

t2_alg_1
(TMdYjRP9raYeiKh2uBEqtfWHkG5tqVSrC6U)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_unialg_1 : \iota \Rightarrow o$ be given. Let $v3_unialg_1 : \iota \Rightarrow o$ be given. Let $v4_unialg_1 : \iota \Rightarrow o$ be given. Let $l1_unialg_1 : \iota \Rightarrow o$ 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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_finseqop : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((m1_finseq_1 X2 \\ & X0) \wedge ((v1_funct_1 X3) \wedge ((v1_funct_2 X3 X0 X1) \wedge (m1_subset_1 X3 (\\ & k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))))) \Rightarrow (k4_finseqop X0 X1 X2 X3 = \\ & k3_relat_1 X2 X3) \end{aligned} \quad (3)$$

Assume the following.

$$v1_xboole_0 k1_xboole_0 \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xboole_0 X0) \wedge (v1_relat_1 X1)) \Rightarrow ((v1_xboole_0 (k3_relat_1 X0 X1)) \wedge (v1_relat_1 (k3_relat_1 X0 X1))) \quad (5)$$

Assume the following.

$$\forall X0.m2_finseq_1 (k6_finseq_1 X0) X0 \quad (6)$$

Assume the following.

$$\forall X0.k6_finseq_1 X0 = k1_xboole_0 \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(v1_relat_1 X2) \quad (8)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0)\wedge((v2_unialg_1 X0)\wedge((v3_unialg_1 \\ & \quad X0)\wedge((v4_unialg_1 X0)\wedge(l1_unialg_1 X0))))\Rightarrow(\forall X1.((\neg \\ & v2_struct_0 X1)\wedge((v2_unialg_1 X1)\wedge((v3_unialg_1 X1)\wedge((v4_unialg_1 \\ & \quad X1)\wedge(l1_unialg_1 X1))))\Rightarrow(\forall X2.((v1_funct_1 X2)\wedge((v1_funct_2 \\ & X2 (u1_struct_0 X0) (u1_struct_0 X1))\wedge(m1_subset_1 X2 (k1_zfmisc_1 \\ & \quad (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X1))))\Rightarrow(k4_finseqop \\ & \quad (u1_struct_0 X0) (u1_struct_0 X1) (k6_finseq_1 (u1_struct_0 X0)) \\ & \quad X2 = k6_finseq_1 (u1_struct_0 X1)))) \end{aligned}$$