

# t24\_ami\_2 (TMWR- DRx7DuzNSdGXSKmzTypP1UeAqnpecYK)

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Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $k2\_ami\_2 : \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v2\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k8\_mcart\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k6\_domain\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $k2\_scm\_inst : \iota$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(k4\_tarski\ X0\ X1 \in k2\_zfmisc\_1\ X2\ X3) \Leftrightarrow ((X0 \in X2) \wedge (X1 \in X3)) \quad (1)$$

Assume the following.

$$\begin{aligned} & ((v2\_xxreal\_0\ np\_1) \wedge (m2\_subset\_1\ np\_1\ k1\_numbers\ k5\_numbers)) \wedge \\ & ((m1\_subset\_1\ np\_1\ k5\_numbers) \wedge (m1\_subset\_1\ np\_1\ k1\_numbers)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((m1\_subset\_1\ X2 \\ & (k1\_zfmisc\_1\ X0)) \wedge (m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ X1))) \Rightarrow (k8\_mcart\_1 \\ & X0\ X1\ X2\ X3 = k2\_zfmisc\_1\ X2\ X3) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((\neg v1\_xboole\_0\ X0) \wedge (m1\_subset\_1\ X1\ X0)) \Rightarrow \\ & (k6\_domain\_1\ X0\ X1 = k1\_tarski\ X1) \end{aligned} \quad (4)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (5)$$

Assume the following.

$$k2\_ami\_2 = k2\_scm\_inst \quad (6)$$

Assume the following.

$$\neg v1\_finset\_1 \ k4\_ordinal1 \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0 \ X0)\wedge(m1\_subset\_1 \ X1 \ X0))\Rightarrow (m1\_subset\_1 \ (k6\_domain\_1 \ X0 \ X1) \ (k1\_zfmisc\_1 \ X0)) \quad (8)$$

Assume the following.

$$m1\_subset\_1 \ k5\_numbers \ (k1\_zfmisc\_1 \ k1\_numbers) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.k4\_tarski \ X0 \ X1 = k2\_tarski \ (k2\_tarski \ X0 \ X1) \ (k1\_tarski \ X0) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1\_tarski \ X0)\Leftrightarrow(\forall X2.(X2 \in \ X1)\Leftrightarrow (X2 = \ X0)) \quad (11)$$

Assume the following.

$$k2\_scm\_inst = k8\_mcart\_1 \ k5\_numbers \ k1\_numbers \ (k6\_domain\_1 \ k5\_numbers \ np\_1) \ k5\_numbers \quad (12)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 \ X0)\Leftrightarrow(X0 \in \ k4\_ordinal1) \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.k2\_tarski \ X0 \ X1 = k2\_tarski \ X1 \ X0 \quad (14)$$

Assume the following.

$$\forall X0.(v1\_xboole\_0 \ X0)\Rightarrow(v1\_finset\_1 \ X0) \quad (15)$$

**Theorem 1**  $\forall X0.(v7\_ordinal1 \ X0)\Rightarrow(k4\_tarski \ np\_1 \ X0 \in \ k2\_ami\_2).$