

t19_sgraph1
(TMX4ZoNVzGWxr5fDVWkEb34TkEntrGPCTem)

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Let $m1_sgraph1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_sgraph1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_sgraph1 : \iota \Rightarrow \iota$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (X1 \in k2_sgraph1 X0) \Leftrightarrow & (((v1_finset_1 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 X0))) \wedge (\exists X2. \exists X3. (X2 \in \\ & X0) \wedge ((X3 \in X0) \wedge ((X2 \neq X3) \wedge (X1 = k2_tarski X2 X3)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (m1_sgraph1 X1 X0) \Rightarrow & ((r1_tarski (u1_struct_0 \\ & X1) X0) \wedge (r1_tarski (u1_sgraph1 X1) (k2_sgraph1 (u1_struct_0 X1)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (r1_tarski X0 X1) \Leftrightarrow & (\forall X2. (X2 \in X0) \Rightarrow \\ & (X2 \in X1)) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} \forall X0. \forall X1. (m1_sgraph1 X1 X0) \Rightarrow & (\forall X2. \neg (X2 \in u1_sgraph1 \\ & X1) \wedge (\forall X3. \forall X4. \neg (X3 \in u1_struct_0 X1) \wedge ((X4 \in u1_struct_0 \\ & X1) \wedge ((X3 \neq X4) \wedge (X2 = k2_tarski X3 X4)))))) \end{aligned}$$