

t16_finseq_8
(TMKB2BifNB32Ld1vJZ3Jb9zhdLt2SEcTQiR)

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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 $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k4_finseq_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_nat_d : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m2_finseq_1 X1 X0) \Rightarrow \\ & (\forall X2. (m2_finseq_1 X2 X0) \Rightarrow (r1_xxreal_0 (k3_finseq_1 (k4_finseq_8 \\ & X0 X1 X2)) (k3_finseq_1 X1)))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((\neg v1_xboole_0 X0) \wedge ((m1_finseq_1 \\ & X1 X0) \wedge (m1_finseq_1 X2 X0))) \Rightarrow (m2_finseq_1 (k4_finseq_8 X0 X1 X2) \\ & X0) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m2_finseq_1 X1 X0) \Rightarrow \\ & (\forall X2. (m2_finseq_1 X2 X0) \Rightarrow (\forall X3. (m2_finseq_1 X3 X0) \Rightarrow \\ & ((X3 = k4_finseq_8 X0 X1 X2) \Leftrightarrow ((r1_xxreal_0 (k3_finseq_1 X3) (k3_finseq_1 \\ & X2)) \wedge ((X3 = k3_finseq_8 X0 X2 np_1 (k3_finseq_1 X3)) \wedge ((X3 = k3_finseq_8 \\ & X0 X1 (k2_nat_1 (k7_nat_d (k3_finseq_1 X1) (k3_finseq_1 X3)) np_1) \\ & (k3_finseq_1 X1)) \wedge (\forall X4. (v7_ordinal1 X4) \Rightarrow (((r1_xxreal_0 \\ & X4 (k3_finseq_1 X2)) \wedge (k3_finseq_8 X0 X2 np_1 X4 = k3_finseq_8 X0 \\ & X1 (k2_nat_1 (k7_nat_d (k3_finseq_1 X1) X4) np_1) (k3_finseq_1 \\ & X1)))) \Rightarrow (r1_xxreal_0 X4 (k3_finseq_1 X3)))))))))) \end{aligned} \quad (4)$$

Theorem 1

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m2_finseq_1 X1 X0) \Rightarrow \\ & (\forall X2. (m2_finseq_1 X2 X0) \Rightarrow ((r1_xxreal_0 (k3_finseq_1 (\\ & k4_finseq_8 X0 X1 X2)) (k3_finseq_1 X1)) \wedge (r1_xxreal_0 (k3_finseq_1 \\ & (k4_finseq_8 X0 X1 X2)) (k3_finseq_1 X2)))))) \end{aligned}$$