

t59_flang_1

(TMGDQiUvi3td5o82mWP55JNzWr5qqi6XTJV)

October 27, 2020

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 $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8_flang_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_flang_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_flang_1 : \iota \Rightarrow \iota$ be given. Let $k6_flang_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k4_flang_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k1_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k4_afinsq_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 X0))) \Rightarrow (k2_flang_1 X0 \in k8_flang_1 X0 X1) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 X0))) \Rightarrow (\forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (k3_catalan2 X0))) \Rightarrow (\forall X3. (m1_subset_1 X3 (k1_zfmisc_1 (k3_catalan2 X0))) \Rightarrow (((r1_tarski X1 (k8_flang_1 X0 X2)) \wedge (r1_tarski X3 (k8_flang_1 X0 X2)))) \Rightarrow (r1_tarski (k6_flang_1 X0 X1 X3) (k8_flang_1 X0 X2)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski (k1_tarski X0) X1) \Leftrightarrow (X0 \in X1) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 X0))) \Rightarrow (k7_flang_1 X0 X1 k6_numbers = k4_flang_1 X0 (k2_flang_1 X0)) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 X0))) \Rightarrow (\forall X2. (v7_ordinal1 X2) \Rightarrow (k7_flang_1 X0 X1 (k2_xcmplx_0 X2 np_1) = k6_flang_1 X0 (k7_flang_1 X0 X1 X2) X1)) \quad (5)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 \ np_1) \wedge (m2_subset_1 \ np_1 \ k1_numbers \ k5_numbers)) \wedge \\ & ((m1_subset_1 \ np_1 \ k5_numbers) \wedge (m1_subset_1 \ np_1 \ k1_numbers)) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0 : \iota \Rightarrow o. ((X0 \ k6_numbers) \wedge (\forall X1. (v7_ordinal1 \\ & X1) \Rightarrow ((X0 \ X1) \Rightarrow (X0 \ (k1_nat_1 \ X1 \ np_1)))))) \Rightarrow (\forall X1. (v7_ordinal1 \\ & X1) \Rightarrow (X0 \ X1)) \end{aligned} \quad (7)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 \ X1 \ (k3_catalan2 \ X0)) \Rightarrow (k4_flang_1 \\ & X0 \ X1 = k1_tarski \ X1) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0. k2_flang_1 \ X0 = k4_afinsq_1 \ X0 \quad (10)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v7_ordinal1 \ X0) \wedge (m1_subset_1 \ X1 \ k5_numbers)) \Rightarrow \\ & (k1_nat_1 \ X0 \ X1 = k2_xcmplx_0 \ X0 \ X1) \end{aligned} \quad (11)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((m1_subset_1 \ X1 \ (k1_zfmisc_1 \\ & (k3_catalan2 \ X0))) \wedge (v7_ordinal1 \ X2)) \Rightarrow (m1_subset_1 \ (k7_flang_1 \\ & X0 \ X1 \ X2) \ (k1_zfmisc_1 \ (k3_catalan2 \ X0))) \end{aligned} \quad (12)$$

Assume the following.

$$\forall X0. m1_subset_1 \ (k2_flang_1 \ X0) \ (k3_catalan2 \ X0) \quad (13)$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 \ X1 \ (k1_zfmisc_1 \ (k3_catalan2 \\ & X0))) \Rightarrow (\forall X2. (m1_subset_1 \ X2 \ (k1_zfmisc_1 \ (k3_catalan2 \\ & X0))) \Rightarrow (\forall X3. (v7_ordinal1 \ X3) \Rightarrow ((r1_tarski \ X1 \ (k8_flang_1 \\ & X0 \ X2)) \Rightarrow (r1_tarski \ (k7_flang_1 \ X0 \ X1 \ X3) \ (k8_flang_1 \ X0 \ X2)))))) \end{aligned}$$