t6_algstr_4 (TM-LUBji8FVAhgNqn4H4CV4moHrJvmvPGArk)

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Let $l3\_algstr\_0 : \iota \Rightarrow o$ be given. Let $m1\_algstr\_4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $g3\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $u2\_algstr\_0 : \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_realset1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(l3\_algstr\_0\ X0) \Rightarrow (\forall X1.(m1\_algstr\_4\ X1\ X0) \Rightarrow (l3\_algstr\_0\ X1)) \tag{1}$$

Assume the following.

$$\forall X0.(l3\_algstr\_0\ X0) \Rightarrow (\forall X1.(l3\_algstr\_0\ X1) \Rightarrow ((m1\_algstr\_4\ X1\ X0) \Leftrightarrow ((r1\_tarski\ (u1\_struct\_0\ X1)\ (u1\_struct\_0\ X0)) \wedge (u2\_algstr\_0\ X1 = k1\_realset1\ (u2\_algstr\_0\ X0)\ (u1\_struct\_0\ X1))))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(X0 = X1) \Leftrightarrow ((r1\_tarski\ X0\ X1) \wedge (r1\_tarski\ X1\ X0)) \tag{3}$$

Theorem 1

$$\forall X0.(l3\_algstr\_0\ X0) \Rightarrow (\forall X1.(m1\_algstr\_4\ X1\ X0) \Rightarrow (\forall X2.(m1\_algstr\_4\ X2\ X0) \Rightarrow (((m1\_algstr\_4\ X1\ X2) \wedge (m1\_algstr\_4\ X2\ X1)) \Rightarrow (g3\_algstr\_0\ (u1\_struct\_0\ X1)\ (u2\_algstr\_0\ X1) = g3\_algstr\_0\ (u1\_struct\_0\ X2)\ (u2\_algstr\_0\ X2)))))$$