t67_lexbfs (TMGtixRFeFEErw-pZHAaow2pJojnW3xWegW9)

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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 $k23\_lexbfs : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k26\_lexbfs : \iota \Rightarrow \iota$ be given. Let $k1\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_glib\_000 : \iota \Rightarrow \iota$ be given. Let $k7\_lexbfs : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_finsub\_1 : \iota \Rightarrow \iota$ be given. Let $k13\_lexbfs : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k16\_lexbfs : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v4\_relat\_1\ X0\ k5\_numbers) \wedge ((v1\_funct\_1\ X0) \wedge ((v1\_finset\_1\ X0) \wedge ((v1\_glib\_000\ X0) \wedge (v2\_glib\_000\ X0)))))) \Rightarrow (\forall X1.(v7\_ordinal1\ X1) \Rightarrow ((r1\_xxreal\_0\ (k15\_glib\_000\ X0)\ X1) \Rightarrow (k23\_lexbfs\ X0\ (k26\_lexbfs\ X0)\ (k15\_glib\_000\ X0) = k23\_lexbfs\ X0\ (k26\_lexbfs\ X0)\ X1))) \tag{1}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v4\_relat\_1\ X0\ k5\_numbers) \wedge ((v1\_funct\_1\ X0) \wedge ((v1\_finset\_1\ X0) \wedge ((v1\_glib\_000\ X0) \wedge (v2\_glib\_000\ X0)))))) \Rightarrow (\forall X1.(v7\_ordinal1\ X1) \Rightarrow ((k1\_relset\_1\ (k6\_glib\_000\ X0)\ (k7\_lexbfs\ (k6\_glib\_000\ X0)\ k5\_numbers\ (k9\_funct\_2\ (k6\_glib\_000\ X0)\ (k5\_finsub\_1\ k5\_numbers))\ (k13\_lexbfs\ X0\ (k16\_lexbfs\ X0)\ X1)) = k6\_glib\_000\ X0) \Leftrightarrow (r1\_xxreal\_0\ (k15\_glib\_000\ X0)\ X1))) \tag{2}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v4\_relat\_1\ X0\ k5\_numbers) \wedge ((v1\_funct\_1\ X0) \wedge ((v1\_finset\_1\ X0) \wedge ((v1\_glib\_000\ X0) \wedge (v2\_glib\_000\ X0)))))) \Rightarrow (\forall X1.(v7\_ordinal1\ X1) \Rightarrow (\forall X2.(v7\_ordinal1\ X2) \Rightarrow ((r1\_xxreal\_0\ (k15\_glib\_000\ X0)\ X1) \wedge (r1\_xxreal\_0\ X1\ X2)) \Rightarrow (k13\_lexbfs\ X0\ (k16\_lexbfs\ X0)\ X1 = k13\_lexbfs\ X0\ (k16\_lexbfs\ X0)\ X2)))) \tag{3}$$

Theorem 1

$$\forall X0.((v1\_relat\_1\ X0)\wedge((v4\_relat\_1\ X0\ k5\_numbers)\wedge((v1\_funct\_1\ X0)\wedge((v1\_finset\_1\ X0)\wedge((v1\_glib\_000\ X0)\wedge(v2\_glib\_000\ X0)))))\Rightarrow(\forall X1.(v7\_ordinal1\ X1)\Rightarrow(\forall X2.(v7\_ordinal1\ X2)\Rightarrow(((r1\_xxreal\_0\ (k15\_glib\_000\ X0)\ X1)\wedge(r1\_xxreal\_0\ X1\ X2))\Rightarrow(k23\_lexbfs\ X0\ (k26\_lexbfs\ X0)\ X1 = k23\_lexbfs\ X0\ (k26\_lexbfs\ X0)\ X2))))$$