

t19_flang_1
(TMbP92oMHxht2NJSxvf4w9HbRWm5NWLhfDx)

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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 $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_flang_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((r1_tarski X0 X1) \wedge (r1_tarski X0 X2)) \Rightarrow (r1_tarski X0 (k3_xboole_0 X1 X2)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. r1_tarski (k3_xboole_0 X0 X1) X0 \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 \\ & X0))) \Rightarrow (\forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (k3_catalan2 \\ & X0))) \Rightarrow (\forall X3. (m1_subset_1 X3 (k1_zfmisc_1 (k3_catalan2 \\ & X0))) \Rightarrow (\forall X4. (m1_subset_1 X4 (k1_zfmisc_1 (k3_catalan2 \\ & X0))) \Rightarrow (((r1_tarski X1 X2) \wedge (r1_tarski X3 X4)) \Rightarrow (r1_tarski (k6_flang_1 \\ & X0 X1 X3) (k6_flang_1 X0 X2 X4)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. r1_tarski X0 X0 \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 X0)) \Rightarrow (k9_subset_1 X0 X1 X2 = k3_xboole_0 X1 X2) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 X0))\Rightarrow(m1_subset_1 (k9_subset_1 X0 X1 X2) (k1_zfmisc_1 X0)) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 X0)))\wedge(m1_subset_1 X2 (k1_zfmisc_1 (k3_catalan2 X0))))\Rightarrow(m1_subset_1 (k6_flang_1 X0 X1 X2) (k1_zfmisc_1 (k3_catalan2 X0))) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.k3_xboole_0 X0 X1 = k3_xboole_0 X1 X0 \quad (9)$$

Theorem 1

$$\begin{aligned} & \forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 X0)))\Rightarrow(\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k3_catalan2 X0)))\Rightarrow(\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 (k3_catalan2 X0)))\Rightarrow((r1_tarski (k6_flang_1 X0 X1 (k9_subset_1 (k3_catalan2 X0) X2 X3)) (k9_subset_1 (k3_catalan2 X0) (k6_flang_1 X0 X1 X2) (k6_flang_1 X0 X1 X3)))\wedge(r1_tarski (k6_flang_1 X0 (k9_subset_1 (k3_catalan2 X0) X2 X3) X1) (k9_subset_1 (k3_catalan2 X0) (k6_flang_1 X0 X2 X1) (k6_flang_1 X0 X3 X1)))))) \end{aligned}$$