

t48_flang_2 (TMcuWFWgyvH- DAomNL4eKyWGaBmxMyPpseja)

October 27, 2020

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 $k1_flang_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $np_2 : \iota$ be given. Let $k4_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_catalan2 : \iota \Rightarrow \iota$ be given. Let $k4_flang_1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $np_1 : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_flang_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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 $np_0 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k4_afinsq_1 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $v1_xxreal_0 : \iota \Rightarrow o$ be given. Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k8_afinsq_1 \\ & X0))) \Rightarrow (k1_flang_2 X0 X1 k6_numbers np_1 = k4_subset_1 (k8_afinsq_1 \\ & X0) (k4_flang_1 X0 (k2_flang_1 X0)) X1) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k8_afinsq_1 \\ & X0))) \Rightarrow (\forall X2.(v7_ordinal1 X2) \Rightarrow (\forall X3.(v7_ordinal1 \\ & X3) \Rightarrow ((r1_xxreal_0 X2 (k2_xcmplx_0 X3 np_1)) \Rightarrow (k1_flang_2 X0 X1 \\ & X2 (k2_xcmplx_0 X3 np_1) = k4_subset_1 (k3_catalan2 X0) (k1_flang_2 \\ & X0 X1 X2 X3) (k7_flang_1 X0 X1 (k2_xcmplx_0 X3 np_1)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 X0))) \Rightarrow (k7_flang_1 X0 X1 np_2 = k6_flang_1 X0 X1 X1) \quad (4)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 \ np_1) \wedge (m2_subset_1 \ np_1 \ k1_numbers \ k5_numbers)) \wedge \\ & ((m1_subset_1 \ np_1 \ k5_numbers) \wedge (m1_subset_1 \ np_1 \ k1_numbers)) \end{aligned} \quad (5)$$

Assume the following.

$$v1_xboole_0 \ np_0 \quad (6)$$

Assume the following.

$$k2_xcmplx_0 \ np_1 \ np_1 = np_2 \quad (7)$$

Assume the following.

$$\neg r1_xxreal_0 \ np_2 \ np_0 \quad (8)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (9)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (10)$$

Assume the following.

$$\forall X0. k3_catalan2 \ X0 = k8_afinsq_1 \ X0 \quad (11)$$

Assume the following.

$$\forall X0. k2_flang_1 \ X0 = k4_afinsq_1 \ X0 \quad (12)$$

Assume the following.

$$\begin{aligned} & \forall X0. (v1_relat_1 \ (k4_afinsq_1 \ X0)) \wedge ((v5_relat_1 \ (k4_afinsq_1 \\ & X0) \ X0) \wedge ((v5_ordinal1 \ (k4_afinsq_1 \ X0)) \wedge ((v1_funct_1 \ (k4_afinsq_1 \\ & X0)) \wedge ((v1_xboole_0 \ (k4_afinsq_1 \ X0)) \wedge (v1_finset_1 \ (k4_afinsq_1 \\ & X0)))))) \end{aligned} \quad (13)$$

Assume the following.

$$\forall X0. \forall X1. ((v7_ordinal1 \ X0) \wedge (v7_ordinal1 \ X1)) \Rightarrow (v7_ordinal1 \ (k2_xcmplx_0 \ X0 \ X1)) \quad (14)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_xxreal_0 \ X0) \wedge (v1_xxreal_0 \ X1)) \Rightarrow (r1_xxreal_0 \ X0 \ X1) \vee (r1_xxreal_0 \ X1 \ X0) \quad (15)$$

Assume the following.

$$\forall X0. (m1_subset_1 \ X0 \ k4_ordinal1) \Rightarrow (v7_ordinal1 \ X0) \quad (16)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (v7_ordinal1 X0) \quad (17)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (v1_xxreal_0 X0) \quad (18)$$

Theorem 1

$$\begin{aligned} & \forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k8_afinsq_1 \\ & X0))) \Rightarrow (k1_flang_2 X0 X1 k6_numbers np_2 = k4_subset_1 (k3_catalan2 \\ & X0) (k4_subset_1 (k8_afinsq_1 X0) (k4_flang_1 X0 (k2_flang_1 X0)) \\ & X1) (k6_flang_1 X0 X1 X1)) \end{aligned}$$