_pre_topc X1))$$

Assume the following.

$$\forall X0.(l1_rltopsp1 X0)\Rightarrow((l1_rlvect_1 X0)\wedge(l1_pre_topc X0)) \quad (13)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((v7_ordinal1\ X0)\wedge((m1_subset_1 \\ & X1\ (u1_struct_0\ (k15_euclid\ X0)))\wedge(m1_subset_1\ X2\ (u1_struct_0 \\ & (k15_euclid\ X0))))\Rightarrow((\neg v2_struct_0\ (k3_mfold_2\ X0\ X1\ X2))\wedge(m1_pre_topc \\ & (k3_mfold_2\ X0\ X1\ X2)\ (k15_euclid\ X0))) \end{aligned} \quad (14)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow((v5_rltopsp1\ (k15_euclid\ X0))\wedge (l1_rltopsp1\ (k15_euclid\ X0))) \quad (15)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k4_ordinal1)\Rightarrow(v7_ordinal1\ X0) \quad (16)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1\ X0)\Rightarrow(\forall X1.(l1_pre_topc\ X1)\Rightarrow((\\ & (\neg v2_struct_0\ X1)\wedge((v2_pre_topc\ X1)\wedge((v8_pre_topc\ X1)\wedge((v5_waybel23 \\ & X1)\wedge(v2_mfold_1\ X1\ X0))))\Rightarrow((\neg v2_struct_0\ X1)\wedge((v2_pre_topc \\ & X1)\wedge(v3_mfold_1\ X1\ X0)))))) \end{aligned} \quad (17)$$

Assume the following.

$$\forall X0.((v2_pre_topc\ X0)\wedge(l1_pre_topc\ X0))\Rightarrow(\forall X1. (m1_pre_topc\ X1\ X0)\Rightarrow(v2_pre_topc\ X1)) \quad (18)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v7_ordinal1\ X0)\Rightarrow(\forall X1.(m1_subset_1\ X1\ (u1_struct_0 \\ & (k15_euclid\ (k23_binop_2\ X0\ np_1))))\Rightarrow(\forall X2.(m1_subset_1 \\ & X2\ (u1_struct_0\ (k15_euclid\ (k23_binop_2\ X0\ np_1))))\Rightarrow((X1\neq k4_struct_0 \\ & (k15_euclid\ (k23_binop_2\ X0\ np_1))\Rightarrow(v3_mfold_1\ (k3_mfold_2 \\ & (k23_binop_2\ X0\ np_1)\ X1\ X2)\ X0)))) \end{aligned}$$