

t39_filerec1

(TMUhAo4nvRKUCTxcNFhHMYUkQVeMpt3kwfN)

October 27, 2020

Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r2_finseq_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_finseq_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k1_finseq_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_finseq_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_finseq_1 X1 X0) \Rightarrow \\ & (\forall X2.(m1_finseq_1 X2 X0) \Rightarrow (\forall X3.(m1_finseq_1 X3 X0) \Rightarrow \\ & ((X3 = k1_finseq_8 X0 X1 X2) \Rightarrow ((r2_finseq_8 X0 X3 X1 np_1) \wedge (r2_finseq_8 \\ & X0 X3 X2 np_1)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(m2_finseq_1 X1 X0) \Rightarrow \\ & (\forall X2.(m2_finseq_1 X2 X0) \Rightarrow (k5_finseq_8 X0 X1 X2 = k1_finseq_8 \\ & X0 (k6_finseq_8 X0 X1 X2) X2))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((\neg v1_xboole_0 X0) \wedge ((m1_finseq_1 \\ & X1 X0) \wedge (m1_finseq_1 X2 X0))) \Rightarrow (m2_finseq_1 (k6_finseq_8 X0 X1 X2) \\ & X0) \end{aligned} \tag{4}$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((m1_finseq_1 X1 X0) \wedge (m1_finseq_1 X2 X0)) \Rightarrow (m2_finseq_1 (k1_finseq_8 X0 X1 X2) X0) \tag{5}$$

Theorem 1

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_finseq_1 X1 X0) \Rightarrow \\ & (\forall X2.(m1_finseq_1 X2 X0) \Rightarrow (r2_finseq_8 X0 (k5_finseq_8 \\ & X0 X1 X2) X2 np_1))) \end{aligned}$$