

t14_instalg1

(TMUovuKXB9BapBPSjsdWAwKgGCDwLjtK3hs)

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Let $v1_instalg1 : \iota \Rightarrow o$ be given. Let $l1_msualg_1 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $u1_msualg_1 : \iota \Rightarrow \iota$ be given. Let $k2_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u4_struct_0 : \iota \Rightarrow \iota$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ be given. Let $u2_msualg_1 : \iota \Rightarrow \iota$ be given. Let $m1_instalg1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k5_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (v1_relat_1 X1) \Rightarrow (r1_tarski (k5_relat_1 X1 X0) X1) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1_instalg1 X0) \wedge (l1_msualg_1 X0)) \Rightarrow (\forall X1. \\ & ((v1_instalg1 X1) \wedge (l1_msualg_1 X1)) \Rightarrow (((r1_tarski (u1_struct_0 X1) (u1_struct_0 X0)) \wedge ((r1_tarski (u1_msualg_1 X1) (u1_msualg_1 X0)) \wedge (r1_tarski (u2_msualg_1 X1) (u2_msualg_1 X0)))) \Rightarrow (m1_instalg1 X1 X0))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. ((v1_funct_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))) \Rightarrow (k2_partfun1 X0 X1 X2 X3 = k5_relat_1 X2 X3) \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. (l1_msualg_1 X0) \Rightarrow ((v1_funct_1 (u2_msualg_1 X0)) \wedge \\ & ((v1_funct_2 (u2_msualg_1 X0) (u4_struct_0 X0) (u1_struct_0 X0)) \wedge \\ & (m1_subset_1 (u2_msualg_1 X0) (k1_zfmisc_1 (k2_zfmisc_1 (u4_struct_0 X0) (u1_struct_0 X0)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1_msualg_1 X0) \Rightarrow & ((v1_funct_1 (u1_msualg_1 X0)) \wedge \\ & ((v1_funct_2 (u1_msualg_1 X0) (u4_struct_0 X0) (k3_finseq_2 (\\ & u1_struct_0 X0))) \wedge (m1_subset_1 (u1_msualg_1 X0) (k1_zfmisc_1 \\ & (k2_zfmisc_1 (u4_struct_0 X0) (k3_finseq_2 (u1_struct_0 X0))))))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 \\ (k2_zfmisc_1 X0 X1))) \Rightarrow (v1_relat_1 X2) \end{aligned} \quad (6)$$

Theorem 1

$$\begin{aligned} \forall X0.((v1_instalg1 X0) \wedge (l1_msualg_1 X0)) \Rightarrow & (\forall X1. \\ & ((v1_instalg1 X1) \wedge (l1_msualg_1 X1)) \Rightarrow (((r1_tarski (u1_struct_0 \\ & X1) (u1_struct_0 X0)) \wedge ((u1_msualg_1 X1 = k2_partfun1 (u4_struct_0 \\ & X0) (k3_finseq_2 (u1_struct_0 X0)) (u1_msualg_1 X0) (u4_struct_0 \\ & X1)) \wedge (u2_msualg_1 X1 = k2_partfun1 (u4_struct_0 X0) (u1_struct_0 \\ & X0) (u2_msualg_1 X0) (u4_struct_0 X1)))) \Rightarrow (m1_instalg1 X1 X0))) \end{aligned}$$