

l10_glib_002

(TMVLUL3pgETRejx3cntgbBWbFxabALCiF8Q)

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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 $m3_glib_001 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_glib_000 : \iota \Rightarrow \iota$ be given. Let $k13_glib_001 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_glib_002 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_glib_001 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow (\forall X1.(m3_glib_001 \\ X1 X0) \Rightarrow (\forall X2.\forall X3.\neg(X2 \in k13_glib_001 X0 X1) \wedge ((X3 \in \\ k13_glib_001 X0 X1) \wedge (\forall X4.(m3_glib_001 X4 X0) \Rightarrow (\neg r1_glib_001 \\ X0 X2 X3 X4)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow (\forall X1.(m3_glib_001 \\ X1 X0) \Rightarrow (\forall X2.\forall X3.(r1_glib_001 X0 X2 X3 X1) \Rightarrow ((m1_subset_1 \\ X2 (k6_glib_000 X0)) \wedge (m1_subset_1 X3 (k6_glib_000 X0)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge \\ ((v1_funct_1 X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \wedge (m1_subset_1 \\ X1 (k6_glib_000 X0)) \Rightarrow ((\neg v1_xboole_0 (k1_glib_002 X0 X1)) \wedge (m1_subset_1 \\ (k1_glib_002 X0 X1) (k1_zfmisc_1 (k6_glib_000 X0)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow (\forall X1.(m1_subset_1 \\ X1 (k6_glib_000 X0)) \Rightarrow (\forall X2.((\neg v1_xboole_0 X2) \wedge (m1_subset_1 \\ X2 (k1_zfmisc_1 (k6_glib_000 X0)))) \Rightarrow ((X2 = k1_glib_002 X0 X1) \Leftrightarrow \\ (\forall X3.(X3 \in X2) \Leftrightarrow (\exists X4.(m3_glib_001 X4 X0) \wedge (r1_glib_001 \\ X0 X1 X3 X4)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarSKI X0 X1)\Leftrightarrow(\forall X2.(X2 \in X0)\Rightarrow (X2 \in X1)) \quad (5)$$

Theorem 1

$$\begin{aligned} &\forall X0.((v1_relat_1 X0)\wedge((v4_relat_1 X0 k5_numbers)\wedge((v1_funct_1 \\ &X0)\wedge((v1_finset_1 X0)\wedge(v1_glib_000 X0))))\Rightarrow(\forall X1.(m3_glib_001 \\ X1 X0)\Rightarrow(\forall X2.(m1_subset_1 X2 (k6_glib_000 X0))\Rightarrow((X2 \in k13_glib_001 \\ X0 X1)\Rightarrow(r1_tarSKI (k13_glib_001 X0 X1) (k1_glib_002 X0 X2)))))) \end{aligned}$$