

t19_hallmar1
(TMTiyvomghfS2vK4LqUQmjP9fU6wErQTopE)

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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 $m1_hallmar1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_hallmar1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_finseq_1 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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.

$$\forall X0. \forall X1. \forall X2. ((m1_finseq_1 X1 (k1_zfmisc_1 X0)) \wedge (m1_subset_1 X2 k5_numbers)) \Rightarrow (\forall X3. (m1_hallmar1 X3 X0 X1 X2) \Rightarrow (m2_finseq_1 X3 (k1_zfmisc_1 X0))) \quad (2)$$

Assume the following.

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

Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 k5_numbers) \Rightarrow (\forall X3. (m2_finseq_1 X3 (k1_zfmisc_1 X0)) \Rightarrow ((m1_hallmar1 X3 X0 X1 X2) \Leftrightarrow ((k4_finseq_1 X3 = k4_finseq_1 X1) \wedge ((\forall X4. (m1_subset_1 X4 k5_numbers) \Rightarrow ((X4 \in k4_finseq_1 X1) \Rightarrow ((X4 = X2) \vee (k1_funct_1 X1 X4 = k1_funct_1 X3 X4)))) \wedge (r1_tarski (k1_funct_1 X3 X2) (k1_funct_1 X1 X2))))))) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. (X0 = X1) \Leftrightarrow ((r1_tarski X0 X1) \wedge (r1_tarski X1 X0)) \quad (5)$$

Theorem 1

$$\forall X0.(v1_finset_1 X0) \Rightarrow (\forall X1.(m2_finseq_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 k5_numbers) \Rightarrow (\forall X3.(m1_hallmar1 X3 X0 X1 X2) \Rightarrow (m2_hallmar1 X3 X0 X1))))$$