

t2\_msualg\_8 (TM-  
dUUKLDZZF3wLyXj42ZTybTGzbs8saZX5s)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k2\_msualg\_5 : \iota \Rightarrow \iota$  be given. Let  $v1\_partfun1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v3\_relat\_2 : \iota \Rightarrow o$  be given. Let  $v8\_relat\_2 : \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r3\_lattices : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1\_subset\_1 X1 (u1\_struct\_0 (k2\_msualg\_5 \\ & X0))) \Rightarrow (\forall X2. (m1\_subset\_1 X2 (u1\_struct\_0 (k2\_msualg\_5 \\ & X0))) \Rightarrow ((r3\_lattices (k2\_msualg\_5 X0) X1 X2) \Leftrightarrow (r1\_tarski X1 X2))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. (m1\_subset\_1 X2 ( \\ & k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1))) \Rightarrow ((r1\_relset\_1 X0 X1 X2 X3) \Leftrightarrow ( \\ & r1\_tarski X2 X3)) \end{aligned} \quad (2)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. \forall X1. (m1\_subset\_1 X1 (u1\_struct\_0 (k2\_msualg\_5 \\ & X0))) \Rightarrow (\forall X2. (m1\_subset\_1 X2 (u1\_struct\_0 (k2\_msualg\_5 \\ & X0))) \Rightarrow (\forall X3. ((v1\_partfun1 X3 X0) \wedge ((v3\_relat\_2 X3) \wedge ((v8\_relat\_2 \\ & X3) \wedge (m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X0)))))) \Rightarrow (\forall X4. \\ & ((v1\_partfun1 X4 X0) \wedge ((v3\_relat\_2 X4) \wedge ((v8\_relat\_2 X4) \wedge (m1\_subset\_1 \\ & X4 (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X0)))))) \Rightarrow (((X1 = X3) \wedge (X2 = X4)) \Rightarrow \\ & ((r3\_lattices (k2\_msualg\_5 X0) X1 X2) \Leftrightarrow (r1\_relset\_1 X0 X0 X3 X4)))))) \end{aligned}$$