

t30_flang_1
(TMSi6J5pHKoQjPzBrxCc4HypfWsTHmxoVYZ)

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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 $k3_catalan2 : \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k2_flang_1 : \iota \Rightarrow \iota$ be given. Let $k7_flang_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k4_flang_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k6_flang_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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 $k1_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 X0))) \Rightarrow (k7_flang_1 X0 X1 k6_numbers = k4_flang_1 X0 (k2_flang_1 X0)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 X0))) \Rightarrow (\forall X2. (v7_ordinal1 X2) \Rightarrow (k7_flang_1 X0 X1 (k2_xcmplx_0 X2 np_1) = k6_flang_1 X0 (k7_flang_1 X0 X1 X2) X1)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 X0))) \Rightarrow (\forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (k3_catalan2 X0))) \Rightarrow ((k2_flang_1 X0 \in k6_flang_1 X0 X1 X2) \Leftrightarrow ((k2_flang_1 X0 \in X1) \wedge (k2_flang_1 X0 \in X2)))) \quad (3)$$

Assume the following.

$$((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \quad (4)$$

Assume the following.

$$\forall X0 : \iota \Rightarrow o. ((X0 k6_numbers) \wedge (\forall X1. (v7_ordinal1 X1) \Rightarrow ((X0 X1) \Rightarrow (X0 (k1_nat_1 X1 np_1)))))) \Rightarrow (\forall X1. (v7_ordinal1 X1) \Rightarrow (X0 X1)) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k3_catalan2 X0))\Rightarrow(k4_flang_1 X0 X1 = k1_tarski X1) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1 X0)\wedge(m1_subset_1 X1 k5_numbers))\Rightarrow(k1_nat_1 X0 X1 = k2_xcmplx_0 X0 X1) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 X0)))\wedge(v7_ordinal1 X2))\Rightarrow(m1_subset_1 (k7_flang_1 X0 X1 X2) (k1_zfmisc_1 (k3_catalan2 X0))) \quad (8)$$

Assume the following.

$$\forall X0.m1_subset_1 (k2_flang_1 X0) (k3_catalan2 X0) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1_tarski X0)\Leftrightarrow(\forall X2.(X2 \in X1)\Leftrightarrow(X2 = X0)) \quad (10)$$

Theorem 1

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 X0)))\Rightarrow(\forall X2.(v7_ordinal1 X2)\Rightarrow((k2_flang_1 X0 \in X1)\Rightarrow(k2_flang_1 X0 \in k7_flang_1 X0 X1 X2)))$$