

t91_euclid_8 (TMRMvg- GhEVCrzig7iP5cguZaRmENM4Zhrycd)

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Let $m2_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k1_euclid : \iota \Rightarrow \iota$ be given. Let $np_3 : \iota$ be given. Let $k7_euclid_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k5_euclid_8 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_euclid : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k23_rvsum_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_binop_2 : \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_finseq_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m2_finseq_2 X0 k1_numbers (k1_euclid np_3)) \Rightarrow (\forall X1. \\ & (m2_finseq_2 X1 k1_numbers (k1_euclid np_3)) \Rightarrow (k7_euclid_8 X0 \quad (1) \\ & \quad X0 X1 = k6_numbers)) \end{aligned}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2_finseq_2 X0 k1_numbers (k1_euclid np_3)) \Rightarrow (\forall X1. \\ & (m2_finseq_2 X1 k1_numbers (k1_euclid np_3)) \Rightarrow (k5_euclid_8 X0 \quad (2) \\ & \quad X1 = k6_euclid np_3 (k5_euclid_8 X1 X0))) \end{aligned}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2_finseq_2 X0 k1_numbers (k1_euclid np_3)) \Rightarrow (\forall X1. \\ & (m2_finseq_2 X1 k1_numbers (k1_euclid np_3)) \Rightarrow (k23_rvsum_1 (\quad (3) \\ & \quad k6_euclid np_3 X0) (k6_euclid np_3 X1) = k23_rvsum_1 X0 X1)) \end{aligned}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2_finseq_2 X0 k1_numbers (k1_euclid np_3)) \Rightarrow (\forall X1. \\ & (m2_finseq_2 X1 k1_numbers (k1_euclid np_3)) \Rightarrow (k23_rvsum_1 (\quad (4) \\ & \quad k6_euclid np_3 X0) X1 = k7_binop_2 (k23_rvsum_1 X0 X1))) \end{aligned}$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_3) \wedge (m2_subset_1 np_3 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_3 k5_numbers) \wedge (m1_subset_1 np_3 k1_numbers)) \quad (5) \end{aligned}$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_2 X1 X0)\Rightarrow(\forall X2.(m2_finseq_2 X2 X0 X1)\Leftrightarrow(m1_subset_1 X2 X1)) \quad (6)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (7)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (8)$$

Assume the following.

$$v6_membered k4_ordinal1 \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 (k1_euclid np_3))\wedge(m1_subset_1 X1 (k1_euclid np_3)))\Rightarrow(m2_finseq_2 (k5_euclid_8 X0 X1) k1_numbers (k1_euclid np_3)) \quad (10)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow(m1_finseq_2 (k1_euclid X0) k1_numbers) \quad (11)$$

Assume the following.

$$\forall X0.(m2_finseq_2 X0 k1_numbers (k1_euclid np_3))\Rightarrow(\forall X1.(m2_finseq_2 X1 k1_numbers (k1_euclid np_3))\Rightarrow(\forall X2.(m2_finseq_2 X2 k1_numbers (k1_euclid np_3))\Rightarrow(k7_euclid_8 X0 X1 X2 = k23_rvsum_1 X0 (k5_euclid_8 X1 X2)))) \quad (12)$$

Assume the following.

$$\forall X0.(v6_membered X0)\Rightarrow(\forall X1.(m1_subset_1 X1 X0)\Rightarrow(v7_ordinal1 X1)) \quad (13)$$

Theorem 1

$$\forall X0.(m2_finseq_2 X0 k1_numbers (k1_euclid np_3))\Rightarrow(\forall X1.(m2_finseq_2 X1 k1_numbers (k1_euclid np_3))\Rightarrow(k7_euclid_8 X0 X1 X0 = k6_numbers))$$