

t10_instalg1

(TMS8ehAkGkfpTE79M6nRhDHJ4zXjys51W2L)

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Let $v1_instal\!g1 : \iota \Rightarrow o$ be given. Let $l1_msual\!g1 : \iota \Rightarrow o$ be given. Let $m1_instal\!g1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $u4_struct_0 : \iota \Rightarrow \iota$ be given. Let $k6_partfun1 : \iota \Rightarrow \iota$ be given. Let $k4_relat_1 : \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r3_pua2mss1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k3_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u2_msual\!g1 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_msual\!g1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. k6_partfun1\ X0 = k4_relat_1\ X0 \quad (1)$$

Assume the following.

$$\forall X0. k10_xtuple_0\ (k4_relat_1\ X0) = X0 \quad (2)$$

Assume the following.

$$\forall X0. (v1_relat_1\ (k4_relat_1\ X0)) \wedge ((v4_relat_1\ (k4_relat_1\ X0)\ X0) \wedge ((v1_funct_1\ (k4_relat_1\ X0)) \wedge (v1_partfun1\ (k4_relat_1\ X0)\ X0))) \quad (3)$$

Assume the following.

$$\forall X0. ((v1_instal\!g1\ X0) \wedge (l1_msual\!g1\ X0)) \Rightarrow (\forall X1. (m1_instal\!g1\ X1\ X0) \Rightarrow (l1_msual\!g1\ X1)) \quad (4)$$

Assume the following.

$$\forall X0. ((v1_instal\!g1\ X0) \wedge (l1_msual\!g1\ X0)) \Rightarrow (\forall X1. (l1_msual\!g1\ X1) \Rightarrow ((m1_instal\!g1\ X1\ X0) \Leftrightarrow (r3_pua2mss1\ X1\ X0\ (k6_partfun1\ (u1_struct_0\ X1))\ (k6_partfun1\ (u4_struct_0\ X1)))))) \quad (5)$$

Assume the following.

$$\begin{aligned}
& \forall X0.(l1_msualg_1 X0) \Rightarrow (\forall X1.(l1_msualg_1 X1) \Rightarrow (\forall X2. \\
& ((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \Rightarrow (\forall X3. ((v1_relat_1 \\
& X3) \wedge (v1_funct_1 X3)) \Rightarrow ((r3_pua2mss1 X0 X1 X2 X3) \Leftrightarrow ((k9_xtuple_0 \\
& X2 = u1_struct_0 X0) \wedge ((k9_xtuple_0 X3 = u4_struct_0 X0) \wedge ((r1_tarski \\
& (k10_xtuple_0 X2) (u1_struct_0 X1)) \wedge ((r1_tarski (k10_xtuple_0 \\
& X3) (u4_struct_0 X1)) \wedge ((k3_relat_1 (u2_msualg_1 X0) X2 = k3_relat_1 \\
& X3 (u2_msualg_1 X1)) \wedge (\forall X4. \forall X5. ((v1_relat_1 X5) \wedge \\
& (v1_funct_1 X5)) \Rightarrow (((X4 \in u4_struct_0 X0) \wedge (X5 = k1_funct_1 (u1_msualg_1 \\
& X0) X4)) \Rightarrow (k3_relat_1 X5 X2 = k1_funct_1 (u1_msualg_1 X1) (k1_funct_1 \\
& X3 X4)))))))))))))
\end{aligned} \tag{6}$$

Theorem 1

$$\begin{aligned}
& \forall X0. ((v1_instal1 X0) \wedge (l1_msualg_1 X0)) \Rightarrow (\forall X1. \\
& (m1_instal1 X1 X0) \Rightarrow ((r1_tarski (u1_struct_0 X1) (u1_struct_0 \\
& X0)) \wedge (r1_tarski (u4_struct_0 X1) (u4_struct_0 X0))))
\end{aligned}$$