

t15_algseq_1

(TMdsn4hXiAqphoX4wSNzZLBWM3yWtfVNpYc)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l2_struct_0 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v1_algseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r2_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_algseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Let $k2_algseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k1_algseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k7_card_1 : \iota \Rightarrow \iota$ be given. Let $k6_card_1 : \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (l2_struct_0 X0)) \Rightarrow (\forall X1. \\ & ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 k5_numbers (u1_struct_0 X0)) \wedge \\ & ((v1_algseq_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k5_numbers (u1_struct_0 X0)))))) \Rightarrow ((r2_funct_2 k5_numbers (\\ & u1_struct_0 X0) X1 (k3_algseq_1 X0 (k4_struct_0 X0))) \Leftrightarrow (k1_algseq_1 \\ & X0 X1 = k6_numbers))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (k7_card_1 X0 = k6_card_1 X0) \tag{2}$$

Assume the following.

$$k6_numbers = k1_xboole_0 \tag{3}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(((\neg v2_struct_0 X0) \wedge (l2_struct_0 X0)) \wedge \\ & ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 k5_numbers (u1_struct_0 X0)) \wedge \\ & ((v1_algseq_1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & k5_numbers (u1_struct_0 X0)))))) \Rightarrow (m1_subset_1 (k1_algseq_1 \\ & X0 X1) k5_numbers) \end{aligned} \tag{5}$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(k6_card_1\ X0 = X0) \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0\ X0)\wedge(l2_struct_0\ X0))\Rightarrow(\forall X1. \\ ((v1_funct_1\ X1)\wedge((v1_funct_2\ X1\ k5_numbers\ (u1_struct_0\ X0))\wedge \\ ((v1_algseq_1\ X1\ X0)\wedge(m1_subset_1\ X1\ (k1_zfmisc_1\ (k2_zfmisc_1 \\ k5_numbers\ (u1_struct_0\ X0))))))\Rightarrow(k2_algseq_1\ X0\ X1 = k7_card_1 \\ (k1_algseq_1\ X0\ X1))) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k4_ordinal1)\Rightarrow(v7_ordinal1\ X0) \quad (8)$$

Theorem 1

$$\begin{aligned} \forall X0.((\neg v2_struct_0\ X0)\wedge(l2_struct_0\ X0))\Rightarrow(\forall X1. \\ ((v1_funct_1\ X1)\wedge((v1_funct_2\ X1\ k5_numbers\ (u1_struct_0\ X0))\wedge \\ ((v1_algseq_1\ X1\ X0)\wedge(m1_subset_1\ X1\ (k1_zfmisc_1\ (k2_zfmisc_1 \\ k5_numbers\ (u1_struct_0\ X0))))))\Rightarrow((r2_funct_2\ k5_numbers\ (\\ u1_struct_0\ X0)\ X1\ (k3_algseq_1\ X0\ (k4_struct_0\ X0)))\Leftrightarrow(k2_algseq_1 \\ X0\ X1 = k1_xboole_0))) \end{aligned}$$