

t11_pdiff_7 (TM- SEN9MJNFVgew4NSs8vBEuadRM6GanQ5q9)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k1_numbers : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k1_finseq_7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_euclid : \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $m2_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k14_rvsum_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k4_euclid : \iota \Rightarrow \iota$ 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 $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Let $k1_euclid : \iota \Rightarrow \iota$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(m2_finseq_2 X1 k1_numbers (k4_finseq_2 X0 k1_numbers)) \Rightarrow (k14_rvsum_1 X1 (k5_euclid X0) = k5_euclid X0)) \quad (1)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\forall X2.(m2_finseq_2 X2 k1_numbers (k4_finseq_2 X0 k1_numbers)) \Rightarrow (k1_funct_1 (k14_rvsum_1 X2 (k5_euclid X0)) X1 = k6_numbers))) \quad (2)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (3)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (4)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (k5_euclid X0 = k4_euclid X0) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v3_valued_0 X0)))\Rightarrow(k1_seq_1 X0 X1 = k1_funct_1 X0 X1) \quad (6)$$

Assume the following.

$$\begin{aligned} &\forall X0.((\neg v1_xboole_0 X0)\wedge(m1_subset_1 X0 k5_numbers))\Rightarrow \\ &(\forall X1.(m1_subset_1 X1 k1_numbers)\Rightarrow(\forall X2.(m1_subset_1 \\ &X2 k5_numbers)\Rightarrow(\forall X3.(m1_subset_1 X3 k5_numbers)\Rightarrow(((r1_xxreal_0 \\ &np_1 X3)\wedge(r1_xxreal_0 X3 X0))\Rightarrow(((X2 = X3)\Rightarrow(k1_seq_1 (k1_finseq_7 \\ &k1_numbers (k5_euclid X0) X2 X1) X3 = X1))\wedge((X2\neq X3)\Rightarrow(k1_seq_1 (\\ &k1_finseq_7 k1_numbers (k5_euclid X0) X2 X1) X3 = k6_numbers)))))) \end{aligned} \quad (7)$$

Assume the following.

$$v6_membered k4_ordinal1 \quad (8)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow(m2_finseq_2 (k5_euclid X0) k1_numbers (k1_euclid X0)) \quad (9)$$

Assume the following.

$$\begin{aligned} &\forall X0.(v7_ordinal1 X0)\Rightarrow((v1_relat_1 (k4_euclid X0))\wedge((\\ &v1_funct_1 (k4_euclid X0))\wedge((v1_finseq_1 (k4_euclid X0))\wedge(v3_valued_0 \\ &(k4_euclid X0)))))) \end{aligned} \quad (10)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0)\Rightarrow(k1_euclid X0 = k4_finseq_2 X0 k1_numbers) \quad (11)$$

Assume the following.

$$\forall X0.(v6_membered X0)\Rightarrow(\forall X1.(m1_subset_1 X1 X0)\Rightarrow (v7_ordinal1 X1)) \quad (12)$$

Theorem 1

$$\begin{aligned} &\forall X0.((\neg v1_xboole_0 X0)\wedge(m1_subset_1 X0 k5_numbers))\Rightarrow \\ &(\forall X1.(m1_subset_1 X1 k1_numbers)\Rightarrow(\forall X2.(m1_subset_1 \\ &X2 k5_numbers)\Rightarrow(\neg(r1_xxreal_0 np_1 X2)\wedge((r1_xxreal_0 X2 X0)\wedge \\ &((X1\neq k6_numbers)\wedge(k1_finseq_7 k1_numbers (k5_euclid X0) X2 X1 = \\ &k5_euclid X0)))))) \end{aligned}$$