

t11_hallmar1
(TMQmvtgAZqhHvQajKHecdkZP956ZV8tFAon)

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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 $k4_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_card_1 : \iota \Rightarrow \iota$ be given. Let $k2_hallmar1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_card_1 : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_finset_1 X0) \Rightarrow (\forall X1.(v1_finset_1 X1) \Rightarrow ((r1_tarski X1 X0) \Rightarrow (k5_card_1 (k6_subset_1 X0 X1) = k6_xcmplx_0 (k5_card_1 X0) (k5_card_1 X1)))) \quad (1)$$

Assume the following.

$$\forall X0.(k1_card_1 X0 = np_1) \Leftrightarrow (\exists X1.X0 = k1_tarski X1) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski (k1_tarski X0) X1) \Leftrightarrow (X0 \in X1) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (4)$$

Assume the following.

$$\forall X0.(v1_finset_1 X0) \Rightarrow (k5_card_1 X0 = k1_card_1 X0) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v1_finset_1 X0) \wedge ((m1_finseq_1 X1 (k1_zfmisc_1 X0)) \wedge (m1_subset_1 X2 k5_numbers))) \Rightarrow (v1_finset_1 (k1_funct_1 X1 X2)) \quad (6)$$

Assume the following.

$$\forall X0.v1_finset_1 (k1_tarski X0) \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((v1_finset_1 X0) \wedge \\ & ((m1_finseq_1 X1 (k1_zfmisc_1 X0)) \wedge (m1_subset_1 X2 k5_numbers))) \Rightarrow \\ & (m2_finseq_1 (k2_hallmar1 X0 X1 X2 X3) (k1_zfmisc_1 X0)) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_finset_1 X0) \Rightarrow (\forall X1.(m2_finseq_1 X1 (k1_zfmisc_1 \\ & X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 k5_numbers) \Rightarrow (\forall X3.\forall X4. \\ & (m2_finseq_1 X4 (k1_zfmisc_1 X0)) \Rightarrow ((X4 = k2_hallmar1 X0 X1 X2 X3) \Leftrightarrow \\ & ((k4_finseq_1 X4 = k4_finseq_1 X1) \wedge (\forall X5.(m1_subset_1 X5 \\ & k5_numbers) \Rightarrow ((X5 \in k4_finseq_1 X4) \Rightarrow (((X2 = X5) \Rightarrow (k1_funct_1 X4 \\ & X5 = k6_subset_1 (k1_funct_1 X1 X5) (k1_tarski X3))) \wedge ((X2 \neq X5) \Rightarrow \\ & (k1_funct_1 X4 X5 = k1_funct_1 X1 X5)))))))))) \end{aligned} \quad (9)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_finset_1 X0) \Rightarrow (\forall X1.(m2_finseq_1 X1 (k1_zfmisc_1 \\ & X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 k5_numbers) \Rightarrow (\forall X3.((\\ & X2 \in k4_finseq_1 X1) \wedge (X3 \in k1_funct_1 X1 X2)) \Rightarrow (k5_card_1 (k1_funct_1 \\ & (k2_hallmar1 X0 X1 X2 X3) X2) = k6_xcmplx_0 (k5_card_1 (k1_funct_1 \\ & X1 X2)) np_1)))) \end{aligned}$$