

t24_sgraph1 (TMbqqFYZED- HfXY3ofnADteTtDpmJ19tABnQ)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_sgraph1 : \iota \Rightarrow \iota$ be given. Let $g1_sgraph1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_sgraph1 : \iota \Rightarrow \iota$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (X1 \in k2_sgraph1 X0) \Leftrightarrow (((v1_finset_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X0))) \wedge (\exists X2. \exists X3. (X2 \in X0) \wedge ((X3 \in X0) \wedge ((X2 \neq X3) \wedge (X1 = k2_tarski X2 X3)))))) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (r1_tarski (k2_tarski X0 X1) X2) \Leftrightarrow ((X0 \in X2) \wedge (X1 \in X2)) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. k2_tarski X0 X1 = k2_xboole_0 (k1_tarski X0) (k1_tarski X1) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. (X1 \in k3_sgraph1 X0) \Leftrightarrow (\exists X2. ((v1_finset_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 X0))) \wedge (\exists X3. ((v1_finset_1 X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_sgraph1 X2)))))) \wedge (X1 = g1_sgraph1 X2 X3)) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (\forall X2. (X2 \in X0) \Rightarrow (m1_subset_1 (k2_xboole_0 X1 (k1_tarski X2)) (k1_zfmisc_1 X0))) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k2_sgraph1 X0)))\Rightarrow(\forall X2.\forall X3.(g1_sgraph1 X0 X1 = g1_sgraph1 X2 X3)\Rightarrow((X0 = X2)\wedge(X1 = X3))) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((v1_finset_1 X0)\wedge(v1_finset_1 X1))\Rightarrow(v1_finset_1 (k2_xboole_0 X0 X1)) \quad (8)$$

Assume the following.

$$\forall X0.v1_finset_1 (k1_tarski X0) \quad (9)$$

Theorem 1

$$\begin{aligned} & \forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0))\Rightarrow(\forall X2. \\ & (m1_subset_1 X2 (k1_zfmisc_1 (k2_sgraph1 X1)))\Rightarrow(\forall X3.\forall X4. \\ & \neg(X3 \in X1)\wedge((X4 \in X1)\wedge((X3 \neq X4)\wedge((g1_sgraph1 X1 X2 \in k3_sgraph1 X0)\wedge \\ & (\forall X5.((v1_finset_1 X5)\wedge(m1_subset_1 X5 (k1_zfmisc_1 (\\ & k2_sgraph1 X1))))\Rightarrow(\neg(X5 = k2_xboole_0 X2 (k1_tarski (k2_tarski \\ & X3 X4))))\wedge(g1_sgraph1 X1 X5 \in k3_sgraph1 X0)))))) \end{aligned}$$