

t80_glib_000

(TMMwTQjKHnyPTK5uUEHapVn67iKk1VbMnjp)

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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 $m1_glib_000 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_glib_000 : \iota \Rightarrow \iota$ be given. Let $k25_glib_000 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k29_glib_000 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_glib_000 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k11_glib_000 : \iota \Rightarrow \iota$ be given. Let $k10_glib_000 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge \\ & ((v1_funct_1 X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \wedge (m1_glib_000 \\ & X1 X0) \Rightarrow (k25_glib_000 X0 X1 = k7_glib_000 X1) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ & X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow (\forall X1. (m1_glib_000 \\ & X1 X0) \Rightarrow ((v1_relat_1 X1) \wedge ((v4_relat_1 X1 k5_numbers) \wedge ((v1_funct_1 \\ & X1) \wedge ((v1_finset_1 X1) \wedge (v1_glib_000 X1)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ & X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow (\forall X1. (m1_subset_1 \\ & X1 (k6_glib_000 X0) \Rightarrow (\forall X2. (((X2 \in k7_glib_000 X0) \wedge (k1_funct_1 \\ & (k11_glib_000 X0) X2 = X1)) \Rightarrow (k29_glib_000 X0 X1 X2 = k1_funct_1 (\\ & k10_glib_000 X0) X2)) \wedge (((X2 \in k7_glib_000 X0) \wedge (k1_funct_1 (k10_glib_000 \\ & X0) X2 = X1)) \Rightarrow ((k1_funct_1 (k11_glib_000 X0) X2 = X1) \vee (k29_glib_000 \\ & X0 X1 X2 = k1_funct_1 (k11_glib_000 X0) X2))) \wedge (\neg(\neg(X2 \in k7_glib_000 \\ & X0) \wedge (k1_funct_1 (k11_glib_000 X0) X2 = X1)) \wedge (\neg(X2 \in k7_glib_000 \\ & X0) \wedge ((k1_funct_1 (k10_glib_000 X0) X2 = X1) \wedge (k1_funct_1 (k11_glib_000 \\ & X0) X2 \neq X1))) \wedge (k29_glib_000 X0 X1 X2 \neq X1)))))) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarSKI X0 X1)\Leftrightarrow(\forall X2.(X2 \in X0)\Rightarrow (X2 \in X1)) \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0)\wedge((v4_relat_1 X0 k5_numbers)\wedge((v1_funct_1 \\ X0)\wedge((v1_finset_1 X0)\wedge(v1_glib_000 X0))))\Rightarrow(\forall X1.((v1_relat_1 \\ X1)\wedge((v4_relat_1 X1 k5_numbers)\wedge((v1_funct_1 X1)\wedge((v1_finset_1 \\ X1)\wedge(v1_glib_000 X1))))\Rightarrow((m1_glib_000 X1 X0)\Leftrightarrow((r1_tarSKI (\\ k6_glib_000 X1) (k6_glib_000 X0))\wedge((r1_tarSKI (k7_glib_000 X1) \\ (k7_glib_000 X0))\wedge(\forall X2.(X2 \in k7_glib_000 X1)\Rightarrow((k1_funct_1 \\ (k10_glib_000 X1) X2 = k1_funct_1 (k10_glib_000 X0) X2)\wedge(k1_funct_1 \\ (k11_glib_000 X1) X2 = k1_funct_1 (k11_glib_000 X0) X2)))))))) \quad (5) \end{aligned}$$

Theorem 1

$$\begin{aligned} \forall X0.((v1_relat_1 X0)\wedge((v4_relat_1 X0 k5_numbers)\wedge((v1_funct_1 \\ X0)\wedge((v1_finset_1 X0)\wedge(v1_glib_000 X0))))\Rightarrow(\forall X1.(m1_glib_000 \\ X1 X0)\Rightarrow(\forall X2.(m1_subset_1 X2 (k6_glib_000 X0))\Rightarrow(\forall X3. \\ (m1_subset_1 X3 (k6_glib_000 X1))\Rightarrow(\forall X4.((X2 = X3)\wedge(X4 \in \\ k25_glib_000 X0 X1))\Rightarrow(k29_glib_000 X0 X2 X4 = k29_glib_000 X1 X3 \\ X4)))))) \end{aligned}$$