

l1_binari_2

(TMaxSzfcquMCgTFTTs1VrXLCqoCDpr5SQvwc)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v3_card_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_margrel1 : \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k7_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((\\ & X0 \in k2_finseq_1 X1) \Leftrightarrow ((r1_xxreal_0 np_1 X0) \wedge (r1_xxreal_0 X0 X1)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(m2_finseq_1 X1 X0) \Rightarrow \\ & (\forall X2.(m2_finseq_1 X2 X0) \Rightarrow (((k3_finseq_1 X1 = k3_finseq_1 \\ & X2) \wedge (\forall X3.(v7_ordinal1 X3) \Rightarrow (((r1_xxreal_0 np_1 X3) \wedge (\\ & r1_xxreal_0 X3 (k3_finseq_1 X1))) \Rightarrow (k7_partfun1 X0 X1 X3 = k7_partfun1 \\ & X0 X2 X3)))) \Rightarrow (X1 = X2)))) \end{aligned} \quad (2)$$

Assume the following.

$$\neg v1_xboole_0 k6_margrel1 \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.((v3_card_1 X1 X0) \wedge (\\ & m2_finseq_1 X1 k6_margrel1)) \Rightarrow (\forall X2.((v3_card_1 X2 X0) \wedge \\ & (m2_finseq_1 X2 k6_margrel1)) \Rightarrow (((k3_finseq_1 X1 = X0) \wedge ((k3_finseq_1 \\ & X2 = X0) \wedge (\forall X3.(v7_ordinal1 X3) \Rightarrow ((X3 \in k2_finseq_1 X0) \Rightarrow (\\ & k7_partfun1 k6_margrel1 X1 X3 = k7_partfun1 k6_margrel1 X2 X3)))))) \Rightarrow \\ & (X1 = X2)))) \end{aligned}$$