

t17_measure1 (TMNvXNNFzpJMUxD- cSt4sfQt7G2T3Q4dsNcx)

October 27, 2020

Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k9_setfam_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_prob_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $np_1 : \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k13_funct_7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_prob_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4_prob_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k14_funct_7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$m1_subset_1 \ k1_xboole_0 \ k4_ordinal1 \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.k10_xtuple_0 \ (k13_funct_7 \ X0 \ X1 \ X2) = k1_enumset1 \ X0 \ X1 \ X2 \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(v7_ordinal1 \ X3) \Rightarrow ((\neg r1_xxreal_0 \ X3 \ np_1) \Rightarrow (k1_funct_1 \ (k13_funct_7 \ X0 \ X1 \ X2) \ X3 = X2)) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.k1_funct_1 \ (k13_funct_7 \ X0 \ X1 \ X2) \ np_1 = X1 \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.k1_funct_1 \ (k13_funct_7 \ X0 \ X1 \ X2) \ k6_numbers = X0 \tag{5}$$

Assume the following.

$$\begin{aligned} & ((v2_xreal_0 \text{ } np_1) \wedge (m2_subset_1 \text{ } np_1 \text{ } k1_numbers \text{ } k5_numbers)) \wedge \\ & ((m1_subset_1 \text{ } np_1 \text{ } k5_numbers) \wedge (m1_subset_1 \text{ } np_1 \text{ } k1_numbers)) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 \text{ } X0) \wedge ((\neg v1_xboole_0 \text{ } X1) \wedge \\ & (m1_subset_1 \text{ } X1 \text{ } (k1_zfmisc_1 \text{ } X0)))) \Rightarrow (\forall X2. (m2_subset_1 \\ & X2 \text{ } X0 \text{ } X1) \Leftrightarrow (m1_subset_1 \text{ } X2 \text{ } X1)) \end{aligned} \quad (7)$$

Assume the following.

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

Assume the following.

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

Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_relat_1 \text{ } X1) \wedge (v5_relat_1 \text{ } X1 \text{ } X0)) \Rightarrow (\\ & k2_relset_1 \text{ } X0 \text{ } X1 = k10_xtuple_0 \text{ } X1) \end{aligned} \quad (11)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. (((\neg v1_xboole_0 \\ & X1) \wedge ((v1_prob_1 \text{ } X1 \text{ } X0) \wedge ((v4_prob_1 \text{ } X1 \text{ } X0) \wedge (m1_subset_1 \text{ } X1 \text{ } (k1_zfmisc_1 \\ & (k1_zfmisc_1 \text{ } X0)))))) \wedge (((v5_relat_1 \text{ } X2 \text{ } X1) \wedge (v1_funct_1 \text{ } X2) \wedge \\ & ((v1_funct_2 \text{ } X2 \text{ } k5_numbers \text{ } (k9_setfam_1 \text{ } X0)) \wedge (m1_subset_1 \text{ } X2 \\ & (k1_zfmisc_1 \text{ } (k2_zfmisc_1 \text{ } k5_numbers \text{ } (k9_setfam_1 \text{ } X0)))))) \wedge \\ & (m1_subset_1 \text{ } X3 \text{ } k5_numbers))) \Rightarrow (k1_prob_2 \text{ } X0 \text{ } X1 \text{ } X2 \text{ } X3 = k1_funct_1 \\ & X2 \text{ } X3) \end{aligned} \quad (12)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((\neg v1_xboole_0 \text{ } X0) \wedge \\ & ((m1_subset_1 \text{ } X1 \text{ } X0) \wedge ((m1_subset_1 \text{ } X2 \text{ } X0) \wedge (m1_subset_1 \text{ } X3 \text{ } X0)))) \Rightarrow \\ & (k14_funct_7 \text{ } X0 \text{ } X1 \text{ } X2 \text{ } X3 = k13_funct_7 \text{ } X1 \text{ } X2 \text{ } X3) \end{aligned} \quad (13)$$

Assume the following.

$$(\neg v1_xboole_0 \text{ } k4_ordinal1) \wedge (v3_ordinal1 \text{ } k4_ordinal1) \quad (14)$$

Assume the following.

$$\forall X0. v4_prob_1 \text{ } (k1_zfmisc_1 \text{ } X0) \text{ } X0 \quad (15)$$

Assume the following.

$$\forall X0.v1_prob_1 (k1_zfmisc_1 X0) X0 \quad (16)$$

Assume the following.

$$\forall X0.\neg v1_xboole_0 (k1_zfmisc_1 X0) \quad (17)$$

Assume the following.

$$\forall X0.m1_subset_1 (k9_setfam_1 X0) (k1_zfmisc_1 (k1_zfmisc_1 X0)) \quad (18)$$

Assume the following.

$$m1_subset_1 k5_numbers (k1_zfmisc_1 k1_numbers) \quad (19)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((\neg v1_xboole_0 X0) \wedge \\ & ((m1_subset_1 X1 X0) \wedge ((m1_subset_1 X2 X0) \wedge (m1_subset_1 X3 X0)))) \Rightarrow \\ & ((v1_funct_1 (k14_funct_7 X0 X1 X2 X3)) \wedge ((v1_funct_2 (k14_funct_7 \\ & X0 X1 X2 X3) k5_numbers X0) \wedge (m1_subset_1 (k14_funct_7 X0 X1 X2 X3) \\ & (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers X0)))))) \end{aligned} \quad (20)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1) \Rightarrow (v7_ordinal1 X0) \quad (21)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow ((v4_relat_1 X2 X0) \wedge (v5_relat_1 X2 X1)) \quad (22)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (v1_xboole_0 X1)) \quad (23)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (v1_relat_1 X2) \quad (24)$$

Theorem 1

$$\begin{aligned} & \forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (k1_zfmisc_1 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\ & (k1_zfmisc_1 X0)) \Rightarrow (\exists X4.((v1_funct_1 X4) \wedge ((v1_funct_2 \\ & X4 k5_numbers (k9_setfam_1 X0)) \wedge (m1_subset_1 X4 (k1_zfmisc_1 \\ & (k2_zfmisc_1 k5_numbers (k9_setfam_1 X0)))))) \wedge ((k2_relset_1 \\ & (k9_setfam_1 X0) X4 = k1_enumset1 X1 X2 X3) \wedge ((k1_prob_2 X0 (k9_setfam_1 \\ & X0) X4 k6_numbers = X1) \wedge ((k1_prob_2 X0 (k9_setfam_1 X0) X4 np_1 = \\ & X2) \wedge (\forall X5.(m2_subset_1 X5 k1_numbers k5_numbers) \Rightarrow ((\neg r1_xxreal_0 \\ & X5 np_1) \Rightarrow (k1_prob_2 X0 (k9_setfam_1 X0) X4 X5 = X3)))))))))) \end{aligned}$$