

l58_matrix13

(TMZdDj8r3GrEY3xjevVFpvjav6C5Lup5H1p)

October 27, 2020

Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $v1_setfam_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_card_1 : \iota \Rightarrow \iota$ be given. Let $k5_card_1 : \iota \Rightarrow \iota$ be given. Let $k8_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_matrix13 : \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v2_funct_1 : \iota \Rightarrow o$ be given. Let $k14_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k7_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r2_wellord2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (v7_ordinal1 X1) \Rightarrow ((r1_tarski X0 (k2_finseq_1 X1)) \Rightarrow (v2_funct_1 (k14_finseq_1 X0))) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow ((r1_tarski X0 (k10_xtuple_0 X1)) \Rightarrow (k7_relat_1 X1 (k8_relat_1 X1 X0) = X0)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (r2_wellord2 X0 X1) \Leftrightarrow (k1_card_1 X0 = k1_card_1 X1) \quad (3)$$

Assume the following.

$$\forall X0. ((v1_finset_1 X0) \wedge ((v1_setfam_1 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 k5_numbers)))) \Rightarrow (\exists X1. (v7_ordinal1 X1) \wedge (r1_tarski X0 (k2_finseq_1 X1))) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow (((r1_tarski X0 (k9_xtuple_0 X1)) \wedge (v2_funct_1 X1)) \Rightarrow (r2_wellord2 X0 (k7_relat_1 X1 X0))) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(v1_relat_1 X1)\Rightarrow(r1_tarski (k8_relat_1 X1 X0) (k9_xtuple_0 X1)) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0)\Leftrightarrow(m1_finseq_1 X1 X0) \quad (7)$$

Assume the following.

$$\forall X0.((v1_finset_1 X0)\wedge((v1_setfam_1 X0)\wedge(m1_subset_1 X0 (k1_zfmisc_1 k5_numbers))))\Rightarrow(k5_matrix13 X0 = k14_finseq_1 X0) \quad (8)$$

Assume the following.

$$\forall X0.(v1_finset_1 X0)\Rightarrow(k5_card_1 X0 = k1_card_1 X0) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v1_finset_1 X0)))\Rightarrow(v1_finset_1 (k8_relat_1 X0 X1)) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0)\Rightarrow((v1_relat_1 X1)\wedge((v1_funct_1 X1)\wedge(v1_finseq_1 X1))) \quad (11)$$

Assume the following.

$$\forall X0.m2_finseq_1 (k14_finseq_1 X0) k5_numbers \quad (12)$$

Assume the following.

$$\begin{aligned} & \forall X0.(\exists X1.(v7_ordinal1 X1)\wedge(r1_tarski X0 (k2_finseq_1 X1)))\Rightarrow(\forall X1.(m2_finseq_1 X1 k5_numbers)\Rightarrow((X1 = k14_finseq_1 X0)\Leftrightarrow((k10_xtuple_0 X1 = X0)\wedge(\forall X2.(v7_ordinal1 X2)\Rightarrow(\forall X3. \\ & (v7_ordinal1 X3)\Rightarrow(\forall X4.(v7_ordinal1 X4)\Rightarrow(\forall X5.(v7_ordinal1 X5)\Rightarrow(\neg(r1_xxreal_0 np_1 X2)\wedge((\neg r1_xxreal_0 X3 X2)\wedge \\ & ((r1_xxreal_0 X3 (k3_finseq_1 X1))\wedge((X4 = k1_funct_1 X1 X2)\wedge((X5 = k1_funct_1 X1 X3)\wedge(r1_xxreal_0 X5 X4)))))))))))))) \quad (13) \end{aligned}$$

Assume the following.

$$\forall X0.((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v1_finseq_1 X0)))\Rightarrow((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v1_finset_1 X0))) \quad (14)$$

Theorem 1

$$\forall X0.\forall X1.((v1_finset_1 X1)\wedge((v1_setfam_1 X1)\wedge(m1_subset_1 X1 (k1_zfmisc_1 k5_numbers))))\Rightarrow((r1_tarski X0 X1)\Rightarrow(k1_card_1 X0 = k5_card_1 (k8_relat_1 (k5_matrix13 X1) X0)))$$