

t2_taxonom2
(TMUN4YNmns2PE2nfFPDKhwpvpkvfQmzN1ns)

October 27, 2020

Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_relat_2 : \iota \Rightarrow o$ be given. Let $v8_relat_2 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_eqrel_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((v3_relat_2 X3) \wedge \\ & ((v1_partfun1 X3 X0) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 X0)))) \Rightarrow ((X1 \in k6_eqrel_1 X0 X0 X3 X2) \Leftrightarrow (k4_tarski X1 X2 \in X3)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. (m1_subset_1 X3 (\\ & k1_zfmisc_1 (k2_zfmisc_1 X2 X2))) \Rightarrow ((k4_tarski X0 X1 \in X3) \Rightarrow ((X0 \in \\ & X2) \wedge (X1 \in X2))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((v3_relat_2 X2) \wedge ((v8_relat_2 \\ & X2) \wedge ((v1_partfun1 X2 X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 X0)))))) \Rightarrow (\forall X3. (X3 \in X0) \Rightarrow ((k4_tarski X3 X1 \in X2) \Leftrightarrow (k6_eqrel_1 \\ & X0 X0 X2 X3 = k6_eqrel_1 X0 X0 X2 X1))) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((v1_partfun1 X1 X0) \wedge \\ & ((v3_relat_2 X1) \wedge ((v8_relat_2 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X0)))))) \Rightarrow (\forall X2. \forall X3. \forall X4. (\\ & (X4 \in k6_eqrel_1 X0 X0 X1 X2) \wedge (X4 \in k6_eqrel_1 X0 X0 X1 X3)) \Rightarrow (k6_eqrel_1 \\ & X0 X0 X1 X2 = k6_eqrel_1 X0 X0 X1 X3))) \end{aligned}$$