

t11_topreal8
(TMWv5BqZ8Q4KvCYjSrnMnLuJPUjB3vSbMLU)

October 27, 2020

Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_zfmisc_1 : \iota \Rightarrow o$ be given. Let $k7_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $v1_finseq_6 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_graph_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(m2_finseq_1 X1 X0) \Rightarrow \\ & (\forall X2.((\neg v1_zfmisc_1 X2) \wedge (m2_finseq_1 X2 X0)) \Rightarrow (k7_partfun1 \\ & X0 (k4_graph_2 X0 X1 X2) (k3_finseq_1 (k4_graph_2 X0 X1 X2)) = k7_partfun1 \\ & X0 X2 (k3_finseq_1 X2)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge \\ & (m2_finseq_1 X1 X0)) \Rightarrow (\forall X2.(m2_finseq_1 X2 X0) \Rightarrow (k7_partfun1 \\ & X0 (k4_graph_2 X0 X1 X2) np_1 = k7_partfun1 X0 X1 np_1))) \end{aligned} \tag{2}$$

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1_finseq_1 X1 X0) \wedge (m1_finseq_1 X2 X0)) \Rightarrow (m2_finseq_1 (k4_graph_2 X0 X1 X2) X0) \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(m2_finseq_1 X1 X0) \Rightarrow \\ & ((v1_finseq_6 X1 X0) \Leftrightarrow (k7_partfun1 X0 X1 np_1 = k7_partfun1 X0 X1 \\ & (k3_finseq_1 X1)))) \end{aligned} \tag{5}$$

Theorem 1

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.((\neg v1_xboole_0 X1) \wedge \\ & (m2_finseq_1 X1 X0)) \Rightarrow (\forall X2.((\neg v1_zfmisc_1 X2) \wedge (m2_finseq_1 \\ & X2 X0)) \Rightarrow ((k7_partfun1 X0 X2 (k3_finseq_1 X2) = k7_partfun1 X0 X1 \\ & np_1) \Rightarrow (v1_finseq_6 (k4_graph_2 X0 X1 X2) X0)))) \end{aligned}$$