

## t22\_ami\_6

(TMVpU9LAXw4Jwdt4wNDZruPfzcYj6bHegy)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $k3\_amistd\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_2 : \iota$  be given. Let  $k1\_ami\_3 : \iota$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_ordinal1 : \iota \Rightarrow \iota$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  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  $k4\_ordinal1 : \iota$  be given. Let  $k1\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k5\_numbers) \Rightarrow (k3\_amistd\_1 np\_2 k1\_ami\_3 X0 = k2\_tarski X0 (k1\_ordinal1 X0)) \quad (1)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 X0) \Rightarrow (\forall X1.(v7\_ordinal1 X1) \Rightarrow (r1\_xxreal\_0 X0 (k2\_xcmplx\_0 X0 X1))) \quad (2)$$

Assume the following.

$$((v2\_xxreal\_0 np\_1) \wedge (m2\_subset\_1 np\_1 k1\_numbers k5\_numbers)) \wedge ((m1\_subset\_1 np\_1 k5\_numbers) \wedge (m1\_subset\_1 np\_1 k1\_numbers)) \quad (3)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v7\_ordinal1 X0) \wedge (m1\_subset\_1 X1 k5\_numbers)) \Rightarrow (k1\_nat\_1 X0 X1 = k2\_xcmplx\_0 X0 X1) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k2\_tarski X0 X1) \Leftrightarrow (\forall X3.(X3 \in X2) \Leftrightarrow ((X3 = X0) \vee (X3 = X1))) \quad (6)$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(k1\_ordinal1\ X0 = k1\_nat\_1\ X0\ np\_1) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xxreal\_0\ X0)\wedge(v1\_xxreal\_0\ X1))\Rightarrow( \quad (8)$$

$$(r1\_xxreal\_0\ X0\ X1)\vee(r1\_xxreal\_0\ X1\ X0))$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k4\_ordinal1)\Rightarrow(v7\_ordinal1\ X0) \quad (9)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(v1\_xxreal\_0\ X0) \quad (10)$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(v1\_xreal\_0\ X0) \quad (11)$$

**Theorem 1**

$$\forall X0.(m1\_subset\_1\ X0\ k5\_numbers)\Rightarrow((k2\_xcmplx\_0\ X0\ np\_1 \in$$

$$k3\_amistd\_1\ np\_2\ k1\_ami\_3\ X0)\wedge(\forall X1.(m1\_subset\_1\ X1\ k5\_numbers)\Rightarrow$$

$$((X1 \in k3\_amistd\_1\ np\_2\ k1\_ami\_3\ X0)\Rightarrow(r1\_xxreal\_0\ X0\ X1))))$$