

l34_scm_comp (TMHi- wWGCxtVE9eGRww1WKHDD67xxffeY6Za)

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Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_scm_comp : \iota$ be given. Let $k6_dtconstr : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_ami_3 : \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v5_funct_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_memstr_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k17_scm_comp : \iota \Rightarrow \iota$ be given. Let $k3_scm_comp : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_ami_3 : \iota \Rightarrow \iota$ be given. Let $k12_scm_comp : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k16_scm_comp : \iota \Rightarrow \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $v1_xbool_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v1_dtconstr : \iota \Rightarrow o$ be given. Let $l1_lang1 : \iota \Rightarrow o$ be given. Let $v1_lang1 : \iota \Rightarrow o$ be given. Let $v2_dtconstr : \iota \Rightarrow o$ be given. Let $v3_dtconstr : \iota \Rightarrow o$ be given. Let $v3_bintree1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(m2_subset_1 X0 (u1_struct_0 k1_scm_comp) (k6_dtconstr k1_scm_comp)) \Rightarrow (k17_scm_comp (k3_scm_comp X0) = k16_scm_comp X0) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 (u1_struct_0 k1_ami_3)) \wedge \\ & ((v1_funct_1 X0) \wedge ((v5_funct_1 X0 (k2_memstr_0 np_2 k1_ami_3)) \wedge \\ & (v1_partfun1 X0 (u1_struct_0 k1_ami_3)))))) \Rightarrow (\forall X1.(m2_subset_1 \\ & X1 (u1_struct_0 k1_scm_comp) (k6_dtconstr k1_scm_comp)) \Rightarrow (k12_scm_comp \\ & X0 (k3_scm_comp X1) = k1_funct_1 X0 X1)) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0 X0) \wedge (v1_xxreal_0 X1)) \Rightarrow (r1_xxreal_0 X0 X0) \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge((\neg v1_xboole_0 X1)\wedge \\ (m1_subset_1 X1 (k1_zfmisc_1 X0))))\Rightarrow(\forall X2.(m2_subset_1 \\ X2 X0 X1)\Leftrightarrow(m1_subset_1 X2 X1)) \end{aligned} \quad (4)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (5)$$

Assume the following.

$$(\neg v1_xboole_0 k4_ordinal1)\wedge(v3_ordinal1 k4_ordinal1) \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0)\wedge((v1_dtconstr X0)\wedge(l1_lang1 X0)))\Rightarrow \\ ((\neg v1_xboole_0 (k6_dtconstr X0))\wedge(m1_subset_1 (k6_dtconstr \\ X0) (k1_zfmisc_1 (u1_struct_0 X0)))) \end{aligned} \quad (7)$$

Assume the following.

$$m1_subset_1 k5_numbers (k1_zfmisc_1 k1_numbers) \quad (8)$$

Assume the following.

$$\begin{aligned} (\neg v2_struct_0 k1_scm_comp)\wedge((v1_lang1 k1_scm_comp)\wedge((v1_dtconstr \\ k1_scm_comp)\wedge((v2_dtconstr k1_scm_comp)\wedge((v3_dtconstr k1_scm_comp)\wedge \\ ((v3_bintree1 k1_scm_comp)\wedge(l1_lang1 k1_scm_comp)))))) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k6_dtconstr k1_scm_comp))\Rightarrow(m2_subset_1 \\ (k16_scm_comp X0) k1_numbers k5_numbers) \quad (10)$$

Assume the following.

$$\begin{aligned} \forall X0.(m2_subset_1 X0 (u1_struct_0 k1_scm_comp) (k6_dtconstr \\ k1_scm_comp))\Rightarrow(\forall X1.(m2_subset_1 X1 k1_numbers k5_numbers)\Rightarrow \\ ((X1 = k16_scm_comp X0)\Leftrightarrow(k10_ami_3 X1 = X0))) \end{aligned} \quad (11)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1)\Rightarrow(v7_ordinal1 X0) \quad (12)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow(v1_xxreal_0 X0) \quad (13)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ X0))\Rightarrow(v1_xboole_0 X1)) \quad (14)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m2_subset_1 X0 (u1_struct_0 k1_scm_comp) (k6_dtconstr \\ & \quad k1_scm_comp)) \Rightarrow (\forall X1.((v1_relat_1 X1) \wedge ((v4_relat_1 X1 \\ & (u1_struct_0 k1_ami_3)) \wedge ((v1_funct_1 X1) \wedge ((v5_funct_1 X1 (k2_memstr_0 \\ & \quad np_2 k1_ami_3)) \wedge (v1_partfun1 X1 (u1_struct_0 k1_ami_3)))))) \Rightarrow \\ & \quad (\forall X2.((v1_relat_1 X2) \wedge ((v4_relat_1 X2 (u1_struct_0 k1_ami_3)) \wedge \\ & \quad ((v1_funct_1 X2) \wedge ((v5_funct_1 X2 (k2_memstr_0 np_2 k1_ami_3)) \wedge \\ & \quad (v1_partfun1 X2 (u1_struct_0 k1_ami_3)))))) \Rightarrow ((\forall X3.(m2_subset_1 \\ & \quad X3 k1_numbers k5_numbers) \Rightarrow ((r1_xxreal_0 X3 (k17_scm_comp (k3_scm_comp \\ & \quad X0)) \Rightarrow (k1_funct_1 X1 (k10_ami_3 X3) = k1_funct_1 X2 (k10_ami_3 \\ & \quad X3)))) \Rightarrow (k12_scm_comp X1 (k3_scm_comp X0) = k12_scm_comp X2 (k3_scm_comp \\ & \quad X0)))))) \end{aligned}$$