

t41_algspec1 (TMQsSocsXoYoN- RYvQBuKWd64ZDtuoPSbp1G)

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Let $v11_struct_0 : \iota \Rightarrow o$ be given. Let $v1_instalg1 : \iota \Rightarrow o$ be given. Let $l1_msualg_1 : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $u4_struct_0 : \iota \Rightarrow \iota$ be given. Let $r1_algspec1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r3_pua2mss1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_algspec1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_partfun1 : \iota \Rightarrow \iota$ be given. Let $k5_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_algspec1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (v1_relat_1 X1) \Rightarrow ((r1_tarski (k9_xtuple_0 X1) X0) \Rightarrow (k5_relat_1 X1 X0 = X1)) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v11_struct_0 X0) \wedge ((v1_instalg1 X0) \wedge (l1_msualg_1 X0))) \Rightarrow (\forall X1. ((v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow (\forall X2. \\ & ((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \Rightarrow ((r1_algspec1 X0 X1 X2) \Leftrightarrow (r3_pua2mss1 X0 (k2_algspec1 X0 X1 X2) (k1_algspec1 (u1_struct_0 X0) X1) (k1_algspec1 \\ & (u4_struct_0 X0) X2)))))) \quad (2) \end{aligned}$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow (k1_algspec1 X0 X1 = k1_funct_4 (k6_partfun1 X0) (k5_relat_1 X1 X0)) \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0. ((\neg v11_struct_0 X0) \wedge ((v1_instalg1 X0) \wedge (l1_msualg_1 X0))) \Rightarrow (\forall X1. ((v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow (\forall X2. \\ & ((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \Rightarrow (((r1_tarski (k9_xtuple_0 X1) (u1_struct_0 X0)) \wedge ((r1_tarski (k9_xtuple_0 X2) (u4_struct_0 X0)) \wedge (r1_algspec1 X0 X1 X2))) \Rightarrow (r3_pua2mss1 X0 (k2_algspec1 X0 X1 X2) (k1_funct_4 (k6_partfun1 (u1_struct_0 X0)) X1) (k1_funct_4 (k6_partfun1 (u4_struct_0 X0) X2)))))) \end{aligned}$$