

t7_roughs_1
(TMVBLo2LhXn4n7s8VqPk7CnXP5hZaH1fnJD)

October 27, 2020

Let $v1_relat_2 : \iota \Rightarrow o$ be given. Let $v3_relat_2 : \iota \Rightarrow o$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $k6_eqrel_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((v3_relat_2 X3) \wedge \\ & ((v1_partfun1 X3 X0) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 X0)))) \Rightarrow ((X1 \in k6_eqrel_1 X0 X0 X3 X2) \Leftrightarrow (k4_tarski X1 X2 \in X3)) \end{aligned} \quad (2)$$

Theorem 1

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((v1_relat_2 X3) \wedge \\ & ((v3_relat_2 X3) \wedge ((v1_partfun1 X3 X0) \wedge (m1_subset_1 X3 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X0)))) \Rightarrow ((X1 \in k6_eqrel_1 X0 X0 X3 X2) \Rightarrow (X2 \in k6_eqrel_1 \\ & X0 X0 X3 X1)) \end{aligned}$$