

t24_glib_001

(TML2pCSQzhNMiZe5C31xpRMUAMok1Ppou9n)

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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 $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_glib_001 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k2_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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. Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow (\forall X1.(m3_glib_001 \\ X1 X0) \Rightarrow ((k3_finseq_1 X1 = k3_finseq_1 (k6_glib_001 X0 X1)) \wedge ((k1_relset_1 \\ k5_numbers X1 = k1_relset_1 k5_numbers (k6_glib_001 X0 X1)) \wedge (k2_relset_1 \\ (k2_xboole_0 (k6_glib_000 X0) (k7_glib_000 X0)) X1 = k2_relset_1 \\ (k2_xboole_0 (k6_glib_000 X0) (k7_glib_000 X0)) (k6_glib_001 \\ X0 X1)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow (\forall X1.(m3_glib_001 \\ X1 X0) \Rightarrow (\forall X2.(m1_subset_1 X2 k5_numbers) \Rightarrow ((X2 \in k1_relset_1 \\ k5_numbers (k6_glib_001 X0 X1)) \Rightarrow ((k1_funct_1 (k6_glib_001 X0 \\ X1) X2 = k1_funct_1 X1 (k2_xcmplx_0 (k6_xcmplx_0 (k3_finseq_1 X1) \\ X2) np_1)) \wedge (k2_xcmplx_0 (k6_xcmplx_0 (k3_finseq_1 X1) X2) np_1 \in \\ k1_relset_1 k5_numbers X1)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1.(((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge \\ ((v1_funct_1 X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \wedge (m3_glib_001 \\ X1 X0) \Rightarrow (k6_glib_001 X0 (k6_glib_001 X0 X1) = X1) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge \\ & ((v1_funct_1 X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \wedge (m3_glib_001 \\ & X1 X0) \Rightarrow (m3_glib_001 (k6_glib_001 X0 X1) X0) \end{aligned} \quad (4)$$

Theorem 1

$$\begin{aligned} & \forall X0. ((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ & X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow (\forall X1. (m3_glib_001 \\ & X1 X0) \Rightarrow (\forall X2. (m1_subset_1 X2 k5_numbers) \Rightarrow ((X2 \in k1_relset_1 \\ & k5_numbers X1) \Rightarrow ((k1_funct_1 X1 X2 = k1_funct_1 (k6_glib_001 X0 \\ & X1) (k2_xcmplx_0 (k6_xcmplx_0 (k3_finseq_1 X1) X2) np_1)) \wedge (k2_xcmplx_0 \\ & (k6_xcmplx_0 (k3_finseq_1 X1) X2) np_1 \in k1_relset_1 k5_numbers \\ & (k6_glib_001 X0 X1)))))) \end{aligned}$$