

t50_glib_003

(TMQqNnnkhJ13TL5FkM5rCX2uFX6vJxYwgFf)

October 27, 2020

Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $v1_glib_000 : \iota \Rightarrow o$ be given. Let $v2_glib_003 : \iota \Rightarrow o$ be given. Let $k7_glib_000 : \iota \Rightarrow \iota$ be given. Let $k11_glib_003 : \iota \Rightarrow \iota$ be given. Let $k12_glib_003 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0. ((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ X0) \wedge ((v1_finset_1 X0) \wedge ((v1_glib_000 X0) \wedge (v2_glib_003 X0)))))) \Rightarrow \\ (\forall X1. \forall X2. (X1 \in k7_glib_000 X0) \Rightarrow (k11_glib_003 (k12_glib_003 \\ X0 X1 X2) = k2_xboole_0 (k11_glib_003 X0) (k1_tarski X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (X0 \in k2_xboole_0 X2 (k1_tarski X1)) \Leftrightarrow ((X0 \in X2) \vee (X0 = X1)) \quad (2)$$

Theorem 1

$$\begin{aligned} \forall X0. ((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ X0) \wedge ((v1_finset_1 X0) \wedge ((v1_glib_000 X0) \wedge (v2_glib_003 X0)))))) \Rightarrow \\ (\forall X1. \forall X2. (X1 \in k7_glib_000 X0) \Rightarrow (X1 \in k11_glib_003 \\ (k12_glib_003 X0 X1 X2))) \end{aligned}$$