

t147_glib_001 (TMMMrTVVUoAkYwJiXtvjGm- CYpyRoLEENE35)

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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 $v5_glib_001 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m3_glib_001 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_glib_001 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_abian : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $v4_glib_001 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow (\forall X1.(m3_glib_001 \\ X1 X0) \Rightarrow ((v1_glib_001 X1 X0) \Leftrightarrow (k1_funct_1 X1 np_1 = k1_funct_1 X1 \\ (k3_finseq_1 X1)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow (\forall X1.(m3_glib_001 \\ X1 X0) \Rightarrow ((v5_glib_001 X1 X0) \Leftrightarrow ((v4_glib_001 X1 X0) \wedge (\forall X2. \\ ((\neg v1_abian X2) \wedge (m1_subset_1 X2 k5_numbers)) \Rightarrow (\forall X3.((\\ \neg v1_abian X3) \wedge (m1_subset_1 X3 k5_numbers)) \Rightarrow (((r1_xxreal_0 X3 \\ (k3_finseq_1 X1)) \wedge (k1_funct_1 X1 X2 = k1_funct_1 X1 X3)) \Rightarrow ((r1_xxreal_0 \\ X3 X2) \vee ((X2 = np_1) \wedge (X3 = k3_finseq_1 X1)))))))))) \end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow (\forall X1.((v5_glib_001 \\ X1 X0) \wedge (m3_glib_001 X1 X0)) \Rightarrow ((\neg v1_glib_001 X1 X0) \Rightarrow (\forall X2. \\ ((\neg v1_abian X2) \wedge (m1_subset_1 X2 k5_numbers)) \Rightarrow (\forall X3.((\\ \neg v1_abian X3) \wedge (m1_subset_1 X3 k5_numbers)) \Rightarrow (\neg(\neg r1_xxreal_0 \\ X3 X2) \wedge ((r1_xxreal_0 X3 (k3_finseq_1 X1)) \wedge (k1_funct_1 X1 X2 = k1_funct_1 \\ X1 X3)))))))) \end{aligned}$$