

t34_lexbfs (TMQjxKwXm- GaVHbmTP3TcRYNsNAYsUhAnTPs)

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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 $v2_glib_000 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k15_glib_000 : \iota \Rightarrow \iota$ be given. Let $k13_lexbfs : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k16_lexbfs : \iota \Rightarrow \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0. ((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ X0) \wedge ((v1_finset_1 X0) \wedge ((v1_glib_000 X0) \wedge (v2_glib_000 X0)))))) \Rightarrow \\ (\forall X1. (v7_ordinal1 X1) \Rightarrow ((r1_xxreal_0 (k15_glib_000 X0) \\ X1) \Rightarrow (k13_lexbfs X0 (k16_lexbfs X0) (k15_glib_000 X0) = k13_lexbfs \\ X0 (k16_lexbfs X0) X1))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0. (v1_xxreal_0 X0) \Rightarrow (\forall X1. (v1_xxreal_0 X1) \Rightarrow (\forall X2. \\ (v1_xxreal_0 X2) \Rightarrow (((r1_xxreal_0 X0 X1) \wedge (r1_xxreal_0 X1 X2)) \Rightarrow \\ (r1_xxreal_0 X0 X2)))) \end{aligned} \tag{2}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{3}$$

Assume the following.

$$\begin{aligned} \forall X0. ((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ X0) \wedge ((v1_finset_1 X0) \wedge ((v1_glib_000 X0) \wedge (v2_glib_000 X0)))))) \Rightarrow \\ ((\neg v1_xboole_0 (k15_glib_000 X0)) \wedge (m1_subset_1 (k15_glib_000 \\ X0) k5_numbers)) \end{aligned} \tag{4}$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 k4_ordinal1) \Rightarrow (v7_ordinal1 X0) \tag{5}$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(v1_xxreal_0\ X0) \quad (6)$$

Theorem 1

$$\begin{aligned} &\forall X0.((v1_relat_1\ X0)\wedge((v4_relat_1\ X0\ k5_numbers)\wedge((v1_funct_1 \\ &\ X0)\wedge((v1_finset_1\ X0)\wedge((v1_glib_000\ X0)\wedge(v2_glib_000\ X0))))))\Rightarrow \\ &\quad (\forall X1.(v7_ordinal1\ X1)\Rightarrow(\forall X2.(v7_ordinal1\ X2)\Rightarrow(\\ &((r1_xxreal_0\ (k15_glib_000\ X0)\ X1)\wedge(r1_xxreal_0\ X1\ X2))\Rightarrow(k13_lexbfs \\ &\ X0\ (k16_lexbfs\ X0)\ X1 = k13_lexbfs\ X0\ (k16_lexbfs\ X0)\ X2)))) \end{aligned}$$