

l4_rearran1 (TMH- mQUNP4BDJivDHUTcmKVfFawfaS1RvK8j)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k4_finseq_1 : \iota \Rightarrow \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0 : \iota \Rightarrow \iota. \forall X1. \exists X2. ((v1_relat_1 X2) \wedge (\\ & (v1_funct_1 X2) \wedge (v1_finseq_1 X2))) \wedge ((k3_finseq_1 X2 = X1) \wedge (\forall X3. \\ & (v7_ordinal1 X3) \Rightarrow ((X3 \in k4_finseq_1 X2) \Rightarrow (k1_funct_1 X2 X3 = X0 X3)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. (m2_subset_1 X0 k1_numbers k5_numbers) \Rightarrow (\forall X1. \\ & (\neg v1_xboole_0 X1) \Rightarrow (\forall X2. (m2_finseq_1 X2 X1) \Rightarrow (((r1_xxreal_0 \\ & np_1 X0) \wedge (r1_xxreal_0 X0 (k3_finseq_1 X2))) \Rightarrow (m1_subset_1 (k1_funct_1 \\ & X2 X0) X1)))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \neg v1_xboole_0 (k1_zfmisc_1 X0) \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow \\ & (m2_subset_1 (k3_finseq_1 X0) k1_numbers k5_numbers) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0. (v1_finset_1 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (v1_finset_1 X1)) \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0) \wedge (v1_finset_1 X0)) \Rightarrow (\forall X1. \\ & (m2_finseq_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 \\ & k5_numbers) \Rightarrow (((r1_xxreal_0 np_1 X2) \wedge (r1_xxreal_0 X2 (k3_finseq_1 \\ & X1))) \Rightarrow (v1_finset_1 (k1_funct_1 X1 X2)))))) \end{aligned}$$