

t152_glib_001

(TMS7FAN3WKE8V7SGSbpcUirrNZpap4WJsWF)

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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 $k16_glib_001 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k18_glib_001 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v5_glib_001 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((r1_xxreal_0 X0 X1) \wedge (r1_xxreal_0 X1 X0)) \Rightarrow (X0 = X1)) \quad (1)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0))))) \Rightarrow (\forall X1.(m3_glib_001 X1 X0) \Rightarrow (\forall X2.((\neg v1_abian X2) \wedge (m1_subset_1 X2 k5_numbers)) \Rightarrow ((r1_xxreal_0 X2 (k3_finseq_1 X1)) \Rightarrow ((r1_xxreal_0 (k16_glib_001 X0 X1 (k1_funct_1 X1 X2)) X2) \wedge (r1_xxreal_0 X2 (k18_glib_001 X0 X1 (k1_funct_1 X1 X2))))))) \end{aligned} \quad (3)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((v1_relat_1 X0)\wedge(v4_relat_1 X0 k5_numbers)\wedge((v1_funct_1 X0)\wedge((v1_finset_1 X0)\wedge(v1_glib_000 X0))))\wedge(m3_glib_001 X1 X0))\Rightarrow((\neg v1_abian (k16_glib_001 X0 X1 X2))\wedge(m1_subset_1 (k16_glib_001 X0 X1 X2) k5_numbers)) \quad (5)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1)\Rightarrow(v7_ordinal1 X0) \quad (6)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow(v1_xreal_0 X0) \quad (7)$$

Theorem 1

$$\forall X0.(((v1_relat_1 X0)\wedge((v4_relat_1 X0 k5_numbers)\wedge((v1_funct_1 X0)\wedge((v1_finset_1 X0)\wedge(v1_glib_000 X0))))\Rightarrow(\forall X1.(m3_glib_001 X1 X0)\Rightarrow((\forall X2.((\neg v1_abian X2)\wedge(m1_subset_1 X2 k5_numbers))\Rightarrow((r1_xreal_0 X2 (k3_finseq_1 X1))\Rightarrow(k16_glib_001 X0 X1 (k1_funct_1 X1 X2) = k18_glib_001 X0 X1 (k1_funct_1 X1 X2))))\Rightarrow(v5_glib_001 X1 X0)))$$