

t107_finseq_6

(TMTsm5Ryz7zfeyPWqN7owXSWBBad3h48DPH)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_zfmisc_1 : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k12_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_card_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((v3_card_1 X1 np_1) \wedge \\ & (m2_finseq_1 X1 X0)) \Rightarrow (\exists X2.(m1_subset_1 X2 X0) \wedge (X1 = k12_finseq_1 \\ & \quad X0 X2))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.((\neg v1_xboole_0 X0) \wedge (v1_zfmisc_1 X0)) \Rightarrow (v3_card_1 X0 np_1) \tag{2}$$

Theorem 1

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((v1_zfmisc_1 X1) \wedge \\ & (m2_finseq_1 X1 X0)) \Rightarrow (\neg(\neg v1_xboole_0 X1) \wedge (\forall X2.(m1_subset_1 \\ & \quad X2 X0) \Rightarrow (X1 \neq k12_finseq_1 X0 X2)))) \end{aligned}$$