

t30_transgeo
(TMM5p9A5mB4FUroCZ4YLKF6mWWBGGWLLSgd)

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Let $v7_struct_0 : \iota \Rightarrow o$ be given. Let $v2_analoaf : \iota \Rightarrow o$ be given. Let $l1_analoaf : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_transgeo : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_transgeo : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_transgeo : \iota \Rightarrow o$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $r3_transgeo : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((\neg v7_struct_0 X0) \wedge ((v2_analoaf X0) \wedge (l1_analoaf X0))) \Rightarrow (v1_transgeo X0) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v1_transgeo X0) \wedge (l1_analoaf X0))) \Rightarrow (\forall X1.((v1_funct_1 X1) \wedge ((v1_funct_2 X1 (u1_struct_0 X0) (u1_struct_0 X0)) \wedge ((v3_funct_2 X1 (u1_struct_0 X0) (u1_struct_0 X0)) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)))))) \Rightarrow (\forall X2.((v1_funct_1 X2) \wedge ((v1_funct_2 X2 (u1_struct_0 X0) (u1_struct_0 X0)) \wedge ((v3_funct_2 X2 (u1_struct_0 X0) (u1_struct_0 X0)) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)))))) \Rightarrow (((r3_transgeo X0 X1) \wedge (r3_transgeo X0 X2)) \Rightarrow (r3_transgeo X0 (k1_transgeo (u1_struct_0 X0) X2 X1)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.(l1_analoaf X0) \Rightarrow (l1_struct_0 X0) \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(((v1_funct_1 X1)\wedge((v1_funct_2 \\ & X1 X0 X0)\wedge((v3_funct_2 X1 X0 X0)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (\\ & k2_zfmisc_1 X0 X0))))))\wedge((v1_funct_1 X2)\wedge((v1_funct_2 X2 X0 X0)\wedge \\ & ((v3_funct_2 X2 X0 X0)\wedge(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 X0))))))\Rightarrow((v1_funct_1 (k1_transgeo X0 X1 X2))\wedge((v1_funct_2 \\ & (k1_transgeo X0 X1 X2) X0 X0)\wedge((v3_funct_2 (k1_transgeo X0 X1 X2) \\ & X0 X0)\wedge(m1_subset_1 (k1_transgeo X0 X1 X2) (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 X0)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0)\wedge((v2_analoaf X0)\wedge(l1_analoaf \\ & X0)))\Rightarrow(\forall X1.((v1_funct_1 X1)\wedge((v1_funct_2 X1 (u1_struct_0 \\ & X0) (u1_struct_0 X0))\wedge((v3_funct_2 X1 (u1_struct_0 X0) (u1_struct_0 \\ & X0))\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 \\ & X0) (u1_struct_0 X0))))))\Rightarrow((v2_transgeo X1 X0)\Leftrightarrow(r3_transgeo \\ & X0 X1))) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.(l1_struct_0 X0)\Rightarrow((v2_struct_0 X0)\Rightarrow(v7_struct_0 X0)) \quad (6)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0)\wedge((v2_analoaf X0)\wedge(l1_analoaf \\ & X0)))\Rightarrow(\forall X1.((v1_funct_1 X1)\wedge((v1_funct_2 X1 (u1_struct_0 \\ & X0) (u1_struct_0 X0))\wedge((v3_funct_2 X1 (u1_struct_0 X0) (u1_struct_0 \\ & X0))\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 \\ & X0) (u1_struct_0 X0))))))\Rightarrow(\forall X2.((v1_funct_1 X2)\wedge((v1_funct_2 \\ & X2 (u1_struct_0 X0) (u1_struct_0 X0))\wedge((v3_funct_2 X2 (u1_struct_0 \\ & X0) (u1_struct_0 X0))\wedge(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (u1_struct_0 X0) (u1_struct_0 X0))))))\Rightarrow(((v2_transgeo X1 X0)\wedge \\ & (v2_transgeo X2 X0))\Rightarrow(v2_transgeo (k1_transgeo (u1_struct_0 \\ & X0) X2 X1) X0)))) \end{aligned}$$