

t54_glib_001

(TMFwpFzffsC71qxamXx8D4M1kStNVmiBik2)

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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 $v1_abian : \iota \Rightarrow o$ 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 $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k20_glib_001 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_glib_001 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. (((v1_relat_1 X0) \wedge \\ & ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 X0) \wedge ((v1_finset_1 \\ & X0) \wedge (v1_glib_000 X0)))))) \wedge ((m3_glib_001 X1 X0) \wedge ((m1_subset_1 \\ & X2 k5_numbers) \wedge (m1_subset_1 X3 k5_numbers)))) \Rightarrow (k20_glib_001 \\ & X0 X1 X2 X3 = k9_glib_001 X0 X1 X2 X3) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ & X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow (\forall X1. (m3_glib_001 \\ & X1 X0) \Rightarrow (\forall X2. \forall X3. \forall X4. ((\neg v1_abian X4) \wedge (m1_subset_1 \\ & X4 k5_numbers)) \Rightarrow (\forall X5. ((\neg v1_abian X5) \wedge (m1_subset_1 X5 \\ & k5_numbers)) \Rightarrow (((r1_xxreal_0 X4 X5) \wedge ((r1_xxreal_0 X5 (k3_finseq_1 \\ & X1)) \wedge (k1_funct_1 X1 X4 = k1_funct_1 X1 X5))) \Rightarrow (\forall X6. (m1_subset_1 \\ & X6 k5_numbers) \Rightarrow ((X6 \in k2_finseq_1 X4) \Rightarrow (k1_funct_1 (k9_glib_001 \\ & X0 X1 X4 X5) X6 = k1_funct_1 X1 X6))))))))) \end{aligned} \quad (2)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ & X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow (\forall X1.(m3_glib_001 \\ & X1 X0) \Rightarrow (\forall X2.((\neg v1_abian X2) \wedge (m1_subset_1 X2 k5_numbers)) \Rightarrow \\ & (\forall X3.((\neg v1_abian X3) \wedge (m1_subset_1 X3 k5_numbers)) \Rightarrow ((\\ & (r1_xxreal_0 X2 X3) \wedge ((r1_xxreal_0 X3 (k3_finseq_1 X1)) \wedge (k1_funct_1 \\ & X1 X2 = k1_funct_1 X1 X3))) \Rightarrow (\forall X4.(m1_subset_1 X4 k5_numbers) \Rightarrow \\ & ((X4 \in k2_finseq_1 X2) \Rightarrow (k1_funct_1 (k20_glib_001 X0 X1 X2 X3) X4 = \\ & k1_funct_1 X1 X4)))))) \end{aligned}$$