

t35_toler_1 (TMVW- pYL8LVoJgv1jnPwRvYUZXHotuW8n82M)

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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 $v8_relat_2 : \iota \Rightarrow o$ be given. Let $v1_toler_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_toler_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ 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.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. ((v1_relat_2 \\ & X4) \wedge ((v3_relat_2 X4) \wedge ((v8_relat_2 X4) \wedge ((v1_partfun1 X4 X0) \wedge \\ & (m1_subset_1 X4 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0)))))) \Rightarrow ((X1 \in \\ & k6_eqrel_1 X0 X0 X4 X2) \wedge (X3 \in k6_eqrel_1 X0 X0 X4 X2)) \Rightarrow (k4_tarski \\ & X1 X3 \in X4)) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_relat_2 X1) \wedge ((v3_relat_2 X1) \wedge ((v1_partfun1 \\ & X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0)))))) \Rightarrow \\ & (\forall X2. (X2 \in X0) \Rightarrow (X2 \in k6_eqrel_1 X0 X0 X1 X2)) \end{aligned} \tag{2}$$

Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. (m1_subset_1 X2 (\\ & k1_zfmisc_1 (k2_zfmisc_1 X0 X1)) \Rightarrow (k6_eqrel_1 X0 X1 X2 X3 = k9_relat_1 \\ & X2 X3)) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v1_relat_2 X1)\wedge((v3_relat_2 X1)\wedge((v1_partfun1 \\ & X1 X0)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0))))))\Rightarrow \\ & (\forall X2.(m1_toler_1 X2 X0 X1)\Rightarrow((v1_toler_1 X2 X0 X1)\Leftrightarrow(\forall X3. \\ & \neg(\neg X3 \in X2)\wedge((X3 \in X0)\wedge(\forall X4.\neg(X4 \in X2)\wedge(\neg k4_tarski X3 X4 \in \\ & X1)))))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v1_relat_2 X1)\wedge((v3_relat_2 X1)\wedge((v1_partfun1 \\ & X1 X0)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0))))))\Rightarrow \\ & (\forall X2.(m1_toler_1 X2 X0 X1)\Leftrightarrow(\forall X3.\forall X4.((X3 \in \\ & X2)\wedge(X4 \in X2))\Rightarrow(k4_tarski X3 X4 \in X1))) \end{aligned} \quad (6)$$

Theorem 1

$$\begin{aligned} & \forall X0.\forall X1.((v1_relat_2 X1)\wedge((v3_relat_2 X1)\wedge((v1_partfun1 \\ & X1 X0)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0))))))\Rightarrow \\ & ((v8_relat_2 X1)\Rightarrow(\forall X2.(X2 \in X0)\Rightarrow((v1_toler_1 (k9_relat_1 \\ & X1 X2) X0 X1)\wedge(m1_toler_1 (k9_relat_1 X1 X2) X0 X1)))) \end{aligned}$$