

l44_glib_000

(TMaTVhq3YCwbG74ihtzo7YxStTpzHRHTqTD)

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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 $k7_glib_000 : \iota \Rightarrow \iota$ be given. Let $k21_glib_000 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_glib_000 : \iota \Rightarrow \iota$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_glib_000 : \iota \Rightarrow \iota$ be given. Let $k11_glib_000 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((v1_funct_1 X3) \wedge \\ & ((v1_funct_2 X3 X0 X1) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 X1)))) \Rightarrow ((X2 \in X0) \Rightarrow ((X1 = k1_xboole_0) \vee (k1_funct_1 X3 X2 \in X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (\forall X2. (X2 \in X0) \Leftrightarrow (X2 \in X1)) \Rightarrow (X0 = X1) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ & X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))) \Rightarrow (\forall X1. \forall X2. \\ & ((X1 \in k7_glib_000 X0) \wedge ((k1_funct_1 (k10_glib_000 X0) X1 \in X2) \wedge \\ & (k1_funct_1 (k11_glib_000 X0) X1 \in X2))) \Leftrightarrow (X1 \in k21_glib_000 X0 X2)) \end{aligned} \quad (3)$$

Assume the following.

$$v1_xboole_0 \quad k1_xboole_0 \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ & X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))) \Rightarrow (\neg v1_xboole_0 (\\ & k6_glib_000 X0)) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow ((v1_funct_1 (k11_glib_000 \\ X0)) \wedge ((v1_funct_2 (k11_glib_000 X0) (k7_glib_000 X0) (k6_glib_000 \\ X0)) \wedge (m1_subset_1 (k11_glib_000 X0) (k1_zfmisc_1 (k2_zfmisc_1 \\ (k7_glib_000 X0) (k6_glib_000 X0))))))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow ((v1_funct_1 (k10_glib_000 \\ X0)) \wedge ((v1_funct_2 (k10_glib_000 X0) (k7_glib_000 X0) (k6_glib_000 \\ X0)) \wedge (m1_subset_1 (k10_glib_000 X0) (k1_zfmisc_1 (k2_zfmisc_1 \\ (k7_glib_000 X0) (k6_glib_000 X0))))))) \end{aligned} \quad (7)$$

Theorem 1

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow (k7_glib_000 X0 = \\ k21_glib_000 X0 (k6_glib_000 X0)) \end{aligned}$$