# t60_flang_3 (TMT6dS99CVEsRoGF1q8rsXeJHDvkRa1CuTq)

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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 $k2\_flang\_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8\_flang\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_catalan2 : \iota \Rightarrow \iota$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7\_flang\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k3\_catalan2\ X0))) \Rightarrow (\forall X2.(v7\_ordinal1\ X2) \Rightarrow (r1\_tarski\ (k7\_flang\_1\ X0\ (k8\_flang\_1\ X0\ X1)\ X2)\ (k8\_flang\_1\ X0\ X1))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k3\_catalan2\ X0))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k3\_catalan2\ X0))) \Rightarrow ((r1\_tarski\ X1\ X2) \Rightarrow (r1\_tarski\ (k8\_flang\_1\ X0\ X1)\ (k8\_flang\_1\ X0\ X2)))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k8\_afinsq\_1\ X0))) \Rightarrow (r1\_tarski\ X1\ (k2\_flang\_3\ X0\ X1)) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k8\_afinsq\_1\ X0))) \Rightarrow (r1\_tarski\ (k2\_flang\_3\ X0\ X1)\ (k8\_flang\_1\ X0\ X1)) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k3\_catalan2\ X0))) \Rightarrow ((X1 \in k8\_flang\_1\ X0\ X2) \Leftrightarrow (\exists X3.(v7\_ordinal1\ X3) \wedge (X1 \in k7\_flang\_1\ X0\ X2\ X3))) \tag{5}$$

Assume the following.

$$\forall X0.k3\_catalan2\ X0 = k8\_afinsq\_1\ X0 \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k3\_catalan2\ X0)))\Rightarrow(m1\_subset\_1\ (k8\_flang\_1\ X0\ X1)\ (k1\_zfmisc\_1\ (k3\_catalan2\ X0))) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k8\_afinsq\_1\ X0)))\Rightarrow(m1\_subset\_1\ (k2\_flang\_3\ X0\ X1)\ (k1\_zfmisc\_1\ (k8\_afinsq\_1\ X0))) \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.(r1\_tarski\ X0\ X1)\Leftrightarrow(\forall X2.(X2 \in X0)\Rightarrow(X2 \in X1)) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.(X0 = X1)\Leftrightarrow((r1\_tarski\ X0\ X1)\wedge(r1\_tarski\ X1\ X0)) \tag{10}$$

**Theorem 1**

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k8\_afinsq\_1\ X0)))\Rightarrow((k2\_flang\_3\ X0\ (k8\_flang\_1\ X0\ X1) = k8\_flang\_1\ X0\ X1)\wedge(k8\_flang\_1\ X0\ (k2\_flang\_3\ X0\ X1) = k8\_flang\_1\ X0\ X1))$$