

t8_flang_2

(TMa9wn8BCUuqxgjhZajReh777HJVefRVrRb)

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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 $k2_flang_1 : \iota \Rightarrow \iota$ be given. Let $k7_flang_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k6_flang_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_flang_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k3_catalan2 : \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 \\ & (k8_afinsq_1 X1))) \Rightarrow (\forall X3. (m1_subset_1 X3 (k1_zfmisc_1 \\ & (k8_afinsq_1 X1))) \Rightarrow (\neg((X0 \in X2) \vee (X0 \in X3)) \wedge ((X0 \neq k2_flang_1 X1) \wedge \\ & (k6_flang_1 X1 X2 X3 = k4_flang_1 X1 (k2_flang_1 X1)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (\neg(X1 \neq k1_xboole_0) \wedge (\forall X2. (m1_subset_1 X2 X0) \Rightarrow (\neg X2 \in X1))) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 \\ & X0))) \Rightarrow (\forall X2. (v7_ordinal1 X2) \Rightarrow (\forall X3. (v7_ordinal1 \\ & X3) \Rightarrow (k7_flang_1 X0 X1 (k2_xcmplx_0 X2 X3) = k6_flang_1 X0 (k7_flang_1 \\ & X0 X1 X2) (k7_flang_1 X0 X1 X3)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 \\ & X0))) \Rightarrow (\forall X2. (v7_ordinal1 X2) \Rightarrow ((k2_flang_1 X0 \in k7_flang_1 \\ & X0 X1 X2) \Rightarrow ((r1_xxreal_0 X2 k6_numbers) \vee (k2_flang_1 X0 \in X1)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 X0)))\Rightarrow(\forall X2.(v7_ordinal1 X2)\Rightarrow((k2_flang_1 X0 \in X1)\Rightarrow(k2_flang_1 X0 \in k7_flang_1 X0 X1 X2))) \quad (5)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow(r1_xxreal_0 k6_numbers X0) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 X0)))\Rightarrow(\forall X2.(v7_ordinal1 X2)\Rightarrow((k7_flang_1 X0 X1 X2 = k1_xboole_0)\Leftrightarrow((\neg r1_xxreal_0 X2 k6_numbers)\wedge(X1 = k1_xboole_0)))) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 X0)))\Rightarrow(k7_flang_1 X0 X1 k6_numbers = k4_flang_1 X0 (k2_flang_1 X0)) \quad (8)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow(\forall X1.(v7_ordinal1 X1)\Rightarrow(\neg (X0 \neq k6_numbers)\wedge(r1_xxreal_0 (k2_xcmplx_0 X1 X0) X1))) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 X0)))\Rightarrow((k6_flang_1 X0 X1 (k4_flang_1 X0 (k2_flang_1 X0)) = X1)\wedge(k6_flang_1 X0 (k4_flang_1 X0 (k2_flang_1 X0)) X1 = X1)) \quad (10)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (11)$$

Assume the following.

$$\forall X0.k3_catalan2 X0 = k8_afinsq_1 X0 \quad (12)$$

Assume the following.

$$v1_xboole_0 k1_xboole_0 \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1 X0)\wedge(v7_ordinal1 X1))\Rightarrow(v7_ordinal1 (k2_xcmplx_0 X0 X1)) \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 X0)))\wedge(v7_ordinal1 X2))\Rightarrow(m1_subset_1 (k7_flang_1 X0 X1 X2) (k1_zfmisc_1 (k3_catalan2 X0))) \quad (15)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0)\Rightarrow(v7_ordinal1 X0) \quad (16)$$

Theorem 1

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k8_afinsq_1 X0)))\Rightarrow(\forall X2.(v7_ordinal1 X2)\Rightarrow((k2_flang_1 X0 \in k7_flang_1 X0 X1 X2)\Leftrightarrow((X2 = k6_numbers)\vee(k2_flang_1 X0 \in X1))))$$