

t12_flang_1 (TMHLqBNHgwuEYSSm-
LQmYvzRCi3esQp11GQd)

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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 $k6_flang_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_flang_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

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

Assume the following.

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

Assume the following.

$$v1_xboole_0 k1_xboole_0 \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 X0))) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k3_catalan2 X0)))) \Rightarrow (m1_subset_1 (k6_flang_1 X0 X1 X2) (k1_zfmisc_1 (k3_catalan2 X0))) \quad (4)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Leftrightarrow (\forall X1.\neg X1 \in X0) \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 X0))) \Rightarrow (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k3_catalan2 X0))) \Rightarrow (\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 (k3_catalan2 X0))) \Rightarrow ((X3 = k6_flang_1 X0 X1 X2) \Leftrightarrow (\forall X4.(X4 \in X3) \Leftrightarrow (\exists X5. \\ & (m1_subset_1 X5 (k3_catalan2 X0)) \wedge (\exists X6.(m1_subset_1 X6 (k3_catalan2 X0)) \wedge ((X5 \in X1) \wedge ((X6 \in X2) \wedge (X4 = k1_flang_1 X0 X5 X6)))))))))) \end{aligned} \quad (6)$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 \\ & X0))) \Rightarrow (\forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (k3_catalan2 \\ & X0))) \Rightarrow ((k6_flang_1 X0 X1 X2 = k1_xboole_0) \Leftrightarrow ((X1 = k1_xboole_0) \vee \\ & (X2 = k1_xboole_0)))) \end{aligned}$$