

t38_flang_3
(TMdaSjNYkitoBsk7fSUvjcSX8PnxfHbiapu)

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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 $k1_flang_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k2_flang_1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_flang_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_catalan2 : \iota \Rightarrow \iota$ be given. Let $k4_afinsq_1 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k8_afinsq_1 \\ X0))) \Rightarrow (\forall X2.(v7_ordinal1 X2) \Rightarrow (\forall X3.(v7_ordinal1 \\ X3) \Rightarrow ((r1_xxreal_0 X2 X3) \Rightarrow (r1_tarski (k1_flang_3 X0 X1 X3) (k1_flang_3 \\ X0 X1 X2)))))) \end{aligned} \quad (2)$$

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k8_afinsq_1 \\ & X0)))\Rightarrow(\forall X2.(m1_subset_1 X2 (k8_afinsq_1 X0))\Rightarrow(\forall X3. \\ & (m1_subset_1 X3 (k8_afinsq_1 X0))\Rightarrow(\forall X4.(v7_ordinal1 X4)\Rightarrow \\ & (\forall X5.(v7_ordinal1 X5)\Rightarrow(((X2 \in k1_flang_3 X0 X1 X4)\wedge(X3 \in \\ & k1_flang_3 X0 X1 X5))\Rightarrow(k1_flang_1 X0 X2 X3 \in k1_flang_3 X0 X1 (k2_xcmplx_0 \\ & X4 X5))))))))) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski (k1_tarski X0) X1)\Leftrightarrow(X0 \in X1) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X0 X1)\Rightarrow((v1_xboole_0 X1)\vee (X0 \in X1)) \quad (7)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow(\forall X1.(v7_ordinal1 X1)\Rightarrow(r1_xxreal_0 X0 (k2_xcmplx_0 X0 X1))) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k3_catalan2 X0))\Rightarrow((k1_flang_1 X0 X1 X1 = X1)\Rightarrow(X1 = k1_xboole_0)) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.r1_tarski X0 X0 \quad (10)$$

Assume the following.

$$\forall X0.k3_catalan2 X0 = k8_afinsq_1 X0 \quad (11)$$

Assume the following.

$$\forall X0.k2_flang_1 X0 = k4_afinsq_1 X0 \quad (12)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_relat_1 (k4_afinsq_1 X0))\wedge((v5_relat_1 (k4_afinsq_1 \\ & X0) X0)\wedge((v5_ordinal1 (k4_afinsq_1 X0))\wedge((v1_funct_1 (k4_afinsq_1 \\ & X0))\wedge((v1_xboole_0 (k4_afinsq_1 X0))\wedge(v1_finset_1 (k4_afinsq_1 \\ & X0))))))))) \end{aligned} \quad (13)$$

Assume the following.

$$\forall X0.\neg v1_xboole_0 (k1_tarski X0) \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1\ X0)\wedge(v7_ordinal1\ X1))\Rightarrow(v7_ordinal1\ (k2_xcmplx_0\ X0\ X1)) \quad (15)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1_subset_1\ X1\ (k1_zfmisc_1\ (k8_afinsq_1\ X0)))\wedge(v7_ordinal1\ X2))\Rightarrow(m1_subset_1\ (k1_flang_3\ X0\ X1\ X2)\ (k1_zfmisc_1\ (k8_afinsq_1\ X0))) \quad (16)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1_tarski\ X0)\Leftrightarrow(\forall X2.(X2 \in X1)\Leftrightarrow(X2 = X0)) \quad (17)$$

Theorem 1

$$\forall X0.\forall X1.\forall X2.(m1_subset_1\ X2\ (k1_zfmisc_1\ (k8_afinsq_1\ X1)))\Rightarrow(\forall X3.(v7_ordinal1\ X3)\Rightarrow((k1_flang_3\ X1\ X2\ X3 = k1_tarski\ X0)\Rightarrow(X0 = k2_flang_1\ X1)))$$