

t1_alg_1

(TMGPRijyoUAp3khyhHSNkga4j8XmBaLhynH)

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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 $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k3_unialg_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_unialg_1 : \iota \Rightarrow \iota$ be given. Let $m1_unialg_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_unialg_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_unialg_1 X0) \wedge ((v3_unialg_1 X0) \wedge ((v4_unialg_1 X0) \wedge (l1_unialg_1 X0))))) \Rightarrow (m1_unialg_2 X0 X0) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_unialg_1 X0) \wedge ((v3_unialg_1 X0) \wedge ((v4_unialg_1 X0) \wedge (l1_unialg_1 X0))))) \Rightarrow (\forall X1. ((\neg v2_struct_0 X1) \wedge ((v2_unialg_1 X1) \wedge ((v3_unialg_1 X1) \wedge ((v4_unialg_1 X1) \wedge (l1_unialg_1 X1))))) \Rightarrow ((m1_unialg_2 X1 X0) \Leftrightarrow ((m1_subset_1 (u1_struct_0 X1) (k1_zfmisc_1 (u1_struct_0 X0))) \wedge (\forall X2. ((\neg v1_xboole_0 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0)))) \Rightarrow ((X2 = u1_struct_0 X1) \Rightarrow ((u1_unialg_1 X1 = k3_unialg_2 X0 X2) \wedge (v1_unialg_2 X2 X0))))))) \quad (2) \end{aligned}$$

Theorem 1

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_unialg_1 X0) \wedge ((v3_unialg_1 X0) \wedge ((v4_unialg_1 X0) \wedge (l1_unialg_1 X0))))) \Rightarrow (\forall X1. ((\neg v1_xboole_0 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0)))) \Rightarrow ((X1 = u1_struct_0 X0) \Rightarrow (k3_unialg_2 X0 X1 = u1_unialg_1 X0))) \end{aligned}$$