

t49_relset_2

(TMdQdBU1hsb9kbKDgDbzcg4t4jdYxBp4pH3)

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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 $k3_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_relset_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 \\ & X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 X0 \\ & X1))) \Rightarrow (k3_subset_1 X1 (k6_relset_2 X0 X1 X2 X3) = k7_relset_1 X0 \\ & X1 (k3_subset_1 (k2_zfmisc_1 X0 X1) X3) X2)) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (k3_subset_1 X0 (k3_subset_1 X0 X1) = X1) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((m1_subset_1 X2 \\ & (k1_zfmisc_1 X0)) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 X1)))) \Rightarrow (m1_subset_1 (k6_relset_2 X0 X1 X2 X3) (k1_zfmisc_1 X1)) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (m1_subset_1 (k3_subset_1 X0 X1) (k1_zfmisc_1 X0)) \quad (4)$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 \\ & X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 X0 \\ & X1))) \Rightarrow (k3_subset_1 X1 (k7_relset_1 X0 X1 X3 X2) = k6_relset_2 X0 \\ & X1 X2 (k3_subset_1 (k2_zfmisc_1 X0 X1) X3))) \end{aligned}$$