

t36_flang_3 (TMTyfc-
TUWf73KFC9kRjbGU6WuTrUaz2Awjk)

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 $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_flang_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_flang_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $v3_xxreal_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_catalan2 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k4_flang_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_flang_1 : \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow ((r1_xxreal_0 X0 X1) \Rightarrow ((v1_xboole_0 X0) \vee ((v2_xxreal_0 X1) \vee (v3_xxreal_0 X0)))))) \quad (1)$$

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k8_afinsq_1 X0))) \Rightarrow (\forall X2.(v7_ordinal1 X2) \Rightarrow (\forall X3.(v7_ordinal1 X3) \Rightarrow (r1_tarski (k1_flang_3 X0 (k7_flang_1 X0 X1 X2) X3) (k1_flang_3 X0 X1 (k3_xcmplx_0 X2 X3)))))) \quad (3)$$

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.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k8_afinsq_1 X0))) \Rightarrow (\forall X2.(v7_ordinal1 X2) \Rightarrow (\forall X3.(v7_ordinal1 X3) \Rightarrow ((-r1_xxreal_0 X2 k6_numbers) \Rightarrow (k7_flang_1 X0 (k1_flang_3 X0 X1 X3) X2 = k1_flang_3 X0 X1 (k3_xcmplx_0 X3 X2)))))) \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k8_afinsq_1 \\ & X0))) \Rightarrow (\forall X2. (v7_ordinal1 X2) \Rightarrow ((k1_flang_3 X0 X1 X2 = k4_flang_1 \\ & X0 (k2_flang_1 X0)) \Leftrightarrow ((X1 = k4_flang_1 X0 (k2_flang_1 X0)) \vee ((X2 = \\ & k6_numbers) \wedge (X1 = k1_xboole_0)))))) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. r1_tarski X0 X0 \quad (7)$$

Assume the following.

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

Assume the following.

$$\forall X0. k3_catalan2 X0 = k8_afinsq_1 X0 \quad (9)$$

Assume the following.

$$\exists X0. (v1_xboole_0 X0) \wedge ((v1_xcmplx_0 X0) \wedge ((v1_xxreal_0 X0) \wedge (v1_xreal_0 X0))) \quad (10)$$

Assume the following.

$$v1_xboole_0 k1_xboole_0 \quad (11)$$

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.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((m1_subset_1 X1 (k1_zfmisc_1 \\ & (k8_afinsq_1 X0))) \wedge (v7_ordinal1 X2)) \Rightarrow (m1_subset_1 (k1_flang_3 \\ & X0 X1 X2) (k1_zfmisc_1 (k8_afinsq_1 X0))) \end{aligned} \quad (13)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_xcmplx_0 X0) \wedge (v1_xcmplx_0 X1)) \Rightarrow (k3_xcmplx_0 X0 X1 = k3_xcmplx_0 X1 X0) \quad (14)$$

Assume the following.

$$\forall X0. ((v1_xboole_0 X0) \wedge (v1_xxreal_0 X0)) \Rightarrow ((v1_xxreal_0 X0) \wedge ((\neg v2_xxreal_0 X0) \wedge (\neg v3_xxreal_0 X0))) \quad (15)$$

Assume the following.

$$\forall X0. (v1_xreal_0 X0) \Rightarrow (v1_xcmplx_0 X0) \quad (16)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow((v7_ordinal1\ X0)\wedge(\neg v3_xreal_0\ X0)) \quad (17)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(v1_xreal_0\ X0) \quad (18)$$

Theorem 1

$$\begin{aligned} &\forall X0.\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1\ (k8_afinsq_1 \\ &\quad X0)))\Rightarrow(\forall X2.(v7_ordinal1\ X2)\Rightarrow(\forall X3.(v7_ordinal1 \\ &X3)\Rightarrow(r1_tarski\ (k1_flang_3\ X0\ (k7_flang_1\ X0\ X1\ X2)\ X3)\ (k7_flang_1 \\ &\quad X0\ (k1_flang_3\ X0\ X1\ X3)\ X2)))) \end{aligned}$$