

t31_relset_1 (TMVppYWBoXPtAXNA- jshU9FFmj3s8v5wFVnw)

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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 $k9_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r2_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. (v1_relat_1 X2) \Rightarrow ((k4_tarski X0 X1 \in X2) \Leftrightarrow (X1 \in k9_relat_1 X2 X0)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. (k4_tarski X0 X1 \in k2_zfmisc_1 X2 X3) \Leftrightarrow ((X0 \in X2) \wedge (X1 \in X3)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (\forall X2. (X2 \in X1) \Rightarrow (X2 \in X0)) \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1))) \Rightarrow (\forall X3. (m1_subset_1 X3 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1))) \Rightarrow ((r2_relset_1 X0 X1 X2 X3) \Leftrightarrow (\forall X4. (\\ & m1_subset_1 X4 X0) \Rightarrow (\forall X5. (m1_subset_1 X5 X1) \Rightarrow ((k4_tarski \\ & X4 X5 \in X2) \Leftrightarrow (k4_tarski X4 X5 \in X3)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (v1_relat_1 X2) \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 X0))) \Rightarrow (\forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 X0))) \Rightarrow ((\forall X3. (X3 \in X0) \Rightarrow (k9_relat_1 X1 X3 = k9_relat_1 X2 \\ & X3)) \Rightarrow (r2_relset_1 X0 X0 X1 X2))) \end{aligned}$$