

t6_flang_1
(TMZ1R7iNTD8iEdmBGjqmYXGXEEcswhf6ff8)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_afinsq_1 : \iota \Rightarrow \iota$ be given. Let $k3_catalan2 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ 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. Let $k2_afinsq_1 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_afinsq_1 : \iota \Rightarrow \iota$ be given. Let $m1_catalan2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge ((v5_ordinal1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finset_1 X1)))) \Rightarrow ((X1 = k5_afinsq_1 X0) \Leftrightarrow ((k2_afinsq_1 X1 = np_1) \wedge (k10_xtuple_0 X1 = k1_tarski X0))) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski (k1_tarski X0) X1) \Leftrightarrow (X0 \in X1) \quad (2)$$

Assume the following.

$$\forall X0. k5_afinsq_1 X0 = k3_afinsq_1 X0 \quad (3)$$

Assume the following.

$$\forall X0. (v5_ordinal1 (k3_afinsq_1 X0)) \wedge (v1_finset_1 (k3_afinsq_1 X0)) \quad (4)$$

Assume the following.

$$\forall X0. (v1_relat_1 (k3_afinsq_1 X0)) \wedge (v1_funct_1 (k3_afinsq_1 X0)) \quad (5)$$

Assume the following.

$$\forall X0. m1_catalan2 (k3_catalan2 X0) X0 \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. (v1_relat_1 X1) \Rightarrow ((v5_relat_1 X1 X0) \Leftrightarrow (r1_tarski (k10_xtuple_0 X1) X0)) \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(m1_catalan2\ X1\ X0) \Rightarrow (\forall X2.(m1_subset_1 \\ X2\ X1) \Rightarrow ((v5_ordinal1\ X2) \wedge ((v5_relat_1\ X2\ X0) \wedge (v1_finset_1\ X2)))) \end{aligned} \quad (8)$$

Theorem 1

$$\forall X0.\forall X1.(m1_subset_1\ (k5_afinsq_1\ X0)\ (k3_catalan2\ X1)) \Rightarrow (X0 \in X1)$$