

t34_toler_1

(TMPizTK86AR1vbeufKbNAinM3Z5SHp2PWwS)

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 $m1_toler_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v8_relat_2 : \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_relat_1 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $r8_relat_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. ((v3_relat_2 X3) \wedge ((v1_partfun1 X3 X0) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0)))))) \Rightarrow ((k4_tarski X1 X2 \in X3) \Rightarrow (k4_tarski X2 X1 \in X3)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((v1_relat_2 X2) \wedge ((v3_relat_2 X2) \wedge ((v1_partfun1 X2 X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0)))))) \Rightarrow (\forall X3. (X3 \in k9_relat_1 X2 X1) \Leftrightarrow (k4_tarski X1 X3 \in X2)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_partfun1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0)))) \Rightarrow (k1_relat_1 X1 = X0) \quad (3)$$

Assume the following.

$$\forall X0. (v1_relat_1 X0) \Rightarrow (\forall X1. (r8_relat_2 X0 X1) \Leftrightarrow (\forall X2. \forall X3. \forall X4. ((X2 \in X1) \wedge ((X3 \in X1) \wedge ((X4 \in X1) \wedge ((k4_tarski X2 X3 \in X0) \wedge (k4_tarski X3 X4 \in X0)))))) \Rightarrow (k4_tarski X2 X4 \in X0)) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_2 X1) \wedge ((v3_relat_2 X1) \wedge ((v1_partfun1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0)))))) \Rightarrow (\forall X2. (m1_toler_1 X2 X0 X1) \Leftrightarrow (\forall X3. \forall X4. ((X3 \in X2) \wedge (X4 \in X2)) \Rightarrow (k4_tarski X3 X4 \in X1))) \quad (5)$$

Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow ((v8_relat_2 X0) \Leftrightarrow (r8_relat_2 X0 (k1_relat_1 X0))) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (v1_relat_1 X2) \quad (7)$$

Theorem 1

$$\begin{aligned} & \forall X0.\forall X1.((v1_relat_2 X1) \wedge ((v3_relat_2 X1) \wedge ((v1_partfun1 \\ & X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0)))))) \Rightarrow \\ & ((\forall X2.(X2 \in X0) \Rightarrow (m1_toler_1 (k9_relat_1 X1 X2) X0 X1)) \Rightarrow (\\ & v8_relat_2 X1)) \end{aligned}$$