t41_mycielsk (TMZMaJZEZWV7s4Jdv1uNasgho25EFC6d98Y)

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Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $m1\_mycielsk : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1\_orders\_2 : \iota \Rightarrow \iota$ be given. Let $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_mycielsk : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_numbers : \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $k6\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5. (X5 \in k2\_xboole\_0\ (k2\_xboole\_0\ (k2\_xboole\_0\ (k2\_xboole\_0\ X0\ X1)\ X2)\ X3)\ X4) \Leftrightarrow (\neg(\neg X5 \in X0) \wedge ((\neg X5 \in X1) \wedge ((\neg X5 \in X2) \wedge ((\neg X5 \in X3) \wedge (\neg X5 \in X4)))))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1\_subset\_1\ X0\ X1) \tag{2}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((v7\_ordinal1\ X0) \wedge (m1\_mycielsk\ X1\ X0)) \Rightarrow (m1\_mycielsk\ (k6\_mycielsk\ X0\ X1)\ (k2\_xcmplx\_0\ (k3\_xcmplx\_0\ np\_\_2\ X0)\ np\_\_1)) \tag{4}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(\forall X1.(m1\_mycielsk\ X1\ X0)\Rightarrow (\forall X2.(m1\_mycielsk\ X2\ (k2\_xcmplx\_0\ (k3\_xcmplx\_0\ np\_\_2\ X0)\ np\_\_1))\Rightarrow((X2 = k6\_mycielsk\ X0\ X1)\Leftrightarrow(u1\_orders\_2\ X2 = k2\_xboole\_0\ (k2\_xboole\_0\ (k2\_xboole\_0\ (u1\_orders\_2\ X1)\ (ReplSep2\ (toset\ (\lambda X3 : \iota.m1\_subset\_1\ X3\ k5\_numbers))\ (\lambda X3 : \iota.\ toset\ (\lambda X4 : \iota.m1\_subset\_1\ X4\ k5\_numbers))\ (\lambda X3 : \iota.\lambda X4 : \iota.k4\_tarski\ X3\ X4 \in u1\_orders\_2\ X1)\ (\lambda X3 : \iota.\lambda X4 : \iota.\ k4\_tarski\ X3\ (k2\_xcmplx\_0\ X4\ X0)))))\ (ReplSep2\ (toset\ (\lambda X3 : \iota.\ m1\_subset\_1\ X3\ k5\_numbers))\ (\lambda X3 : \iota.toset\ (\lambda X4 : \iota.m1\_subset\_1\ X4\ k5\_numbers))\ (\lambda X3 : \iota.\lambda X4 : \iota.k4\_tarski\ X3\ X4 \in u1\_orders\_2\ X1)\ (\lambda X3 : \iota.\lambda X4 : \iota.k4\_tarski\ (k2\_xcmplx\_0\ X3\ X0)\ X4)))\ (k2\_zfmisc\_1\ (k1\_tarski\ (k3\_xcmplx\_0\ np\_\_2\ X0))\ (k6\_subset\_1\ (k3\_xcmplx\_0\ np\_\_2\ X0)\ X0)))\ (k2\_zfmisc\_1\ (k6\_subset\_1\ (k3\_xcmplx\_0\ np\_\_2\ X0)\ X0)\ (k1\_tarski\ (k3\_xcmplx\_0\ np\_\_2\ X0))))))) \tag{5}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Leftrightarrow(X0 \in k4\_ordinal1) \tag{6}$$

Theorem 1

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(\forall X1.(m1\_mycielsk\ X1\ X0)\Rightarrow (\forall X2.(v7\_ordinal1\ X2)\Rightarrow(\forall X3.(v7\_ordinal1\ X3)\Rightarrow((k4\_tarski\ X2\ X3 \in u1\_orders\_2\ X1)\Rightarrow((k4\_tarski\ X2\ (k2\_xcmplx\_0\ X3\ X0) \in u1\_orders\_2\ (k6\_mycielsk\ X0\ X1))\wedge(k4\_tarski\ (k2\_xcmplx\_0\ X2\ X0)\ X3 \in u1\_orders\_2\ (k6\_mycielsk\ X0\ X1)))))))$$