

t32_euclid_2

(TMG8Mxk79HqQv8NBg5oPNB4PhGVYXJLXRKn)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k15_euclid : \iota \Rightarrow \iota$ be given. Let $k23_rvsum_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $v3_valued_0 : \iota \Rightarrow o$ be given. Let $k5_euclid : \iota \Rightarrow \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k16_euclid : \iota \Rightarrow \iota$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_card_1 : \iota \Rightarrow \iota$ be given. Let $v3_card_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge ((v1_finseq_1 X0) \wedge (v3_valued_0 X0)))) \Rightarrow (k23_rvsum_1 X0 (k5_euclid (k3_finseq_1 X0)) = k6_numbers) \quad (1)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (k4_struct_0 (k15_euclid X0) = k5_euclid X0) \quad (2)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (k16_euclid X0 = k4_struct_0 (k15_euclid X0)) \quad (3)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid X0))) \Rightarrow (m2_finseq_1 X1 k1_numbers)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (5)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow (k3_finseq_1 X0 = k1_card_1 X0) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 X1 X0)\Rightarrow((v1_relat_1 X1)\wedge(v1_funct_1 X1)\wedge(v1_finseq_1 X1)) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(v3_card_1 X1 X0)\Leftrightarrow(k1_card_1 X1 = X0) \quad (8)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid X0)))\Rightarrow(v3_card_1 X1 X0)) \quad (9)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid X0)))\Rightarrow(v3_valued_0 X1)) \quad (10)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid X0)))\Rightarrow(v1_finseq_1 X1)) \quad (11)$$

Theorem 1

$$\forall X0.(v7_ordinal1 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid X0)))\Rightarrow(k23_rvsum_1 X1 (k4_struct_0 (k15_euclid X0)) = k6_numbers))$$