

t96_glib_001

(TMYxNYTZABda9Sg9h1VgfkceTugLCX5v3rr)

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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 $v2_glib_000 : \iota \Rightarrow o$ be given. Let $m3_glib_001 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_glib_000 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_glib_001 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k13_glib_001 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_card_1 : \iota \Rightarrow \iota$ be given. Let $k10_glib_001 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k6_glib_000 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow (\forall X1.(m3_glib_001 \\ X1 X0) \Rightarrow (\forall X2.\forall X3.(r1_glib_000 X0 (k4_glib_001 X0 \\ X1) X3 X2) \Rightarrow (k13_glib_001 X0 (k10_glib_001 X0 X1 X2) = k2_xboole_0 \\ (k13_glib_001 X0 X1) (k1_tarski X3)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(v1_finset_1 X1) \Rightarrow ((\neg X0 \in X1) \Rightarrow (k5_card_1 \\ (k2_xboole_0 X1 (k1_tarski X0)) = k2_nat_1 (k5_card_1 X1) np_1)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge \\ ((v1_funct_1 X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \wedge (m3_glib_001 \\ X1 X0) \Rightarrow ((v1_finset_1 (k13_glib_001 X0 X1)) \wedge (m1_subset_1 (k13_glib_001 \\ X0 X1) (k1_zfmisc_1 (k6_glib_000 X0)))) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ X0) \wedge ((v1_finset_1 X0) \wedge ((v1_glib_000 X0) \wedge (v2_glib_000 X0)))))) \Rightarrow \\ (\forall X1.(m3_glib_001 X1 X0) \Rightarrow (\forall X2.\forall X3.(r1_glib_000 \\ X0 (k4_glib_001 X0 X1) X3 X2) \Rightarrow ((X3 \in k13_glib_001 X0 X1) \vee (k5_card_1 \\ (k13_glib_001 X0 (k10_glib_001 X0 X1 X2)) = k2_nat_1 (k5_card_1 \\ (k13_glib_001 X0 X1)) np_1)))) \end{aligned}$$