

t30_toler_1

(TMZc7NmJDoXnvZjacjJ2CSpWWaxavs89rKz)

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 $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_toler_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_toler_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_toler_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_relat_2 X1) \wedge ((v3_relat_2 X1) \wedge ((v1_partfun1 \\ & X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0)))))) \Rightarrow \\ & (\forall X2. \forall X3. \neg(k4_tarski X2 X3 \in X1) \wedge (\forall X4. ((v1_toler_1 \\ & X4 X0 X1) \wedge (m1_toler_1 X4 X0 X1)) \Rightarrow (\neg(X2 \in X4) \wedge (X3 \in X4)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_relat_2 X1) \wedge ((v3_relat_2 X1) \wedge ((v1_partfun1 \\ & X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0)))))) \Rightarrow \\ & (\forall X2. (X2 = k4_toler_1 X0 X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow ((v1_toler_1 \\ & X3 X0 X1) \wedge (m1_toler_1 X3 X0 X1)))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_relat_2 X1) \wedge ((v3_relat_2 X1) \wedge ((v1_partfun1 \\ & X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0)))))) \Rightarrow \\ & (\forall X2. (m1_toler_1 X2 X0 X1) \Leftrightarrow (\forall X3. \forall X4. ((X3 \in \\ & X2) \wedge (X4 \in X2)) \Rightarrow (k4_tarski X3 X4 \in X1))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1))) \Rightarrow (\forall X3. (r1_relset_1 X0 X1 X2 X3) \Leftrightarrow (\forall X4. \\ & (m1_subset_1 X4 X0) \Rightarrow (\forall X5. (m1_subset_1 X5 X1) \Rightarrow ((k4_tarski \\ & X4 X5 \in X2) \Rightarrow (k4_tarski X4 X5 \in X3)))))) \end{aligned} \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. ((v1_relat_2 X1) \wedge ((v3_relat_2 X1) \wedge ((v1_partfun1 \\ & X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0)))))) \Rightarrow \\ & (\forall X2. ((v1_relat_2 X2) \wedge ((v3_relat_2 X2) \wedge ((v1_partfun1 \\ & X2 X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0)))))) \Rightarrow \\ & ((r1_tarSKI (k4_toler_1 X0 X1) (k4_toler_1 X0 X2)) \Rightarrow (r1_relset_1 \\ & X0 X0 X1 X2))) \end{aligned}$$