

t9_quaterni (TM- bLu6cgRYie2mBSrULxhU57chF2jGUHYYG)

October 27, 2020

Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k5_arytm_3 : \iota$ be given. Let $k11_arytm_3 : \iota$ be given. Let $r3_arytm_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k9_arytm_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k5_arytm_3) \Rightarrow (\forall X1.(m1_subset_1 \\ X1 k5_arytm_3) \Rightarrow (\neg(\neg r3_arytm_3 X1 X0) \wedge (\forall X2.(m1_subset_1 \\ X2 k5_arytm_3) \Rightarrow (\neg(\neg r3_arytm_3 X2 X0) \wedge (\neg r3_arytm_3 X1 X2)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\neg(X0 \in X1) \wedge (v1_xboole_0 X1) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k5_arytm_3) \Rightarrow (\forall X1.(m1_subset_1 \\ X1 k5_arytm_3) \Rightarrow (r3_arytm_3 X0 (k9_arytm_3 X0 X1))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k5_arytm_3) \Rightarrow (\neg(X0 \neq k11_arytm_3) \wedge \\ (\forall X1.(m1_subset_1 X1 k5_arytm_3) \Rightarrow (\neg(\neg r3_arytm_3 X0 X1) \wedge \\ (\neg X1 \in k4_ordinal1)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k5_arytm_3) \Rightarrow (\forall X1.(m1_subset_1 \\ X1 k5_arytm_3) \Rightarrow ((\neg r3_arytm_3 X1 X0) \Leftrightarrow ((r3_arytm_3 X0 X1) \wedge (X0 \neq \\ X1)))))) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k5_arytm_3) \Rightarrow (r3_arytm_3 k11_arytm_3 X0) \quad (7)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k5_arytm_3) \Rightarrow (k9_arytm_3 X0 k11_arytm_3 = X0) \quad (8)$$

Assume the following.

$$\forall X0.(v3_ordinal1 X0) \Rightarrow ((X0 \in k5_arytm_3) \Rightarrow (X0 \in k4_ordinal1)) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (11)$$

Assume the following.

$$k11_arytm_3 = k1_xboole_0 \quad (12)$$

Assume the following.

$$\neg v1_xboole_0 k5_arytm_3 \quad (13)$$

Assume the following.

$$v1_xboole_0 k1_xboole_0 \quad (14)$$

Assume the following.

$$\forall X0.\exists X1.m1_subset_1 X1 X0 \quad (15)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k5_arytm_3) \wedge (m1_subset_1 X1 k5_arytm_3)) \Rightarrow (m1_subset_1 (k9_arytm_3 X0 X1) k5_arytm_3) \quad (16)$$

Assume the following.

$$m1_subset_1 k11_arytm_3 k5_arytm_3 \quad (17)$$

Assume the following.

$$k1_xboole_0 = the (\lambda X0 : \iota.v1_xboole_0 X0) \quad (18)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k5_arytm_3) \wedge (m1_subset_1 X1 k5_arytm_3)) \Rightarrow (k9_arytm_3 X0 X1 = k9_arytm_3 X1 X0) \quad (19)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (v3_ordinal1 X0) \quad (20)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k5_arytm_3)) \Rightarrow (\neg(\exists X1. \\ & (m1_subset_1 X1 k5_arytm_3) \wedge ((X1 \in X0) \wedge (X1 \neq k11_arytm_3))) \wedge (\\ & (\forall X1.(m1_subset_1 X1 k5_arytm_3) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 k5_arytm_3) \Rightarrow (((X1 \in X0) \wedge (r3_arytm_3 X2 X1)) \Rightarrow (X2 \in X0)))) \wedge (\forall X1. \\ & (m1_subset_1 X1 k5_arytm_3) \Rightarrow (\forall X2.(m1_subset_1 X2 k5_arytm_3) \Rightarrow \\ & (\forall X3.(m1_subset_1 X3 k5_arytm_3) \Rightarrow (\forall X4.(m1_subset_1 \\ & X4 k5_arytm_3) \Rightarrow (\forall X5.(m1_subset_1 X5 k5_arytm_3) \Rightarrow (\neg(X1 \in \\ & X0) \wedge ((X2 \in X0) \wedge ((X3 \in X0) \wedge ((X4 \in X0) \wedge ((X5 \in X0) \wedge ((X1 \neq X2) \wedge ((X1 \neq X3) \wedge \\ & ((X1 \neq X4) \wedge ((X1 \neq X5) \wedge ((X2 \neq X3) \wedge ((X2 \neq X4) \wedge ((X2 \neq X5) \wedge ((X3 \neq X4) \wedge (\\ & (X3 \neq X5) \wedge (X4 \neq X5))))))))))))))))))))))))) \end{aligned}$$