

t62_flang_3 (TM-
NiWN3X3Es8HhGerwZQYv2hsuT57xuRGXw)

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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 $k8_afinsq_1 : \iota \Rightarrow \iota$ be given. Let $k2_flang_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_catalan2 : \iota \Rightarrow \iota$ be given. Let $k8_flang_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_flang_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_setfam_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 X0))) \Rightarrow (k8_flang_1 X0 (k8_flang_1 X0 X1) = k8_flang_1 X0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k8_afinsq_1 X0))) \Rightarrow ((k2_flang_3 X0 (k8_flang_1 X0 X1) = k8_flang_1 X0 X1) \wedge (k8_flang_1 X0 (k2_flang_3 X0 X1) = k8_flang_1 X0 X1)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k8_afinsq_1 X0))) \Rightarrow (k2_flang_3 X0 X1 = k6_flang_1 X0 (k8_flang_1 X0 X1) X1) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 X0))) \Rightarrow (\forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (k3_catalan2 X0))) \Rightarrow (\forall X3. (m1_subset_1 X3 (k1_zfmisc_1 (k3_catalan2 X0))) \Rightarrow (k6_flang_1 X0 (k6_flang_1 X0 X1 X2) X3 = k6_flang_1 X0 X1 (k6_flang_1 X0 X2 X3)))) \quad (4)$$

Assume the following.

$$\forall X0. k9_setfam_1 X0 = k1_zfmisc_1 X0 \quad (5)$$

Assume the following.

$$\forall X0. k3_catalan2 X0 = k8_afinsq_1 X0 \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 X0)))\Rightarrow(m1_subset_1 (k8_flang_1 X0 X1) (k1_zfmisc_1 (k3_catalan2 X0))) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k8_afinsq_1 X0)))\Rightarrow(m1_subset_1 (k2_flang_3 X0 X1) (k1_zfmisc_1 (k8_afinsq_1 X0))) \quad (8)$$

Theorem 1

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k8_afinsq_1 X0)))\Rightarrow(k2_flang_3 X0 (k2_flang_3 X0 X1) = k2_flang_3 X0 X1)$$