

t28_hallmar1 (TMbTTYMc-
CQA44RPNvPugwB5t7swCXbX2571)

October 27, 2020

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 $m2_hallmar1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_hallmar1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_finseq_1 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_funct_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1_finseq_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (\forall X2. (m2_hallmar1 X2 X0 X1) \Rightarrow (m2_finseq_1 X2 (k1_zfmisc_1 X0))) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m2_finseq_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (\forall X2. \\ & (m2_finseq_1 X2 (k1_zfmisc_1 X0)) \Rightarrow ((m2_hallmar1 X2 X0 X1) \Leftrightarrow ((k4_finseq_1 \\ & X2 = k4_finseq_1 X1) \wedge (\forall X3. (m1_subset_1 X3 k5_numbers) \Rightarrow \\ & ((X3 \in k4_finseq_1 X1) \Rightarrow (r1_tarski (k1_funct_1 X2 X3) (k1_funct_1 \\ & X1 X3))))))) \quad (3) \end{aligned}$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. (v1_finset_1 X0) \Rightarrow (\forall X1. (m2_finseq_1 X1 (k1_zfmisc_1 \\ & X0)) \Rightarrow (\forall X2. (r1_hallmar1 X0 X1 X2) \Leftrightarrow (\exists X3. (m2_finseq_1 \\ & X3 X0) \wedge ((X3 = X2) \wedge ((k4_finseq_1 X1 = k4_finseq_1 X3) \wedge (\forall X4. \\ & (m1_subset_1 X4 k5_numbers) \Rightarrow ((X4 \in k4_finseq_1 X3) \Rightarrow (k1_funct_1 \\ & X3 X4 \in k1_funct_1 X1 X4)))) \wedge (v2_funct_1 X3)))))) \quad (5) \end{aligned}$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0 X0) \wedge (v1_finset_1 X0)) \Rightarrow (\forall X1. \\ & ((\neg v1_xboole_0 X1) \wedge (m2_finseq_1 X1 (k1_zfmisc_1 X0))) \Rightarrow (\forall X2. \\ & \forall X3.(m2_hallmar1 X3 X0 X1) \Rightarrow ((r1_hallmar1 X0 X3 X2) \Rightarrow (r1_hallmar1 \\ & X0 X1 X2)))) \end{aligned}$$