

t19_scmpds_6

(TMF76bzwedbZ1AUw8UGswarbQ425zt9JyyL)

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Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_scmpds_6 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_scmpds_2 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_afinsq_1 : \iota \Rightarrow o$ be given. Let $v5_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $k5_afinsq_1 : \iota \Rightarrow \iota$ be given. Let $k1_afinsq_1 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $l1_compos_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_compos_1 : \iota \Rightarrow \iota$ be given. Let $k9_compos_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_afinsq_1 : \iota \Rightarrow \iota$ be given. Let $l1_extpro_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_memstr_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_scmpds_2 : \iota$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_extpro_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_2 : \iota$ be given. Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 X0) \wedge ((\neg v1_xboole_0 X0) \wedge (v1_afinsq_1 X0)))))) \Rightarrow (k6_numbers \in k9_xtuple_0 X0) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge ((v5_ordinal1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finset_1 X1)))) \Rightarrow ((X1 = k5_afinsq_1 X0) \Leftrightarrow ((k1_afinsq_1 X1 = np_1) \wedge (k1_funct_1 X1 k6_numbers = X0))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. ((l1_compos_1 X0) \wedge (m1_subset_1 X1 (u1_compos_1 X0))) \Rightarrow (k9_compos_1 X0 X1 = k3_afinsq_1 X1) \quad (3)$$

Assume the following.

$$\forall X0. k5_afinsq_1 X0 = k3_afinsq_1 X0 \quad (4)$$

Assume the following.

$$\forall X0. (v5_ordinal1 (k3_afinsq_1 X0)) \wedge (v1_finset_1 (k3_afinsq_1 X0)) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(l1_extpro_1 X1 X0)\Rightarrow((l1_memstr_0 X1 X0)\wedge(l1_compos_1 X1)) \quad (6)$$

Assume the following.

$$\forall X0.(v1_relat_1 (k5_afinsq_1 X0))\wedge(v1_funct_1 (k5_afinsq_1 X0)) \quad (7)$$

Assume the following.

$$\forall X0.(v1_int_1 X0)\Rightarrow(m1_subset_1 (k3_scmpds_2 X0) (u1_compos_1 k1_scmpds_2)) \quad (8)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_int_1 X0)\Rightarrow(&(\neg v1_xboole_0 (k1_scmpds_6 X0))\wedge \\ &(v1_relat_1 (k1_scmpds_6 X0))\wedge((v4_relat_1 (k1_scmpds_6 X0) \\ &k5_numbers)\wedge((v5_relat_1 (k1_scmpds_6 X0) (u1_compos_1 k1_scmpds_2))\wedge \\ &((v1_funct_1 (k1_scmpds_6 X0))\wedge((v1_finset_1 (k1_scmpds_6 X0))\wedge \\ &(v1_afinsq_1 (k1_scmpds_6 X0))))))))) \quad (9) \end{aligned}$$

Assume the following.

$$(v1_extpro_1 k1_scmpds_2 np_2)\wedge(l1_extpro_1 k1_scmpds_2 np_2) \quad (10)$$

Assume the following.

$$\forall X0.(v1_int_1 X0)\Rightarrow(k1_scmpds_6 X0 = k9_compos_1 k1_scmpds_2 (k3_scmpds_2 X0)) \quad (11)$$

Theorem 1

$$\forall X0.(v1_int_1 X0)\Rightarrow((k6_numbers \in k9_xtuple_0 (k1_scmpds_6 X0))\wedge(k1_funct_1 (k1_scmpds_6 X0) k6_numbers = k3_scmpds_2 X0))$$