

t10_euclid_7
(TMaNSR7PLb2kd63hCJdH4oihnkUA7JgjKpt)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_finseq_7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m2_finseq_1 X1 X0) \Rightarrow \\ & \quad (\forall X2. (v7_ordinal1 X2) \Rightarrow (\forall X3. (v7_ordinal1 X3) \Rightarrow (\\ & \quad ((r1_xxreal_0 np_1 X2) \wedge (r1_xxreal_0 X2 (k3_finseq_1 X1)) \wedge (\\ & \quad (r1_xxreal_0 np_1 X3) \wedge (r1_xxreal_0 X3 (k3_finseq_1 X1)))))) \Rightarrow \\ & ((k1_funct_1 (k2_finseq_7 X0 X1 X2 X3) X2 = k1_funct_1 X1 X3) \wedge (k1_funct_1 \\ & \quad (k2_finseq_7 X0 X1 X2 X3) X3 = k1_funct_1 X1 X2)))))) \end{aligned} \tag{1}$$

Theorem 1

$$\begin{aligned} & \forall X0. (v7_ordinal1 X0) \Rightarrow (\forall X1. (v7_ordinal1 X1) \Rightarrow (\forall X2. \\ & (\neg v1_xboole_0 X2) \Rightarrow (\forall X3. (m2_finseq_1 X3 X2) \Rightarrow (((r1_xxreal_0 \\ & np_1 X0) \wedge ((r1_xxreal_0 X0 (k3_finseq_1 X3)) \wedge ((r1_xxreal_0 np_1 \\ & X1) \wedge (r1_xxreal_0 X1 (k3_finseq_1 X3)))))) \Rightarrow ((k1_funct_1 (k2_finseq_7 \\ & X2 X3 X0 X1) X0 = k1_funct_1 X3 X1) \wedge (k1_funct_1 (k2_finseq_7 X2 X3 \\ & \quad X0 X1) X1 = k1_funct_1 X3 X0)))))) \end{aligned}$$