

t4_finseq_7

(TMGbMx7J8DYm8XBWMEpuMsqvcUaxgWnxKAB)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k4_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k2_rfinseq : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.(v7_ordinal1\ X1) \Rightarrow (\forall X2. \\ & \forall X3.(m2_finseq_1\ X3\ X2) \Rightarrow ((X0 \in k4_finseq_1\ (k2_rfinseq \\ & X2\ X1\ X3)) \Rightarrow (k7_partfun1\ X2\ (k2_rfinseq\ X2\ X1\ X3)\ X0 = k7_partfun1 \\ & X2\ X3\ (k2_xcmplx_0\ X1\ X0)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.(v7_ordinal1\ X1) \Rightarrow (\forall X2. \\ & \forall X3.(m2_finseq_1\ X3\ X2) \Rightarrow ((X0 \in k4_finseq_1\ (k2_rfinseq \\ & X2\ X1\ X3)) \Rightarrow (k2_xcmplx_0\ X1\ X0 \in k4_finseq_1\ X3)))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1\ X1\ X0) \Leftrightarrow (m1_finseq_1\ X1\ X0) \tag{3}$$

Assume the following.

$$\forall X0.((v1_relat_1\ X0) \wedge ((v1_funct_1\ X0) \wedge (v1_finseq_1\ X0))) \Rightarrow (k4_finseq_1\ X0 = k9_xtuple_0\ X0) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1\ X1\ X0) \Rightarrow ((v1_relat_1\ X1) \wedge (v1_funct_1\ X1) \wedge (v1_finseq_1\ X1)) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v7_ordinal1\ X1) \wedge (m1_finseq_1\ X2\ X0)) \Rightarrow (m2_finseq_1\ (k2_rfinseq\ X0\ X1\ X2)\ X0) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X1)\wedge((v5_relat_1 X1 X0)\wedge(v1_funct_1 X1)))\Rightarrow(\forall X2.(X2 \in k9_xtuple_0 X1)\Rightarrow(k7_partfun1 X0 X1 X2 = k1_funct_1 X1 X2)) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0)\Rightarrow(v5_relat_1 X1 X0) \quad (8)$$

Theorem 1

$$\forall X0.(\neg v1_xboole_0 X0)\Rightarrow(\forall X1.(m2_finseq_1 X1 X0)\Rightarrow(\forall X2.(v7_ordinal1 X2)\Rightarrow(\forall X3.(v7_ordinal1 X3)\Rightarrow(X2 \in k4_finseq_1 (k2_rfinseq X0 X3 X1))\Rightarrow(k1_funct_1 (k2_rfinseq X0 X3 X1) X2 = k1_funct_1 X1 (k2_xcmplx_0 X3 X2))))))$$