

t1_toprealc (TMNRSEJA-
JTCgM652pmkmfha55sS3rvYXtPN)

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Let $v1_zfmisc_1 : \iota \Rightarrow o$ be given. Let $r2_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (r2_tarski X0 X1) \Leftrightarrow (\exists X2. (\forall X3. \\ & \neg(X3 \in X0) \wedge (\forall X4. \neg(X4 \in X1) \wedge (k4_tarski X3 X4 \in X2))) \wedge ((\forall X3. \\ & \neg(X3 \in X1) \wedge (\forall X4. \neg(X4 \in X0) \wedge (k4_tarski X4 X3 \in X2))) \wedge (\forall X3. \\ & \forall X4. \forall X5. \forall X6. ((k4_tarski X3 X4 \in X2) \wedge (k4_tarski \\ & X5 X6 \in X2)) \Rightarrow ((X3 = X5) \Leftrightarrow (X4 = X6)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. (v1_zfmisc_1 X0) \Leftrightarrow (\forall X1. \forall X2. ((X1 \in X0) \wedge (X2 \in X0)) \Rightarrow (X1 = X2)) \quad (2)$$

Theorem 1

$$\forall X0. (v1_zfmisc_1 X0) \Rightarrow (\forall X1. (r2_tarski X0 X1) \Rightarrow (v1_zfmisc_1 X1))$$