# t10_msualg_1 (TMaD-VXEuGJvQ5oGKd4mati8wtW42WZrckzW)

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Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v2\_unialg\_1 : \iota \Rightarrow o$ be given. Let $v3\_unialg\_1 : \iota \Rightarrow o$ be given. Let $v4\_unialg\_1 : \iota \Rightarrow o$ be given. Let $l1\_unialg\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_unialg\_1 : \iota \Rightarrow \iota$ be given. Let $k3\_finseq\_2 : \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ 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 $k1\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_numbers : \iota$ be given. Let $k7\_finseq\_2 : \iota \Rightarrow \iota$ be given. Let $k6\_msualg\_1 : \iota \Rightarrow \iota$ be given. Let $g1\_msualg\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_margrel1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $k2\_funcop\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3\_ordinal1 : \iota \Rightarrow o$ be given. Let $v7\_struct\_0 : \iota \Rightarrow o$ be given. Let $v11\_struct\_0 : \iota \Rightarrow o$ be given. Let $v1\_msualg\_1 : \iota \Rightarrow o$ be given. Let $v5\_msualg\_1 : \iota \Rightarrow o$ be given. Let $l1\_msualg\_1 : \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $u4\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $u1\_msualg\_1 : \iota \Rightarrow \iota$ be given. Let $u2\_msualg\_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X0\ X1) \Rightarrow ((v1\_xboole\_0\ X1) \vee (X0 \in X1)) \tag{1}$$

Assume the following.

$$m1\_subset\_1\ k1\_xboole\_0\ k4\_ordinal1 \tag{2}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{3}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1\_xboole\_0\ X0) \wedge (m1\_subset\_1\ X2\ X0)) \Rightarrow (k1\_margrel1\ X0\ X1\ X2 = k2\_funcop\_1\ X1\ X2) \tag{5}$$

Assume the following.

$$(\neg v1\_xboole\_0\ k4\_ordinal1)\wedge(v3\_ordinal1\ k4\_ordinal1) \tag{6}$$

Assume the following.

$$\forall X0.\neg v1\_xboole\_0\ (k1\_tarski\ X0) \tag{7}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v2\_unialg\_1\ X0)\wedge((v3\_unialg\_1\ X0)\wedge((v4\_unialg\_1\ X0)\wedge(l1\_unialg\_1\ X0)))))\Rightarrow((v7\_struct\_0\ (k6\_msualg\_1\ X0))\wedge((\neg v11\_struct\_0\ (k6\_msualg\_1\ X0))\wedge((v1\_msualg\_1\ (k6\_msualg\_1\ X0))\wedge((v5\_msualg\_1\ (k6\_msualg\_1\ X0))\wedge(l1\_msualg\_1\ (k6\_msualg\_1\ X0))))))) \tag{8}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v2\_unialg\_1\ X0)\wedge((v3\_unialg\_1\ X0)\wedge((v4\_unialg\_1\ X0)\wedge(l1\_unialg\_1\ X0)))))\Rightarrow(\forall X1.((v7\_struct\_0\ X1)\wedge((\neg v11\_struct\_0\ X1)\wedge((v1\_msualg\_1\ X1)\wedge((v5\_msualg\_1\ X1)\wedge(l1\_msualg\_1\ X1)))))\Rightarrow((X1 = k6\_msualg\_1\ X0)\Leftrightarrow((u1\_struct\_0\ X1 = k1\_tarski\ k6\_numbers)\wedge((u4\_struct\_0\ X1 = k4\_finseq\_1\ (k1\_unialg\_1\ X0))\wedge((u1\_msualg\_1\ X1 = k1\_partfun1\ k5\_numbers\ k5\_numbers\ k5\_numbers\ (k3\_finseq\_2\ (k1\_tarski\ k6\_numbers))\ (k1\_unialg\_1\ X0)\ (k7\_finseq\_2\ k6\_numbers))\wedge(u2\_msualg\_1\ X1 = k1\_margrel1\ k5\_numbers\ (k4\_finseq\_1\ (k1\_unialg\_1\ X0))\ k6\_numbers)))))) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1\_tarski\ X0)\Leftrightarrow(\forall X2.(X2 \in X1)\Leftrightarrow(X2 = X0)) \tag{10}$$

Assume the following.

$$\forall X0.(l1\_msualg\_1\ X0)\Rightarrow((v1\_msualg\_1\ X0)\Rightarrow(X0 = g1\_msualg\_1\ (u1\_struct\_0\ X0)\ (u4\_struct\_0\ X0)\ (u1\_msualg\_1\ X0)\ (u2\_msualg\_1\ X0))) \tag{11}$$

**Theorem 1**

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v2\_unialg\_1\ X0)\wedge((v3\_unialg\_1\ X0)\wedge((v4\_unialg\_1\ X0)\wedge(l1\_unialg\_1\ X0)))))\Rightarrow(\forall X1.((v1\_funct\_1\ X1)\wedge((v1\_funct\_2\ X1\ (k4\_finseq\_1\ (k1\_unialg\_1\ X0))\ (k3\_finseq\_2\ (k1\_tarski\ k6\_numbers)))\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k4\_finseq\_1\ (k1\_unialg\_1\ X0))\ (k3\_finseq\_2\ (k1\_tarski\ k6\_numbers))))))))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (k1\_tarski\ k6\_numbers))\Rightarrow((X1 = k1\_partfun1\ k5\_numbers\ k5\_numbers\ k5\_numbers\ (k3\_finseq\_2\ (k1\_tarski\ k6\_numbers))\ (k1\_unialg\_1\ X0)\ (k7\_finseq\_2\ k6\_numbers))\Rightarrow(k6\_msualg\_1\ X0 = g1\_msualg\_1\ (k1\_tarski\ k6\_numbers)\ (k4\_finseq\_1\ (k1\_unialg\_1\ X0))\ X1\ (k1\_margrel1\ (k1\_tarski\ k6\_numbers)\ (k4\_finseq\_1\ (k1\_unialg\_1\ X0))\ X2))))) $$