

t68_euclid

(TMdg98Cm2rvDmW7TVi1J4oqVGmjkTB8EaTz)

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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 $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v3_valued_0 : \iota \Rightarrow o$ be given. Let $k4_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k30_valued_1 : \iota \Rightarrow \iota$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $k6_rvsum_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge ((v3_valued_0 X0) \wedge (v1_finseq_1 X0)))) \Rightarrow (k6_rvsum_1 X0 = k30_valued_1 X0) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((v7_ordinal1 X0) \wedge ((m1_subset_1 X1 (u1_struct_0 (k15_euclid X0))) \wedge ((v1_relat_1 X2) \wedge ((v1_funct_1 X2) \wedge ((v1_finseq_1 X2) \wedge (v3_valued_0 X2))))))) \Rightarrow ((X1 = X2) \Rightarrow (k4_algstr_0 (k15_euclid X0) X1 = k6_rvsum_1 X2)) \quad (2)$$

Assume the following.

$$\forall X0. (v7_ordinal1 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 (k15_euclid X0))) \Rightarrow (v1_finseq_1 X1)) \quad (3)$$

Theorem 1

$$\forall X0. (v7_ordinal1 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 (k15_euclid X0))) \Rightarrow (\forall X2. ((v1_relat_1 X2) \wedge ((v1_funct_1 X2) \wedge (v3_valued_0 X2)))) \Rightarrow ((X1 = X2) \Rightarrow (k4_algstr_0 (k15_euclid X0) X1 = k30_valued_1 X2))))$$