

t17_armstrng (TMLZQjx- TQQYst2JfQXbsMiSwpTm2wNuYzWX)

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Let $k1_relat_1 : \iota \Rightarrow \iota$ be given. Let $k7_armstrng : \iota \Rightarrow \iota$ be given. Let $k8_mcart_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k9_setfam_1 : \iota \Rightarrow \iota$ be given. Let $k2_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_armstrng : \iota \Rightarrow \iota$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. k2_relset_1 (k4_armstrng X0) (k7_armstrng X0) = k8_mcart_1 (k1_zfmisc_1 X0) (k1_zfmisc_1 X0) (k9_setfam_1 X0) (k9_setfam_1 X0) \quad (1)$$

Assume the following.

$$\forall X0. k1_relset_1 (k4_armstrng X0) (k7_armstrng X0) = k8_mcart_1 (k1_zfmisc_1 X0) (k1_zfmisc_1 X0) (k9_setfam_1 X0) (k9_setfam_1 X0) \quad (2)$$

Assume the following.

$$\forall X0. k9_setfam_1 X0 = k1_zfmisc_1 X0 \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v5_relat_1 X1 X0)) \Rightarrow (k2_relset_1 X0 X1 = k10_xtuple_0 X1) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v4_relat_1 X1 X0)) \Rightarrow (k1_relset_1 X0 X1 = k9_xtuple_0 X1) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. k2_xboole_0 X0 X0 = X0 \quad (6)$$

Assume the following.

$$\forall X0.m1_subset_1 (k7_armstrng X0) (k1_zfmisc_1 (k2_zfmisc_1 (k4_armstrng X0) (k4_armstrng X0))) \quad (7)$$

Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (k1_relat_1 X0 = k2_xboole_0 (k9_xtuple_0 X0) (k10_xtuple_0 X0)) \quad (8)$$

Assume the following.

$$\forall X0.k4_armstrng X0 = k8_mcart_1 (k1_zfmisc_1 X0) (k1_zfmisc_1 X0) (k9_setfam_1 X0) (k9_setfam_1 X0) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow ((v4_relat_1 X2 X0) \wedge (v5_relat_1 X2 X1)) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (v1_relat_1 X2) \quad (11)$$

Theorem 1

$$\forall X0.k1_relat_1 (k7_armstrng X0) = k8_mcart_1 (k1_zfmisc_1 X0) (k1_zfmisc_1 X0) (k9_setfam_1 X0) (k9_setfam_1 X0)$$