

t52_relset_2

(TMJQXS5XwYHq9eqjmLJSO8yXbNYV7HYfDfH)

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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 $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k7_relset_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k3_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.(v1_relat_1 X1) \Rightarrow (k10_xtuple_0 (k3_relat_1 X0 X1) = k7_relat_1 X1 (k10_xtuple_0 X0))) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(v1_relat_1 X1) \Rightarrow (r1_tarski (k7_relat_1 X1 X0) (k10_xtuple_0 X1)) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.((m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \wedge (m1_subset_1 X4 (k1_zfmisc_1 (k2_zfmisc_1 X1 X2)))) \Rightarrow (k7_relset_2 X0 X1 X2 X3 X4 = k3_relat_1 X3 X4)) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (k7_relset_1 X0 X1 X2 X3 = k7_relat_1 X2 X3) \quad (4)$$

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

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.(m1_subset_1 X3 (\\ & \quad k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (\forall X4.(m1_subset_1 X4 \\ & \quad (k1_zfmisc_1 (k2_zfmisc_1 X1 X2))) \Rightarrow ((k10_xtuple_0 (k7_relset_2 \\ X0 X1 X2 X3 X4) = k7_relset_1 X1 X2 X4 (k10_xtuple_0 X3)) \wedge (r1_tarski \\ & \quad (k10_xtuple_0 (k7_relset_2 X0 X1 X2 X3 X4) (k10_xtuple_0 X4)))) \end{aligned}$$