

# t10\_lexbfs (TML- RvWsimVK2pSPXLvwrcrrXXQsVoRmMXjq)

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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  $v1\_partfun1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v2\_lexbfs : \iota \Rightarrow o$  be given. Let  $v3\_lexbfs : \iota \Rightarrow o$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k39\_glib\_000 : \iota \Rightarrow \iota$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k40\_glib\_000 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0.((v1\_relat\_1 X0) \wedge ((v4\_relat\_1 X0 k5\_numbers) \wedge ((v1\_funct\_1 \\ X0) \wedge ((v1\_partfun1 X0 k5\_numbers) \wedge ((v2\_lexbfs X0) \wedge (v3\_lexbfs \\ X0)))))) \Rightarrow (\forall X1.(v7\_ordinal1 X1) \Rightarrow ((r1\_xxreal\_0 (k39\_glib\_000 \\ X0) X1) \Rightarrow (k1\_funct\_1 X0 (k39\_glib\_000 X0) = k1\_funct\_1 X0 X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (\forall X2. \\ (v1\_xxreal\_0 X2) \Rightarrow (((r1\_xxreal\_0 X0 X1) \wedge (r1\_xxreal\_0 X1 X2)) \Rightarrow \\ (r1\_xxreal\_0 X0 X2)))) \end{aligned} \quad (2)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1\_relat\_1 X0) \wedge ((v4\_relat\_1 X0 k5\_numbers) \wedge ((v1\_funct\_1 \\ X0) \wedge (v1\_partfun1 X0 k5\_numbers)))) \Rightarrow (m1\_subset\_1 (k39\_glib\_000 \\ X0) k5\_numbers) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1\_relat\_1 X0) \wedge ((v4\_relat\_1 X0 k5\_numbers) \wedge ((v1\_funct\_1 \\ X0) \wedge (v1\_partfun1 X0 k5\_numbers)))) \Rightarrow (k40\_glib\_000 X0 = k1\_funct\_1 \\ X0 (k39\_glib\_000 X0)) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k4\_ordinal1) \Rightarrow (v7\_ordinal1 X0) \quad (6)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (v1\_xxreal\_0 X0) \quad (7)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((v1\_relat\_1 X0) \wedge ((v4\_relat\_1 X0 k5\_numbers) \wedge ((v1\_funct\_1 \\ & X0) \wedge ((v1\_partfun1 X0 k5\_numbers) \wedge ((v2\_lexbfs X0) \wedge (v3\_lexbfs \\ & X0)))))) \Rightarrow (\forall X1.(v7\_ordinal1 X1) \Rightarrow (\forall X2.(v7\_ordinal1 \\ & X2) \Rightarrow (((r1\_xxreal\_0 (k39\_glib\_000 X0) X1) \wedge (r1\_xxreal\_0 X1 X2)) \Rightarrow \\ & (k1\_funct\_1 X0 X2 = k1\_funct\_1 X0 X1)))) \end{aligned}$$