

t23_sgraph1 (TMd- VQXrxQm49LEQ4ykj2viiKTYTVATP7xgQ)

October 27, 2020

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 $v1_finset_1 : \iota \Rightarrow o$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $g1_sgraph1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_sgraph1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (X1 \in k3_sgraph1 X0) \Leftrightarrow (\exists X2. ((v1_finset_1 \\ X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 X0))) \wedge (\exists X3. ((v1_finset_1 \\ X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_sgraph1 X2)))))) \wedge (X1 = g1_sgraph1 \\ X2 X3)) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (\forall X2. \\ (X2 \in X0) \Rightarrow (m1_subset_1 (k2_xboole_0 X1 (k1_tarski X2)) (k1_zfmisc_1 \\ X0))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k2_sgraph1 \\ X0))) \Rightarrow (\forall X2. \forall X3. (g1_sgraph1 X0 X1 = g1_sgraph1 X2 \\ X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3))) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0. \forall X1. ((v1_finset_1 X0) \wedge (v1_finset_1 X1)) \Rightarrow (v1_finset_1 (k2_xboole_0 X0 X1)) \tag{4}$$

Assume the following.

$$\forall X0. v1_finset_1 (k1_tarski X0) \tag{5}$$

Assume the following.

$$\forall X0. \forall X1. k2_xboole_0 X0 X1 = k2_xboole_0 X1 X0 \tag{6}$$

Theorem 1

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