

t52_armstrng (TMMN-
wXbc3WfWS4d4Ft2DEX1P8BaJ58nt4im)

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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 $k9_setfam_1 : \iota \Rightarrow \iota$ be given. Let $v3_armstrng : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v8_relat_2 : \iota \Rightarrow o$ be given. Let $v4_armstrng : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5_armstrng : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v7_armstrng : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. k9_setfam_1 X0 = k1_zfmisc_1 X0 \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (k9_setfam_1 X0) (k9_setfam_1 X0)))) \Rightarrow (((v8_relat_2 X1) \wedge (v7_armstrng \\ & X1 X0)) \Rightarrow ((v3_armstrng X1 X0) \wedge (v4_armstrng X1 X0))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (k9_setfam_1 X0) (k9_setfam_1 X0)))) \Rightarrow (((v3_armstrng X1 X0) \wedge (\\ & v4_armstrng X1 X0)) \Rightarrow (v7_armstrng X1 X0)) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (k9_setfam_1 X0) (k9_setfam_1 X0)))) \Rightarrow (((v3_armstrng X1 X0) \wedge \\ & ((v8_relat_2 X1) \wedge ((v4_armstrng X1 X0) \wedge (v5_armstrng X1 X0)))) \Rightarrow \\ & ((v8_relat_2 X1) \wedge ((v7_armstrng X1 X0) \wedge (v5_armstrng X1 X0)))) \wedge \\ & (((v8_relat_2 X1) \wedge ((v7_armstrng X1 X0) \wedge (v5_armstrng X1 X0))) \Rightarrow \\ & ((v3_armstrng X1 X0) \wedge ((v8_relat_2 X1) \wedge ((v4_armstrng X1 X0) \wedge (\\ & v5_armstrng X1 X0)))))) \end{aligned}$$