t26_graph_5 (TMMDRYWMPc-MAmp4fzszHzg5R9os3R4tzQtZ)

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Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $l1\_graph\_1 : \iota \Rightarrow o$ be given. Let $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u4\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_graph\_5 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_finseq\_1 : \iota \Rightarrow o$ be given. Let $k10\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k7\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v1\_funct\_1\ X0) \wedge (v1\_finseq\_1\ X0))) \Rightarrow (\forall X1.((v1\_relat\_1\ X1) \wedge ((v1\_funct\_1\ X1) \wedge (v1\_finseq\_1\ X1))) \Rightarrow (r1\_tarski\ (k10\_xtuple\_0\ X0)\ (k10\_xtuple\_0\ (k7\_finseq\_1\ X1\ X0)))) \tag{1}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v1\_funct\_1\ X0) \wedge (v1\_finseq\_1\ X0))) \Rightarrow (\forall X1.((v1\_relat\_1\ X1) \wedge ((v1\_funct\_1\ X1) \wedge (v1\_finseq\_1\ X1))) \Rightarrow (r1\_tarski\ (k10\_xtuple\_0\ X0)\ (k10\_xtuple\_0\ (k7\_finseq\_1\ X0\ X1)))) \tag{2}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge (l1\_graph\_1\ X0)) \Rightarrow (\forall X1.(m2\_finseq\_1\ X1\ (u4\_struct\_0\ X0)) \Rightarrow (\forall X2.(m2\_finseq\_1\ X2\ (u4\_struct\_0\ X0)) \Rightarrow ((r1\_tarski\ (k10\_xtuple\_0\ X1)\ (k10\_xtuple\_0\ X2)) \Rightarrow (r1\_tarski\ (k2\_graph\_5\ X0\ X1)\ (k2\_graph\_5\ X0\ X2))))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1\ X1\ X0) \Leftrightarrow (m1\_finseq\_1\ X1\ X0) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1\_finseq\_1\ X1\ X0) \wedge (m1\_finseq\_1\ X2\ X0)) \Rightarrow (k8\_finseq\_1\ X0\ X1\ X2 = k7\_finseq\_1\ X1\ X2) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_1\ X1\ X0)\Rightarrow((v1\_relat\_1\ X1)\wedge((v1\_funct\_1\ X1)\wedge(v1\_finseq\_1\ X1))) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1\_finseq\_1\ X1\ X0)\wedge(m1\_finseq\_1\ X2\ X0))\Rightarrow(m2\_finseq\_1\ (k8\_finseq\_1\ X0\ X1\ X2)\ X0) \tag{7}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge(l1\_graph\_1\ X0))\Rightarrow(\forall X1.(m2\_finseq\_1\ X1\ (u4\_struct\_0\ X0))\Rightarrow(\forall X2.(m2\_finseq\_1\ X2\ (u4\_struct\_0\ X0))\Rightarrow((r1\_tarski\ (k2\_graph\_5\ X0\ X1)\ (k2\_graph\_5\ X0\ (k8\_finseq\_1\ (u4\_struct\_0\ X0)\ X1\ X2)))\wedge(r1\_tarski\ (k2\_graph\_5\ X0\ X2)\ (k2\_graph\_5\ X0\ (k8\_finseq\_1\ (u4\_struct\_0\ X0)\ X1\ X2))))))$$