

t58_glib_001

(TMXvopDAiPQTsFm5JLh5zhSSw7htK9SbbfN)

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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 $k3_glib_001 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r2_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_glib_000 : \iota \Rightarrow \iota$ be given. Let $k7_glib_000 : \iota \Rightarrow \iota$ be given. Let $k20_glib_001 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k8_glib_001 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k9_glib_001 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & ((v2_xxreal_0\ np_1) \wedge (m2_subset_1\ np_1\ k1_numbers\ k5_numbers)) \wedge \\ & ((m1_subset_1\ np_1\ k5_numbers) \wedge (m1_subset_1\ np_1\ k1_numbers)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.(((v1_relat_1\ X0) \wedge \\ & ((v4_relat_1\ X0\ k5_numbers) \wedge ((v1_funct_1\ X0) \wedge ((v1_finset_1 \\ & X0) \wedge (v1_glib_000\ X0)))))) \wedge ((m3_glib_001\ X1\ X0) \wedge ((m1_subset_1 \\ & X2\ k5_numbers) \wedge (m1_subset_1\ X3\ k5_numbers)))) \Rightarrow (k20_glib_001 \\ & X0\ X1\ X2\ X3 = k9_glib_001\ X0\ X1\ X2\ X3) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(((v1_relat_1\ X0) \wedge ((v4_relat_1\ X0\ k5_numbers) \wedge ((v1_funct_1 \\ & X0) \wedge ((v1_finset_1\ X0) \wedge (v1_glib_000\ X0)))))) \Rightarrow (\forall X1.(m3_glib_001 \\ & X1\ X0) \Rightarrow (\forall X2.(m1_subset_1\ X2\ k5_numbers) \Rightarrow ((k3_glib_001 \\ & X0\ X1 = k1_funct_1\ X1\ X2) \Rightarrow (r2_relset_1\ k5_numbers\ (k2_xboole_0 \\ & (k6_glib_000\ X0)\ (k7_glib_000\ X0))\ (k9_glib_001\ X0\ X1\ np_1\ X2) \\ & (k8_glib_001\ X0\ X1\ X2\ (k3_finseq_1\ X1)))))) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ & X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow (\forall X1.(m3_glib_001 \\ & X1 X0) \Rightarrow (\forall X2.(m1_subset_1 X2 k5_numbers) \Rightarrow ((k3_glib_001 \\ & X0 X1 = k1_funct_1 X1 X2) \Rightarrow (r2_relset_1 k5_numbers (k2_xboole_0 \\ & (k6_glib_000 X0) (k7_glib_000 X0)) (k20_glib_001 X0 X1 np_1 X2) \\ & (k8_glib_001 X0 X1 X2 (k3_finseq_1 X1)))))) \end{aligned}$$