

t21_sgraph1 (TMRBkZgrETcMVkt- GiRkP9B6wv3Nv8vouF8n)

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Let $m1_sgraph1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_finset1 : \iota \Rightarrow o$ 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 $u1_sgraph1 : \iota \Rightarrow \iota$ be given. Let $k2_sgraph1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k3_sgraph1 : \iota \Rightarrow \iota$ be given. Let $g1_sgraph1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l1_sgraph1 : \iota \Rightarrow o$ be given. Let $v1_sgraph1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (X1 \in k3_sgraph1 X0) \Leftrightarrow (\exists X2. ((v1_finset_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 X0))) \wedge (\exists X3. ((v1_finset_1 X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_sgraph1 X2)))) \wedge (X1 = g1_sgraph1 X2 X3))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k2_sgraph1 X0))) \Rightarrow (\forall X2. \forall X3. (g1_sgraph1 X0 X1 = g1_sgraph1 X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3))) \quad (3)$$

Assume the following.

$$\forall X0. \neg v1_xboole_0 (k3_sgraph1 X0) \quad (4)$$

Assume the following.

$$\forall X0. (l1_sgraph1 X0) \Rightarrow (m1_subset_1 (u1_sgraph1 X0) (k1_zfmisc_1 (k2_sgraph1 (u1_struct_0 X0)))) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. (m1_sgraph1 X1 X0) \Rightarrow ((v1_sgraph1 X1) \wedge (l1_sgraph1 X1)) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v1_sgraph1\ X1)\wedge(l1_sgraph1\ X1))\Rightarrow((m1_sgraph1\ X1\ X0)\Leftrightarrow(m1_subset_1\ X1\ (k3_sgraph1\ X0))) \quad (7)$$

Assume the following.

$$\forall X0.(l1_sgraph1\ X0)\Rightarrow((v1_sgraph1\ X0)\Rightarrow(X0 = g1_sgraph1\ (u1_struct_0\ X0)\ (u1_sgraph1\ X0))) \quad (8)$$

Theorem 1

$$\forall X0.\forall X1.(m1_sgraph1\ X1\ X0)\Rightarrow(((v1_finset_1\ (u1_struct_0\ X1))\wedge(m1_subset_1\ (u1_struct_0\ X1)\ (k1_zfmisc_1\ X0)))\wedge((v1_finset_1\ (u1_sgraph1\ X1))\wedge(m1_subset_1\ (u1_sgraph1\ X1)\ (k1_zfmisc_1\ (k2_sgraph1\ (u1_struct_0\ X1))))))$$