

t6_binari_2

(TMJtsDV7XXgGWr2GasKL3vsaPTRe9Rh7C4b)

October 27, 2020

Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k7_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_margrel1 : \iota$ be given. Let $k1_binari_2 : \iota \Rightarrow \iota$ be given. Let $k7_margrel1 : \iota$ be given. Let $k8_margrel1 : \iota$ be given. Let $k2_xboolean : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k15_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k14_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_card_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$k8_margrel1 = k2_xboolean \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. \forall X4. ((m1_subset_1 X3 X0) \wedge (m1_subset_1 X4 X0)) \Rightarrow (k15_funcop_1 X0 X1 X2 X3 X4 = k14_funcop_1 X1 X2 X3 X4) \tag{2}$$

Assume the following.

$$m1_subset_1 k8_margrel1 k6_margrel1 \tag{3}$$

Assume the following.

$$m1_subset_1 k7_margrel1 k6_margrel1 \tag{4}$$

Assume the following.

$$\forall X0. (v7_ordinal1 X0) \Rightarrow ((v3_card_1 (k1_binari_2 X0) X0) \wedge (m2_finseq_1 (k1_binari_2 X0) k6_margrel1)) \tag{5}$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. ((X0 = X1) \Rightarrow (k14_funcop_1 X0 X1 X2 X3 = X2)) \wedge ((X0 \neq X1) \Rightarrow (k14_funcop_1 X0 X1 X2 X3 = X3)) \tag{6}$$

Assume the following.

$$k2_xboolean = np_1 \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.((v3_card_1 X1 X0) \wedge (\\ m2_finseq_1 X1 k6_margrel1)) \Rightarrow ((X1 = k1_binari_2 X0) \Leftrightarrow (\forall X2. \\ (v7_ordinal1 X2) \Rightarrow ((X2 \in k2_finseq_1 X0) \Rightarrow (k7_partfun1 k6_margrel1 \\ X1 X2 = k15_funcop_1 k6_margrel1 X2 np_1 k8_margrel1 k7_margrel1)))))) \end{aligned} \quad (8)$$

Theorem 1

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((\\ X1 \in k2_finseq_1 X0) \Rightarrow ((X1 = np_1) \vee (k7_partfun1 k6_margrel1 (k1_binari_2 \\ X0) X1 = k7_margrel1)))) \end{aligned}$$