

t36_relset_2 (TMVWoe- Jqt9W5sbhf5cVoniXPSUyPHzKbVTW)

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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 $k1_xboole_0 : \iota$ be given. Let $k6_relset_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_relset_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k7_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.(m1_subset_1 X3 (\\ & k1_zfmisc_1 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 X1))) \Rightarrow ((X2 \in k6_relset_2 X0 X1 X3 X4) \Rightarrow (\forall X5.(X5 \in X3) \Rightarrow (X2 \in \\ & k1_relset_2 X0 X1 X4 X5)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.(m1_subset_1 X2 (\\ & k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (k1_relset_2 X0 X1 X2 X3 = k9_relat_1 \\ & X2 X3) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xboole_0 X0) \wedge (v1_relat_1 X0)) \Rightarrow (v1_xboole_0 (k7_relat_1 X0 X1)) \quad (4)$$

Assume the following.

$$v1_xboole_0 k1_xboole_0 \quad (5)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Leftrightarrow (\forall X1.\neg X1 \in X0) \quad (6)$$

Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.k9_relat_1 X0 X1 = k7_relat_1 X0 (k1_tarski X1)) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(v1_relat_1 X2) \quad (8)$$

Theorem 1

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 X0))\Rightarrow(\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow((X3 = k1_xboole_0)\Rightarrow((X2 = k1_xboole_0)\vee(k6_relset_2 X0 X1 X2 X3 = k1_xboole_0))))$$