

t37\_msafree3  
(TMMWzCUh9DFnULEkMRBqJcd9559BPiaiudE)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v11\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l1\_msualg\_1 : \iota \Rightarrow o$  be given. Let  $l3\_msualg\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_msualg\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u4\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_msualg\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2\_struct\_0 X0) \wedge ((\neg v11\_struct\_0 X0) \wedge (l1\_msualg\_1 \\ &X0))) \Rightarrow (\forall X1. (l3\_msualg\_1 X1 X0) \Rightarrow (\forall X2. (m1\_msualg\_2 \\ &X2 X0 X1) \Rightarrow (\forall X3. (m1\_subset\_1 X3 (u4\_struct\_0 X0)) \Rightarrow (\forall X4. \\ &(X4 \in k3\_msualg\_1 X0 X3 X2) \Rightarrow (X4 \in k3\_msualg\_1 X0 X3 X1)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (r1\_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (2)$$

**Theorem 1**

$$\begin{aligned} \forall X0. (&(\neg v2\_struct\_0 X0) \wedge ((\neg v11\_struct\_0 X0) \wedge (l1\_msualg\_1 \\ &X0))) \Rightarrow (\forall X1. (l3\_msualg\_1 X1 X0) \Rightarrow (\forall X2. (m1\_msualg\_2 \\ &X2 X0 X1) \Rightarrow (\forall X3. (m1\_subset\_1 X3 (u4\_struct\_0 X0)) \Rightarrow (r1\_tarski \\ &(k3\_msualg\_1 X0 X3 X2) (k3\_msualg\_1 X0 X3 X1)))))) \end{aligned}$$