

t58_relset_2 (TMWsMucZQbM- pDZhLtGY3P8pNbBgf2KpMm5y)

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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 $k6_relset_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_relset_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k7_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

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

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. r1_tarski (k4_xboole_0 X0 X1) X0 \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (v1_relat_1 X1) \Rightarrow (\forall X2. (v1_relat_1 \\ & X2) \Rightarrow (k7_relat_1 (k3_relat_1 X1 X2) X0 = k7_relat_1 X2 (k7_relat_1 \\ & X1 X0))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. ((m1_subset_1 \\ & X3 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \wedge (m1_subset_1 X4 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X1 X2)))) \Rightarrow (k7_relset_2 X0 X1 X2 X3 X4 = k3_relat_1 X3 \\ & X4) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(k7_relset_1 X0 X1 X2 X3 = k7_relat_1 X2 X3) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0))\Rightarrow(k3_subset_1 X0 (k3_subset_1 X0 X1) = X1) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.v1_relat_1 (k2_zfmisc_1 X0 X1) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.((m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\wedge(m1_subset_1 X4 (k1_zfmisc_1 (k2_zfmisc_1 X1 X2))))\Rightarrow(m1_subset_1 (k7_relset_2 X0 X1 X2 X3 X4) (k1_zfmisc_1 (k2_zfmisc_1 X0 X2))) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(m1_subset_1 (k7_relset_1 X0 X1 X2 X3) (k1_zfmisc_1 X1)) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0))\Rightarrow(k3_subset_1 X0 X1 = k4_xboole_0 X0 X1) \quad (11)$$

Assume the following.

$$\forall X0.(v1_relat_1 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0))\Rightarrow(v1_relat_1 X1)) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(v1_relat_1 X2) \quad (13)$$

Theorem 1

$$\forall X0.\forall X1.\forall X2.\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 X0))\Rightarrow(\forall X4.(m1_subset_1 X4 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(\forall X5.(m1_subset_1 X5 (k1_zfmisc_1 (k2_zfmisc_1 X1 X2))))\Rightarrow(k6_relset_2 X1 X2 (k7_relset_1 X0 X1 X4 X3) X5 = k6_relset_2 X0 X2 X3 (k3_subset_1 (k2_zfmisc_1 X0 X2) (k7_relset_2 X0 X1 X2 X4 (k3_subset_1 (k2_zfmisc_1 X1 X2) X5))))))$$