

t15_pua2mss1 (TMRkx- Prow8Vt3X2j64XLyYYzBXu6FTXoqeZ)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_eqrel_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. 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 $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_funct_1 : \iota \Rightarrow o$ be given. Let $m2_pua2mss1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v5_relat_1 X1 X0)) \Rightarrow (k2_relset_1 X0 X1 = k10_xtuple_0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow ((m2_pua2mss1 X1 X0) \Leftrightarrow ((m1_eqrel_1 (k10_xtuple_0 X1) X0) \wedge (v2_funct_1 X1))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (v1_relat_1 X1) \Rightarrow ((v5_relat_1 X1 X0) \Leftrightarrow (r1_tarski (k10_xtuple_0 X1) X0)) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (X0 = X1) \Leftrightarrow ((r1_tarski X0 X1) \wedge (r1_tarski X1 X0)) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow ((v4_relat_1 X2 X0) \wedge (v5_relat_1 X2 X1)) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (v1_relat_1 X2) \quad (6)$$

Theorem 1

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0\ X0) \Rightarrow (\forall X1.(\neg v1_xboole_0\ X1) \Rightarrow \\ & (\forall X2.(m1_eqrel_1\ X2\ X1) \Rightarrow (\forall X3.((v1_funct_1\ X3) \wedge \\ & ((v1_funct_2\ X3\ X0\ X2) \wedge (m1_subset_1\ X3\ (k1_zfmisc_1\ (k2_zfmisc_1 \\ & X0\ X2)))))) \Rightarrow (((r1_tarski\ X2\ (k2_relset_1\ X2\ X3)) \wedge (v2_funct_1\ X3)) \Rightarrow \\ & (m2_pua2mss1\ X3\ X1)))))) \end{aligned}$$