

t52_euclid_7

(TMJse5xtuDEV9t5AoMSmjebnZcCEsuWE9au)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v5_euclid_7 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_euclid : \iota \Rightarrow \iota$ be given. Let $k1_card_1 : \iota \Rightarrow \iota$ be given. Let $m1_rlvect_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_funcsdom : \iota \Rightarrow \iota$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v2_rlvect_1 : \iota \Rightarrow o$ be given. Let $v3_rlvect_1 : \iota \Rightarrow o$ be given. Let $v4_rlvect_1 : \iota \Rightarrow o$ be given. Let $v5_rlvect_1 : \iota \Rightarrow o$ be given. Let $v6_rlvect_1 : \iota \Rightarrow o$ be given. Let $v7_rlvect_1 : \iota \Rightarrow o$ be given. Let $v8_rlvect_1 : \iota \Rightarrow o$ be given. Let $l1_rlvect_1 : \iota \Rightarrow o$ be given. Let $v1_rlvect_1 : \iota \Rightarrow o$ be given. Let $g1_rlvect_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k8_funcsdom : \iota \Rightarrow \iota$ be given. Let $k5_funcsdom : \iota \Rightarrow \iota$ be given. Let $k7_funcsdom : \iota \Rightarrow \iota$ be given. Let $k8_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k6_numbers : \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.((v5_euclid_7 X1 X0) \wedge \\ (m1_subset_1 X1 (k1_zfmisc_1 (k1_euclid X0)))) \Rightarrow (m1_rlvect_3 \\ X1 (k10_funcsdom (k2_finseq_1 X0)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ (u1_struct_0 (k10_funcsdom (k2_finseq_1 X0)))))) \Rightarrow ((m1_rlvect_3 \\ X1 (k10_funcsdom (k2_finseq_1 X0))) \Rightarrow (k1_card_1 X1 = X0)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 \\ X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge \\ ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 \\ X0)))))))))) \Rightarrow (\forall X1.(m1_rlvect_3 X1 X0) \Rightarrow (m1_subset_1 X1 \\ (k1_zfmisc_1 (u1_struct_0 X0)))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. (\neg v2_struct_0 (k10_funcsdom X0) \wedge ((v13_algstr_0 \\ & (k10_funcsdom X0) \wedge (v1_rlvect_1 (k10_funcsdom X0) \wedge (v2_rlvect_1 \\ & (k10_funcsdom X0) \wedge (v3_rlvect_1 (k10_funcsdom X0) \wedge (v4_rlvect_1 \\ & (k10_funcsdom X0) \wedge (v5_rlvect_1 (k10_funcsdom X0) \wedge (v6_rlvect_1 \\ & (k10_funcsdom X0) \wedge (v7_rlvect_1 (k10_funcsdom X0) \wedge (v8_rlvect_1 \\ & (k10_funcsdom X0) \wedge (l1_rlvect_1 (k10_funcsdom X0)))))))))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0. k10_funcsdom X0 = g1_rlvect_1 (k9_funct_2 X0 k1_numbers) (k8_funcsdom X0) (k5_funcsdom X0) (k7_funcsdom X0) \quad (5)$$

Assume the following.

$$\forall X0. k8_funcsdom X0 = k8_funcop_1 k5_numbers X0 k6_numbers \quad (6)$$

Theorem 1

$$\begin{aligned} & \forall X0. (v7_ordinal1 X0) \Rightarrow (\forall X1. ((v5_euclid_7 X1 X0) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (k1_euclid X0)))) \Rightarrow (k1_card_1 X1 = \\ & X0)) \end{aligned}$$