t112_flang_2 (TMUBqrx8fgob985McC2V8Ht4AeQ1ncVq2hH)

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Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k8\_afinsq\_1 : \iota \Rightarrow \iota$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $k6\_flang\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_flang\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_flang\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_flang\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $k4\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_flang\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_flang\_1 : \iota \Rightarrow \iota$ be given. Let $k3\_catalan2 : \iota \Rightarrow \iota$ be given. Let $k9\_setfam\_1 : \iota \Rightarrow \iota$ be given. Let $k4\_afinsq\_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k8\_afinsq\_1\ X0))) \Rightarrow (k2\_flang\_2\ X0\ X1 = k4\_subset\_1\ (k8\_afinsq\_1\ X0)\ (k4\_flang\_1\ X0\ (k2\_flang\_1\ X0))\ X1) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k3\_catalan2\ X0))) \Rightarrow (\forall X2.(v7\_ordinal1\ X2) \Rightarrow (k6\_flang\_1\ X0\ (k7\_flang\_1\ X0\ X1\ X2)\ X1 = k6\_flang\_1\ X0\ X1\ (k7\_flang\_1\ X0\ X1\ X2))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k8\_afinsq\_1\ X0))) \Rightarrow (\forall X2.(v7\_ordinal1\ X2) \Rightarrow (k1\_flang\_2\ X0\ X1\ X2\ (k2\_xcmplx\_0\ X2\ np\_\_1) = k4\_subset\_1\ (k3\_catalan2\ X0)\ (k7\_flang\_1\ X0\ X1\ X2)\ (k7\_flang\_1\ X0\ X1\ (k2\_xcmplx\_0\ X2\ np\_\_1)))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k3\_catalan2\ X0))) \Rightarrow (\forall X2.(v7\_ordinal1\ X2) \Rightarrow (k7\_flang\_1\ X0\ X1\ (k2\_xcmplx\_0\ X2\ np\_\_1) = k6\_flang\_1\ X0\ (k7\_flang\_1\ X0\ X1\ X2)\ X1)) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k3\_catalan2\ X0)))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k3\_catalan2\ X0)))\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k3\_catalan2\ X0)))\Rightarrow((k4\_subset\_1\ (k3\_catalan2\ X0)\ (k6\_flang\_1\ X0\ X1\ X2)\ (k6\_flang\_1\ X0\ X1\ X3) = k6\_flang\_1\ X0\ X1\ (k4\_subset\_1\ (k3\_catalan2\ X0)\ X2\ X3))\wedge(k4\_subset\_1\ (k3\_catalan2\ X0)\ (k6\_flang\_1\ X0\ X2\ X1)\ (k6\_flang\_1\ X0\ X3\ X1) = k6\_flang\_1\ X0\ (k4\_subset\_1\ (k3\_catalan2\ X0)\ X2\ X3)\ X1)))) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k3\_catalan2\ X0)))\Rightarrow((k6\_flang\_1\ X0\ X1\ (k4\_flang\_1\ X0\ (k2\_flang\_1\ X0)) = X1)\wedge(k6\_flang\_1\ X0\ (k4\_flang\_1\ X0\ (k2\_flang\_1\ X0))\ X1 = X1)) \tag{6}$$

Assume the following.

$$\forall X0.k9\_setfam\_1\ X0 = k1\_zfmisc\_1\ X0 \tag{7}$$

Assume the following.

$$\forall X0.k3\_catalan2\ X0 = k8\_afinsq\_1\ X0 \tag{8}$$

Assume the following.

$$\forall X0.k2\_flang\_1\ X0 = k4\_afinsq\_1\ X0 \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k3\_catalan2\ X0)))\wedge(v7\_ordinal1\ X2))\Rightarrow(m1\_subset\_1\ (k7\_flang\_1\ X0\ X1\ X2)\ (k1\_zfmisc\_1\ (k3\_catalan2\ X0))) \tag{10}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k3\_catalan2\ X0))\Rightarrow(m1\_subset\_1\ (k4\_flang\_1\ X0\ X1)\ (k1\_zfmisc\_1\ (k3\_catalan2\ X0))) \tag{11}$$

Assume the following.

$$\forall X0.m1\_subset\_1\ (k2\_flang\_1\ X0)\ (k3\_catalan2\ X0) \tag{12}$$

Theorem 1

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k8\_afinsq\_1\ X0)))\Rightarrow(\forall X2.(v7\_ordinal1\ X2)\Rightarrow(k6\_flang\_1\ X0\ (k2\_flang\_2\ X0\ X1)\ (k7\_flang\_1\ X0\ X1\ X2) = k1\_flang\_2\ X0\ X1\ X2\ (k2\_xcmplx\_0\ X2\ np\_\_1)))$$