

t35_flang_1 (TMSkaWVH-
BCq7p5p2MMEXjAo52HZSKdgGwGT)

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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 $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k2_flang_1 : \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ 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. Let $k1_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_flang_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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 $k9_setfam_1 : \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k8_afinsq_1 : \iota \Rightarrow \iota$ be given. Let $k4_afinsq_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\neg(X0 \neq k6_numbers) \wedge (\forall X1. (v7_ordinal1 X1) \Rightarrow (X0 \neq k1_nat_1 X1 np_1))) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 X0))) \Rightarrow (\forall X2.(v7_ordinal1 X2) \Rightarrow ((k2_flang_1 X0 \in X1) \Rightarrow (k2_flang_1 X0 \in k7_flang_1 X0 X1 X2))) \quad (3)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (r1_xxreal_0 k6_numbers X0) \quad (4)$$

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.

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 \\ & X0))) \Rightarrow (\forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (k3_catalan2 \\ & X0))) \Rightarrow ((k2_flang_1 X0 \in X1) \Rightarrow ((r1_tarski X2 (k6_flang_1 X0 X2 X1)) \wedge \\ & (r1_tarski X2 (k6_flang_1 X0 X1 X2)))))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0. k9_setfam_1 X0 = k1_zfmisc_1 X0 \quad (8)$$

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.

$$\begin{aligned} & \forall X0. \forall X1. ((v7_ordinal1 X0) \wedge (m1_subset_1 X1 k5_numbers)) \Rightarrow \\ & (k1_nat_1 X0 X1 = k2_xcmplx_0 X0 X1) \end{aligned} \quad (13)$$

Assume the following.

$$v1_xboole_0 k1_xboole_0 \quad (14)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((m1_subset_1 X1 (k1_zfmisc_1 \\ & (k3_catalan2 X0))) \wedge (v7_ordinal1 X2)) \Rightarrow (m1_subset_1 (k7_flang_1 \\ & X0 X1 X2) (k1_zfmisc_1 (k3_catalan2 X0))) \end{aligned} \quad (15)$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 \\ & X0))) \Rightarrow (\forall X2. (v7_ordinal1 X2) \Rightarrow ((k2_flang_1 X0 \in X1) \Rightarrow ((r1_xxreal_0 \\ & X2 k6_numbers) \vee (r1_tarski X1 (k7_flang_1 X0 X1 X2)))))) \end{aligned}$$