

t17_algstr_4
(TMcNygxqkDjiCDmJkfiCgh9Q3icev4zGyGQ)

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Let $k11_algstr_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_setfam_1 : \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ 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 $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $k10_algstr_4 : \iota \Rightarrow \iota$ be given. Let $k1_yellow_6 : \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_2 : \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k6_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_card_3 : \iota \Rightarrow \iota$ be given. Let $k2_card_3 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 \ np_1) \wedge (m2_subset_1 \ np_1 \ k1_numbers \ k5_numbers)) \wedge \\ & ((m1_subset_1 \ np_1 \ k5_numbers) \wedge (m1_subset_1 \ np_1 \ k1_numbers)) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. k9_setfam_1 \ X0 = k1_zfmisc_1 \ X0 \quad (2)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((\neg v1_xboole_0 \ X0) \wedge \\ & (((v1_funct_1 \ X2) \wedge ((v1_funct_2 \ X2 \ X0 \ X1) \wedge (m1_subset_1 \ X2 \ (k1_zfmisc_1 \\ & (k2_zfmisc_1 \ X0 \ X1)))))) \wedge (m1_subset_1 \ X3 \ X0))) \Rightarrow (k3_funct_2 \ X0 \\ & \quad X1 \ X2 \ X3 = k1_funct_1 \ X2 \ X3) \end{aligned} \quad (4)$$

Assume the following.

$$(\neg v1_xboole_0 \ k4_ordinal1) \wedge (v3_ordinal1 \ k4_ordinal1) \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_funct_1 (k10_algstr_4 X0) \wedge ((v1_funct_2 (k10_algstr_4 \\ & X0) k5_numbers (k9_setfam_1 (k1_yellow_6 (k2_xboole_0 X0 k5_numbers)))) \wedge \\ & (m1_subset_1 (k10_algstr_4 X0) (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers \\ & (k9_setfam_1 (k1_yellow_6 (k2_xboole_0 X0 k5_numbers))))))) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(v7_ordinal1 X1) \Rightarrow (k11_algstr_4 X0 X1 = k1_funct_1 (k10_algstr_4 X0) X1) \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v1_funct_1 X1) \wedge ((v1_funct_2 X1 k5_numbers \\ & (k9_setfam_1 (k1_yellow_6 (k2_xboole_0 X0 k5_numbers)))) \wedge (m1_subset_1 \\ & X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers (k9_setfam_1 (k1_yellow_6 \\ & (k2_xboole_0 X0 k5_numbers))))))) \Rightarrow ((X1 = k10_algstr_4 X0) \Leftrightarrow (\\ & (k3_funct_2 k5_numbers (k9_setfam_1 (k1_yellow_6 (k2_xboole_0 \\ & X0 k5_numbers))) X1 k6_numbers = k1_xboole_0) \wedge ((k3_funct_2 k5_numbers \\ & (k9_setfam_1 (k1_yellow_6 (k2_xboole_0 X0 k5_numbers))) X1 np_1 = \\ & X0) \wedge (\forall X2.(v7_ordinal1 X2) \Rightarrow (\neg(r1_xreal_0 np_2 X2) \wedge \\ & \forall X3.((v1_relat_1 X3) \wedge ((v1_funct_1 X3) \wedge (v1_finseq_1 X3))) \Rightarrow \\ & (\neg(k3_finseq_1 X3 = k6_xcmplx_0 X2 np_1) \wedge ((\forall X4.(v7_ordinal1 \\ & X4) \Rightarrow (((r1_xreal_0 np_1 X4) \wedge (r1_xreal_0 X4 (k6_xcmplx_0 X2 \\ & np_1))) \Rightarrow (k1_funct_1 X3 X4 = k2_zfmisc_1 (k1_funct_1 X1 X4) (k1_funct_1 \\ & X1 (k6_xcmplx_0 X2 X4)))))) \wedge (k1_funct_1 X1 X2 = k3_card_3 (k2_card_3 \\ & X3)))))))))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1) \Rightarrow (v7_ordinal1 X0) \quad (9)$$

Theorem 1 $\forall X0.k11_algstr_4 X0 np_1 = X0.$